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Local Transport Planning in Leicestershire 2011-2026 Leicestershire Local Transport Plan 3



FOREWORD

I have great pleasure in presenting Leicestershire County Council's third Local Transport Plan (LTP3).

Leicestershire is a prosperous, diverse and attractive County. Working with partners, including through the Leicestershire Together Strategic Partnership and the Leicester and Leicestershire Local Enterprise Partnership, we, the County Council, have a key role to play in ensuring that it remains so.

Essential to achieving wider economic, social and environmental aims is a transport system that enables the efficient movement of people, materials and goods. Building on good progress during LTP2, our LTP3 long-term transport strategy sets out how we will manage and develop the County's

transport system in the future, focusing on the strategic approach that we will take, rather than identifying specific schemes and standards. Our separate LTP3 Implementation Plan is the key delivery framework for the strategy (the 'how' bit) – and more details about the Implementation Plan can be found later in this document.

It is proper and important that we have high aspirations for the quality of Leicestershire's transport system, but in going forward we face many complex financial, social and environmental challenges. In particular, balancing the challenges of delivering growth and sustainability alongside those of affordability and climate change is a complex issue. I am sure, however, that by working with our partners, and with the support of our residents and businesses, we will be well placed to address the transport challenges that arise from such issues. In doing so, I am confident that we will be able to ensure that our transport system continues to play its part in helping Leicestershire to remain a safe and attractive place to live, work and visit.



Betown

Peter Osborne CC Cabinet Member for Environment & Transport







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The first chapter of our long-term transport strategy outlines our long-term vision for transport in Leicestershire and provides details of the context in which LTP3 has been prepared. It also provides details of how the rest of our long-term transport strategy is structured and an outline of our performance monitoring framework.

Chapter 2: Where we are now: a look at Leicestershire

This chapter helps to set the scene for our long-term transport strategy by providing a description of Leicestershire and summarising the wider issues and challenges that the County faces, and that we therefore need to consider when developing our long-term transport strategy.

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This chapter helps to further set the scene for our long-term transport strategy by describing Leicestershire's transport system and assessing how it is performing.

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Glossary



PREAMBLE

What is a Local Transport Plan? First announced in the 1998 White Paper: A New Deal for Transport: Better for Everyone, the Transport Act 2000 required strategic transport authorities in England, including county councils, to produce a Local Transport Plan (LTP) for their area.

Since this announcement, three LTP's have been produced in Leicestershire: LTP1, which ran from 2000 to 2006, LTP2, which ran from 2006 to 2011 and this, the third LTP, which runs from 2011 to 2026.

Local Transport Plans are the key mechanism for delivering integrated transport at a local level, and they help to promote transport as an enabler of other things. During both LTP1 and LTP2 we made significant progress in developing and improving our transport system. LTP3 will build on this success.

What geographical area does this LTP cover? Leicestershire County Council and Leicester City Council worked together during the development of both LTP1 and LTP2, producing one plan for central Leicestershire. This Plan covered the geographical area of Leicester City and parts of the surrounding County. The Leicestershire Local Transport Plan 2006 – 2011 (LTP2) covered the whole of the County. Whilst ensuring a joined-up approach, this also resulted in some overlap and duplication and, in some cases, issues around responsibilities for taking matters forward were uncertain. Therefore, for the third round of LTP's (LTP3), there will be a slightly different approach in Leicestershire.

We, the County Council, have produced a plan that covers the whole of Leicestershire, not including Leicester City. Leicester City Council has produced a separate plan that covers Leicester City, the area for which it is responsible. Thus, no area is covered by more than one LTP3.

To ensure that our LTPs align we have worked closely with Leicester City Council on the development of our respective LTP3's. We will continue to do so over the plan period, as we implement our LTP3's. This work will include building on current joint working arrangements for scheme development, delivery and monitoring.

How has the updated version of LTP3 (published in 2014) changed? We conducted a review of our long-term transport strategy in 2013 to ensure that it remained robust and relevant in the light of changing circumstances since its publication in 2011. Following the review, the fundamental focus of our strategy and our policy direction remains unchanged. We believe that our strategy remains fit for purpose, focusing as it does on efforts to support low carbon economic growth in Leicestershire. However, some changes have been made to reflect new evidence (particularly emerging information from the 2011 Census), the changing financial position (particularly new national government spending policies), changes to the planning system and changes in our own policies (particularly in relation to our spending priorities and to public transport provision). We have also taken the opportunity to review and update our LTP3 Performance Framework.



Looking ahead, we envisage undertaking a more comprehensive review of our strategy in 2016. At this time we will have more evidence about the impacts of the measures that we are delivering, as well as improved understanding of future transport conditions. Following the General Election in 2015 we should also have a clearer understanding of what money we will have available to us as we head towards the 2020's. Reviewing our strategy in 2016 is likely to lead to a further revised version of our strategy being published in 2017.

EXECUTIVE SUMMARY

Good transport delivers improved economic and social outcomes. From an economic perspective, it enables people to get to work, children to get to school, and businesses to receive materials and distribute goods. As such, an effective transport system has a key role to play in achieving the economic ambitions of the Leicester and Leicestershire Enterprise Partnership and the successful delivery of its Strategic Economic Plan. Socially, an effective transport system enables people to access a range of facilities, such as shops, healthcare and leisure opportunities. In doing so, a good transport system helps to build a growing economy and strong, sustainable, safe and healthy communities. Where transport fails, these aspirations are put at risk.

Leicestershire's third Local Transport Plan (LTP3) sets out how we, as the transport authority, will seek to ensure that transport continues to play its important role in helping Leicestershire to continue to be a prosperous, safe and attractive County. Our LTP3 is made up of a long-term transport strategy with a vision for transport to 2026, supported by a rolling three year Implementation Plan.

Our ability to continue to develop and improve our transport system throughout the LTP3 period so that it is able to mitigate the predicted impacts of population and housing growth will be affected by a number of factors, particularly the ongoing impacts of cuts in funding to local government as part of efforts to tackle the national deficit. Nevertheless, in a strategy that looks forward to 2026, it is important that our ambitions are not limited by current constraints, and that we set high aspirations for the quality of transport in Leicestershire.

Given this, our long-term vision for our transport system over the course of LTP3 is for:

'Leicestershire to be recognised as a place that has, with the help of its residents and businesses, a first class transport system that enables economic and social travel in ways that improve people's health, safety and prosperity, as well as their environment and their quality of life.'

There are a number of challenges that we must address if our long-term strategy is to successfully deliver this vision. Perhaps of most significance are those associated with helping to support increased economic activity, and provide for future levels of economic and population growth in ways that minimise the impacts on our transport system, communities, individuals and on the environment. However, the challenge we face in seeking to help reduce the social and financial costs arising from poor health is also substantial.



Such challenges need to be viewed in the context of how our transport system is currently performing. Whilst our assessment of progress during LTP2 indicates that our transport system is generally in a good state of repair, is safe and is performing well, it also highlights that there remain areas for improvement. These are particularly around tackling congestion, improving accessibility and road safety, and reducing the social and environmental impacts of traffic and our transport system.

In the light of such issues, the dilemma that we face in developing LTP3 is a tricky one. There are genuine reasons for increasing local transport capacity in a fair and equal way, not least to aid the economic recovery, underpin future prosperity and improve social inclusion. But, at the same time we must all work to change our travel behaviour. This is now more essential than ever, particularly in the light of new evidence that has become available to us since our LTP3 was first published in 2011. By attempting to reduce emissions, particularly from road transport, the local transport sector has a key role to play if the country is to meet its legal requirements to reduce levels of carbon dioxide and thereby minimise the worst financial, social and environmental impacts of climate change. In addition, we must obviously continue to deliver on a number of our more traditional responsibilities, such as road safety and asset management. This dilemma has to be faced in the context of an economic climate which ensures that the nature and scale of interventions introduced through LTP3 will be constrained by a difficult financial situation, and will take place at a time of considerable uncertainty, not least in terms of the localism agenda, changes in the relationship between central and local government and changes in the planning system.

In responding to this situation, we have sought to develop a strategic framework that will allow us to give some certainty to transport policy and planning throughout our LTP3. This framework includes a set of goals and activities around which our efforts in LTP3 will be grouped (as shown in Table 1). We have also identified a set of strategic outcomes that we want our LTP3 to deliver for the people of Leicestershire. It is the delivery of these outcomes on which we will judge the success of our strategy. Reflecting changes in circumstances, these outcomes have been modified very slightly as part of our 2013 review. However, the fundamental focus of our strategy and policy direction remains unchanged.

Note: Where there are two or more items in each of the sections of the table below, those in bold black type are the main, or primary, items and those in grey italics are related or secondary items.

Our strategic transport goals	Our LTP3 activities	Our strategic transport outcomes	
Goal 1 A transport system that supports a prosperous economy and provides successfully for population growth	Supporting the economy and population growth	Our transport system provides more consistent, predictable and reliable journey times for the movement of people and goods	



Goal 2 An efficient, resilient and sustainable transport system that is well managed and maintained	Managing the condition and resilience of our transport system	Our transport system and its assets are effectively managed and well maintained Our transport system is resilient to the impacts of			
		climate change			
Goal 3 A transport system that helps to	Encouraging active and sustainable travel	The negative impact of our transport system on the environment and individuals is reduced			
reduce the carbon footprint of Leicestershire		More people walk, cycle and use public transport as part of their daily journeys, including to access key services			
Goal 4 An accessible and integrated transport system that helps promote	Improving the connectivity and accessibility of our transport system	More people walk, cycle and use public transport a part of their daily journeys, including to access key services.			
equality of opportunity for all our residents	Encouraging active and sustainable travel	Effective and integrated public and community transport provision, including targeted and innovative travel solutions that meet the essential transport needs of Leicestershire residents.			
Goal 5	Improving road safety	The number of road casualties is reduced			
A transport system that improves the safety, health and security of our residents	Encouraging active and sustainable travel	More people walk, cycle and use public transport as part of their daily journeys, including to access key services			
Goal 6 A transport system that helps to	Managing the impact of our transport system on quality of life	There is improved satisfaction with the transport system amongst both users and residents			
improve the quality of life for our residents and makes Leicestershire a more attractive place to live, work		The natural environment can be accessed easily and efficiently, particularly by bike or on foot			
and visit		(The negative impact of our transport system on the environment and individuals is reduced)			

Table 1: Our LTP3 goals, activities and outcomes

The way that we manage our transport system in order to deliver our long-term transport strategy will reflect our key challenges, principally the ongoing impacts of the economic downturn around the end of the last decade, the need to deliver growth in a sustainable manner and the need to help improve people's health. Our approach in LTP3 will focus on the key theme of making the best use of our existing transport system by improving its efficiency and attempting to change the travel behaviour of transport users away from the private car and onto more sustainable modes of transport, such as walking, cycling and public transport. The increased level of funding that the Government has made available to fund new transport infrastructure means that we are now more able to consider adding to our transport system where we can (thus increasing its capacity), but only where doing so will provide clear benefits for the economy of Leicester and Leicestershire, it is affordable and it is clearly the best choice in the context of the strategic goals and outcomes that we are seeking to achieve.

But, the delivery of new infrastructure takes considerable time (because of the need to buy land, for example). It is also important to note that, whilst welcome, even the increased level of funding available remains small relative to the scale of the challenges that we face. So, in the short-term, this renews the emphasis on improving the performance and reliability of our transport system, helping users make more informed choices about when and how to travel, working with public transport providers to try and secure better services, working with businesses and our residents to manage the demand and stresses placed on our transport system, and seeking to limit the demand for travel, particularly by unsustainable modes, from new development.

The short-term actions that we will take to deliver our strategic goals and activities will be detailed in our LTP3 Implementation Plan. These actions include the detailed revenue and capital programmes of work that we will be undertaking. These programmes reflect the increased emphasis that our strategy will be placing on delivering educational, training, publicity and awarenessraising initiatives to influence road user behaviour and encourage modal shift, but they also show the capital-based infrastructure investment that is required to ensure we are able to make the best use of our transport system. The Council's requirement to deliver £110m of savings over the next five years (to put this in context the County Council's total budget for 2012/13 was around £346m), on top of the considerable savings that we have already had to make, means that we will continue to see significant pressures on our revenue and capital budgets. Our Implementation Plan therefore also contains details of the efficiency savings and service reduction programmes that we will be implementing.

As we undertake annual reviews of our Implementation Plan and roll it forward, so we will describe future revenue and capital programmes. We will also develop further the information that we provide about preparatory work and studies that we will be undertaking to inform our programmes for future years.

Evidence suggests that measures to encourage people to change their travel behaviour, coupled with relatively modest investments in measures to help them to make better use of existing sustainable transport facilities, can bring some benefits in terms of reducing the number of journeys people make using a car. In turn, this can bring economic, health and environmental benefits,



by reducing levels of congestion, encouraging more active travel and reducing pollution and CO2 emissions from road transport. In the medium-to-longer-term, we hope that an improved financial situation will enable us to consider the delivery of more major sustainable transport projects, such as the possible provision of new park and ride sites and further improvements to important public transport routes. Even so, our current evidence suggests that in order to maintain a transport system that effectively supports Leicester and Leicestershire's economic growth aspirations, and at the same time helps to deliver the required reduction in CO2 output, it is likely that we will need to investigate and deliver more proactive ways to reduce the demand for travel within the lifetime of this strategy.

We and our partners can only do so much in helping to create and maintain a safe, attractive and reliable transport system that encourages walking, cycling and the use of public transport. How our residents, our businesses and our visitors choose to travel during the first few years of our LTP3 will either bring nearer the date for introducing more proactive demand measures, or push it more towards the end of the strategy period.

It is important that we continue to review regularly the approach that our long-term transport strategy and Implementation Plan are taking to ensure that they remain robust in the light of the changing circumstances that we find ourselves in, and the progress that we are making in delivering our LTP3 outcomes. To enable us to do this, we have put in place performance management and monitoring arrangements which build on our successful regime during LTP2.

We will measure the delivery of our LTP3 outcomes using a set of key performance indicators, with aspirational long-term targets, and shorter-term three-year targets, to assess progress. Given the wider economic, social and environmental outcomes that we want our long-term transport strategy to deliver, and the delays to national decisions about local government performance requirements, the finalisation of our LTP3 performance framework took place during 2011/12. This allowed us to take full account of the ongoing exercise to review and update the Leicestershire Together Outcome Framework and ensure that the targets we set ourselves in our long-term transport strategy were aligned with the wider economic, social and environmental outcomes that are important to the Council and its partners. It also allowed us to fully dissect the changes to the national local government data set and to use the new Leicester and Leicestershire Integrated Transport Model to establish baseline positions and robust, evidence-based targets for a number of our new indicators.

Given the scale of the strategic challenges that we face in LTP3 and the continuingly uncertain and changing environment in which it has been prepared, the performance management regime that we put in place will also monitor the effectiveness of the actual activities that we deliver, and assess the degree to which they are providing cost-effective solutions to the problems they have been designed to tackle. We will also seek to maintain a robust evidence-based understanding of wider economic, social and environmental issues and the role that our transport system can play in addressing these issues.



Our work to develop LTP3 has highlighted how the challenges that we face are broad-ranging and complex. We realise that we cannot meet these challenges on our own, and ultimately want to create a shared responsibility amongst our stakeholders and residents for what we are trying to achieve and deliver in LTP3. Reflecting current Government thinking that centres on placing powers more in the hands of communities, the final element of our performance management regime for LTP3 will therefore see us undertake continued engagement with stakeholders and residents to help both develop and deliver our strategy and the initiatives that we put in place. This may well mean that services in LTP3 are delivered more through local people and organisations rather than through traditionally contracted services.

By ensuring that our long-term transport strategy remains relevant and robust, and that the things it delivers provide effective, value for money solutions to meet the evidence-based needs of our communities, we will be well placed to achieve our vision for the County's transport system in 2026.

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This first chapter of our long-term transport strategy:

- Outlines our long-term vision for transport in Leicestershire.
- Provides details of the context in which our LTP3 has been prepared, how we went about developing it, its structure, and its purpose.
- Provides details of how the rest of this long-term strategy is structured and outlines the performance monitoring framework we will use in LTP3.



OUR VISION FOR TRANSPORT IN LEICESTERSHIRE

- 1.1 The quality of local transport is critical to the success or otherwise of local economies in a number of different ways. We, the County Council, want Leicestershire to continue to be a pleasant, prosperous and safe county in which to live, work and visit. This is important to support both the economic recovery and the future prosperity of Leicestershire. There is an important economic and social relationship between the county of Leicestershire and the city of Leicester and, in order for Leicestershire to be successful, it is important that Leicester City is successful too. Good transport is a vital factor in achieving this aspiration. It enables people to get to work and access things such as shops and healthcare, children to get to school, and businesses to receive materials and distribute goods. In doing so, a good transport system helps to build a growing economy and strong, sustainable, safe and healthy communities. Where transport fails, these aspirations are put at risk.
- 1.2 The Local Strategic Partnership (LSP) for Leicestershire, 'Leicestershire Together'¹, seeks to improve both the quality of life and the quality of public services in Leicestershire. The priorities for these improvements are set out in the Leicestershire Together Outcomes Framework. This endorses the importance of transport, describing it as 'a key cross-cutting issue which has a strong link to a number of the Leicestershire Together outcomes and which therefore has an important role to play in improving quality of life in Leicestershire.'
- 1.3 Our ability to continue to develop and improve our transport system throughout the LTP3 period will, at least in the short-term, be affected by a number of constraints, not least the current national deficit and the public spending cuts that are being made as part of attempts to tackle this. Nevertheless, in a strategy that looks forward to 2026, it is important that our ambitions are not limited by current constraints and that we set high aspirations for the quality of transport in Leicestershire. Given this, our long-term vision for our transport system is for:

'Leicestershire to be recognised as a place that has, with the help of its residents and businesses, a first class transport system that enables economic and social travel in ways that improve people's health, safety and prosperity, as well as their environment and their quality of life.'

- 1.4 We see a 'first class transport system' as one that plays an important role in helping Leicestershire to be recognised locally, regionally and nationally for:
 - its strong economy that plays to its strengths by:
 - ensuring that transport infrastructure and interchanges are linked to business growth;
 - ensuring that the transport system meets the needs of key business sectors and workers alike, in the most efficient way possible; and
 - providing for the housing needs of a growing population in ways that maintain the efficient and effective operation of our transport system for all users.
 - its attractiveness as a place to live and work because:
 - of its accessible countryside where parks, waterways and rights of way are well-used;
 - tree cover and green space is increased in the County with habitats protected and bio-diversity encouraged;
 - steps have been taken to protect places from the pollution impacts of our transport system;
 - towns, village centres, urban parks and streets are places where people can enjoy a high quality environment free from traffic;
 - there are excellent transport links that make getting about easy; and
 - there is good access to sport and recreational facilities and opportunities.
 - the successful contribution it is making to a more sustainable future for the world, because:
 - people use their cars less as there are attractive opportunities to travel on foot, by bike or by public transport for most journeys;
 - carbon emissions have been reduced as there are fewer, and less polluting, cars on the road creating less traffic congestion and pollution; and
 - the implications of climate change for our transport system have been investigated and better understood, and measures have been taken to mitigate the impacts, adapt to the changes and make the most of any opportunities they provide.
 - its engaged, informed, optimistic and confident people, who:
 - are provided with a safe environment in which to travel, whether by car, on foot, by bike or by public transport;

- feel safe travelling in their communities at any time, whether by car, on foot, by bike or by public transport; and
- have equal opportunities to live long, healthy and active lives.
- 1.5 Reflecting the wider role of transport, we have aligned our long-term vision with that mapped out for the County in its SCS. We have also sought to reflect the vision of the Leicester City LSP which is outlined in 'One Leicester'³.
- 1.6 It is important to emphasise that, given the scale and complexity of the challenges we face (see Chapters 2 and 3), achieving our vision will take time. The initial development of this strategy marked the first step on a journey towards doing this. This journey will involve others. For our strategy to be successful, it is vital we establish a sense of shared responsibility for what we are trying to achieve amongst the authority, our partners, our residents, our businesses and all users of our transport system.

PREPARING OUR LTP3

The general context

1.7 The economic and political context in which we prepared LTP3 differed significantly to that in which we developed and delivered both LTP1 and LTP2. It is apparent that the Coalition Government sees an effective transport system as vital to the country's chances of economic recovery and prosperity. However, although transport was less affected by the 2010 Comprehensive Spending Review than some other departments of state, our LTP3 was still developed at a time of considerable uncertainty and change, and there have been further changes in circumstances since then. Some of the more important matters are discussed further below. These will certainly affect the delivery of our LTP3 during its early years. However, it is much less certain what the implications will be in the medium to longer-term. This will depend on the country's economic performance and the impacts of the Coalition Government's localism agenda. These factors will be considered during future reviews of our LTP3.

Financial

- 1.8 When the Coalition Government came to power in 2010, it made significant cuts in public spending in response to the financial crisis and in the light of the scale of the national debt. These cuts affected virtually all areas of spending, including funding for new transport infrastructure and local authority budgets.
- 1.9 Since then, the Government has made more money available to fund new transport infrastructure as part of its attempts to stimulate and support economic growth. Thus, we have, perhaps, been able to move more quickly than we had initially thought to deliver schemes and measures of a scale necessary to achieve our LTP3 strategic goals. The Government's actions have also given us the confidence to begin to explore the possibility of delivering new infrastructure, such as new roads (although for reasons set out elsewhere in our strategy we will need to be selective and careful in any choices that we make about promoting new road schemes).
- 1.10 However, the funding available to us to develop and improve our transport system remains limited in comparison with the challenges that we face, and local authority budgets continue to be under very significant pressure. Also, the Coalition Government has indicated that even as the economy improves there will be an ongoing need for further cuts in public spending to address the national debt. In addition, there is uncertainty about the way in which we will receive money in future. Whilst to date our 'LTP3 money' has come to us direct from the Department for Transport, the Coalition Government is moving to an approach where money from a number of Government departments and other sources will be pooled into a single pot under the control of Local Enterprise Partnerships. The financial environment in which we are delivering our LTP3 will remain challenging for some time yet.

Delivery of economic growth

1.11 The economic climate provides an entirely different economic context for the development of LTP3. LTP2 was written against a backdrop of economic prosperity and growth with the business cycle going through an expansionary phase. However, with the recession around the end of the last decade resulting in both private and public sector employment cuts and fundamental changes to regeneration activity and the availability of resources, there continues to be widespread debate about

how economic growth will be supported and who will be responsible for making this happen.

- 1.12 Local Enterprise Partnerships (LEPs)⁹ have emerged as the key policy tool to answer these questions. In 2010, the Coalition Government announced 24 LEPs that were ready to move forward across the country, with a further six announced since, replacing the Regional Development Agencies¹⁰. LEPs are being jointly run by local authorities and the private sector and have been established with the aim of allowing local areas to have more influence over their economies, and creating jobs, whilst addressing barriers to employment. LEPs will also focus on efforts to align improvements to the built environment (i.e. housing, the public realm, workspace and transport) with business investment. It is increasingly being recognised that the need to improve an areas' infrastructure cannot be assessed without an indepth understanding of the geography of jobs and where future job creation is likely to come from. The importance of combining physical regeneration with economic interventions to create a viable economic future for areas has been recognised as a key priority that LEPs will help deliver.
- 1.13 Leicester and Leicestershire has established its own LEP¹¹. It is early days but its establishment is undoubtedly an important step in helping the local area to find the most effective way of dealing with the challenging economic situation. A major part of our efforts in LTP3 will focus on working with both private and public sector partners to ensure that physical regeneration improvements are closely aligned with the job creation and business investment needs of the economies of Leicester and Leicestershire in order to help facilitate the economic recovery and future growth. As there is a close interdependence between the local economies in Leicester and Leicestershire, the LEP will also help to further ensure that transport policy and delivery for the City and County are complementary.

Planning

1.14 Since 2010, the Coalition Government has made some significant changes to the planning system, including the abolition of the regional planning system, the streamlining of national planning guidance through the introduction of the National Planning Policy Framework⁹⁴ and the introduction of Neighbourhood Plans. These

changes have placed an even stronger emphasis on the planning system's role to deliver growth, especially in terms of new houses and jobs. However, the abolition of the Regional Spatial Strategy (RSS)⁸ and the housing provision figures that it contained has removed the only recognised, evidence-based housing data with which Local Planning Authorities can work at a strategic level (that is across Leicester and Leicestershire as a whole). Thus, although Local Planning Authorities are still required to produce an evidence-based Local Development Framework⁶ that sets out how they will meet the housing needs of their area, the changes have currently led to a great deal of uncertainty about how local authorities are to identify, and meet, the future housing needs of Leicester and Leicestershire's growing population.

Flexibility and localism

- 1.15 Although Government guidance for LTP1 and LTP2 continued to evolve from the old 'Transport Policies and Programmes' (TPP) system⁵ the guidance was still very prescriptive, with both Plans remaining as bidding documents focused predominantly on capital (money for building schemes) spend. In contrast, the guidance issued for the development of LTP3 was much less rigid. This guidance ended the role of LTPs as bidding documents and gave local authorities the flexibility to determine their own LTP3 requirements. The main requirements from the guidance were for LTP3's to be published by 1 April 2011, for strategies and implementation plans to be underpinned by robust evidence, and for authorities to engage with stakeholders and residents in the development of LTP3.
- 1.16 This increased flexibility supports the Coalition Government's localist approach. The Government has made it clear that it does not see its role as dictating to local communities, but instead it envisages a change in the relationship between authorities and their residents, with more power placed in the hands of communities. In relation to LTP3, the Government therefore expects decisions to be made locally on how best to ensure transport can meet local needs. This should be informed by evidence and the funding available. The requirement for a Local Transport Plan remains, and this is welcomed, as it offers us the opportunity to set out how, as the local transport authority, we intend to guide transport provision over the coming years.
- 1.17 This new, more localist, approach is something that transport planners and professionals are continuing to have to adapt to, balancing the need to maintain

an effective transport system for the wider community good against specific local desires. It may well mean that, in the coming years, transport services are delivered more through local people and organisations, rather than through traditionally contracted services. We will need to ensure that these changes can happen, whilst also maintaining a balance of transport provision both across the County and across sections of our society.

THE STRUCTURE AND PURPOSE OF OUR LTP3

- 1.18 Our LTP2 made significant strides in ensuring that local transport contributes to the delivery of the wider priorities of the County Council and its partners. LTP3 will build on this success. In doing so, it must help to deliver priorities that will benefit the people of Leicestershire and that will ensure that Leicestershire remains a pleasant, prosperous and safe place in which to live, work and visit. To do so will require our LTP3 to be able to take a longer-term and more strategic approach to improving local transport and be flexible enough to enable us to respond to changes in future circumstances, whilst enabling our residents and businesses to understand what we will actually be doing.
- 1.19 To achieve this, our LTP3 is structured very differently from LTP2, as set out in Figure 1.1 opposite. Our LTP2, which covered a period of five years, was a single document that included a mix of evidence, strategic challenges and operational solutions. In contrast, LTP3 consists of a number of separate, but inter-linked documents. A description of each of these documents is provided in the sections below.



Note: Further supporting documents will be developed throughout the lifetime of our strategy

Figure 1.1 The structure of the Leicestershire LTP3

LTP3 Evidence Base

- 1.20 The development of a robust LTP3 can only be facilitated through a sound evidence base that provides a clear picture of what Leicestershire used to look like, what it looks like now, and what it is likely to look like in the future. Given the importance of transport in helping to achieve wider priorities, it is vital that such an evidence base covers economic, social and environmental trends as well as issues associated with transport.
- 1.21 Our LTP3 evidence base¹² consists of a suite of documents. It contains information on wider issues affecting Leicestershire and the state of Leicestershire's transport system. In doing so, it describes what Leicestershire is like, where it is doing well and not so well, how our transport system is currently performing and the issues that we may face in the future. Finally, it identifies where we currently have gaps in our evidence and knowledge. The key findings from our evidence base are summarised in Chapters 2 and 3 which, where appropriate, have been updated to reflect key pieces of new evidence that have become available since our strategy was first published in 2011. As our evidence base provides a static snapshot of Leicestershire we will continue to ensure that it is periodically updated so that it remains fit for purpose.

LTP3 Engagement Strategy

- 1.22 In addition to developing a stand-alone evidence base, we have also worked with our stakeholders, partners and residents in developing LTP3. At the time of publishing LTP3, we engaged with existing groups of the County Council and its partners, who were already involved in making strategic decisions. These included the Multi-Area Agreement (MAA)¹³ Transport Strategy & Performance Group¹⁴, 'Leicestershire Together', and the Leicestershire Accessibility Forum. This targeted approach was supplemented by engagement with statutory consultees, Government Office for the East Midlands (GOEM)¹⁵, neighbouring authorities, individual organisations, interest and action groups, business representatives, the voluntary sector, other public service providers and members of the public.
- 1.23 Consultation exercises were undertaken on our long-term transport strategy for LTP3 during June and July 2010, and October and November 2010. We used feedback from these engagement and consultation exercises to guide and inform the

development of LTP3 and will continue to work with our partners to deliver both our long-term strategy and our Implementation Plans.

1.24 The context in which we developed LTP3, not least the financial situation, somewhat constrained how we were able to consult and engage with both partners and residents. Nevertheless, we continue to engage as the approach to delivering our strategy evolves (for example in developing proposals for the geographical areas on which we intend to focus) and the input of others will continue to be important to the future development and delivery of our LTP3.

LTP3 Long-term Transport Strategy

- 1.25 Our long-term transport strategy provides a clear framework within which we can work with our partners to ensure that transport plays its part in meeting the strategic challenges that Leicestershire faces. To assist with this, the timescale of our long-term transport strategy aligns with the timescale of the long-term vision mapped out for Leicestershire in its previous Sustainable Community Strategy². It is for this reason that our LTP3 long-term strategy runs from 2011-2026, which also aligns with the timeframe for Development Plan⁶ documents prepared by district councils.
- 1.26 The purpose of our long-term transport strategy is not to provide lists of the operational things that we will, or we think we might, be doing (e.g. delivering road improvements, new lengths of footway or cycleway and bus stop improvements). As the challenges that face us, our residents, our businesses and our partners, are numerous and complex, further investigation into the issues that we face may be required. Given this, providing lists of possible measures that may, or may not, be relevant in 5, 10 or 15 years time could raise false hope, could disappoint people (if measures weren't provided) and could result in wasted time and effort. Instead the purpose of our long-term strategy is to:
 - Explain our vision and aspirations for Leicestershire's transport system.
 - Set out our overall strategic approach to the way in which we will manage and develop Leicestershire's transport system in order to address the strategic challenges we face.

- Explain how this overall approach will be delivered, and what we will concentrate on, and why.
- 1.27 We will continue to periodically review and update our long-term strategy so that it reflects changing circumstances. It will therefore continue to evolve, rather than remain unchanged, over the 15 year plan period.

LTP3 Implementation Plan

1.28 Our Implementation Plan¹⁶ sets out the things (i.e. schemes, studies, actions, educational and promotional campaigns, research programmes) that we will be doing to deliver our strategy. Each Implementation Plan will run for a three year period and will form a 'rolling' programme. Over the lifetime of the Implementation Plan we will monitor the effectiveness of the things that we deliver. We will also monitor whether they have been implemented in a cost-effective way that provides value for money and use this knowledge to help us to develop future programmes.

LTP3 Supporting Documents

- 1.29 Our supporting documents provide more detailed information on specific areas of work that will help deliver our long-term transport strategy and our Implementation Plan. These documents have been, or are in the process of being, revised and updated. They include our Network Management Plan¹⁷, which seeks to ensure that our entire transport network is managed in the most efficient and effective manner, our Transport Asset Management Plan¹⁸ which sets out how our highway assets are managed and maintained, and our Public Rights of Way Improvement Plan¹⁹ which considers how best to manage and develop the Rights of Way network in the County.
- 1.30 Our LTP3 has been subject to a Strategic Environmental Assessment (SEA)²⁰ and Equality Impact Assessment (EqIA)²¹. These independent assessments ensure that environmental, health and equality issues are considered during the development of LTP3 and also that LTP3 does not unintentionally introduce any policies, systems or measures that could have a negative impact on issues associated with equalities, health or the environment.

THE STRUCTURE OF OUR LONG-TERM TRANSPORT STRATEGY

- 1.31 In developing our LTP3 we have sought to develop a clear understanding of the way that Leicestershire's transport system is functioning at present, the various roles that it plays in enabling economic and social activity, and how it is likely to be affected as the area recovers from recession and its population continues to grow. We have also sought to gain an understanding of how additional travel demand arising from an expanding economy and population will affect peoples' lives, the functioning of businesses and the environment. As important as it is for us to try and understand these issues, it is equally important for others to gain an understanding of them. Thus, the early parts of our strategy seek to enable the development of such an understanding by setting the context in which our long-term strategy has been developed. Our early, scene-setting chapters include:
 - Chapter 2: Where we are now: a look at Leicestershire Helps to set the scene by using data from our evidence base to summarise the wider issues and challenges that Leicestershire faces, and that we therefore need to consider when developing our long-term transport strategy.
 - Chapter 3: Where we are now: transport in Leicestershire

Helps to further set the scene by describing our transport system and using data from our LTP2 performance management regime, and other key sources of information, to look at how our transport system is currently performing. This enables us to identify our key transport challenges that will inform the development of our long-term transport strategy.

- 1.32 From an appreciation of these issues flows the key elements of our long-term transport strategy, as outlined in Chapter 4.
 - Chapter 4: Our strategic transport goals, outcomes and activities

Sets out our response to the challenges presented in Chapters 2 and 3 by presenting the long-term strategic transport goals we have set ourselves in order to realise our vision, identifying the long-term strategic outcomes we want our strategy to deliver for the people of Leicestershire, identifying the key activities we will need to undertake in order to deliver our goals and discussing the principles that will govern the approach that is taken to delivering our long-term strategy.

- 1.33 Chapters 2 to 4 provide the context for the more detailed chapters of our strategy that set out how we intend to manage and develop Leicestershire's transport system in order to support the area's economy, improve peoples' lives and reduce the environmental impact of travel. In setting out the details these chapters do not, however, talk about specific schemes, such as the delivery of new roads, or park and ride sites. Rather, based on what we know now, they seek to provide a strategic framework that will guide our future actions and investment decisions. The chapters that do this, and the activities they cover, are shown below.
 - Chapter 5: Supporting the economy and population growth.
 - Chapter 6: Encouraging active and sustainable travel.
 - Chapter 7: Improving the connectivity and accessibility of our transport system.
 - · Chapter 8: Improving road safety.
 - Chapter 9: Managing the condition and resilience of our transport system.
 - Chapter 10: Managing the impact of our transport system on quality of life.
- 1.34 It is the role of the Implementation Plan to identify and present the things that we will be doing to deliver our long-term strategy. In **Chapter 11: Turning our strategy into reality**, we describe the context in which our initial Implementation Plans have been developed and how we will continue to refine our approach for developing future Implementation Plans.
- 1.35 We recognise that we are adopting a different and unfamiliar approach to our previous LTPs. However, given the scale and complexity of the challenges that we, and our residents and businesses, face in the coming years there is a need for informed, clear strategic thinking. There is also a need for us to periodically review our long-term transport strategy during its lifetime as circumstances evolve. This too represents something of a departure from previous LTPs, but it is necessary to ensure that our strategy remains relevant and robust. Chapter 11 of our long-term strategy therefore also indicates how we will do this.
- 1.36 The structure of our long-term transport strategy is illustrated in figure 1.2. Note that, where appropriate, each of the chapters in our long-term transport strategy has been updated as part of our 2013 strategy review.



MONITORING THE IMPACTS OF OUR LTP3

- 1.37 For LTP2, we put in place performance monitoring arrangements that enabled us to understand and demonstrate the effectiveness of what we were doing and the impact this had on the delivery of our objectives.
- 1.38 Our performance framework for LTP3 builds on the successful previous arrangements in LTP2 and, again, has been updated as part of our 2013 strategy review. Chapters 5 to 10 outline the framework and performance indicators (PIs) that we will put in place for each of our key LTP3 activities. In summary, however, the general structure of our performance framework has three levels, as shown below

Level 1 – KPI (Key Performance Indicator)

1.39 These are overarching indicators that will demonstrate whether we are achieving our strategic transport outcomes. They have been aligned with the strategic outcomes in the Leicestershire SCS and other indicators set by Government at a national level.

Level 2 – PIs (Performance Indicators)

- 1.40 This is the supporting PI set that we will use to inform whether we are meeting the actions set out in our LTP3 Implementation Plans. They will also provide us with useful supporting information with which we can further assess the delivery of our Key PIs. Some will be short-term, but some will continue to roll forward from one Implementation Plan to the next.
- 1.41 Across all our performance indicators we will be seeking to ensure that our efforts in LTP3 are better focused on outcomes rather than outputs. For example, whereas in LTP2 we monitored the number of school and workplace travel plans put in place across the County, in LTP3 we want to measure what these actually deliver i.e. the actual changes in travel behaviour that result from these travel plans being in place.

Level 3 – PIs and supporting information

- 1.42 This level of our performance framework will provide us with particularly detailed evidence to inform future decision making, not just about the development of our strategy, but also about the types of things that we will do to deliver it.
- 1.43 Whilst in many cases our performance framework contains indicators that we were measuring during LTP2 (e.g. slight road casualties and bus patronage), it is neither possible, nor indeed appropriate, to put in place the complete framework from the outset of our strategy. In some cases we are looking to establish new indicators (e.g. in respect of journey time reliability and the resilience of our transport system to climate change), and in others we need to establish new baseline data and refresh targets that were originally set to 2010.
- 1.44 To ensure that we put in place a robust and realistic performance framework (one that reflects the challenging financial circumstances that we find ourselves in and one that does what we need it to do in ways that are proportionate and affordable), it is appropriate that we take the time to use the best tools available to us. Where appropriate, this will see us undertake further pieces of research as well as work to better understand the implications of national policy changes.
- 1.45 A particularly important tool to help us do this is our Leicester and Leicestershire Integrated Transport Model (LLITM), which only became fully operational early in 2011 as our LTP3 was being finalised for publication. We are using LLITM to help us to establish a number of baseline positions (i.e. the situation at present) and to analyse future situations in order to help us to establish trends and targets. In other areas, notably around the impacts of climate change, more research is necessary before we will be in a position to consider setting any meaningful performance indicators. In yet other areas, particularly around current and planned cuts in funding affecting the provision of local bus services and changes to national policies in respect of education and provision of social care, we need to understand what actual impacts such changes might have on our performance before we consider what might be appropriate targets to set.

1.46 Thus, whilst chapters 5 to 10 set out the performance indicators that we will be pursuing to monitor the delivery of our LTP3 outcomes and activities, they do not show the targets that we will be seeking to achieve. Reflecting the fact that publication of our LTP3 marks the start of a journey, rather than the end of a production process, work will continue to develop our performance framework, and to review it as necessary throughout the lifetime of our strategy.

This chapter helps to set the scene for our long-term transport strategy by:

- Providing a description of Leicestershire.
- Summarising the wider issues and challenges that the County faces, and that we therefore need to consider when developing our long-term transport strategy.



INTRODUCTION

2.1 Chapter 1 has detailed how transport is an important cross-cutting issue that has a role to play in delivering a number of the wider economic, social and environmental priorities of the County Council and its partners. With this in mind, as we look to develop LTP3, it is important that we do not just focus on those challenges that are related to the operation of our transport system. Instead, we must consider these issues in the context of the wider strategic challenges facing both Leicester and Leicestershire. The discussion in this chapter focuses mainly on Leicestershire as a county but, where appropriate, it also looks at issues in Leicester City, particularly where there are implications for the County's transport system. The information contained in this chapter has been developed from our LTP3 Evidence Base¹² and is intended to provide a factual back drop, and not a critique of performance. In conducting our strategy review in 2013, we decided not to significantly alter this chapter. It is intended to give a general overview of the area, and whilst some of the detailed figures might have changed as a result of more recent information, we believe the picture that this chapter paints is still fundamentally correct. This chapter is more likely to be comprehensively updated as part of a more fundamental review of our long-term strategy, which we currently anticipate will take place in 2016.

THE LOCATION OF LEICESTERSHIRE

2.2 The area covered by both Leicester and Leicestershire (known from now on as the 'sub-region') is located in the East Midlands, almost exactly in the middle of England. The East Midlands includes the counties of Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire, Rutland and the cities of Derby, Leicester, and Nottingham, as well as the Peak Park Authority. Leicestershire itself is bordered by seven County Councils: Derbyshire, Nottinghamshire, Lincolnshire, Rutland, Northamptonshire, Staffordshire and Warwickshire.



2.3 Leicestershire covers an area of approximately 2,000 square kilometres (around 1250 square miles), with the City of Leicester, which is a unitary authority, at the County's centre. Seven districts and boroughs surround the City of Leicester - Blaby, Charnwood, Harborough, Hinckley & Bosworth, Melton, North West Leicestershire and Oadby & Wigston. Each of these seven districts and boroughs has its own district council. Leicestershire County Council and Leicester City Council are highway authorities. The district councils are local planning authorities. A map of Leicestershire is shown in Figure 2.1.

2.4 Leicestershire has 18 distinctive areas of natural beauty, including the Wolds, Charnwood Forest, pockets of ancient woodland and High Leicestershire. Other recognisable landscapes include the Soar and Wreake Valleys, and the Leicestershire Vales. The National Forest in North West Leicestershire spans around 500 square kms (200 square miles), across three counties. It is one of the country's boldest environmental projects with more than seven million trees already having been planted.

THE POPULATION OF LEICESTERSHIRE

2.5 The sub-region is home to just under one million people (980,400). Of this population, approximately two thirds live in Leicestershire (650,500)⁹⁵, and one third live in Leicester City (329,900)⁹⁵. Leicestershire is predominantly a rural county, with 80% of the County's land being used for agriculture and approximately 55% of the County's population living within rural parishes. The County has approximately 150 settlements with a population of less than 10,000, and approximately 150 small villages with a population of less than 250. The majority of these small villages are located in the east of the County, within the districts of Melton and Harborough. There are also a number of towns in Leicestershire. These include Ashby-de-la-Zouch, Coalville, Earl Shilton, Harborough, Hinckley, Loughborough, Lutterworth, Market Harborough and Melton Mowbray. The largest town, Loughborough, has a population of over 60,000⁹⁵.



Figure 2.2 Leicestershire's population structure: 2006 and projected for 2031 Source: ONS Population Estimates, 2008

- 2.6 Over the last two decades the population of Leicester and Leicestershire has grown at a faster rate than regionally and nationally, due in part to inward migration both from within the UK (mostly through increases in the County) and from overseas (mostly through increases in Leicester City). Leicestershire's population structure is also changing. In particular, improved healthcare which is resulting in increasing life expectancy and slower birth rates, has led to an ageing of the population. The County is not unique here, but it is ageing faster than regional and national averages, a trend that is expected to continue. As shown in Figure 2.2, the number of people aged 75-79 and 80+ is projected to more than double between 2006 and 2031, whilst the number of 15-19 year olds and 20-24 year olds is projected to grow by just 10%. In Leicester City, the number of older people is growing but more in line with national trends²³. However, the percentage of 0-18 year olds in the City is higher than the national average²².
- 2.7 Leicester is one of the most culturally diverse cities in the UK. Latest estimates show that 42% of Leicester City's population is non-white British compared to 10% in Leicestershire County²².

HOUSING IN LEICESTERSHIRE

- 2.8 Housing its type, price and quality can impact on the desirability of an area as a place to live and work for different types of workers. Better quality housing (and relevant amenities) can indirectly create jobs by helping to boost the attractiveness of the area to business start-ups and private sector investment²⁴. The Economic Assessment for Leicester and Leicestershire²² reported that, overall, house prices in the sub-region are sufficiently high to contribute to economic buoyancy, and relatively affordable compared to household income and many other areas of the country.
- 2.9 In terms of housing growth, the Leicester and Leicestershire Strategic Housing Market Assessment (SHMA) carried out in 2008 identified that a total of 80,000 new houses need to be built in the sub-region between 2006 and 2026²⁵, largely as a result of a growing population and the need to meet changing housing needs resulting from an ageing population and an increasing number of households (for example, because of more people living on their own). This works out at a rate of 4,020 new houses per year and represents a significant challenge for the sub-region given that only 1,550 houses per year were delivered between 2005 and 2010²⁵. The provision

of new housing by district across the sub-region was previously set out in the East Midlands Regional Spatial Strategy (RSS)⁸ which was abolished in 2013. At the time of our 2013 strategy review, the figures from the RSS (shown in Table 2.1 below), remain the only sub-region wide figures that have been tested and accepted at Examinations in Public. They are included here to give some indication of the scale of the population and housing challenge that we face.

District	2006 Dwellings Projection	Additional Dwelling Provision to 2026	% 2006 Dwellings
Leicester	120,950	25,600	21%
Blaby	38,400	7,600	20%
Charnwood	66,750	15,800	24%
Harborough	34,950	7,000	20%
Hinckley & Bosworth	44,750	9,000	20%
Melton	21,200	3,400	16%
North West Leicestershire	39,250	10,200	26%
Oadby & Wigston	23,050	1,800	8%
Leicester & Leicestershire	389,300	80,400	21%

Table 2.1: Summary of Proposed Housing Provision 2006-2026 Source: East Midlands Regional Strategy

2.10 The RSS had a policy of urban concentration to deliver these numbers, with much of the additional housing likely to be delivered through the extension of existing urban areas including Leicester, Melton Mowbray, Loughborough, Hinckley and Coalville (referred to as Sustainable Urban Extensions⁴⁴, or SUE's). SUEs are envisaged as thriving communities providing a mix of housing, employment opportunities and community facilities, such as shops, schools and open space. Recently commissioned studies have confirmed there is sufficient land to provide the planned additional dwellings in Leicester and Leicestershire in an urban concentration approach (at least for now). Development Plans⁶ being prepared by district councils continue to broadly reflect this approach, although many districts are reviewing their housing provision in light of the Coalition Government's localism agenda and changes to the planning system. This work is ongoing in light of the abolition of the RSS and the introduction

of the National Planning Policy Framework. The work in Leicestershire will see an updated Strategic Housing Market Assessment (SHMA) undertaken. This is expected to be complete by spring 2014.

2.11 Whatever the outcome of work to update the SHMA for Leicestershire, by ensuring that new housing developments are supported by the appropriate infrastructure, are accessible and are located in the right place, transport has a key part to play in helping to meet the housing needs of the County. However, catering for the additional transport demand that is likely to emanate from population and housing growth, without having an additional impact on our transport system, on individuals and on the environment, represents one of the most significant challenges that we face in LTP3. The previous section has also highlighted the need to ensure that LTP3 provides an ever-growing focus on the needs of older people.

A challenge for LTP3: Enable transport to play its part in helping to meet the housing needs of Leicestershire, but ensure population and housing growth does not have an adverse impact on the performance and reliability of our transport system, on individuals and on the environment

A challenge for LTP3: Ensure LTP3 considers the needs of an ageing population



THE LEICESTERSHIRE ECONOMY

- 2.12 Leicestershire has a relatively diverse and successful economy. The County went through economic transition from the 1970s onwards and moved from a manufacturing based economy to one where nearly 80% of jobs are in the service sector²². In 2009, 14% of Leicestershire jobs remained in the manufacturing sector²², indicating that this is still a relatively important source of local employment, especially when set against data that shows that the England average for jobs in this sector is 9%²².
- 2.13 Leicestershire's transport, communications and logistics sector also stands out in terms of its prominence, linked to the area's central location and relatively good transport links. Service sector employment has grown in both Leicester City and Leicestershire in recent years across a broad range of sub-sectors including retail, hospitality and business services. Recent employment forecasts produced through the emda / Experian Scenario Impact Model suggest that the greatest employment growth in Leicestershire over the next ten years will be in the business services, transport, wholesale and retail sectors²².
- 2.14 As we noted earlier, the economies of the County and City are inter-linked and these cannot be considered in isolation indeed, our Local Enterprise Partnership covers both. The Economic Assessment for Leicester and Leicestershire suggests that the sub-regional economy is performing reasonably well. However, there are some concerns about growth rates, and the fact that knowledge-based sectors (defined as those industries where the use of knowledge and specialist skills plays a major part in the creation of wealth, i.e. creative and high-tech industries, such as research and development, and certain business sectors, such as business and management consultancy services) are somewhat under-represented in the local economy compared to more prosperous areas of the country. There are also significant concerns about the impact of ongoing public sector job cuts on the local economy, particularly in Leicester City.
- 2.15 Gross Value Added (GVA the principal measure of the total value of goods and services that an area produces), and particularly GVA growth, are important indicators of the overall health of a local economy. The Leicester and Leicestershire

sub-region had an estimated GVA of £19.4 billion in 2011. Between 1997 and 2009, the total GVA increased at an average nominal rate of 4.1% per year in Leicestershire County and 3.8% in Leicester City. Both of these increases are less than the rate for England $(4.7\%)^{96}$.

2.16 In 2009, the GVA per head for Leicester City was £20,404 which is lower than the figure for England (£21,349) and higher than the Leicestershire figure of £19,032⁹⁶. However, cities generally show higher GVA per head than surrounding rural areas as they provide a focus, or 'core', for economic activity to take place. Figure 2.3 shows that Leicester's 2008 GVA per head is below that seen in Nottingham and Derby. Data also shows that the difference in productivity between Leicester and Leicestershire is less marked than is the case with Nottingham City and Nottinghamshire and Derby City and Derbyshire²². This suggests that Leicestershire's county towns and the rural economy, as well as economic activity concentrated within Leicestershire's science and business parks, make a strong contribution to sub-regional productivity. It also indicates that Leicester City is performing below its potential as an economic core at the heart of the sub-region.



*Figure 2.3: GVA per head indices at current prices (UK=100) Source: Regional Accounts, Office for National Statistics*²⁶ *GVA at NUTS3 Level*

2.17 These findings are further endorsed by other key economic indicators for Leicester and Leicestershire, such as earnings. Compared to other cities, Leicester City's median workplace earnings are relatively low, suggesting a below average proportion of well-paid jobs, and a need to develop the knowledge economy. Cities are generally characterised by higher workplace earnings than the surrounding county areas as they offer a focus for high-skilled employment. This is the case in Leicester and Leicestershire, although there is only a small difference in median workplace earnings between the two areas (see Table 2.2 below). Rural and semi-rural locations are often perceived to offer a better quality of life than city living and this tends to be reflected in resident-based earning statistics. As might be expected, the median resident-based earnings statistics are significantly higher for those living in Leicestershire than those living in Leicester City. This suggests that many of those working in the higher-paid jobs in Leicester are commuting in from the surrounding County area.

Area	Median workplace earnings (Weekly gross £)	Residents workplace earnings (Weekly gross £)
Leicester City	479.10	402.40
Leicestershire County	466.90	493.50
England	512.10	512.70

Table 2.2: Median weekly earnings in Leicester and Leicestershire Source: ASHE 2012²⁷

2.18 In general, these economic indicators suggest that, for a peripheral area, Leicestershire is relatively productive and is a relatively strong economy – it contains a number of employment opportunities that will be attractive to workers within and beyond the County. Table 2.3 shows the top employment locations in the County.

District	Employment locations with over 1,600 jobs
Blaby	Fosse Park Meridian Business Park Leicestershire County Council Cambridge Road Business Units Carlton Park
Charnwood	Bishop Meadow Estate Loughborough Town Centre Loughborough University
Harborough	Magna Park Sovereign Park Industrial Estate
Hinckley & Bosworth	Dodswell Bridge & Harrowbrook Industrial Estate Peckleton Lane Business Park
North West Leicestershire	East Midlands Airport (& racing circuit) Coalville Town Centre Bardon Industrial Estate Ashby-de-la-Zouch Willow Farm Business Park

Table 2.3: Top employment locations in Leicestershire County Source: Census 2001²⁸

2.19 Travel to work data reveals that Leicester is extremely important to the County for the supply of jobs. However, the fact that there are a number of important employment opportunities throughout the County is also borne out through the complex commuting patterns across the sub-region as people travel between the City and County for work, education, and training (see Table 2.4 below), endorsing the importance of the County's transport system in supporting the economy of Leicester. These travel patterns are further explored in both Chapters 3 and 5.

District of residence	Blaby	Charnwood	Harborough	Hinckley & Bosworth	Leicester	Melton	NW Leicestershire	Oadby & Wigston	Outside HMA	Employed residents
Blaby	18.0	1.3	1.9	2.6	16.2	0.1	0.6	2.1	4.3	47.1
Charnwood	2.5	41.7	0.5	1.0	16.1	0.7	2.5	0.7	7.5	73.2
Harborough	2.6	0.6	19.5	0.8	7.0	0.2	0.3	1.5	7.3	39.8
Hinckley & Bosworth	3.2	1.1	1.6	27.4	6.8	0.1	1.4	0.4	9.4	51.4
Leicester	7.3	4.7	1.9	1.6	83.9	0.4	0.7	4.2	6.5	111.2
Melton	0.4	1.3	0.2	0.1	1.8	15.1	0.2	0.1	5.0	24.2
North West Leicestershire	1.0	3.4	0.3	1.8	2.4	0.1	24.4	0.1	8.4	41.9
Oadby & Wigston	2.4	0.7	0.9	0.4	11.0	0.1	0.2	9.1	1.9	26.7
Outside HMA	3.8	7.1	6.0	7.2	9.5	2.8	14.9	0.7		
Workforce (jobs)	41.2	61.9	32.8	42.9	154.7	19.6	45.2	18.9		

Table 2.4: Resident journey to work movements by district (thousands / day) Source: Community Profile, 2005

2.20 In terms of the employment land that is available to help facilitate economic development and growth, the Leicester and Leicestershire Housing Market Area Employment Land Study (PACEC, 2008) identified that the Housing Market Area of Leicester and Leicestershire (the HMA) requires an additional 108,000 square metres of office space, 180 hectares of light industrial land and 100 hectares of land for small warehousing to meet the future needs of businesses in the period to 2026²⁹. The PACEC Study recommended that the majority of additional employment land should be located in strategic employment sites associated with the proposed Sustainable Urban Extensions (SUEs) (see previous section on housing). This will provide an opportunity to promote sustainable development by aligning homes with jobs, reducing the need to travel and providing platforms for low-carbon development, something that will be fundamental to the success of LTP3. The PACEC Study also highlighted that there are issues of local under-supply and over-supply of employment

land across the sub-region. This is of greatest concern in the Leicester Principal Urban Area (PUA)⁹³, where a significant proportion of the additional industrial and warehousing land required to allow for the restructuring of Leicester's industrial base is unable to be met within the City's boundary, and must be found within the wider PUA.

2.21 The Economic Assessment for Leicester and Leicestershire concluded that the transport system has a key role to play in helping to facilitate local economic prosperity and growth by providing key economic sectors and employment centres with operating environments in which they can easily and efficiently access labour, suppliers and markets. The Strategic Economic Plan of the Leicester and Leicestershire Enterprise Partnership also recognises that an effective transport system has a key role to play in delivering the area's economic priorities, including ambitions to create a considerable number of additional jobs in the private sector and boost the area's economic output.

A challenge for LTP3: Review the degree to which our transport system provides key economic sectors and employment centres with operating environments in which they can easily and efficiently access labour, suppliers and markets, and ensure that we play our part in supporting the LLEP to deliver its Strategic Economic Plan.

EMPLOYMENT AND SKILLS IN LEICESTERSHIRE

2.22 Levels of employment in Leicestershire have historically been higher than the national average. However, as with elsewhere in the Country, the recent economic recession has had an impact on employment. Based on figures to the end of June 2013, the employment rate for Leicester City was 57.9%, compared to a higher rate of 76.2% in Leicestershire. This compares to employment rates of 73% in the East Midlands and 73.2% in Great Britain⁹⁷. Between 2008 and 2011 the number of people in employment in both areas has fallen – by 4.2% in Leicester and by 6.2% in Leicestershire⁹⁸. The Leicester City figures are likely to have been hit by the public sector job losses experienced during the recession.

- 2.23 In terms of occupations, there are not as many high and intermediate skilled opportunities as there are workers in the sub-region. For low-skilled occupations, there is a better balance between the number of working residents and jobs available locally. Leicester City residents are more likely to be working in elementary occupations or as process, plant and machine operatives than is the case with County residents. There are also relatively high proportions of working residents employed in health and social welfare. For occupation classification purposes, managers, directors, senior officials, those working in professional occupations and those working in professional and technical occupations are all grouped together. Only 32.4% of Leicester workers are employed in these roles, compared to 44.4% of workers in the County and 40.4% of workers in the East Midlands⁹⁹. We have seen that this is reflected in the lower wages of City residents.
- 2.24 The Economic Assessment for Leicester and Leicestershire reported that improving qualification levels is one of the most significant challenges facing the sub-region. In 2011, there were still 16.4% of the working age population in the City with no recognised qualifications (although this is a figure that has fallen from 22.8% in 2008). This is a figure that compares poorly to the County where 11.7% of the working age population have no qualifications and the England average (10.4%)⁹⁹. Despite the more encouraging picture in the County, figures are still above the England average and there are pockets of poor performance in areas of particularly high deprivation. Groups that are more likely to experience significant barriers to employment and skills development opportunities are: women; those on incapacity benefit; those not in education, employment or training (NEET); carers; lone parents; older people; those in Black or Minority Ethnic Groups; and those from new communities.
- 2.25 The Economic Assessment for Leicester and Leicestershire (2010) concluded that the transport system in Leicestershire can play a vital role in improving people's life chances by enabling them to access employment, training and skills development opportunities²².

A challenge for LTP3: Review the degree to which our transport system provides efficient and affordable access to employment, training and skills development opportunities, particularly for those with lower skills and those who are currently not in employment.

LEICESTERSHIRE AS A PLACE TO LIVE

- 2.26 Generally, people in Leicester and Leicestershire think that their communities are good or very good places to live. In the 2008 Place Survey, 85% of Leicestershire County residents, and 72% of Leicester City residents, indicated that they were 'satisfied' or 'very satisfied' with their local area³⁰. The following paragraphs look at some of the key factors that go into making somewhere a good place to live.
- 2.27 **Deprivation:** based on the 2007 Index of Multiple Deprivation, Leicestershire is the 12th LEAST deprived local authority in the country²³. Despite this Leicestershire still experiences pockets of deprivation. Deprived neighbourhoods tend to be located in the urban areas of Loughborough, Coalville, Hinckley and South Wigston. North-West Leicestershire is the most deprived district in the County.
- 2.28 **Crime levels:** Leicestershire is a relatively safe place to live total recorded crime rates are considerably lower than national and regional averages. Rates in 2008/9 were 7% under an already low 2003/2004 base²³. These figures nevertheless hide the fact that there is usually a gap between real levels of crime and what people feel about crime. In the County's 2008 Place Survey, for example, 23% of respondents were in some way dissatisfied with local crime levels²³, despite the fact that these are comparatively low. Analysis of the British Crime Survey (BCS) revealed that those significantly more likely to suffer from fearful episodes related to crime and anti-social behaviour (ASB) were: older people; those on low incomes; those living in social rented housing; those in poor health and those living in social isolation²³. Figure 2.4 shows neighbourhoods (LSOAs)⁵³ in Leicestershire based on ASB incidents reported to the Police in 2008/9. Eighteen neighbourhoods stand out as displaying a significantly high volume of ASB compared to the rest of the County. These areas account for almost a fifth of Leicestershire's ASB incidents and seem to be mainly located within town centres. Five of the 18 neighbourhoods are in Loughborough.



Map ref	CDRP	LSOA name	ASB
1	Charnwood	Loughborough Centre West	468
2	Hinckley & Bosworth Hinckley	Town Centre	454
3	Charnwood	Loughborough Bell Foundry	391
4	NWLeics	Coalville Centre	374
5	Melton	Melton Sysonby South	307
6	Blaby	Blaby North	289
7	NWLeics	Castle Donington North East & Hemmington	276
8	Oadby & Wigston	Guthlaxton College & Wigston Police Station	275
9	Melton	Melton Craven West	274
10	Charnwood	Loughborough Centre South	263
11	Blaby	Countesthorpe Centre	259
12	Blaby	Fosse Park	237
13	Charnwood	Loughborough Toothill Road	216
14	Charnwood	Thurmaston North West	208
15	Charnwood	Loughborough Ashby East	199
16	NWLeics	Measham Centre	199
17	Oadby & Wigston	Wigston Centre	196
18	Harborough	Market Harborough Coventry Road	192
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2.29 Retail and leisure: an estimated 714,000 shopping trips are made in Leicester and Leicestershire each day, the majority of which both start and end within the sub-region. Leicester represents the second-largest shopping destination in the East Midlands (behind Nottingham), accounting for 13% of all retail flows. Loughborough is the 9th largest retail centre in the East Midlands with 2.2% of shopper flow²². Over the last few years a major regeneration programme has transformed parts of Leicester City Centre with new developments including the Curve Theatre, Highcross Leicester and Phoenix Square, and it is now ranked 11th in the country as a City Centre retail venue. Fosse Park, located close to M1 J21, also represents a further major generator of retail activity within the sub-region.

- 2.30 Leicestershire has a range of major attractions. These include Bosworth Battlefield, the Great Central Railway, Bradgate Park, Beacon Hill, the National Forest, which includes Charnwood Forest, and the National Space Centre. All these attractions play a major role in developing the tourist economy in the sub-region, which is likely to be boosted by the discovery of the remains of King Richard III in Leicester in 2012. Even before that, in 2009, Leicester Shire Promotions estimated the sub-regional tourist industry to be worth £1.31 billion and that annual tourist numbers to the City and County stood at over 31.8 million. Compared to the previous year, there was modest growth in the revenue generated from tourism in 2009 (up 2%), with the level of spend by staying visitors up by 12%²². This indicates that despite the slight decline in visitor numbers compared to 2008, visitors to the sub-region stayed and contributed more to the local economy.
- 2.31 The sub-region has a strong reputation for sport, with successful local teams including Leicester City Football Club, Leicestershire County Cricket Club, Leicester Tigers in rugby union, and Leicester Riders in basketball. Motor sport also takes place on a regular basis in Leicestershire, both at Mallory Park and Donington Park and at the Leicester Speedway circuit. Leicester Racecourse is also a significant attraction and Stoney Cove, located in Blaby District, is a diving centre of national significance. The sporting attractions throughout the County are complemented by pioneering sports science, performance and research work at Loughborough University. Leicester is the largest leisure destination in the East Midlands.

Figure 2.4: High-crime in Leicestershire by LSOA based on anti-social behaviour

2.32 The presence of regionally significant retail, tourist and leisure attractions are likely to contribute to the future growth of the sub-regional economy. This will also add to pressure on the transport system, and when considering the impact of growth in LTP3 it is vital we acknowledge the significance of these economies in the sub-region.

THE HEALTH OF LEICESTERSHIRE'S PEOPLE

- 2.33 The health of the local population is now better than ever. Overall, the decline in the incidence of infectious diseases has coincided with an upsurge in the importance of the so-called 'chronic diseases' and diseases associated with 'lifestyle'. Obesity is now considered to be the number one public health challenge facing the nation with the health service beginning to see cases in children of the type of diabetes linked to obesity that was once restricted to middle age and beyond. In the UK, levels of obesity have risen fourfold over the last 25 years. In 2007/08 it was estimated that a quarter of Leicestershire's population were clinically obese²³. In 2010/11 14.8% of Year 6 pupils in Leicester and Leicestershire were overweight and classed as obese¹⁰⁰. These figures are not exceptional and compared with other authorities, levels of participation in recommended levels of physical activity amongst both children and adults are encouraging. Despite this, in Leicestershire's most recent Joint Strategic Needs Assessment³¹, obesity is cited as a substantive concern for local service providers.
- 2.34 Levels of obesity and physical activity are not experienced equally throughout society. Compared to the rest of the population, people experiencing material disadvantage, living in poor housing, with lower levels of educational attainment or with insecure employment prospects, are amongst those more likely to suffer from poor health. According to the National Health Survey for England (2001), men and women working in unskilled manual occupations are over four times as likely as those working in professional occupations to be morbidly obese, whilst levels of physical activity are usually lowest amongst older people and those with low levels of educational attainment²³. If there is therefore a link between material disadvantage and poor health, then it is usually the case that inequalities in health are expressed spatially they follow areas of disadvantage. Since Leicestershire suffers from low levels of deprivation, the County as a whole is not health deprived. There are nevertheless higher levels of health deprivation found in the north and west of the

County, particularly in two areas in Loughborough and two areas in the Greenhill area of North-West Leicestershire.

2.35 By placing greater emphasis on encouraging physically active transport choices, LTP3 can play a significant part in improving people's health. Our efforts in this area will be given added emphasis given the role that more walking and cycling will also play in tackling congestion and helping to reduce carbon emissions.

A challenge for LTP3: Consider the role that physically active transport choices can play in improving people's health

CLIMATE CHANGE IN LEICESTERSHIRE

- 2.36 Science demonstrates that there is now almost a consensus that recently observed changes in climate are partly a result of human activity²³. For some time, everyday emissions from businesses and households have altered naturally occurring levels of carbon gases, and the outcome has been an acceleration in the earth's warming. It is estimated that, if we continue the current trend, average temperatures will rise by 2-3°C within the next 50 years or so²³. According to UKCP09 scenarios³², by 2050 these impacts in Leicestershire are expected to include:
 - Temperature increases of around +2.2°C in winter and +2.5°C in summer.
 - Similar levels of rainfall overall but more of that rain in winter (+14%) and that which falls in summer (-15%) becoming more intense, meaning more summer flooding but also more periods of summer droughts.
 - Milder winters and longer growing seasons.
 - More extreme weather events.

(Since our strategy was first published in 2011 we have experienced extremes of weather (whether this is very high temperatures, strong winds, heavy rainfall, very low temperatures or heavy snowfall) that has caused significant flooding, property and infrastructure damage and disruption to travel and peoples' lives.)

- 2.37 As a result of the threat from climate change the Government has committed itself to a range of emissions reduction targets, including to reduce CO_2 emissions from all sectors from 1990 levels by 34% by 2020 and by 80% by 2050. The Government target requires Leicestershire to reduce carbon emissions by at least 3% per annum between now and 2020 and by over 1.5% per annum thereafter²². These statutory requirements need to be seen in the context of the sub-region's growing population.
- 2.38 In terms of transport, our research tells us that 33.1% of carbon emissions in Leicestershire come from road transport². The increasing profile of carbon reduction efforts place even greater emphasis on efforts to improve the operational efficiency of our transport system and encourage changes in travel behaviour away from the private car and towards the use of public transport, walking and cycling. Also key will be efforts by others to develop better, more fuel efficient engines or engines which find their energy from zero carbon sources. It is these major strands of activity that are likely to make up our efforts to develop a programme that will help reduce CO_2 emissions from road transport in Leicestershire.
- 2.39 Whilst a programme of emissions reductions will obviously need to be put in place and delivered, changes in climate appear inevitable and there will also be a need to develop a programme of ongoing adaptation to the changing climate. As we have moved through LTP2, we have sought to reflect the increased profile of climate change by building in adaptation measures and planning to our transport asset management activities. Adaptation is the process of making changes to our transport infrastructure and its maintenance regimes, so that it can tolerate the more extreme weather conditions which are expected to result from climate change. The major threat to our transport system is not the temporary (although very inconvenient) effect of closing much of the system during extreme weather conditions, but of substantial damage to key pieces of infrastructure (including roads, pavements and bridges) which are expensive and time-consuming to repair or replace, and cause prolonged disruption of the usual network as the route undergoes repairs. Studies conducted by others have highlighted that the costs of doing nothing to reduce CO₂ are likely to outweigh the costs of changing and adapting.

A challenge for LTP3: Develop a programme to try and ensure a reduction in CO_2 emissions from road transport in Leicestershire

A challenge for LTP3: Ensure our transport system is resilient and adaptable to the impacts of climate change

LEICESTERSHIRE AND ITS RESPONSE TO THE CHANGING FINANCIAL SITUATION

2.40 LTP3 is being written and reviewed against a back drop of unprecedented public spending reductions (being implemented by the Coalition Government to reduce the level of the national debt) and significant changes to the way in which Government is making funding available.

BUDGET PRESSURES

- 2.41 The state of the public finances set out in the emergency budget announced by the Chancellor on 22nd June 2010 was much worse than previously anticipated. In response to this, the County Council made in-year cuts of £13m in 2010/11. From a transportation perspective, this impacted most severely on our integrated transport schemes and road safety budgets.
- 2.42 Since 2010, there has continued to be very significant pressures on local authority budgets. At the time of our 2013 strategy review, in addition to the considerable savings already made since 2010, the County Council needs to save another £110m over the next five years (to put this in context the Council's overall budget for 2012/13 was around £346m). As a local authority, and a highway authority within that, we will continue to seek to achieve savings through delivering our services more efficiently. In a number of cases, this will include rethinking the way services are delivered. Even so, given the scale of savings required it appears that there may have to be service cuts across the authority. The County Council's Medium Term Financial Strategy (MTFS)³³, which is reviewed and rolled forward every year, sets out the

authority's budget and savings proposals in more detail. The most recent version of the MTFS is available on our website. In terms of future investments to improve our transport system the emphasis will increasingly be on seeking to attract funding from other, external sources. In continuing to develop our long-term transport strategy we will therefore need to take into account how the highways and transportation service will deliver the savings required as part of the Council's MTFS.

A challenge for LTP3: Ensure our forward plan for transport is robust, realistic and achievable in the context of the challenging economic and financial situation

FUNDING CHANGES

- 2.43 Previously, Government made money directly available to local authorities (including that used for transport) through a number of grants and funding streams. However, in recently making more money available to fund transport infrastructure, the Coalition Government's approach has been to use bidding competitions (where we have to compete with other local authorities for a share of the funding available). It seems likely that a bidding approach to the allocation and award of funding will continue. Whilst we have been successful in bidding for additional funding, doing so can be resource intensive and requires us to have clear plans of what we want to do and the benefits this will provide.
- 2.44 The other most significant change in funding arrangements is the creation of a Single Local Growth Fund for an area. It is the intention of the Government that each Local Enterprise Partnership around the country will be responsible for a Single Local Growth Fund (SLGF), which pulls into one pot monies for a number of individual funding streams this includes funding for business support initiatives, training and skills, and transport. A substantial proportion of the money that we used to receive direct from Government to deliver small scale traffic and safety schemes has been included in the SLGF. Likewise, a substantial proportion of money previously used for major transport schemes (such as Earl Shilton Bypass and the Loughborough Town Centre Transport Scheme) has been included in the SLGF.

- 2.45 A benefit of the SLGF concept is that, potentially, it could give us access to a greater level of funding going forward than we might otherwise have had. However, transport projects will be in competition for funding with a wide range of other, non-transport, proposals.
- 2.46 A challenge for LTP3: Ensure that we are well placed to secure funding from other sources to deliver improvements to our transport system

CONCLUSIONS

- 2.47 This chapter has helped identify some of the key wider issues that we must consider when developing our long-term transport strategy for Leicestershire. Of particular importance will be the need to ensure our long-term transport strategy:
 - Reflects the changing economic environment and helps people and businesses meet their travel needs and remain economically active.
 - Reflects the growing importance of climate change and its impacts.
 - Reflects the role that transport can play in improving the health of people in Leicestershire.
 - Is able to deliver the levels of growth and regeneration planned for Leicester and Leicestershire without having an adverse impact on other LTP goals.
- 2.48 Developing a long-term strategy that is able to do this will be even more challenging in a difficult and changing financial situation. These challenges need to be looked at in the context of our transport system, how it is currently performing and some of the impacts that these challenges are predicted to have. Chapter 3 goes on to do this.

Following Chapter 2, this Chapter helps to further set the scene for our long-term transport strategy by:

- Describing Leicestershire's transport system.
- Assessing how our transport system is currently performing.
- · Summarising some of the key transport issues we are likely to face in the future.

Note: To avoid complexity, unless otherwise indicated, the information contained in this chapter is drawn from our LTP3 evidence base or other data that we hold. Only information from external sources is individually referenced.



LEICESTERSHIRE'S TRANSPORT SYSTEM

- 3.1 Our transport system enables people, materials and goods to move around for economic, social and leisure purposes. It includes:
 - Roads for which either we (as the County Council) or the Government's Highways Agency (HA) are responsible.
 - Passenger transport services, including local bus services, and other forms of provision, such as, demand responsive services, community transport services and taxis.
 - Routes that are open for people to walk and cycle along (including footways, footpaths, cycle lanes and cycleways).
 - The rail network, including the Midland Main Line and other rail routes that run through, and across, Leicester and Leicestershire.
 - East Midlands Airport.
 - The waterways network.
- 3.2 The County Council does not have direct responsibility for all of the elements of our transport system. As is explained below, our ability to influence policy that is set by others can, at times, be limited.

The road network

3.3 Leicestershire's major road network is shown in Figure 3.1. Responsibility for this road network is shared between the HA (the strategic highway network), Leicester City Council and Leicestershire County Council. The strategic highway network comprises the M1, running north-south through the sub-region and to the west of Leicester; the M69 from the M1 Junction 21 (Leicester) via Hinckley to the M6 at Coventry; the A46 running from the M1 Junction 21a north-east towards Newark and the east coast; and the A42 / M42 from the (M1 Junction 23a, towards Ashby-de-la-Zouch and Birmingham in the West Midlands). Very small sections of the M6, A1 and A14 strategic routes also fall within the sub-region and the A57 runs along the boundary with Warwickshire in the south-west of the County. The A50, from Junction 24 of the M1 heading westwards to Stoke, and the M6, provide further

strategic road links with the West Midlands and the North. Whilst we work with the HA, they are ultimately responsible for the management and improvement of these routes.



Figure 3.1: Leicestershire's Major Road and Rail network

- 3.4 The major settlements in Leicester and Leicestershire are connected by a number of important A class roads, predominantly in a radial pattern linking Leicester to the county towns in Leicestershire. These are (clockwise starting from the north):
 - The A6 (north) between Leicester, Loughborough and the M1 at Kegworth (Junction 24).
 - The A607 between Leicester, Melton Mowbray and Grantham (Lincolnshire).
 - The A47 (east) between Leicester, Uppingham and the A1 west of Peterborough (and A508 between Market Harborough, the A14 (Junction 2) and Northampton (Northamptonshire)).
 - The A6 (south) between Leicester, Market Harborough and the A14 west of Kettering.
 - The A5199 between Leicester, the A14 (Junction 1) and Northampton (Northamptonshire).
 - The A426 between Leicester, Lutterworth and Rugby (Warwickshire).
 - The A47 (west) between Leicester, Hinckley and Nuneaton (Warwickshire).
 - The A50/A511 between Leicester, M1 (Junction 22), Coalville and Burton-on-Trent (Staffordshire).
- 3.5 The main road network within the Leicester urban area comprises an inner and (partial) outer ring road and radial 'spokes' representing the inner sections of the radial A roads described previously. Over recent years, bypasses have become a feature of the highway network around some of the county towns on these routes (for example Earl Shilton and Ashby-de-la-Zouch). In addition, there are a number of other A roads linking the county towns in a more radial pattern including:
 - The A6006 between the A6 north of Loughborough and Melton Mowbray.
 - The A606 between Melton Mowbray, Oakham and Stamford (Lincolnshire).
 - The A6003 between Oakham, Uppingham and Corby/Kettering (Northamptonshire).
 - The A4303/A4304 between the A5, Lutterworth M1 (Junction 20) and Market Harborough.

- The A444 between Nuneaton (Warwickshire) and Burton-on-Trent (Staffordshire).
- The A447 between Hinckley and Coalville.
- 3.6 In total, the sub-region's road network currently comprises 165km (around 100 miles) of trunk roads/motorways, 423km (over 260 miles) of principal non-trunk roads (A roads), 239km (around 150 miles) of B class roads and 3625km (over 2200 miles) of C class and unclassified roads. We are responsible for the management and maintenance of over 4000km (nearly 2500 miles) of this network.

The bus network

- 3.7 Like many counties, bus services in Leicestershire broadly operate in one of two ways. Commercial services operate without any direct subsidy, but they do receive concessionary travel reimbursement and Bus Service Operators Grant⁴⁵ (both from the Government). We have an extensive network of commercial services within Leicestershire, as well as a number of services that operate across the county boundary, mainly linking the key urban areas of the city and county towns with other cities and towns such as Nottingham and Nuneaton. Commercial services generally operate at frequencies of better than hourly throughout the day (Monday to Saturday) in corridors with high origin and destination demand. Bus operators are responsible for decisions about the running of commercial services. We have also developed a network of financially subsidised bus services in Leicestershire, where passenger numbers are too low for a commercial service to be viable. Some of these services also operate across the county boundary. These cross boundary services are jointly subsidised by us and the adjoining authority.
- 3.8 Within Leicester and Leicestershire, there are currently 75 main bus service routes offering an hourly or better daytime frequency from Monday to Saturday. Services on Monday to Saturday evenings are much reduced (only 26 services run at a frequency of hourly or better), with a similar level of coverage provided on Sundays and Bank Holidays.

- 3.9 Away from the hourly bus network, most communities are served by less frequent scheduled bus services, or the increasing number of demand responsive connecting services in the most remote rural areas, nearly all supported by Leicestershire County Council.
- 3.10 A network of inter-urban bus services provides linkages between the main settlements in the sub-region and beyond, and to / from East Midlands Airport. Service frequencies typically operate hourly or half-hourly and journey times vary considerably between settlements and services. Longer-distance coach services, such as those operated by National Express, operate to many destinations through the St. Margaret's bus station in Leicester (as a hub) and some of the county towns (such as Coalville, Market Harborough and Loughborough) on route.
- 3.11 There are three Monday to Saturday park and ride sites in the sub-region. The first site opened at Meynell's Gorse, on the A47 west just inside the City boundary in 1997. The site now operates at its 500-space capacity with bus services running into central Leicester up to six times per hour. A second site opened close to the M1 Junction 21 at Enderby in November 2009. The site has 1,000 spaces and bus services operate into central Leicester every 10 minutes. A third site was opened at Birstall to the north-west of Leicester in July 2011. This site has 1000 spaces and services operate into central Leicester every 15 minutes.

Footways and cycleways

3.12 Leicestershire, like many counties in England, has a wide network of public Rights of Way (RoW). More than 40% of the highways in the County are made up of RoW (footpaths, bridleways and byways) and we have approximately 3,000 km (1,864 miles) of public footpaths and bridleways in Leicestershire. These footpaths, cycleways, bridleways, towpaths and byways help walkers, cyclists and equestrians access the countryside and also provide local paths that link communities and give access to schools, shops, work places and other facilities.

The rail network

- 3.13 The rail network in Leicester and Leicestershire comprises four distinct elements centred around Leicester. These are:
 - The Midland Mainline, running north-south between London St. Pancras and Nottingham, Derby and Sheffield (with stations at Market Harborough, Leicester, Loughborough, East Midlands Parkway and local 'Ivanhoe line' stations at Syston, Sileby and Barrow-upon-Soar).
 - The South Leicestershire Line running east-west from Nuneaton (Warwickshire) to Leicester (with stations at Hinckley, Narborough, South Wigston and Leicester).
 - The Syston & Peterborough Line running east-west from Leicester to Peterborough (with stations at Syston, Melton Mowbray and Oakham (Rutland)).
 - The Leicester & Burton Line running north-west from Leicester to Burton-upon-Trent (Staffordshire) (freight only).
- 3.14 These lines are shown in Figure 3.2. An additional station in the County, Bottesford, lies on the Nottingham to Grantham line. Network Rail is responsible for the maintenance and improvement of the rail network in Leicestershire.


- 3.15 A range of passenger rail services operated by private companies through franchised arrangements determined nationally run across this network:
 - East Midlands Trains high-speed services from Sheffield, Derby or Nottingham to London via Leicester, of which some additionally call at Loughborough, Market Harborough (up to five trains per hour in each direction in the peak) and East Midlands Parkway.
 - Cross Country Trains services between Birmingham and Leicester, with some services calling at South Wigston, Narborough and Hinckley (peak service of two trains per hour in each direction).
 - Cross Country Trains services between Leicester and Stansted Airport, also calling at Melton Mowbray (peak service of one train per hour in each direction, comprising a continuation of the Birmingham-Leicester service).
 - East Midlands Trains services between Leicester and Lincoln via Nottingham, also calling at Syston, Sileby and Barrow-upon-Soar (one train per hour per direction).
- 3.16 Although a high volume of freight traffic is carried by road, rail freight plays an important transportation role for the aggregate industry in Leicestershire. Up to 30 freight trains per day pass through Leicester in each direction on the Midland Mainline, approximately 20 per direction on the Nuneaton-Peterborough route. These are not the highest flows in the UK, but the movements through Leicester in particular are significant. A particularly high proportion of freight paths between Leicester and the West Coast Mainline at Nuneaton are utilised (upwards of 80%). Most freight train movements in the sub-region can be categorised into:
 - Coal trains to / from Ratcliffe Power Station (via Nuneaton, Leicester, Loughborough).
 - Construction materials and aggregates from Bardon Hill, Croft, Stud Farm, Mountsorrel (predominantly Nuneaton-Leicester-Loughborough but also other lines including Leicester-Burton).
 - Metals and petroleum (north-south on the Midland Mainline and to some extent on the Cross Country Route east of Leicester).

Access by air

3.17 East Midlands Airport (EMA), which lies in the north of the County, is one of the UK's major freight airports, and whilst Government is responsible for air transport policy we have an interest in how the airport is accessed by car, bus and other transport modes. The strategic location of the Airport, in the centre of the country and adjacent to the national motorway network, has been a significant factor in the growth of both passenger and cargo flights to and from the airport. EMA has one of the largest catchment areas of any airport in the UK, with 10.6 million people living within ninety minutes drive – more than any other airport in the Midlands. In addition to serving businesses across the sub-region, EMA also has a national role in supporting a range of markets across much of England, especially in relation to the Airport's express freight hub role which provides international connectivity to businesses and employers in a wide range of economic markets and sectors. The airport also provides a point of access for international business travellers and tourists.

Waterways

3.18 The waterways network in the City and County is set to undergo a major development following the recent launch of the River Soar and Grand Union Canal Strategy. In addition, there are successful attractions and boating operations throughout the County, including Sileby Mill, Pillings Lock, Foxton Locks and Ashby Canal.

HOW OUR TRANSPORT SYSTEM IS PERFORMING

3.19 In order to develop our long-term transport strategy, it is important to understand where we are starting from, i.e. how our transport system is currently performing. The current state of our transport system is summarised below by looking at each of our LTP2 objectives in turn. Further information is available in our LTP2 Delivery Report³⁴. Note that as part of work to review our long-term strategy ahead of the production of our 2nd LTP3 Implementation Plan (2014-17) we have updated this chapter to include reference to new and important sources of evidence that have come to light since the start of LTP3. This evidence has re-enforced the challenges identified throughout this chapter.

Tackling congestion

3.20 Tackling congestion was a key focus of our LTP2, in particular in central Leicestershire and Loughborough. Our work focused on: developing park and ride; tackling congestion hotspots through road improvement schemes; improving bus performance; providing better facilities for walking and cycling; encouraging smarter choices in people's travel behaviour; and seeking to ensure that new developments did not increase congestion through land use planning, or by requiring appropriate mitigation measures.

Improving journey time

3.21 Journey times on key routes into Leicester City centre improved over the course of LTP2, as can be seen in Figure 3.3. Our original LTP2 target was to effectively manage the increase in journey time that was likely to emanate from the anticipated increase in vehicle kilometres.



Urban Congestion Target Trajectory

- 3.22 Reflecting our approach in central Leicestershire, our congestion strategy in Loughborough was aimed at effectively managing the anticipated growth in vehicle kilometres during the morning peak. We successfully did this. Our LTP2 figures show that the time lost per vehicle kilometre in Loughborough during the morning peak reduced marginally from 34 seconds per vehicle kilometre in 2003 to 33.16 seconds per vehicle kilometre. Key aspects of our congestion strategy for Loughborough that we implemented through LTP2 were work to progress completion of the Loughborough cycle network and provision of new and improved bus stops on a number of routes serving Loughborough.
- 3.23 We are confident that the congestion strategies that we put in place in LTP2 enabled improved journey times in both central Leicestershire and Loughborough. However, it is widely recognised (through national, regional and local data) that there is a clear relationship between times of economic downturn and falling car travel, as increasing unemployment reduces the number of journeys to and from work and a reduction in the availability of disposable household income limits funds to shop, or make social or leisure based trips. Our data shows that in 2008, 2009 and 2010 there was a reduction in car vehicle kilometres in Leicester and Leicestershire, a trend that goes against the overall pattern of largely regular growth of between 1% and 4% per annum between 1994 and 2006. It is therefore possible that, in reducing people's ability and desire to travel, the recession enabled us to deliver more improved journey times than we were anticipating as part of our congestion programmes in both central Leicestershire and Loughborough. The latest data we have shows that in 2011 there was a slight increase in traffic flows from 2010 levels. This mirrored statistics at a national level which showed that there was a 0.2% increase in traffic flows in 2011 following three successive years of declining flows. We need to further understand the relative relationship between times of economic change and its impact on levels of car travel verses the effectiveness of our measures, particularly given the desire to facilitate economic and population growth in both Leicester and Leicestershire.
- 3.24 Despite the progress that we made during LTP2 in improving journey times in both central Leicestershire and Loughborough, there remain congestion issues in both areas, particularly in Leicester City, and on its arterial routes and ring roads. The 6Cs Congestion Management Study²² highlighted that a number of the other county towns, including Melton Mowbray, Coalville, Hinckley and Ashby, also suffer from

Figure 3.3: Leicester Urban Congestion Target Trajectory

'appreciable congestion', especially at peak times of travel. Away from the local road network, delays on the strategic road network in Leicestershire are comparatively less severe than regionally or nationally. The worst delay hotspots on our strategic road network can be found on the A5 around Hinckley, on the M1 northbound around Loughborough and southbound south of Leicester (around Junction 21), on the A46 north-east of Leicester, and at the western end of the A14 close to the M1.

Improving bus performance and encouraging smarter choices

- 3.25 Over the last four years we have seen a reduction in bus patronage from a peak of 16.438m in 2008/09 to a low of 13.57m in 2012/13 (a figure that is back below our LTP2 2003/04 baseline of 14.918m). This is thought to be due to a levelling off of concessionary travel and a reduced number of trips as a result of the economic downturn. However, we are doing further work to look into the more local reasons for the decline in bus patronage we have seen in recent times. Reflecting our efforts to improve bus service provision and patronage (now including corridor focused improvements (such as those on the A426 Blaby to Leicester route) to provide more bus priority and improved journey times for buses), the Economic Assessment for Leicester and Leicestershire²² concluded that, with more bus priority, journey times by bus are becoming increasingly competitive with the car, especially at peak times and in urban areas across the County. The Economic Assessment did, however, flag up that the public transport interchange in Leicester City Centre was poor due to the distance between the London Road Railway Station, and the Haymarket and St. Margaret's Bus Stations, and that there is often limited access by bus to employment centres outside the Leicester Principal Urban Area (PUA), such as business parks.
- 3.26 From our own indicators, it would also appear that there is scope for improvement with local bus services. Results from recent bus punctuality surveys have been disappointing and compare poorly against the results of other upper tier and unitary authorities. Reductions in punctuality are a concern and improvements are essential given that reliable journey times are a key driver for passenger satisfaction and essential as an incentive to increase passenger numbers. Our figures show that only 51% of residents are satisfied with local bus services and even less (42%) are satisfied with public transport information. These indicators represent useful measures of the performance of our hourly bus network and demand-responsive

services, as well as our performance in communicating information to residents on public transport services, and it will be a priority going forward to improve both resident and user satisfaction with these aspects of our service.

- 3.27 Reflecting our wider congestion strategy, our cycling work in LTP2 focused on building schemes to join up the cycle network in central Leicestershire and Loughborough. Our original LTP2 target was set to increase levels of cycling at our counting points in central Leicestershire and Loughborough by 8% from 2003 to 2010, averaging out at just over 1% annual growth. However, figures to the end of 2009/10 showed that we had achieved a 16% increase in cycling at our counting points. Despite these promising figures, our research tells us that barriers to cycling still exist and include busy roads, poorly maintained surfaces, bad weather, inadequate street lighting and a belief that other road users do not show adequate consideration towards cyclists. During LTP3 we will be doing further work to install a cordon of cycling across the County and the initiatives that have a positive impact on these numbers.
- 3.28 Based on provisional figures to the end of 2010/11, we have reduced the number of children travelling to school by car as the only pupil by approximately 2000 during LTP2. We believe this is due to our strong strategy in place which includes Star Walkers⁴⁷, safer routes to school, school 20 mph zones and our publicity, safety and educational initiatives around school travel issues. Influencing the travel choices of future generations is recognised as a key ongoing priority.



3.29 Based on figures to the end of 2009/10 forty-seven percent of major employers in the County (those with more than 250 employees) have a travel plan in place. However, the latest data that we have (the 2011 census) indicates that the journey to work in Leicester and Leicestershire remains heavily dominated by the private car (as depicted in Table 3.1).

District	Biles	Due	0.000	On fast	Work from
District	Bike	Bus	Car / van	On foot	home
Blaby	2.7%	5.1%	68.8%	5.9%	10.4%
Charnwood	3.7%	4.9%	63.5%	9.9%	10.3%
Harborough	2.0%	2.0%	65.9%	8.1%	15.0%
Hinckley & Bosworth	2.2%	2.9%	68.9%	7.5%	11.2%
Melton	2.2%	2.4%	63.0%	10.9%	13.8%
NW Leicestershire	1.6%	2.2%	70.3%	7.4%	11.2%
Oadby & Wigston	3.0%	8.1%	64.0%	8.1%	8.7%
Leicestershire	2.6%	3.9%	66.5%	8.3%	11.4%

Table 3.1: Mode share on journey to work trips in Leicestershire (Census 2011)⁹⁵

3.30 There are potentially a number of reasons for this. Leicestershire is a rural County and it is difficult to cater for a number of the journeys to work by modes other than the private car. Car ownership has also increased across the County in the last 10 years. The percentage of households without access to a car in Leicestershire has fallen, whilst the percentage of multiple vehicle households has increased (particularly in rural areas of the County). In addition, according to the Office of National Statistics (2009),²⁶ fares on public transport have grown at a faster rate than motoring costs, as depicted in Figure 3.4. These factors represent a significant disincentive to travel by sustainable means, something that is borne out in how local travel to work movements have changed in the County in the last 10 years. The number (and percentage) of people walking, cycling or using a bus to get to work in Leicestershire has fallen between 2001 and 2011, whilst the number (and percentage) of people driving a car or van to work has increased. More encouragingly, the number (and percentage) of people working from home in Leicestershire has increased in the

last 10 years. Evidence indicates that, in order to try and achieve behavioural change on the journey to work, efforts may best be focused on urban areas (around Leicester City and our county towns) and areas of high deprivation. In these areas, car ownership is lower, journeys to work tend to be shorter and the provision of bus services, and walking and cycling links, tends to be greater. Evidence also indicates that to achieve significant levels of change can take significant and co-ordinated investment, not only in providing improved walking, cycling and public transport infrastructure but also in delivering measures to promote, encourage and help people to use the new infrastructure. Local Sustainable Transport Fund initiatives being implemented up and down the country are examples of the sort of co-ordinated investment that is required.



Figure 3.4: Growth in passenger transport prices and motoring costs 1987 - 2009 ONS Transport Trends 2009^{26}



LTP3 and tackling congestion

The challenge: Continue to tackle congestion and journey time issues throughout the County by improving the operational efficiency of our transport system, and through encouraging people to change their travel behaviour

- 3.31 In developing our approach to this challenge there are a number of issues that we need to consider:
 - Peak period congestion hinders the operational efficiency of our transport system particularly on Leicester's arterial routes and ring roads, on some areas of the strategic and inter-urban road networks, and in some of the county towns.
 - Fares on public transport have grown at a faster rate than motoring costs, and are likely to continue to do so.
 - There remain a number of well-cited barriers that prevent people from walking, cycling and using public transport more (i.e. reliability, cost, convenience and the perceived safety of such modes of transport).
 - The majority of trips on the journey to work are undertaken using the private car and use of more sustainable modes, such as walking, cycling and using the bus, are declining.
 - Resident and user satisfaction with public transport and local bus services remains low.
 - Bus punctuality on services in both the City and the County could be improved.

IMPROVING ACCESSIBILITY

3.32 Our LTP2 accessibility strategy focused on two areas to improve access to key facilities, including employment, education, health care and food shopping. The first dealt with general improvements to access by public transport, walking and cycling. The second dealt specifically with the needs of more vulnerable groups of people, including those in rural areas, those on low incomes and those with long-term illness or disability.

Access to key services

- 3.33 Our efforts in LTP2 were built around the maintenance of our hourly bus network policy which aimed to ensure that 95% of all people in Leicestershire, and 76% of people in rural areas, had access to an hourly, or better, daytime bus service. During LTP2 our efforts ensured that of those households without access to a car in the County, over 90% were within 30 minutes of a main centre with a range of facilities, and over 97% were within 60 minutes of a main centre. Based on DfT calculations, 80% of our working age population live within the catchment area of a location with more than 500 jobs by either public transport, demand responsive transport, walking or cycling.
- 3.34 The Economic Assessment for Leicester and Leicestershire²² commented positively on how our hourly bus network policy has enabled us to establish and maintain a consistent level of accessibility for Leicestershire residents, praising particularly the dense network of high frequency bus services in Leicester, the comprehensive county town bus services and inter-urban services linking county towns, Leicester and East Midlands Airport, and the good daytime bus access to the PUA. However, on the downside, the Economic Assessment reported that there is often limited access by bus to employment centres outside the PUA, such as business parks, and that evening and weekend bus services are less frequent than at other times which can be particularly problematic for employees working shifts.
- 3.35 The Economic Assessment and the 2006 Leicestershire Rural Transport Study praised the role that our hourly bus network policy plays in ensuring that appoximately three-quarters of rural households in Leicestershire have access to an hourly daytime bus service. The cost of achieving even a small increase in the coverage of our hourly bus network is very high, and so we use alternative scheduled bus routes, alongside community and demand-responsive transport schemes to provide flexible and good levels of access for people in the most rural areas. However, the Leicestershire Rural Transport Study concluded that access to jobs and services, particularly training and education, is a major issue for residents in rural areas. Journeys to / from education, training or employment are especially problematic from isolated hamlets and villages due either to a total lack of public transport or a very inconvenient service. Whilst it was recognised that colleges do provide designated transport for students, extensive travel times and the absence of convenient public transport services have been

identified as a primary cause of young people dropping out of further education. This can increase rural deprivation as young people can miss out on getting the skills required to find better jobs.

- 3.36 In the Leicester and Leicestershire Business Survey of 2009/10³⁵, over one in three rural businesses rated employee travel to work by public transport as a concern compared to only 16% in urban areas. In the same survey, one in five rural businesses expressed concern regarding customer access to their premises by public transport compared to only 8% in urban areas. Our own research has also revealed that geographical access to key services, such as employment, education, health care and food shopping remains an issue in rural areas to the east of the County, particularly in the districts of Melton and Harborough.
- 3.37 Maintaining our hourly bus network policy in LTP2 was challenging during the economic downturn, principally due to the increasing cost of contract buses, combined with a consolidation of the commercial network and the increasing cost of school contract services. We strived to maintain service delivery through growth bids, developer contributions and growing passenger numbers. Where commercial services were withdrawn we often had funds available to replace these with supported services as appropriate. Going forward, continuing to provide passenger transport access for those without access to a private car will, in the light of available monies, be one of the most difficult things for us to achieve. It will almost certainly involve a greater level of provision built around alternatives to conventional bus services.

Access for vulnerable groups

3.38 We have seen in Chapter 2 that Leicestershire is one of the least deprived local authorities in the country. However, there are pockets of deprivation, particularly in certain areas of Coalville and Loughborough where households suffer from low income, poor access to a car and where residents lack training and employment opportunities. The decline in local services in recent years means that residents without access to a car can find it increasingly difficult to access services. This can be a particular issue for those in rural areas where services that others in urban areas or on public transport corridors take for granted, may be difficult to get to. We have tried to ensure throughout LTP2 that our hourly bus network policy provided equality of access for all our residents.

- 3.39 In seeking to reduce the degree to which crime, fear of crime and anti-social behaviour can act as barriers to users of our transport system, particularly amongst our more vulnerable residents, we undertook work as part of our LTP2 Accessibility Strategy to improve community street lighting and bus stops. During LTP2 we implemented a number of community safety lighting schemes. Police records show that this approach had a beneficial effect with, on average, a 20% reduction in crime in the area in which they were installed. This figure was as high as 60% in some areas. We also increased the number of bus stops on our hourly network to designated LTP2 standards from 23% in 2003/04 to around 50% in 2010/11.
- 3.40 Vulnerable groups also include those with a disability and / or a long-term illness. During LTP2, we achieved a 28% increase in the number of journeys per week using complementary transport for disabled people. We also increased the percentage of the combined City and County bus fleet with low floors for level access to 94% in 2009/10 from a 2003/04 baseline of 36%.

LTP3 and improving accessibility

The challenge: Continue to attempt to provide a transport system that provides equality of access to essential services for residents of the County

- 3.41 In developing our approach to this challenge there are a number of issues that we need to consider:
 - Our ability to maintain existing levels of bus service coverage following the economic downturn.
 - The degree to which we can improve access to employment centres by sustainable transport outside the PUA.
 - The degree to which we can improve the provision of evening and weekend bus services for those working shifts.
 - The degree to which we can improve access to employment, education and training and other key services for those living in rural areas and areas of high deprivation, particularly by modes of sustainable transport away from the traditional bus service.

• The degree to which we can improve general levels of accessibility for vulnerable groups, including older people, those on low incomes, those living in social isolation and those with disabilities and long-term illnesses.

REDUCING ROAD CASUALTIES

- 3.42 Our LTP2 road safety strategy focused on tackling the causes of all types and severity of road casualties so that our roads were safer for everyone. Our efforts to achieve the national targets for 2010 focused on the delivery of local safety schemes and speed management measures, as well as continuing road safety education, training and publicity campaigns. The road safety measures and policies we delivered in LTP2 enabled us to continue to make marked improvements in road safety across Leicestershire. Our road safety strategy was of the most successful aspects of our LTP2.
- 3.43 The overall success of our road safety strategy in LTP2 is shown in Figure 3.5 below. This compares the casualty trend for Great Britain against that for Leicestershire between 2001 and 2010. The improving situation in Leicestershire is particularly evident between 2006 and 2010.



⁽indexed to 100 in 2001)

3.44 Looking at our road casualty data in more detail, our indicators in LTP2 revealed that, based on three year average figures for the period 2008-10, we achieved reductions from our LTP2 baseline (2001-04) of:



- 3.45 This success has continued into the early years of LTP3. Based on figures to the end of 2012, total reported casualties in Leicestershire have decreased by 46% since 2000. Total casualties are now 25% less than the 2005-09 average (the new base used to compare local and national performance), whilst killed and seriously injured casualties are now 29% lower than the 2005-09 average. 2012 has continued 12 years of annual casualty reduction in Leicestershire.
- 3.46 These figures have allowed us to maintain our position as having one of the lowest casualty rates of all English county and unitary authorities. Our casualty rate per 100 million vehicle kilometres places us amongst the top 25% performing authorities in England. Despite the progress we have made, and the more favourable comparisons when traffic volumes are taken into account, nearly 200 people are still killed and seriously injured on Leicestershire's roads each year, and there remain a number of significant issues for us to deal with. Reflecting the national picture, we have made fairly limited progress in reducing fatal casualties since 2000, although more

Figure 3.5: Total casualties in Great Britain and Leicestershire between 2001 and 2010 (indexed to 100 in 2001)

significant progress has been made since 2008. Indeed, 2012 saw the lowest number of road deaths (27) in Leicestershire since our records began in 1979. Additionally, drink-drive deaths and young driver casualties are falling at a slower rate than all casualties, more severe injuries are over-represented on rural roads and motorcyclists account for 20% of all killed and seriously injured casualties. 70% of our 2008-10 total casualties and 55% of our 2008-10 killed and seriously injured casualties involved car occupants. This indicates that driver behaviour on our roads remains an area for further improvement.

LTP3 and reducing road casualties

The challenge: Continue to reduce the number of people killed and injured on Leicestershire's roads

- 3.47 In meeting this challenge, our efforts will need to remember that:
 - We have made fairly limited progress in reducing fatal casualties since 2000, although progress has improved since 2008.
 - Drink-drive deaths and young driver casualties are falling at a slower rate than all casualties.
 - Motorcyclists still account for 20% of all killed and seriously injured road casualties.
 - As well as motorcyclists, pedestrian and cyclist percentage casualties are over represented compared with the percentage distance travelled by people using these modes. Motorcyclists, pedestrians and cyclists are consequently at greater risk of injury on our roads than people using other modes of transport.
 - · Driver behaviour on our roads remains an area for improvement.

IMPROVING AIR QUALITY

- 3.48 Our LTP2 Air Quality Strategy focused on those areas of the County where the Government's air quality objectives have not been met due, at least in part, to road traffic, namely in Loughborough, Lutterworth and Kegworth. Air Quality Action Plans (AQAP) were developed for these areas with actions designed to reduce the level of nitrogen dioxide (NO₂). For each AQAP, the ultimate resolution of air guality problems focused on the delivery of major schemes (an Inner Relief Road in Loughborough and bypasses for Lutterworth and Kegworth) to divert road traffic away from the settlement centres. In addition to these major schemes, each AQAP contained a number of further actions to try and improve the level of air quality in each area. These are specific to each Air Quality Management Area (AQMA)⁴⁹ but included generic actions such as the effective management of the highway network, the consideration of air quality in respect of land-use and planning applications, investments in cycle route networks, promotion of smarter travel choices such as walking and cycling, and working with Quality Bus Partnerships⁴⁸ to offer more accessible public transport. Whilst in LTP2 we have made good progress in efforts to limit the growth in traffic in Loughborough, Lutterworth and Kegworth, and in delivering some of the supporting actions in each action plan, there was little or no progress in improving levels of air quality in each of these areas. Two of the three major schemes proposed have not been progressed, in large part due to financial considerations. Since the end of LTP2, work has started on the Loughborough Town Centre improvement Scheme and we are hopeful that the completion of this scheme (including the provision of an Inner Relief Road) will help resolve the air quality problems in the town. There is no prospect of a Lutterworth Bypass being deliverable in the foreseeable future, but long-term plans for a Strategic Rail Freight Interchange at Castle Donington include a proposal for a Kegworth Bypass.
- 3.49 Three further AQMAs due to motorway traffic are in place within Leicestershire on the M1 (two in Blaby and one in Kegworth) and we continue to work closely with the Highways Agency and the relevant district councils to monitor and manage the levels of air quality in these AQMAs. Working with the district councils via the Leicestershire Air Quality Forum, we are also monitoring levels of air quality in areas where baseline measurements are below the national objective but are thought of as potential risk areas. These include two AQMAs in Narborough Road South (Blaby) and Melton

Road, Syston (Charnwood) and an AQMA in Blaby declared just prior to the start of LTP2. Oadby & Wigston Borough Council revoked their four AQMAs in 2007 so, with their agreement, we no longer continue to monitor these via the LTP. A further two AQMAs were declared in North West Leicestershire in December 2007, at High Street, Castle Donington and Bardon Road, Coalville. An additional AQMA is due to be declared jointly between North West Leicestershire and Hinckley & Bosworth for Copt Oak. Real time monitoring continues to take place at all these AQMAs. Table 3.2 shows a list of the AQMAs in Leicestershire (it does not include the AQMA for Leicester City and its arterial routes).

District	Area	Air Quality Issue	Issue at start of LTP2
Blaby	Narborough Rd South and Fosse Park	NO ₂	Yes
	M1 Enderby and Narborough	NO ₂	Yes
	M1 Thorpe Astley and Kirby Muxloe	NO ₂	Yes
	Enderby Road, Whetstone	NO ₂	No
Charnwood	Loughborough – Arterial routes	NO ₂	Yes
	Syston Main Road	NO_2	Yes
	Great Central Railway, Loughborough	SO ₂	Yes
Harborough	Lutterworth	NO ₂	Yes
North West	A6 Kegworth	NO ₂	Yes
Leicestershire	M1 – residential properties near Kegworth	NO ₂	Yes
	Castle Donington High St	NO ₂	No
	Coalville – Bardon Road	NO ₂	No
	Copt Oak	NO ₂	No

Table 3.2: Air Quality Management Areas in Leicestershire

3.50 The challenges we face in continuing to try and improve levels of air quality in LTP3 are presented as part of the section below on reducing the general impact of traffic.

REDUCING THE IMPACT OF TRAFFIC

3.51 LTP2 recognised that, even with improved vehicle technology, traffic will continue to affect the quality of life in local communities and impact on our environment. Our range of measures to reduce the impact of traffic during LTP2 included: building schemes to reduce inappropriate traffic speeds, with a particular emphasis on entry treatments and vehicle activated signs; minimising the impact of lorries on communities; efforts to minimise the impact of our highway network on landscape and biodiversity; and the possible provision of bypasses in exceptional circumstances.

Speed reduction

3.52 Vehicle speeds can be intimidating to pedestrians and cyclists, and the communities can feel divided by the severance effects. This can act as a barrier to people choosing to walk and cycle and can impact adversely on any attempts to encourage people to do so. We worked throughout LTP2 to address these concerns through measures to reduce traffic speeds by road surfacing, traffic signs and road markings, gateway treatments, vehicle activated signs and minor alterations to the road layout, in conjunction with smarter choices measures such as travel plans, routes to school schemes and public transport information and marketing. During LTP2 we achieved an average 18% reduction in 85th percentile speed across all of our speed reduction schemes (comfortably above the target we set ourselves (12%) and our LTP2 2004/05 baseline of 9.5%).

Lorry route network

3.53 Leicestershire lies at the heart of the UK's logistics golden triangle. The area at the intersections of the M1, M6 and M42 / A42 motorways is considered to be the leading location for the logistics and distribution industry. Heavy Goods Vehicles (HGV's) account for over 10% of traffic on a number of strategic links on our road network, including the A511, A512 and A444. Evidence suggests that road traffic volumes of freight could increase by more than 50% to 2020 (against 2000 traffic levels). Significant further growth in demand will continue to place constraints on the highway network that are likely to adversely affect the efficiency by which goods are transported.

- 3.54 Recognising the economic significance of road freight and the potential impact this can have on our roads, communities and residents, our lorry route network was completed in March 2006. This sought to concentrate goods vehicles on the most suitable routes available. There remain a few locations on the network where lorries are still routed through communities, with consequent nuisance for residents. Such locations have been given additional priority through our programme development process, which has included speed reduction schemes and some road alterations to reduce the noise generated by passing lorries.
- 3.55 The delivery of our lorry route network has helped address a number of noise issues in the County. Even though data on noise issues across the County is somewhat limited, even at lower levels we are aware that continuous and persistent noise can act as an environmental stressor and impinge on the quality of life of people living nearby. Our efforts to reduce noise in LTP2 also focused on using road resurfacing materials that reduce the noise of traffic whilst delivering the more conventional requirements of resurfacing material.

Biodiversity

3.56 The highway network has a role to play in ensuring that traffic and transport does not create issues which affect the appearance and character of the landscape. During LTP2 we increasingly used native seeds and plants as part of our own highway schemes, particularly in rural locations. Our developers' design guidance gives advice to developers on this and includes a listing of appropriate planting for different locations. Our maintenance, spraying and cutting of roadside verges and hedges is geared to enhancing biodiversity where possible when this does not compromise road safety. We also make specific provision for wildlife in new road schemes, for example to accommodate newts as part of the Earl Shilton Bypass.

Bypasses

3.57 LTP2 originally put forward potential bypass proposals for a number of our settlements to reduce the impact of traffic on their communities. However, the only addition to the network delivered during LTP2 was the Earl Shilton bypass, opened in March 2009. Along with partners, we studied the viability of a route around Melton

Mowbray, primarily to support the delivery of housing growth. In February 2013 the Inspector at the Examination in Public into the Melton Local Development Framework Core Strategy did not support the proposals in the plan and work will now begin again to look at growth proposals, the transport impact and potential migration for Melton Mowbray. In respect of the other settlements, in a much changed financial world with different strategic policy drivers (as discussed in Chapter 4), there is no foreseeable prospect of building bypasses simply to reduce the impact of traffic on communities; any new, publicly-funded road building must demonstrate clear benefits for the economy of Leicester and Leicestershire and its growth.

LTP3 and reducing the impact of traffic

The challenge: Continue to reduce the impact of traffic on individuals, communities and settlements

- 3.58 The key issues we will need to consider when attempting to meet this challenge include:
 - Traffic speeds remain a significant concern to communities, as well as pedestrians and cyclists on our transport network.
 - Up until 2008 traffic flows rose strongly on our roads and evidence indicates that this long-term trend could resume once the economic recovery gathers pace.
 - Road traffic freight is expected to increase significantly between now and 2020.
 - Data on transport-related noise issues throughout the County is limited.
 - Efforts must continue to protect natural assets, biodiversity and landscape in Leicestershire.
 - Transport must continue to play its part in helping to deliver well-designed development that provides a sense of identity and improves people's quality of life.
 - The existing 13 Air Quality Management Areas in Leicestershire.
 - The AQMAs at Lutterworth and Kegworth where successful efforts to contain the level of traffic growth have not had the anticipated beneficial impact on levels of air quality.

TRANSPORT ASSET MANAGEMENT

- 3.59 Well maintained transport assets are important not just for minimising longterm costs but also because they contribute significantly to the delivery of other transport objectives. For example, cycle tracks with bumps and ruts become rapidly unusable, footways with trip hazards will deter people from walking, and poor road surfaces have a magnified effect for bus passengers and can make travelling by bus an unpleasant experience. Such defects can undermine the effectiveness of the alternatives to car travel. Similarly, emergency repairs to poorly maintained roads or structures, or poor planning of routine repairs, can contribute significantly to worsening traffic congestion. Effective maintenance also contributes significantly to wider quality of life objectives. In particular, the good appearance of well maintained infrastructure can be a real asset in the appearance of our towns and villages as well as in the rural landscape. During LTP2 our first Transport Asset Management Plan (TAMP)¹⁸ sought to address all of these issues by managing our transport assets in a way that produces optimum cost-effectiveness against defined standards through the long-term, as well as recognising shorter-term priorities for routine maintenance.
- 3.60 The condition of roads in Leicestershire continues to be amongst the best in the country. Based on the latest data we have, our road condition surveys indicate that only 2% of our principal road network, 6% of our non-principal road network and 10% of our unclassified road network requires structural maintenance. This has been achieved through a combination of programmed and reactive maintenance. However, this area of asset management, although high achieving, has also been relatively high cost and during LTP3 we will need to consider if we can continue to maintain the current condition of our roads with lower levels of expenditure. The condition of our footway network is as strong. Based on figures to the end of 2012/13, only 2% of our Category 1, 1a & 2 footways (the busiest), have significant defects.
- 3.61 During LTP2 we made good progress in improving the condition of our bridges and maintained the percentage of traffic signal installations requiring renewal at less than 4%. However, whilst we achieved a reduction in the percentage of street lighting columns requiring replacement from the start of LTP2, we did not achieve our LTP2 target. At the start of LTP3 we put strategies in place to secure funding for this remaining work and are now making good progress with this programme.

LTP3 and managing our transport assets

A challenge for LTP3: Maintain our transport assets to a condition that meets the needs of users but which is also affordable.

3.62 We will need to consider the following issues when seeking to meet this challenge:

- Our ability to maintain existing levels of expenditure, and therefore the current condition of our transport assets, is likely to be hit by public sector spending cuts.
- Up until 2008 traffic flows rose strongly on our roads and evidence indicates that this long-term trend could resume when the economic recovery gathers pace.
- Road traffic freight is expected to increase significantly between now and 2020.

LTP3 AND FUTURE TRANSPORT TRENDS

- 3.63 As well as taking account of how our transport system is currently performing, it is important that LTP3 looks ahead to some of the transport challenges we are likely to face in the future. Chapter 2 identifies that one of the key challenges we face will be trying to ensure that population and housing growth does not have an adverse impact on the performance and reliability of our transport system. The modelling work that we have undertaken indicates that this is going to be very difficult. The latest data that we have (from our Transport Model) shows that, as a result of population and housing growth, vehicle kilometres on our road network are predicted to increase by approximately a third over the next 15-20 years, and delays by 50%. The number of highway trips and the hours people will spend in their car is predicted to increase, with average speed on the county's roads predicted to go down (as a consequence of increasing delays). Increases in congestion (delay) are predicted to be greater than increases in travel distance (vehicle kilometres) indicating that we have a highway network at, or near, capacity.
- 3.64 There is predicted to be a significant increase in car owning households (with noncar owning households predicted to fall). Car running costs are expected to decrease, whilst bus fares are predicted to increase. All of this results in a predicted increase in reliance on the car as the predominant model of travel, something that ensures maintaining mode shares for more sustainable modes of travel (i.e. walking, cycling and public transport) is going to be difficult. As we have seen in paragraphs 3.30 – 3.31 of this chapter, these predictions pointing towards more car ownership and use are borne out by the transport and journey to work data that is emerging from the 2011 Census.
- 3.65 Should conditions on our transport system deteriorate as predicted, this could have significantly damaging impacts for the economy of Leicester and Leicestershire, in addition to social and environmental impacts. It is important to stress, however, that this is not a future that we want to see materialise. Notwithstanding the challenges presented by our latest evidence, investment in measures to encourage people to travel by different modes of transport remains an important part of our strategy. Early results from the investments we have made in sustainable transport measures in

Loughborough and Coalville are promising. However, this alone will not be sufficient to address the transport challenges posed by population growth. In the light of new evidence and more money becoming available to fund new transport infrastructure to support the area's population and economic growth (albeit on a bidding basis, or from sources other than our own – see Chapter 2) we are increasingly looking at delivering further targeted investment to make improvements to our transport system. This is particularly focused on addressing congestion and journey reliability problems at key pinch points on the road network and providing new transport infrastructure where this will help to unlock growth and encourage use of more sustainable travel modes.

CONCLUSIONS

3.66 Our performance monitoring indicates that we made good progress across the majority of our objectives and targets during LTP2. Our strategy for LTP2 ensured that our transport system was generally in a good state of repair, was safe, and continued to perform well. However, as documented throughout this chapter, an assessment of our progress during LTP2, and a look at wider trends on, and predicted forecasts for, our transport network, reveal that there remain significant challenges ahead as we move into LTP3. Should these challenges become reality, they will affect the lives of our residents and the productivity of our businesses. It is important to stress that these are not trends and challenges that we aspire to – we do not want to see the levels of vehicle growth and delays on our transport system that our modelling work is predicting. However, we cannot ignore them and these challenges, along with those identified in Chapter 2, help inform the basis of our long-term transport strategy. The key elements of this are presented in Chapter 4.

Chapters 2 and 3 have assessed the issues and challenges that we need to consider when developing our LTP3. This chapter now sets out our response to these challenges. It presents:

- The long-term strategic transport goals we have set ourselves to realise our vision.
- The long-term strategic outcomes we want our strategy to deliver for the people of Leicestershire.
- The broad areas of activity around which our LTP3 efforts will be grouped.
- The strategic principles we have put in place to govern the overall approach that we take to delivering our strategy.



INTRODUCTION

- 4.1 In reviewing both the wider economic, social, environmental and financial issues facing Leicestershire, and the state of our transport system, Chapters 2 and 3 highlight a number of strategic challenges that our long-term transport strategy must seek to address. Chapter 2 highlights that the wider issues and challenges facing Leicestershire are both numerous and complex. Perhaps of most significance to LTP3 is the challenge of firstly helping to facilitate increased economic activity and then seeking to help plan for, and deliver, future levels of growth and regeneration in such a way as to minimise the impact on our transport system, on individuals and on the environment.
- 4.2 Chapter 3 indicates that we made good progress across the majority of our objectives and targets during LTP2 and that our transport system is generally in a good state of repair, is safe and is performing well. However, it also highlights that there remain areas for improvement, particularly around tackling congestion, improving accessibility and road safety, and reducing the impact of traffic and our transport system on individuals, communities and the environment. This is reinforced in Chapter 3 which looks in more detail at some of the predicted highway impacts of growth.
- 4.3 The dilemma that we face in developing LTP3 is a tricky one. There are genuine reasons for increasing local transport capacity in a fair and equal way, not least to aid the economic recovery, underpin future prosperity and improve social inclusion. But, at the same time we must work to change local travel behaviours and use in order to reduce emissions from the local transport sector. In addition, we must obviously continue to deliver on a number of our more traditional responsibilities, such as road safety and asset management. This dilemma has to be faced at a time of considerable financial uncertainty. Our own budgets remain under pressure and significant changes are taking place to the way in which Government funding will be made available in the future (see Chapter 2 for further details).

- 4.4 It is our responsibility to give some certainty to transport planning and policy through our LTP3. In responding to this situation, we have sought to develop a strategic framework that will allow us to do this. Our framework consists of:
 - Our strategic transport goals.
 - The strategic outcomes we would like our goals to deliver for the people of Leicestershire.
 - The key activities around which our efforts in LTP3 will be grouped.

OUR STRATEGIC TRANSPORT GOALS

- 4.5 Our strategic transport goals are shown below. They have been designed to: allow us to embrace and respond to the strategic challenges that we have identified in our evidence base; deliver our long-term vision for transport in Leicestershire; contribute to the delivery of the key wider priorities identified by Leicestershire Together; and support the delivery of the aspirations contained in the Strategic Economic Plan of the Local Enterprise Partnership for Leicester and Leicestershire¹¹.
 - **Goal 1:** A transport system that supports a prosperous economy and provides successfully for population growth.
 - **Goal 2:** An efficient, resilient and sustainable transport system that is well managed and maintained.
 - **Goal 3:** A transport system that helps to reduce the carbon footprint of Leicestershire.
 - **Goal 4:** An accessible and integrated transport system that helps promote equality of opportunity for all our residents.
 - **Goal 5:** A transport system that improves the safety, health and security of our residents.
 - **Goal 6:** A transport system that helps to improve the quality of life for our residents and makes Leicestershire a more attractive place to live, work and visit.

OUR STRATEGIC OUTCOMES

- 4.6 It is our intention that the delivery of our strategic transport goals will result in improved outcomes for the people of Leicestershire. The outcomes that we would like our LTP3 goals to deliver are shown below:
 - Our transport system provides more consistent, predictable and reliable journey times for the movement of people and goods.
 - Our transport system and its assets are effectively managed and well maintained.
 - Our transport system is resilient to the impacts of climate change.
 - The negative impact of our transport system on the environment and individuals is reduced.
 - More people walk, cycle and use public transport as part of their daily journeys, including to access key services.
 - Effective and integrated public and community transport provision, including targeted and innovative travel solutions which meet the essential needs of Leicestershire residents.
 - The number of road casualties is reduced.
 - There is improved satisfaction with the transport system amongst both users and residents.
 - The natural environment can be accessed easily and efficiently, particularly by bike or on foot.

OUR LTP3 ACTIVITIES

4.7 The outcomes that we are seeking to achieve need to be viewed in the context of the pressures that we are likely to face going forward, in particular the level of funding that we will have available and the anticipated level of growth that is forecast for Leicester and Leicestershire. It is important, therefore, that we seek to focus our efforts and resources as effectively and efficiently as is possible. In order to provide

a framework for this, we have chosen to group our efforts around six broad areas of activity. These are shown below.

- To support the economy and population growth (Chapter 5).
- To encourage active and sustainable travel (Chapter 6).
- To improve the connectivity and accessibility of our transport system (Chapter 7).
- To improve road safety (Chapter 8).
- To manage the condition and resilience of our transport system (Chapter 9).
- To manage the impact of our transport system on quality of life (Chapter 10).
- 4.8 The delivery of each of our LTP3 activities is discussed in the remaining chapters of this long-term strategy (as shown above). Each chapter sets out the strategic approach we will take to the delivery of our key activities. The exception to this is Chapter 10. In many respects, seeking to address issues surrounding the impacts of travel and transport on peoples' quality of life and our environment is something that will be delivered by the range of activities that we will be pursuing in LTP3. For example, if we can reduce traffic levels by reducing the need to travel and encouraging more active and sustainable travel, then there will be less pollution, less congestion and fewer delays to travel, and if people have better opportunities to walk and cycle they should become fitter and potentially less prone to a range of serious illnesses. We still consider, however, that it is important to identify 'quality of life' as a separate area of activity. This ensures that it is afforded appropriate weight and consideration when we develop proposals to implement our long-term strategy, and also provides us with a clear focus for addressing issues such as reducing noise and improving access to green space.
- 4.9 Based on our understanding of our LTP3 evidence base and the challenges that arise from it, we believe that these activities provide us with a robust, logical and clearly understandable framework around which to focus our efforts and resources during LTP3.

OUR STRATEGIC FRAMEWORK

- 4.10 Table 4.1 shows the key elements of our strategic framework. It shows how the challenges we have identified in Chapters 2 and 3 have helped inform the development of the strategic transport goals, outcomes and activities that we will be pursuing in LTP3. The table also shows how our goals and outcomes relate to the wider priorities set out in the Leicestershire Together Outcome Framework. The outcomes that we have identified will, in some cases, be as a result of efforts that stem from the delivery of a number of our transport goals; hence, several of our outcomes appear in a number of places in Table 4.1.
- 4.11 As demonstrated in Table 4.1, there are overlaps between our six broad areas of activity. For example, there are close linkages between our efforts to promote improved accessibility to services by foot, bike and public transport and our efforts to reduce CO_2 . In other words, if more people walk, cycle and travel by bus to access key services, instead of using their cars, this will help to reduce the impact that transport has on levels of pollution in the County. Similarly, our efforts to improve road safety for all road users should help to improve the attractiveness of walking and cycling as modes of transport.



DRIVERS FOR OUR LTP3 GOALS		Our strategic		Our LTP3 activities	Wider Leicestershire		
Wider challenges (Chapter 2)	Transport challenges (Chapter 3)	transport goals	Our strategic transport outcomes	(Chapter ref)	priorities		
Review the degree to which our transport system provides key economic sectors and	Continue to tackle congestion and journey time issues throughout the County by improving the	Goal 1 A transport system that supports a prosperous	journey times for the movement of	Supporting the economy and population growth (Chapter 5)	Developing our economy (by delivering economic ambitions of the LLEP):		
employment sectors with operating environments in which they can easily and efficiently access labour supplies and	operational efficiency of our transport system	economy and provides successfully for population growth			Lever in £2.5bn of private sector investment to the area		
markets Enable transport to play its part in helping to meet the	narkets Enable transport to play its part in helping to meet the				Further development of the logistics and transport sector in the area		
housing and employment needs of Leicestershire, but ensure population, housing and economic growth does not have an adverse impact on							Generate an additional 45,000 private sector jobs over and above existing forecasts
the performance and reliability of our transport system, on individuals and on the environment					Increasing the area's GVA from £19bn to £24bn		
Ensure our transport system is	Maintain our transport assets to a	Goal 2 An efficient, resilient and sustainable transport system that is well managed and maintained	Our transport system and its assets	condition and resilience of our	Developing our economy		
	condition that meets the needs of users but which is also affordable		are effectively managed and well maintained		Protecting our environment		
			Our transport system is resilient to the impacts of climate change		environment		
Develop a programme to try and ensure a reduction in CO2 emissions from road transport in Leicestershire	Continue to tackle congestion and journey time issues throughout the County by encouraging people to change their travel behaviour	Goal 3 A transport system that helps to reduce the carbon footprint of Leicestershire	The negative impact of our transport system on the environment and	Encouraging active and sustainable travel (Chapter 6)	Protecting our environment		
			individuals is reduced		Individuals and families		
			More people walk, cycle and use public transport as part of their daily journeys, including to access key services				

Table continued

DRIVERS FOR Wider challenges (Chapter 2)	OUR LTP3 GOALS Transport challenges (Chapter 3)	Our strategic transport goals	Our strategic transport outcomes	Our LTP3 activities (Chapter ref)	Wider Leicestershire priorities	
Review the degree to which our transport system provides efficient and affordable access	Goal 4	More people walk, cycle and use	Improving the	Developing our economy		
	system that provides equality of access to services for residents of	An accessible and integrated transport	integrated transport system that helps promote equality of opportunity for our residents Effective and integrated public and community transport provision, including targeted and innovative	connectivity and accessibility of our transport system (Chapter 7) Encouraging active and sustainable	Individuals and families	
to employment, training and skills development opportunities,	the County	system that helps			Improving our	
particularly for those with lower		opportunity for our			communities	
skills and those not currently in employment		residents				
Ensure LTP3 considers the					travel solutions that meet the essential transport needs of Leicestershire	travel (Chapter 6)
needs of an ageing population			residents			
Consider the role that physically active transport choices can play	Continue to reduce the number of people killed and seriously injured	Goal 5 A transport system that improves the safety,	The number of road casualties is reduced	Improving road safety (Chapter 8)	Individuals and families	
in improving people's health	on Leicestershire's roads		roves the safety,	Encouraging active	Improving our communities	
	health and security of our residents	public transport as part of their daily journeys, including to access key services	and sustainable travel (Chapter 6)	communities		
	Continue to reduce the impact of	Goal 6	The negative impact of our transport	Managing the	Improving our communities	
	traffic and transport on individuals, communities and settlements	A transport system that helps to improve the	system on the environment and individuals is reduced	impact of our transport system		
re Le	quality of life for our residents and makes		on quality of life (Chapter 10)	Protecting our environment		
					Individuals and families	
·		work and visit	The natural environment can be accessed easily and efficiently, particularly by bike or on foot			

Table 4.1: The strategic framework for the Leicestershire LTP3

OUR STRATEGIC APPROACH

- 4.12 As a set of activities there is little difference between those that we have identified for LTP3 and our previous LTP2 objectives. As with LTP2, LTP3 will try and improve the performance of our road network, reduce road casualties, encourage more people to walk, cycle and use public transport, and reduce the impact of traffic and transport on the environment. However, there are a number of strategic drivers that ensure we have to change our approach to how we will deliver and achieve these things. We will also need to consider how ambitious we can be in terms of the targets we set ourselves.
- 4.13 LTP2 put in place an approach that focused on delivering ambitious performance targets and excellent services across a wide range of activities. This approach included, amongst other things, significant capital investment to build things and expand the capacity of our transport system (for example by providing new Park & Ride sites, roads and bypasses). Given the level of funding available, LTP2 was also able to improve the condition of our transport system and assets from an already high base and deliver reactive maintenance and safety policies to tackle problems identified by members of the public. Further, we were able to spread our spending across the County and delivered a number of small, individual schemes that reacted to local requests.
- 4.14 There are a number of reasons why it will be difficult to continue to pursue such an approach. The first, and of most pressing importance (therefore affecting our short-term strategic approach in LTP3), is the current economic climate and its impact on public sector funding. The Coalition Government has made it clear that an effective transport system is vital to the country's economic recovery. Nationally, more money is now being invested in transport infrastructure than we had perhaps anticipated when our strategy was first published in 2011. However, this is largely being made available via bidding processes or third parties as significant changes are made to the funding system (see Chapter 2 for further information). Obtaining money from these sources is not guaranteed. Also, the financial situation in terms of carrying out major improvements to local roads or to build new roads remains very challenging. For

example, at £16m the money we have from Government to fund major road schemes in Leicester and Leicestershire in the period 2015 to 2019 is limited in comparison to the scale of challenges that we face, and the improvements we are likely to need to make.

- 4.15 However, despite this, during the early years of LTP3 we have been able to deliver a number of capital-based initiatives. Some significant investments have been made to improve walking, cycling and public transport infrastructure in order to provide people with more opportunities to travel sustainably and provide improved access to jobs and education. We have also been able to make operational and capacity improvements at congestion pinch points on key routes that have allowed us to pursue our efforts to get the most out of our highway network. This has been largely on the back of Coalition Government efforts to stimulate the economy through providing opportunities to bid for funds to invest in local infrastructure. Whilst these opportunities (and the funding they have enabled us to realise) have been welcomed, the challenging economic climate continues to affect public sector spending and our ability to deliver the services and scale of infrastructure investment required in the face of the transportation challenges posed by population growth.
- 4.16 The financial situation has increased the emphasis on making the best use of the transport system that we have by improving its performance and reliability. Whilst schemes to enable people to travel by modes other than the private car will assist with this, we also continue with work to help users make more informed choices about when and how to travel. Evidence from our own consultation and research demonstrates that there is a growing need for us to provide better information to our residents and business about when and how they can travel. We will therefore be placing greater emphasis on travel choices and information to help make better use of our transport system. This will require different skills and a redistribution of resources from what we were doing in LTP2, set against the context of councils reducing in scale and the Coalition Government's localism agenda.
- 4.17 However, whilst seeking to encourage more sustainable travel remains an important element of our strategy, our latest evidence (see Chapters 2 & 3) highlights that this alone will not be sufficient to address the challenges presented by population growth.

Thus, going forward we will be increasingly looking to make targeted investments in improving our transport system, particularly to seek to address congestion and journey time reliability issues at key pinch points on our road network and, where possible, to provide new infrastructure. It is important to note, however:

- That we will increasingly need to seek money from other sources to deliver any improvements (including through any future bidding opportunities and the Single Local Growth Fund being controlled by the Leicester and Leicestershire Enterprise Partnership).
- That funding will still remain limited in comparison to the predicted scale of future travel demand.
- That this does not mark a return to our LTP2 approach any improvements must clearly be linked to supporting and delivering economic growth (including the delivery of new housing).
- 4.18 Circumstances also ensure that the emphasis on delivering measures and interventions that maximise benefits and value for money is more important than ever across the spectrum of local government activities. In the past, our transport programmes have included a significant element of reactive work, with schemes introduced to meet various local requests. For fairness and transparency, priority ranking systems were used that required significant effort in gathering and analysing data to inform decisions. These projects were scattered about the County and did not always make a useful contribution to strategic objectives. It is no longer tenable to have such request-based programmes and they will not form part of our LTP3. Maximising the value from our investment means targeted and co-ordinated, policy-led programmes that are clearly linked to our strategic goals, outcomes and activities.
- 4.19 Furthermore, even in an improved financial situation, national and local priorities to cut carbon emissions and improve health, mean that we cannot keep ever expanding and increasing road space to cater for the needs of the private motor car. In terms of carbon emissions, our initial modelling work has shown that, even allowing for assumptions about improving vehicle technology, by 2026 the amount of CO₂ produced by transport in the County could increase by more than 5% from levels in 2006³⁹. It will be important for us to continue to develop our understanding of this complex, but fundamentally important, area. With regard to health issues, our

evidence base highlights that adult obesity levels in Leicester and Leicestershire are above regional and national averages, and the cost of providing health care attributable to inactivity in Leicester and Leicestershire is around £20m annually.

4.20 These key reasons have led us to develop a set of principles that will govern the approach that we take to delivering our goals and activities in LTP3. These principles are discussed below and have been designed to help facilitate the economic recovery in Leicestershire, and also ensure that growth can still be delivered, and in such a way so as to protect the local transport system and look after the needs of both the wider community and the environment.

OUR STRATEGIC PRINCIPLES

1. We will focus on making the best use of our existing transport system by seeking to improve its operational efficiency

We recognise that our transport system serves many purposes and must continue to do so. It is not just about the movement of people, but also goods and materials, and, by enabling people to have access to jobs and services as well as opportunities to fulfil other social needs, it also plays an important role in the shaping of places and the building of communities. We are therefore supportive of the need for people and goods to move around for economic and social reasons, and will continue to seek to provide an effective and efficient transport system to be used by all modes, including travel by the private car. However, our transport system has a 'finite' practical capacity, taking into account costs, the social acceptability of major projects and environmental consequences. This means that:

- In the short-term, any infrastructure improvements we make are likely to be focused on delivering sustainable economic growth, through a combination of improvements to our walking, cycling and public transport network, and on tackling congestion hotspots on key routes.
- We will try to limit additional future demand on our transport system by seeking to reduce the need to travel and placing a greater emphasis on travel choices and information to encourage the use of more sustainable modes of travel, especially at times of peak demand and in urban areas.

- We will, where appropriate, consider the need to change the balance of provision on our transport system, i.e. the balance of space available for cars, freight, buses, cycling and walking.
- We will only consider the building of a new road(s) where it provides clear overall benefits in respect of delivering our strategic goals, particularly those focused on helping to support the growth of Leicester and Leicestershire's economy, and where there is an affordable (deliverable) solution. We will not consider new roads simply to add capacity or to address environmental issues. In any event, any new roads are only likely to be deliverable in the medium to longer term (i.e. towards the end of our strategy).
- We may eventually need to consider, and implement, more direct demand management interventions to ensure that our transport system can continue to function efficiently, safely and with the least possible negative impact on people and the environment.

2. We will use an evidence-based approach to focus investment in areas where we can achieve the maximum benefit and best value for money

The current financial situation means it is absolutely imperative that we make the best and most efficient use of the funds we have available to manage, maintain and improve our transport system. This means that:

- We will ensure we use relevant and high quality data and information to inform our decision-making and prioritisation processes.
- We will undertake rigorous, continuous and cost-effective monitoring of our interventions and measures to assess their impacts and effectiveness in order to provide a clear understanding of whether they are achieving their intended aim and are providing value for money.
- We will ensure that resource allocation decisions are based on our strategic transport framework to ensure that resources are focused on delivering planned programmes of work (informed by both public feedback and evidence), rather than lists of requested measures.

• We will, where possible, focus interventions on delivering co-ordinated measures in specific geographical areas to support wider economic, environmental and social priorities, rather than seeking to spread resources thinly across the County.

3. We will work closely with others to address the challenges that we face

Chapters 2 and 3 have highlighted how the challenges that we face are broadranging and complex. They confirm what we already know – we cannot meet these challenges on our own. We therefore want to create a sense of shared responsibility for what we are trying to both deliver and achieve in LTP3. This chimes well with current Government thinking that centres on placing powers more in the hands of communities. This may well mean that services in LTP3 are delivered more through local people and organisations rather than through traditionally contracted services. In some cases, the causes of our challenges, and the range of possible solutions that may be available to tackle them, are not properly understood. Our evidence also indicates that, in some cases, people do not relate to these challenges and the role that they can play in resolving them. We must therefore ensure that discussions about potential options and solutions, and how these might be delivered, are both widespread and properly informed. This means that:

- We must continue to develop our own knowledge and understanding of the challenges that we face and ensure that we are equipped with the necessary capabilities to do so.
- We will seek to develop the understanding people have of the issues and challenges we face by continuing to explain and promote our long-term transport strategy, so that they are better placed to help deliver services and make informed choices and comments.
- We will continue to involve and consult residents and stakeholders on our proposals and interventions. In doing so, we will explain clearly: why we are consulting them; what we want from them; and any constraints on our ability to respond to the views that are expressed.
- We will ensure people have access to targeted information that will enable them to make informed transport choices that are right for them.

- To encourage shared ownership and accountability, we will ensure people have access to information regarding our performance and the delivery of our LTP3 goals, outcomes and activities.
- We will seek to ensure that transport continues to influence national, regional and local policies in order to provide overall economic, social and environmental benefits for Leicester and Leicestershire.

However, we recognise that, at times, it will be necessary to deliver interventions and measures that provide essential overall benefits for communities as a whole but that have some unavoidable adverse local impacts on particular residents and stakeholders. We will always seek to reduce such impacts wherever it is reasonable and affordable to do so.

CONCLUSIONS

4.21 This chapter has identified the goals, outcomes and activities that we will deliver in LTP3. Based on the position that we find ourselves in, and the strategic challenges that we face, we have also developed a set of principles to guide the approach that we will take to delivering LTP3. No longer constrained by rigid guidance and Government-imposed scoring and ranking systems, our LTP3 represents a break from the thinking that constrained LTP1 and LTP2. In challenging financial circumstances, the way that we deal with managing the transport system will evolve to one where the key theme is to make the best use of the transport system that we have, only seeking to make improvements where it is affordable, where we can secure funding (which will increasingly have to come from sources other than our own) and where it is clearly the best choice in the context of the strategic goals and outcomes that we are trying to achieve, particularly those associated with supporting the economic growth of Leicester and Leicestershire.

- 4.22 Given the scale and complexity of the challenges that we face, we must also place a greater emphasis on working with public transport providers to secure the best, most affordable services, and working with businesses and our residents to manage the demand and stresses placed on our transport system. Over the longer-term, more coercive means of managing demand may have to be employed if we are to enable economic stability and growth and ensure that Leicestershire remains a good place to live, work and visit.
- 4.23 It is likely that our approach, and the principles that govern this, may change over the course of LTP3, depending upon the circumstances that we find ourselves in. Therefore, we will review our approach on a regular basis as part of the performance management and monitoring arrangements we put in place to deliver our LTP3 Strategy.
- 4.24 Chapters 5 to 10 now go on to detail the strategic approach that we will put in place to deliver each of the broad areas of activity that form our LTP3.

This chapter:

- Describes the importance of transport in supporting economic growth (including in helping to deliver the Strategic Economic Plan of the Leicester and Leicestershire Enterprise Partnership).
- Looks in detail at the sub-region's economy and its key transport links.
- Identifies the issues on which our approach to supporting the economy and population growth will focus.
- Sets out our approach to supporting the economy and population growth.

Note: This chapter is concerned with population growth. We talk about the impact of demographic and population change in Chapter 7 which details how we will be improving the connectivity and accessibility of our transport system



INTRODUCTION

- 5.1 The quality of local transport is critical to the success or otherwise of local economies in a number of different ways. Transport connectivity enables people and businesses to access services, employment centres and key markets²⁴. In areas of high demand, delays associated with congestion can affect quality of life and have costs for both businesses and employees, eroding some of the benefits associated with the concentration of economic activity. It has been estimated that congestion costs about £10bn per year to urban areas' economies²⁴.
- 5.2 Good connectivity to both internal and external markets is also often an important factor in business location decisions. Indeed, improvements in transport often rank high amongst the business community. The Eddington Transport Study⁴³ found that there are productivity benefits from improved connectivity. A 10 per cent reduction in travel times was forecast to increase productivity between 0.4 and 1.1 per cent⁴³. Further, accessibility (including the cost of transport) is one of the many barriers often faced by those out of work. Investing in transport infrastructure can play an important economic role by linking deprived areas to employment centres.
- 5.3 In addition, the quality of local transport can affect how residents feel about a place. Together with low crime, health services and clean streets, the quality of transport and lack of congestion is amongst those attributes that make a place enjoyable to live in. In short, transport is intrinsically linked to economic development and spatial planning policy and it is therefore vital for the future growth and prosperity of Leicester and Leicestershire that our LTP3 plays an important part in helping to deliver such policies.
- 5.4 In conducting our strategy review in 2013 we decided not to significantly revise this chapter. Whilst some of the facts and figures might have changed as a result of more recent information, we believe the picture that this chapter paints is still fundamentally correct and, for now, remains a sound basis on which to take forward our strategy. We also believe that our strategy already aligns well with the Strategic Economic Plan recently published by the Leicester and Leicestershire Enterprise Partnership. (This Chapter is likely to be comprehensively updated as part of a more fundamental strategy review which we currently anticipate will take place in 2016.)

5.5 Reference also continues to be made to the East Midlands Regional Spatial Strategy (RSS). Whilst this was abolished in 2013, at the time of reviewing our strategy the housing figures that it contained for Leicester and Leicestershire remain the only evidence-based ones to have been tested and accepted at Examinations in Public. In the absence of an updated Strategic Housing Market Assessment for the Leicester and Leicestershire area (this won't be completed until the spring of 2014), the housing figures contained in the East Midlands RSS are included in this chapter to provide an indication of the scale of the challenge that we face in seeking to provide for population growth.

THE ECONOMY OF LEICESTER AND LEICESTERSHIRE

- 5.6 We have seen in Chapter 2 that Leicestershire is a relatively diverse and successful economy. Whilst nearly 80% of jobs are in the service sector, the manufacturing sector still remains significant by national standards²². Leicestershire's transport, communications and logistics sector also stands out in terms of its prominence. Over the next 10 years, the greatest employment growth in Leicestershire is forecast to be in the business services, transport, wholesale and retail sectors²².
- 5.7 The Economic Assessment for Leicester and Leicestershire reported that the sub-region's economy was in reasonably good shape. Between 1997 and 2009, the total Gross Value Added (GVA) in Leicester and Leicestershire increased at an average nominal rate of 4.1% per year in Leicestershire County and 3.8% in Leicester City⁹⁶. As might be expected, GVA growth between 2007 and 2008 was at a lower level locally, reflecting the national picture.
- 5.8 In 2009, the GVA per head for Leicester City was £20,404 which is lower than the figure for England (£21,349) and higher than the Leicestershire figure of £19,104⁹⁶. However, cities generally show higher GVA per head than surrounding rural areas as they provide a focus or, core, for economic activity to take place. Leicester's GVA per head is below that seen in Nottingham and Derby. Regional data also shows that the difference in productivity between Leicester and Leicestershire is less marked than is the case with Nottingham City and Nottinghamshire and Derby City and Derbyshire²². This suggests that Leicestershire's county towns and the rural economy, as well as economic activity concentrated within the County's science and business

parks, make a strong contribution to sub-regional productivity. It also indicates that Leicester City is performing below its potential as an economic core at the heart of the sub-region. Given its location the County's transport system will impact on people's ability to access jobs in the City and the investment decisions made by both existing and new businesses.

- 5.9 Whilst the sub-region is performing reasonably well and is not overly dependent on any one economic sector, it has still been affected by the global financial situation and will continue to be affected in the future by proposals for reducing the national debt. Based on figures to the end of June 2013, the employment rate for Leicester City was 57.9%, compared to a higher rate of 76.2% in Leicestershire. This compares to employment rates of 73% in the East Midlands and 73.2% in Great Britain⁹⁷. Between 2008 and 2011 the number of people in employment has fallen by 4.2% in Leicester and 6.2% in Leicestershire⁹⁸.
- 5.10 There remain a number of additional challenges associated with the local economy. These include: growth rates; the fact that much of the recent start-up growth has been in vulnerable sectors; the fact that knowledge-based sectors (defined as those industries where the use of intangible resources such as knowledge and specialist skills plays a predominant part in the creation of wealth) are somewhat under-represented in the local economy compared to more prosperous areas of the country; the impact that public sector job cuts will have on the local economy, particularly in Leicester City; and the availability of funding to finance regeneration activity. The Economic Assessment also warns that low consumer confidence is affecting the service and retail sectors²².



OUR EFFORTS IN LTP2

- 5.11 In LTP2, our efforts to support the economy were focused mainly on tackling congestion in urban areas and at peak times as part of efforts to improve the reliability of our transport system for people, materials and goods. We did this in a number of ways. We built major schemes, such as Enderby Park and Ride to improve access to Leicester City centre, developed our proposals for the Loughborough Town Centre Improvement Scheme to improve the town's retail competitiveness and support its regeneration, and delivered improvements to two junctions on the Melton Inner Relief Road.
- 5.12 We improved the attractiveness of travel modes that provide an alternative to the private car by developing and supporting bus services to provide access to jobs, delivering bus corridor improvements into Leicester (including on the A47 and the B5366), developing the cycle network into and around Leicester and Loughborough and developing and promoting measures to encourage people to travel by modes other than the car, such as school and workplace travel plans and the Leicestershare.com car-sharing website.
- 5.13 In 2006, we also completed the County's core lorry route network, thus helping to better provide for the effective movement of road freight in a way that minimises the impact of lorries on our residents. Finally, we made significant efforts to co-ordinate land-use planning and transport, including work to inform the production of Local Development Plan⁶ documents prepared by district councils.
- 5.14 At a headline level, combined with our efforts to deliver other parts of our LTP2 strategy, this has helped to:
 - Improve vehicle journey times in central Leicestershire and Loughborough (the two areas on which our efforts to tackle congestion in LTP2 were focused).
 - Increase the number or people travelling by bus over the lifetime of LTP2.
 - Maintain bus network coverage, such that 80% of working age people in Leicestershire have an opportunity to access employment by public transport, walking and cycling.
 - Exceed our targets for increasing the numbers of people cycling at monitored sites in central Leicestershire and Loughborough.

IDENTIFYING KEY ECONOMIC SECTORS AND AREAS FOR GROWTH

5.15 The relative importance of different transport links depends on the needs of different sectors of the economy and their current importance to the wider economy of Leicester and Leicestershire, and the needs of different geographical areas in supporting population growth. This section explores the key economic characteristics of, as well as the forecasted levels of housing growth for, the different economic sub-areas of Leicester and Leicestershire (again, housing figures continue to be based on those included in the East Midlands RSS). It also briefly discusses the role that different elements of our transport system play in meeting local economic and housing needs.

Leicester Principal Urban Area (PUA)

- 5.16 This is an area that forms Leicestershire's urban core. It covers Leicester City, the borough of Oadby & Wigston and adjoining settlements in Blaby, Charnwood and Harborough.
- 5.17 The PUA is a complex urban economy including manufacturing, the public sector (a very high proportion of jobs), business services (although lower than the national average), retail and the leisure economy. The City is a major draw in terms of jobs, shopping and leisure, and there are deep and complex trading patterns within the urban area. Leicester is the East Midlands' second-largest retail destination (Highcross is a major draw) and its largest leisure destination (attractions include the National Space Centre and Curve Theatre)²². It is also home to the University of Leicester and De Montfort University, which have between them a total of about 25,500 full-time and 10,700 part-time students.
- 5.18 The PUA relies on good public transport within the urban area, together with road links into surrounding rural areas, for both its labour market and for providing connectivity to retail and leisure facilities in the City. Congestion in the urban area increases the time taken to travel to work (although there is no particular evidence that this constrains the operation of the labour market) and increases business costs.

- 5.19 The level of importance of strategic connectivity depends on the sector of the economy. The public sector is not particularly reliant on strategic connectivity: it caters for a local client base, whether the NHS or local government. However, business services in the PUA require and benefit from good rail access to London. However, the shortcomings in rail access from Leicester to Nottingham (journey time) and Birmingham (journey time, frequency and punctuality) are a potential issue, and possibly more important than rail access to London, but there is no evidence available on this issue. The PUA currently has a relatively underdeveloped business services sector, and it will be necessary to better understand the factors that need to be in place to nurture the development of this sector, including connectivity. The manufacturing and logistics sectors in Leicester benefit from good access to the strategic road network, including both the M1 and the M69.
- 5.20 The East Midlands Regional Spatial Strategy (RSS) proposed 25,600 new dwellings in Leicester City to 2026 (a 21% increase over 2006 levels)⁸. It proposed the development of Sustainable Urban Extensions (SUEs)*⁴⁴ to help meet the City's housing needs and those of adjoining areas. The local planning authorities and developers are working on proposals for SUE sites at Ashton Green and Lubbesthorpe (see below), both of which now have planning permission. Charnwood Borough Council has also put forward proposals for the delivery of growth in areas of its district that adjoin Leicester City.

SUE	Location	Details
Ashton Green	Leicester	3000 dwellings + 5 hectares (ha) of employment land
Lubbesthorpe	Blaby	4250 dwellings + 20 ha of employment land

* SUEs are envisaged as thriving communities providing a mix of housing, employment opportunities and community facilities, such as shops, schools and open space.

5.21 The RSS proposed 1800 new dwellings (an 8% increase over 2006 levels) in Oadby and Wigston and a further 3100 dwellings elsewhere in Blaby⁸.

Charnwood

- 5.22 Charnwood is a mixed economy. Loughborough plays a key role as the second largest centre in the sub-region and is an important shopping, leisure and education centre (Loughborough University has approximately 17,500 students). There is a particular economic focus on public sector and manufacturing employment, particularly optical and electrical equipment and chemicals. Whilst the south of the Borough looks towards Leicester, much of the Borough is focused on Loughborough as the main centre of economic activity. Bus services play an important role in catering for access to jobs, shops and services in the town.
- 5.23 The Borough benefits from direct access to the strategic road network, both the M1 and the A46, which meets the needs of the manufacturing and logistics sectors. Congestion on the local road network, however, reduces business efficiency, especially in Loughborough, although central area congestion will hopefully be offset by the Loughborough Town Centre Improvement Scheme that is currently being delivered (see paragraph 5.9 above). Loughborough benefits from frequent rail links to the north and south, providing good business-to-business connections in Leicester and Nottingham, although it is not apparent if these are a transport priority for businesses in the area. There are good rail freight links meeting the needs of the area's quarrying industry and the Borough has good access to East Midlands Airport.
- 5.24 The RSS proposed that a further 15,800 new dwellings be built in the district between 2006 and 2026, a 24% increase over 2006 levels. Proposals put forward by the Borough Council include an SUE at Loughborough, in addition to an SUE and a 'direction for growth' in areas of the district adjoining Leicester City.

Melton

- 5.25 Melton is a largely rural economy with Melton Mowbray playing a key role as a local hub for employment, shopping and services. Agriculture plays an important role in the rural area, whilst banking, finance and insurance, and manufacturing are significant sectors in the district. There is a particular focus in the area on the Food and Drink industry. Connectivity needs are largely focused on getting around the area to jobs, shops and services in the Borough. Manufacturing businesses, however, are dependent on the movement of products, including food products, and access to the strategic road network is important.
- 5.26 The area has access to strategic road networks (via the A607 to the A46 at Leicester, and the A1 to the east). Cross-country rail services provide rail connections to Leicester and Birmingham, as well as Peterborough and Stansted Airport. However, services run half-hourly at best and can suffer from severe overcrowding.
- 5.27 The RSS proposed that 3,400 new dwellings would be built in Melton between 2006 and 2026, a 16% increase from 2006 levels⁸. This included an SUE at Melton Mowbray.

Harborough

- 5.28 Harborough has a diverse economy, including agriculture, (reflecting the rural nature of much of the District). There is a strong emphasis on the wholesale and retail sector, and transport and communications, reflecting the position of the District in the East Midlands logistics golden triangle. Magna Park near Lutterworth is one of the largest logistics parks in Europe. A particular advantage is its location, being near the intersection of the M1, M6 and A14, although it has no rail connection.
- 5.29 Market Harborough, the main town of the District, has a particular strength in being located just north of the A14 strategic corridor to the East Coast and, indeed, the southern part of the District has strong links with Kettering and Corby. Market Harborough also benefits from fast and frequent trains to both Leicester and London, and is becoming increasingly attractive to London commuters, particularly due

to the house price differential between London and the District. The rural nature of the District, however, means that many people are reliant on access to Market Harborough and Lutterworth as key centres for shopping and services, whilst many people in the rural areas commute to Leicester. The use of the bus network, unsurprisingly, is relatively low, with a high level of reliance on the car.

5.30 The RSS proposed that 7,000 new dwellings be built in Harborough between 2006 and 2026, a 20% increase over 2006 levels³. The Harborough Core Strategy indicates that most of this will be located at Market Harborough.

Hinckley & Bosworth

- 5.31 Hinckley & Bosworth has a particularly strong presence, and a historic legacy, of manufacturing, particularly machinery and the transport sector. The main town in the Borough is Hinckley, which has a particular concentration of manufacturing. Three of the largest five employers in the Borough are in the manufacturing sector. The Motor Industry Research Association (MIRA) is expanding its facility to the west of the town. This should create opportunities for graduates from Leicester and Leicestershire universities. Tourist attractions include Bosworth Battle Field.
- 5.32 Hinckley is close to Nuneaton, and the area has a strong functional relationship with North Warwickshire and Coventry. The area is otherwise largely rural, with rural communities having a strong dependence on Hinckley, Nuneaton and Leicester for access to jobs and services. Car use in the area is high, and the bus network is limited to key corridors and Hinckley itself.
- 5.33 Hinckley, and the neighbouring towns of Barwell and Earl Shilton, benefit from good access to the strategic road network, with generally easy access to the M69 and M1 motorways, which is important to both the logistics and manufacturing sectors in the town. However, the A5 can become heavily congested in this area, leading to problems accessing the M69 at Junction 1. Rail services are relatively poor, and are unlikely to play an important role in meeting the needs of either commuters or business travellers.

5.34 The RSS proposed 9,000 new dwellings in Hinckley & Bosworth between 2006 and 2026, a 20% increase over 2006 levels⁸. This includes an SUE of 4500 houses and 25ha of employment land in the Hinckley area. To improve regeneration opportunities, the local planning authority has chosen to split this between Earl Shilton (2500 dwellings and 15ha of employment land) and Barwell (2000 dwellings and 10ha of employment land). The Barwell site has been granted planning permission.

North West Leicestershire

- 5.35 North West Leicestershire has a strong orientation towards manufacturing (focused on minerals) and transport and logistics, which is strongly influenced by the presence of East Midlands Airport (EMA). The role of the visitor economy is also important, with a strong influence from the National Forest and EMA. Towns in the area include Castle Donington, Ashby and Coalville, and the economic footprint of the area extends into South Derbyshire and towards Loughborough.
- 5.36 Travel to work is dominated by the car, with very low use of public transport in the area. The recent development of Skylink bus services to EMA from Nottingham, Derby and Leicester has, however, improved public transport connectivity to the airport, and is helping to address the needs of both employees and passengers. This is further complemented by the recent opening of East Midlands Parkway Station on the Midland Mainline. The area benefits from very good access to the strategic road network this is one of the primary reasons for the success of EMA as a nationally important freight hub. The A42 / M42 provides a route to the south-west, whilst the M1 provides connectivity to other core markets within the UK (although the latter is significantly congested at peak times around Leicester). The A50 provides the primary east-west corridor between the East Midlands and the North West, and is heavily used by goods traffic.
- 5.37 EMA does not have any rail freight links, connections are exclusively by road, but this has not impacted on the competitiveness of the airport. The Parkway station provides good passenger rail links to most of the region, although this is likely to focus on catering for business connectivity needs for a wider area, rather than North West Leicestershire itself.

5.38 The RSS proposed that 10,200 new dwellings be built in North West Leicestershire between 2006 and 2026, a 26% increase over 2006 levels⁸. This includes an SUE at Coalville.

WHAT ARE WE SEEKING TO ACHIEVE IN LTP3?

5.39 Assisting the economic recovery in, and the future prosperity of, Leicester and Leicestershire is of great importance to us and our partners, as is seeking to deal with the impacts of an increasing population. Our efforts to support economic and population growth will help us to deliver the strategic transport goal and outcomes that are shown below.

Strategic transport goal	Strategic transport outcomes
A transport system that supports a	More consistent, predictable and
prosperous economy and provides	reliable journey times for the
successfully for population growth	movement of people and goods

- 5.40 Supporting economic and population growth will also play a part in delivering other LTP3 outcomes. For example:
 - A road network that provides more consistent, predictable and reliable journey times will benefit bus services. More reliable services will help to attract more people to travel by bus, helping to reduce CO₂ emissions across the County.
 - Focusing our efforts on encouraging more people to walk and cycle as a way to address congestion issues will help to improve the health of our residents.
 - Bus services that provide access to employment (and other facilities like schools, health services and shops) should help to promote equality of opportunity.
 - Efforts to improve journey time reliability should help to improve satisfaction with our transport system.

WHAT DOES OUR LTP3 APPROACH NEED TO FOCUS ON?

- 5.41 The Economic Assessment reports that transport has a key role to play in enabling economic activity and growth in the sub-region, in particular by:
 - Tackling existing congestion issues throughout the County.
 - Catering for the additional transport demand that is likely to emanate from population and housing growth, without having an additional impact on the transport system, on individuals and on the environment.
 - Providing key economic sectors and employment centres with operating environments in which they can easily and efficiently access labour, suppliers and markets.
 - Enabling people to access employment, training and skills development opportunities.
- 5.42 For our long-term strategy to successfully aid economic recovery and future prosperity it must be focused on seeking to fulfil these enabling roles. This section looks in more detail at each of these four areas. Whilst we have an extensive evidence base¹² to help us to establish our focus, it is only a snapshot in time. Over the lifetime of our strategy, it will be important for us to continue to review our evidence base to ensure that our approach remains robust and credible.

Tackling existing congestion issues

- 5.43 It has been estimated that 1.05% of GVA is lost to congestion in the Leicester PUA each year²². The Economic Assessment concluded that if the present situation is left unchecked, congestion will continue to damage the sub-region's economy and its ability to attract new businesses.
- 5.44 Our ongoing efforts to tackle existing congestion issues on our road network are therefore absolutely vital to the economic health of both Leicester and Leicestershire. Existing problems on the strategic road network in Leicester and Leicestershire include:

- Peak period congestion on the M1, in particular at Junction 21, which affects inter-urban travel and connectivity to Leicester and its southern suburbs.
- Congestion, road safety and a lack of 'free-flow' linkages at the M1 Junction 19, affecting connectivity to the East Coast ports and the West Midlands.
- Congestion, road safety and lack of 'free-flow' movements at the intersection of the M1, A42 and A50 (M1 Junctions 23a, 24 and 24a), affecting connectivity to East Midlands Airport, Nottingham and the North and North-West.
- Congestion along the A5 corridor near Hinckley, including problems associated with lorries striking the Leicester-to-Nuneaton railway bridge (which has sub-standard clearance).
- Poor road links to the A1 northbound.
- Other locations where peak period congestion affects inter-urban connectivity, especially on the A6 between Leicester and Loughborough.
- 5.45 At a more local level, there is currently marked peak period congestion on Leicester's arterial routes and ring roads, and in some of the county towns. The Economic Assessment concluded that severe peak period traffic congestion on Leicester's arterial roads and ring roads currently hinders commuting (including by bus) and business efficiency and deliveries. It highlights how, in the future, this may hinder the delivery of new growth and the attraction of new businesses. The 6Cs Congestion Management Study in 2007 revealed that, of the 15 sections of road with journey time delays of over 3 minutes per mile across the surveyed area (including the 3 cities of Leicester, Nottingham and Derby, plus a number of the county towns in Leicestershire), eight were in and around Leicester and its adjoining settlements²². The study also highlighted that a number of Leicestershire's towns suffer significant congestion, the worst being Loughborough with delays of 122 seconds per mile (comparable to Leicester)²².

5.46 A strong message from the business community is that the *reliability* of journey time, both for road and public transport trips, is often more of an issue than seeking to reduce journey time. Both employees and businesses want certainty over how long journeys will take. For businesses, the late arrival of employees or materials can cause delays in production, or service contracts, meaning that they must therefore plan for considerably longer journey times. In doing so, this can impose additional costs through higher fares or fuel costs, and costs associated with measures to build slack capacity into the system, such as additional vehicles and drivers or holding additional stock. Of course, regular congestion problems do affect journey times, but so do other factors such as disruption caused by on-street parking, the impacts of planned or emergency road closures, and the impacts of traffic from new developments. Thus, our LTP3 approach needs to be more diverse than that of LTP2, reflecting the importance of journey time reliability and the range of factors that affect it.

Minimising the transportation impacts of population growth

- 5.47 We have seen in Chapter 2 that the most recent Leicester and Leicestershire Strategic Housing Market Assessment (SHMA)²⁵ identified that a total of 80,000 new houses need to be built in the sub-region between 2006 and 2026²⁵, to accommodate changing housing needs resulting from an ageing population and an increasing number of households. We have seen that the provision of these housing numbers is spread across the districts, but that the East Midlands Regional Spatial Strategy had a policy of urban concentration to deliver these numbers, with much of the additional housing likely to be delivered through the extension of existing urban areas including Leicester, Melton Mowbray, Loughborough, Hinckley and Coalville (referred to as Sustainable Urban Extensions, or SUE's).
- 5.48 Notwithstanding the sustainability credentials of the proposed SUEs, the pressures placed on our transport system by population growth will affect its ability to cope with increasing demand for business and social travel (by all modes) in a number of ways:

- Strong journey to work movements between Leicester and the districts surrounding it (over 70,000 people travel into the City each day compared to nearly 28,000 travelling out)²², combined with high within-city movements already create significant congestion problems on the main corridors into Leicester. Future housing growth will only exacerbate this problem further unless accompanied by the provision of good public transport alternatives.
- Whilst the impact of relatively small housing developments can be small, the cumulative impact of a large number of small developments on the core networks into Leicester, the county towns and through rural villages is likely to be much more significant.
- Where housing growth in rural towns is supplemented by growth in business activity, additional travel demand will place additional congestion pressures on key routes through settlements such as Lutterworth, Melton Mowbray, Loughborough and Coalville.
- The location of some housing may create additional demand for travel crossing or circulating Leicester rather than to it and hence public transport operators will need to respond by providing arterial routes linking homes to more peripheral work locations.
- Additional public transport capacity may be required on key Leicester radial routes to minimise the impact of increased patronage on journey ambiance and quality.
- In order for businesses to maintain access to high quality and skilled labour, connectivity between areas of housing growth and education and training facilities will be critical.
- Improvements to highway, public transport, cycling and walking networks need to be in place to ensure residents have access to services and employment when they move in.
- Additional traffic derived from housing growth will continue to put pressure on the strategic road network.

- 5.49 In recent years, more sophisticated modelling tools have enabled us to gain a better understanding of the possible impacts of population growth. Based on assumptions about travel behaviour, the outcomes of modelling work we have undertaken to date give a preliminary indication of the scale of the impact that we could face. In comparison to conditions in 2006, by 2026 the number of kilometres travelled by vehicles on the County's road network could increase by over a third, and delays across the County's road network (i.e. the total amount of time spent sitting stationary in traffic) could increase by over 50%³⁹.
- 5.50 The Leicestershire Housing Market Area Growth Infrastructure Assessment⁴¹ identified that, based on current travel habits and patterns, nearly £1.5bn of transportation infrastructure is required to support housing growth in the area⁴¹. Whilst the Coalition Government is making more money available to fund new transport infrastructure (albeit on a bidding basis or via third parties, such as the Leicester and Leicestershire Enterprise Partnership), our ability to fund this new infrastructure continues to be impacted by the recession with local authority budgets continuing to be squeezed. A more risk-averse banking sector (affecting the availability of funding for private developers), lower liquidity and a squeeze in public sector spending means that there has been fewer resources available to improve infrastructure. The amount of funding available to us remains limited in comparison with the scale of the challenges that we face. Further, whilst development activity has increased since 2011, it is unlikely to have any significant impact on private sector funding levels in the shorter-term. Therefore, one of the biggest questions facing the Leicester and Leicestershire Local Enterprise Partnership¹¹ lies in understanding how to prioritise regeneration spending. It must also be noted that, even in a dramatically improved financial situation, there is a question mark over whether the provision of the scale of infrastructure required to match predicted demand would ever be socially and environmentally acceptable.
- 5.51 Key to the long-term success of LTP3 will be the strategic approach that is taken to attempt to manage supply and demand on our transport system. Given the likely infrastructure funding issues described above, and potential environmental and social impacts, a key part of our LTP3 approach must focus on attempting to limit the need for large scale new schemes to support population growth, by seeking to reduce the need to travel in the first place and by actively promoting and encouraging

travel by sustainable modes where it is necessary. But, based on our latest evidence, this alone may not be sufficient to enable growth (population and economic) and to maintain the efficient and effective operation of our transport system. Thus, we will also increasingly be looking to make the most of our transport system by seeking to tackle congestion and journey time reliability problems at key pinch points on our area's road network and to look at options for new transport infrastructure where this will help unlock growth opportunities. We will increasingly need to seek funding from other sources in order to achieve these things. However, transport modelling work indicates that even if we have some success in tackling congestion hotspots and changing travel behaviour, our medium-to-long-term approach must reflect that we are likely to have to do more in the future to manage demand on our transport system.

Supporting key economic sectors

5.52 The strong presence of the manufacturing, transport and logistics sectors in the County, and the likelihood that the business, professional, financial and knowledge-based service sectors will continue to grow, ensure that it is these sectors on which we must focus our attempts to provide businesses in Leicestershire with attractive operating environments in which they can access labour, suppliers and markets as easily and efficiently as possible.

Manufacturing, transport and logistics

5.53 The presence of manufacturing, transport and logistics businesses in Leicestershire means that there is a dependence on the movement of freight. In particular, businesses are looking for efficient strategic road networks that provide easy access to national and international markets. As noted earlier, Leicester and Leicestershire benefits from excellent access to the strategic road network, and the area has a strong competitive advantage in terms of movement of freight by road which should be retained. The position of the area at the heart of the country, between the East Coast Ports and markets in the north of the UK, means that the area has been strongly placed to develop as the UK's logistics hub. Furthermore, East Midlands Airport, at the intersections of the M1, A42 / M42 and A50, has developed a national role for the movement of air freight, second only to Heathrow.

- 5.54 We have seen that there are challenges with the management of traffic on the strategic road network: up until the onset of the economic downturn, traffic flows have risen strongly over the last 15 years and congestion and incidents are impacting on the transport costs, and hence competitiveness, of logistics and manufacturing firms in Leicestershire. Evidence indicates that traffic flows are starting to rise again in the County following the recession. If left unchecked, the Economic Assessment warns that problems on the strategic road network will damage the competitive advantage of the Leicester and Leicestershire economy. Key issues affecting the current and future movement of freight by road across the County include:
 - Whilst improvements have been made to increase capacity on the rail network to carry freight (such as the gauge improvements on the line between Felixstowe and Nuneaton), there remains a dependency on the road network to transport goods to and through Leicester and Leicestershire.
 - The negative impact of lorry movements on quality of life in local communities (safety, air quality, vibration) will need to be managed against a likely increasing demand to transport freight by road. This is particularly relevant on key routes entering into urban areas and passing through rural settlements.
 - Existing congestion, growth in demand for road space for freight, compounded by increases in car traffic and housing growth, will increase demand for limited road space and will lead to more congestion and poorer journey time reliability (particularly in urban and rural built-up areas where road capacity is often more constrained).
- 5.55 The relatively limited role played by rail freight does not appear to have constrained the development of the logistics sector in the sub-region, although the Economic Assessment points out that this could become more of a challenge in the future. Evidence suggests that without additional rail freight capacity, road freight traffic will increase by 58% to 2020 (against 2000 traffic levels)²². However, in its Freight Route Utilisation Strategy, Network Rail sets out a strategy for the strategic enhancement of rail loading gauges to maximise the efficiency of rail freight movement across the UK (see the Felixstowe to Nuneaton example given in paragraph 5.52).

Business, professional, financial, and knowledge-based service sectors

- 5.56 We have seen that the sub-region has a smaller proportion of people working in the business, professional, financial and knowledge-based service sectors than the national average, and that as a result there is a desire locally to increase the size and importance of these sectors in the sub-region. This is seen as particularly important in the context of public sector spending cuts and the need to foster growth in the private sector to create employment opportunities. It will therefore be important to create the conditions to enable these types of businesses to flourish. Leicester City, particularly the City centre, will be the main concentration of this type of activity, which will lead to spill-over benefits for the wider economy. This requires the provision of effective strategic connectivity for business travel, particularly by rail, not only to London, but also to other major cities including Manchester, Nottingham and Birmingham.
- 5.57 Whilst commenting positively on the sub-region's frequent and fast rail services to London from Leicester, Market Harborough and Loughborough, the Economic Assessment highlights issues associated with increasing rail fares, and the quality of services to Manchester, Leeds, Northampton, Milton Keynes, Birmingham and Nottingham. The Economic Assessment concluded that, as planned housing growth across the sub-region occurs, commuting to other key centres is likely to increase, meaning that the quality of these linkages will become increasingly important. At a more local level, issues associated with the rail network include the infrequency of, and severe overcrowding on, services which run through Melton Mowbray, the relatively poor level of rail services through Hinckley and the lack of passenger rail connections in North West Leicestershire.
- 5.58 Away from rail, the Economic Assessment reports that supporting the needs of workers in this sector, who require effective connectivity by a range of modes, (including the car), will require a step-change in the quality of bus services to provide a viable and attractive alternative to the private car for a much greater proportion of the working population.

Tourism

- 5.59 In 2009, Leicester Shire Promotions estimated the sub-regional tourist industry to be worth £1.31 billion and that annual tourist numbers to the City and County now stand at over 31.8 million⁴². In terms of leisure, the former East Midlands Development Agency (EMDA)¹⁰ reported that Leicester is the largest leisure destination in the East Midlands, accounting for 18% of leisure flows. Loughborough attracts a further 1.3% of regional leisure flow¹⁰.
- 5.60 The presence of regionally significant tourist and leisure attractions such as the National Forest (currently attracting over 5.7 million visitors per annum)¹⁰, the Curve Theatre, the National Space Centre and the Highcross Shopping Centre are likely to contribute to further growth. In addition to the growth of these existing tourist attractions the strategic desire to develop the sub-region as a tourist destination, will continue to place additional pressures on the sub-region's transport system. EMDA has identified a number of strategic transport priorities that will help increase the sub-regions attractiveness as a tourist location. The main examples include:
 - To minimise the impacts of congestion as a deterrent to tourists wanting to visit the area and thus increase the attractiveness of the sub-region as a place to visit.
 - To enhance route and attraction signage in addition to providing better information to support access by non-car modes to major tourist locations.
 - To exploit East Midlands Airport as a gateway to Leicester and the region.
 - To enhance joined-up thinking between transport planners and tourism specialists to ensure that future tourism schemes adequately consider the transport infrastructure requirements.

Improving access to jobs and labour

5.61 That the transport system in Leicester and Leicestershire can help to facilitate and underpin economic growth in the City and County by connecting goods, people and ideas as efficiently as possible is something Leicester and Leicestershire's first Multi-Area Agreement¹³ was quick to recognise, and is something that the Local Enterprise Partnership for Leicester and Leicestershire is looking to build on.

Travel to work movements

- 5.62 Our evidence base suggests that the diverse nature of the Leicester and Leicestershire economy ensures that our transport system has to accommodate complex and often inefficient patterns of travel in order to satisfy labour market needs.
- 5.63 At present, the strong links between the economies of the City and the County result in around 70,800 people commuting into the City each day to work, along with 27,600 commuting out²². Given the level of housing growth planned for the PUA, our evidence indicates that it may not be possible for the number of jobs available in the City to keep pace with the growth of its population, with the risk of an ever increasing number of people making travel movements out of the City to find jobs in the County.
- 5.64 Although Leicester is extremely important to the County for the supply of jobs, significant numbers of workers also commute into Loughborough, Coalville, Blaby (Meridian Business Park), Lutterworth (Magna Park), Melton Mowbray and East Midlands Airport. The fact that jobs throughout the County are spatially concentrated (94% of the output areas in the County contain just 50% of the County's jobs)²³ whilst workers are more dispersed, has led to the development of travel patterns that are not particularly efficient. Commuting patterns in the sub-region are generally north / south and not east / west, perhaps reflecting the poorer transport linkages going across the sub-region²³.

- 5.65 Inefficient labour market travel patterns are demonstrated by the fact that 42% of the wards in the County exhibit high levels of in and out-commuting²³, i.e. employers are unable to find workers locally, and / or local workers are unable to easily find local employment. This manifests itself in high cross-boundary movements. Only 26% of wards are self-contained²³ i.e. there is a better balance between workers and jobs. These tend to be in the more rural areas of the County, particularly Melton and Harborough.
- 5.66 Workers in the more rural parts of the County also suffer from being more isolated from relevant opportunities which can result in movements that are difficult to provide for by means other than the private car. The Leicestershire Rural Transport Study concluded that access to jobs and services, particularly training and education, is a major issue for residents in rural areas. Journeys to / from education, training or employment are especially problematic from isolated hamlets and villages due either to a lack of public transport or a very inconvenient service.
- 5.67 Whilst the sub-region is currently relatively self-contained in terms of the journey to work, we have seen that levels of commuting to destinations beyond the Leicestershire boundary could increase significantly if economic growth within the sub-region fails to keep pace with the increasing population i.e. particularly to London and other major cities including Manchester, Nottingham and Birmingham.

Matching employment and skills

5.68 Our evidence base indicates that there are not as many high and intermediate skilled opportunities as there are workers in the sub-region. The fact that a number of opportunities that do exist for these workers are in Leicester City, where the existing labour market is not well placed to meet these needs, and that there is a desire to grow the professional, financial and knowledge-based services sector in the City to help alleviate public sector job losses, adds pressure to provide a transport system that allows these workers to commute into the City, many of whom require effective connectivity by a range of modes, including the private car.

- 5.69 With increasing salary prospects (as efforts to grow this sector in the sub-region continue) these workers will become more willing to travel further to work, adding to the already congested arterial routes coming in and out of the City at peak travel times. We have seen that, in order to meet this likely increase in demand, it is anticipated that a step-change in the quality of public transport (including rail, bus and public transport interchange) is required to provide a viable and attractive alternative to the car for a much greater proportion of this working population. Further consideration will also be required as to the role of car parking provision, especially its location and charges, in both the context of managing car use for journeys and attracting the levels of inward investment that will enable growth.
- 5.70 For low-skilled occupations in the sub-region there is a better balance between the number of working residents and jobs available locally. However, local job provision is more important to low-skilled workers and those providing low-skilled opportunities given travel cost constraints, and there remain areas of spatial mismatch between the supply of jobs and workers for the lower-skilled. These areas may be particularly affected by the limited bus access to employment centres outside of core urban areas and the relatively poor provision of evening and weekend bus services which adversely affects the access of some workers, particularly those working shifts. There are currently a high number of workers commuting out of the City to the County that are employed in routine or manual occupations. Other geographical areas of spatial mismatch for low-skilled workers and occupations across the County include:
 - Ullesthorpe (Magna Park), Lutterworth Springs, Lutterworth Swift (all in Harborough).
 - Ashby Holywell and Loughborough Lemyngton in Charnwood.
 - · Castle Donnington in North West Leicestershire.
 - More rural areas such as Melton district and Earl Shilton in Hinckley & Bosworth.
- 5.71 At a time of job losses in many sectors, competition is intense for opportunities that do become available. To avoid transport provision, or the lack of it, becoming a factor that constrains peoples' ability to find jobs or businesses' ability to access labour markets, we must seek to provide a range of transport choices for people to access job opportunities. We should also play a part in supporting the start-up of new businesses in areas where they are able to meet local needs, and ensuring that significant new housing developments include appropriate employment opportunities.

5.72 There are, however, some significant challenges in seeking to achieve this, particularly with regard to the provision of the local bus network. The Economic Assessment for Leicester and Leicestershire recognises the bus network's current strengths in terms of access to Leicester City centre, increasingly competitive journey times compared with car travel, and punctuality levels that are broadly the same as those found in similar areas elsewhere. However, at a strategic level, issues include: the poor standard of public transport interchange in Leicester City centre, given the distances between the two bus stations and the railway station; limited access by bus to centres of employment outside the City centre, such as business parks; the lower levels of public transport provision in rural areas as compared to other parts of the sub-region; and often limited or non-existent off-peak or evening bus services. The current financial situation also ensures that maintaining the current level of coverage provided by the local bus network is going to be extremely challenging (see Chapter 7 for more on this).

OUR LTP3 APPROACH

- 5.73 In seeking to enable both economic and population growth, the key outcome we are seeking to achieve is that our transport system enables more consistent, predictable and reliable journey times for the movement of people and goods. In order to do this, our efforts will initially focus on making the best use of our existing transport system by seeking to limit the need to travel, more actively promoting and encouraging travel by more sustainable modes, and seeking to address congestion and journey time reliability problems at key pinch points on the area's road network. Reflecting another of our key principles, this will be done in such a way as to maximise the value for money provided by the things that we actually do. Our LTP3 efforts will be designed to tackle the issues highlighted in the previous section. The key elements of our approach will be to:
 - 1. Improve the management of our road network, such that it provides improved journey time reliability for the movement of materials, goods and people.
 - 2. Promote and support the efficient and safe movement of freight.
 - 3. Support the economies of our county towns and rural areas.

- 4. Support the needs of key economic sectors.
- 5. Support people's ability to access job opportunities and the ability of businesses to access a broad pool of labour.
- 6. Work with planning authorities, developers and other relevant bodies to seek to minimise the potential transportation impacts of population growth on the efficient and reliable operation of our transport system.
- 7. Investigate the role that implementing active demand management measures could play in helping to maintain the economic efficiency and effectiveness of our transport system.
- 5.74 Our success in delivering the key elements of our approach to support the economy and growth will depend largely on the degree to which we are able to work effectively with the new Leicester and Leicestershire Local Enterprise Partnership, and the degree to which we are able to improve our understanding of the way our transport system functions and the impacts that economic changes and population growth are likely to have on it.

The Leicester and Leicestershire Local Enterprise Partnership (LLEP)

5.75 The place of transport planning and provision in Leicester and Leicestershire is changing as the LLEP continues to develop its role. The LLEP builds on work under the previous Multi-Area Agreement between Leicester City Council and Leicestershire County Council, which established transport as a key contributor to economic resilience and growth. The transition to the LLEP has reinforced this importance with transport issues remaining central to the thinking behind aspirations to improve the economic performance of both the City and the County. The structure of the LLEP provides an added mechanism to ensure that, although there are two LTP3s covering the sub-region (one for Leicester City and one for Leicestershire County), transport policy and delivery remains complementary. This is obviously vital given the close interdependency between the economies of the City and County.

- 5.76 The role of Local Enterprise Partnerships has continued to evolve since our strategy was first put in place. From 2015 the LLEP will be responsible for managing a pot of money, the Single Local Growth Fund, which, amongst other things, will be used to fund transport initiatives to support growth. The LLEP has significant economic ambitions that it is seeking to achieve by 2020. These include: levering in £2.5bn of private sector investment into the area; generating an additional 45,000 private sector jobs over and above existing forecasts; further developing the logistics and transport sector in the area; and increasing the area's Gross Value Added from £19bn to £24bn.
- 5.77 The LLEP's proposals for achieving these ambitions are set out in the Leicester and Leicestershire Strategic Economic Plan 2014 – 2020 (SEP). The SEP not only sets out the LLEP's proposed strategy, but also forms the basis of negotiations with central Government to secure monies for a Single Local Growth Fund (SLGF). The Coalition Government has established the SLGF concept to draw together a number of existing funding streams, including certain transport monies that we used to receive directly, into one single pot. A benefit of this approach is to provide us with access to a potentially much larger pool of monies to fund transport infrastructure than would otherwise have been the case. A dis-benefit, however, is that the monies in the pot are not ring fenced, so that transport projects will be competing against other projects (e.g. education or business support projects) for funding.
- 5.78 The SLGF, along with monies from other sources, such as the European Union, will be used by the LLEP to fund a range of measures, including support for businesses and training, and the provision of infrastructure to help to deliver economic growth. The SEP recognises transport as an enabler of economic performance and that an efficient, well planned and well connected transport system is vital not just for existing businesses and residents but is also an important consideration for those businesses deciding whether to locate in the area. Specifically, the SEP has a focus on: seeking to address congestion issues at key points on the Strategic Road Network (including at M1 J21, J23, J23a and J24; and A42 J13); delivering measures to support sustainable transport; and unlocking key pinch-points at junctions on the local road network.

5.79 Without investment to improve the performance of our transport network, our evidence base highlights that travel conditions will deteriorate significantly with potentially damaging economic consequences. It is important, therefore, that we help to deliver the LLEP's ambitions – both in this strategy and in our Implementation Plans.

Improving our understanding

- 5.80 The Leicestershire Housing Market Area Growth Infrastructure Assessment noted that despite some good work, the cumulative transportation impacts of growth were not properly understood. It also stated that current transport infrastructure planning work lacked precision in some areas, with geographical gaps in the modelling work that had been undertaken, and that modelling work within Leicester needed to be further developed⁴¹. It is important, therefore, that our LTP3 approach to supporting the economic recovery and growth reflects the need for us to continue to develop our understanding of population and economic growth so as to inform future development of our long-term strategy. To achieve this, we must continue to have robust data and sufficiently reliable and sophisticated monitoring and modelling tools with which to undertake further work.
- 5.81 With this in mind we see it as vital that we continue to improve our understanding of the way that our transport system functions and the impacts that economic changes and population growth are likely to have on it. Key to our LTP3 approach will therefore be to continue to work with Leicester City Council in continuing to develop and improve our approach to data collection, trend monitoring and the use and maintenance of our traffic counting and modelling tools. This will help us make informed decisions about the future approach we take to implementing our LTP3 strategy. It will also help us develop robust business cases to secure any public funding that might be available to help to deliver the transport infrastructure required to support economic growth, including to support the successful delivery of the proposed Sustainable Urban Extensions in Leicester and Leicestershire.

- 5.82 Equally important will be that we undertake research and studies to inform our future approach. Building on work undertaken since our strategy was first published in 2011 (for example for Core Strategies and major development in the districts of Blaby, Harborough and Charnwood), such studies may include work to
 - Further our understanding of local relationships between times of economic downturn and levels of car travel (and conversely the likely impact on traffic levels as the economic recovery gathers pace).
 - Identify the causes of congestion and potential solutions (see below).
 - Assess the impact of housing growth in the PUA and further our understanding of the potential transportation impacts of a growing population.
 - Assess where, and whether, there is a sound evidence-based case for us to invest in major new transportation infrastructure.

DELIVERING OUR LTP3 APPROACH

5.83 The sections that follow provide more details of what we will be doing to deliver the key elements of our long-term strategy to support the economy and population growth. Whilst we recognise that an effective transport system is vital to support the economy and population growth, we cannot concentrate on all aspects of our approach at once, or afford them all the same priority within our available resources. Our Implementation Plan¹⁶ identifies the things that we will be doing in a three year period to deliver our long-term strategy and explains how we will monitor and review progress to ensure that our approach remains relevant and robust. Chapter 11 of this strategy provides the context for our initial Implementation Plans, and thus the context in which we have made decisions regarding which aspects of our approach to supporting economic and population growth we will take forward.



 Improve the management of our road network, such
that it provides improved journey time reliability for the movement of materials, goods and people

Our approach to doing this will include:

a) Working with the Highways Agency to:

- Identify, agree and take forward proposals to address congestion and connectivity issues on the strategic road network, in particular along the M1 at Junctions 19, 21, and 23a to 24a, and to seek to ensure that they are afforded a high priority in future national spending reviews.
- Investigate and seek to secure funding for solutions to problems on other parts of the strategic road network including, for example, the A5 around Hinckley.
- Ensure that we co-ordinate as effectively as possible the management and maintenance of our respective road networks.

b) Continuing to address congestion issues on the local road network. In doing so, we will concentrate mainly on times of peak travel during weekday mornings and evenings, and will primarily focus on:

• Reviewing and updating as necessary our Network Management Plan¹⁷.

Our Network Management Plan (NMP) explains how we seek to manage our road network in order to 'secure the expeditious movement of traffic on our road network, and facilitate the expeditious movement of traffic on road networks for which another authority is the traffic authority.' The NMP applies to all road users as the term traffic includes pedestrians and cyclists as well as motorised vehicles, whether engaged in the transport of people or goods. Our Plan states how we will seek to make the best use of existing road space for the benefit of all road users. Other elements of the Plan include how we: work with others to co-ordinate and plan works and known events; gather and provide information to help secure the expeditious movement of traffic on our transport network; work with others to deal with incidents and emergencies; and deal with traffic growth.
- Tackling congestion at key junctions (pinch points), particularly those that are
 of key strategic importance to the economy of Leicester and Leicestershire and
 those that are predicted to be significantly affected by population growth (that
 is those that will be affected by traffic generated from the Sustainable Urban
 Extensions and other large scale housing proposals).
- Undertaking studies to assess the underlying causes of congestion problems in our county towns.

We have started this process by undertaking such a study in Loughborough. The aim of the study, completed in 2011, was to identify the causes of congestion in Loughborough and explore the potential for the use of low cost measures that will have a noticeable impact on the existing levels of congestion. Further studies are being, or will be, undertaken in Coalville and Hinckley. Each of our studies will build on previous studies if available, as well as the expertise and experience of our traffic management team, and will also include work to investigate the impact of congestion on bus services. We will work with local bus operators as part of the studies to investigate potential solutions to help improve bus journey times.

- Efforts to influence people's travel choices, including further development of our approach to travel planning and maximising the use of existing park and ride sites. (See Chapter 6 for details).
- Working with Leicester City Council to continue to improve the way in which traffic signalled controlled junctions are linked and their timings set and managed.

Leicester City Council operates the Area Traffic Control centre, and on behalf of the County Council, manages the day-to-day operation and maintenance of traffic signal junctions in Leicestershire.

c) Continuing to develop and refine our approach to civil (on-street) parking enforcement, particularly by:

- Making use of the outcomes from our congestion studies to inform our approach to parking enforcement in each of our county towns, and the impact this may have on peak hour congestion.
- Assessing the potential impacts of additional enforcement powers on our parking and network management approach as and when they become available.

From March 2011 we have had powers to enforce fines on motorists who obstruct dropped kerbs or double-park. Such powers have allowed us to further our approach to cutting congestion by better enabling us to try and keep streets free from badly parked cars which helps ensure traffic is more free-flowing, and streets are more accessible to buses and emergency vehicles. This has also helped remove potential safety barriers for some of our more vulnerable road users, such as pedestrians and cyclists.

• Assessing the potential for introducing on-street parking charges in our county towns and larger urban areas.

This is only something we will consider over the longer-term of our strategy. We recognise the importance of our towns to the sub-region's economy and that they provide essential access to services for people in surrounding areas. In undertaking any future studies into the introduction of on-street parking charges, we will take an evidence-based approach that assesses the potential economic impact on local business and the wider economy against the potential to better influence the adoption of more sustainable modes of travel.

d) Adding new carriageway space to existing roads, e.g. to provide a new lane.

Reflecting our LTP3 principles, this will be done where there are clear transport benefits, not just for drivers but also (as appropriate) for bus users, cyclists and pedestrians. Facilitating economic and / or population growth will also be an important consideration.

e) Where appropriate, exploring the possibility of schemes for new roads.

Reflecting our LTP3 principles, this will be considered only where there is clear evidence that it would help to facilitate economic and / or population growth, and if it represents a practical and affordable (deliverable) solution. With regards to both of the above, we will increasingly need to look for funding from third parties (such as the LLEP's Single Local Growth Fund) in order to deliver transport infrastructure improvements. We also recognise that it will not be possible for us to keep adding to and ever-expanding our road network to keep pace with future demand and that, even allowing for improved vehicle technology, building new roads to allow for more travel could increase the CO2 emissions from road transport above current levels. These factors need to be considered when we make decisions regarding the need for new roads.

f) Exploring the implementation of measures aimed specifically at improving the journey time reliability of bus services.

Where appropriate we will work with Leicester City Council and local bus operators to do this, largely through our Quality Bus Partnership⁴⁸. Measures may range from electronic systems to enable buses to be given priority in passing through traffic signal junctions, to the provision of new bus lanes. More information on this is contained in Chapter 6.



2. Promote and support the efficient and safe movement of freight

The efforts outlined above to improve journey time reliability on our road network will have a beneficial impact on our desire to promote and support the efficient and safe movement of freight. Other efforts will include:

a) Engaging with the Freight Transport Association, and continuing to support the Freight Quality Partnership, to improve our understanding of the needs of freight operators and what we can most usefully do to meet these.

b) Ensuring that our road network is maintained to the best possible standard, and minimise disruption from roadworks, in order to facilitate the movement of transport including freight.

We will do this by developing and introducing an effective Network Management Plan (NMP), ensuring that our road network is as resilient and effective as possible.

- c) Improving the information that we make available to lorry drivers in respect to industrial estates, as part of signing rationalisation.
- d) Ensuring that our design guidance for new developments provides for the safe and efficient movement of lorries and other larger vehicles.

Consideration of development proposals is based on guidance set out in the 6Cs design guide, (6CsDG)⁵⁰, which is common to, and managed by, several East Midlands authorities. It provides guidance ranging from first consideration of a piece of land, through to ensuring that the roads within it are built and completed to the required standard.

e) Continuing to work with authorities across the East Midlands and other bodies to support and promote rail freight initiatives, including the delivery of further improvements to enable the movement of freight traffic through the Leicester area and the delivery of a rail freight interchange at Castle Donington.



3. Support the economies of our county towns and rural areas

Our approach to doing this will include:

- a) Completing the delivery of the Loughborough Town Centre Improvement Scheme and monitoring its impacts.
- b) Working with district councils and other bodies to support the development and implementation of Town Centre Masterplans and investigate opportunities to deliver environmental improvements to our town centres.
- c) Seeking to maintain an affordable level of accessibility to main centres and key services, particularly for those in remote and rural areas and those without access to a car. (See Chapter 7 for more information on this.)

d) Working with the Leicester and Leicestershire Local Enterprise Partnership and other local partners to develop the tourism industry.

In seeking to support the development of the tourism industry, we will work actively with key partners to improve our understanding of the role that our transport system can play in increasing the attractiveness of the sub-region as a place to visit. In addition to ongoing efforts to tackle congestion hotspots, initial thoughts are that efforts could usefully focus on continuing to maintain, promote and implement brown tourist sign schemes, developing our efforts to better market and improve information about existing transport facilities and services, and supporting visitor attractions that want to develop travel plans to increase the proportion of their visitors and employees travelling to attractions by private car.



4. Support the needs of key economic sectors

The efforts outlined above to improve journey time reliability on our road network will have a beneficial impact on our desire to support the needs of key economic sectors. We also obviously hope that our work to promote

and support the efficient and safe movement of freight will also bring significant benefits to the manufacturing, transport and logistics sector. In seeking to provide the transport conditions that will allow the business, professional, financial and knowledge-based service sectors to grow, our efforts will include:

a) Seeking to maximise the economic benefits to Leicester and Leicestershire of passenger rail connections, particularly by:

- Improving connectivity to, and interchange at, railway stations by foot, on bike and by public transport in order to promote and support greater use of existing rail services.
- · Working with other authorities to deliver improvements to the Midland Mainline.
- Working with other authorities and businesses to secure further improvements to other major rail services that are important to the County (e.g. the West Coast Main Line at Nuneaton and improvements in services between Leicester and the West Midlands).

- Working with neighbouring authorities on rail proposals in their areas that have the potential to enable opportunities for improved train services between settlements in Leicestershire and key destinations (e.g. proposals for rail improvements at Nuneaton, which could enable opportunities for better services along the route linking Birmingham to Leicester and beyond).
- Working with the promoters of High Speed Two to ensure that: a) should the line pass through Leicestershire its impacts (during construction and operation) are minimised; b) whatever the route chosen, the economic benefits to the County are maximised.

There are cost and deliverability issues around seeking to provide new rail stations and / or provide new rail services for local travel purposes. Comparing the number of new passengers that are likely to be attracted against the costs of providing and maintaining new services, no viable case can be made at present for progressing a local rail-based solution to meet the needs of Leicester and Leicestershire's growing population.

b) Improving the quality and reliability of bus services, particularly those in the PUA and the county towns. More details on how we propose to do this are set out in Chapters 6 and 7.



5. Support people's ability to access job opportunities and the ability of businesses to access a broad pool of labour

Our approach to doing this will include:

a) Ensuring that access to job opportunities, employment centres and labour markets remains a key focus of the local bus network in Leicestershire.

As outlined in Chapter 7, our key tool for ensuring consistent access across Leicestershire is the local bus network. In recognising the key role that the local bus network plays in providing access to both job opportunities and key employment centres, we will work with local bus operators throughout LTP3 to explore when and where it might be possible and cost-effective to adjust bus routes to better cater for journeys to work that are focused on key employment centres. Along with bus operators we will also look at the degree to which bus

routes can be tailored to meet the differing employment needs of both workers and employers throughout Leicestershire. Finally, we will explore how we can work with businesses and job centres to try and maximise the usage of existing bus services between areas of higher unemployment and appropriate job opportunities (e.g. existing bus services between Coalville and East Midlands Airport).

b) Working through the planning system to:

- Promote and support land-use planning policies that provide people with local opportunities to access job opportunities, particularly in areas where there is a clearly identified need, be they urban or rural.
- Provide input to the masterplanning of new developments, especially the Sustainable Urban Extensions around the edges of Leicester and the county towns, to ensure that they include an appropriate range of facilities and services, including employment opportunities. It should be noted that through the planning system we will, as appropriate, seek to resist proposals that would likely result in adverse impacts on the achievement of our LTP3 strategic goals and outcomes.
- Ensure that our highway development control approach and policies do not act as barriers to the delivery of new employment opportunities, whilst at the same time taking into account our other strategic transport goals.

In addition to the importance of seeking to support the creation of new jobs, our evidence base highlights journey to work patterns that can cause congestion and delays on our road network, but which are difficult to provide for by means other than the private car. Increased congestion and delays will affect the network's ability to enable people, materials and goods to move around efficiently, with potential economic consequences. Thus, where it is possible to create a better mix of housing and employment, this could help to reduce the need to travel elsewhere to work with potential benefits in terms of reducing congestion and delays.



6. Work through the planning system to seek to encourage the delivery of sustainable development that helps grow the economy of Leicester and Leicestershire but that also ensures our transport

system continues to operate as efficiently and reliably as possible.

Our approach to doing this will include:

- a) Encouraging and facilitating the continued use of credible and robust transport evidence by District Councils and others to underpin their development proposals.
- b) Maximising the use of our existing transport system by encouraging new development to be located in areas that are already able to be well served by walking, cycling and public transport.
- c) Encouraging high quality, safe facilities in new developments for pedestrians, cyclists and public transport users. We will do this by inputting to the Masterplan process, especially for the Sustainable Urban Extensions around the edges of Leicester and the county towns.

Note that, if it is appropriate we will use the planning system to seek to resist proposals that do not achieve these things.

- e) Continuing to monitor the effectiveness of measures that are implemented to support new development (in particular the Sustainable Urban Extensions), and use the information generated to inform decisions about our future approach; and
- f) Helping to secure and co-ordinate the funding and provision of the significant transportation infrastructure (likely to include some new road building), required to provide access to and support, the Sustainable Urban Extensions around the edges of Leicester and the county towns.

We will continue to provide advice on the development proposals put forward by others, in order to minimise the impacts of development. We will do this by seeking to reduce the potential levels of travel generated by population growth, not only in the interests of maintaining a transport system that is capable of effectively meeting the economic needs of the sub-region, but also in seeking to reduce the

cost of new transport infrastructure that is required to support the growth agenda. We recognise, however, that this may still entail new road building schemes which would open up land for housing development. Given the current financial circumstances, we anticipate that our efforts to provide for sustainable growth will continue to focus primarily on sustainable transport provision.

Mass-rapid transport (MRT) schemes (i.e. trams, guided bus ways, etc) are very expensive and challenging to deliver. Whilst it appears unlikely that an MRT scheme would be an affordable and deliverable solution to Leicester and Leicestershire's public transport challenges over the period of this strategy MRT schemes can have economic benefits in appropriate circumstances. Should Leicester City Council decide to look into this option further it would be important for us to be involved.

We will 7. Investigate the role that implementing active demand management measures could play in helping to maintain the economic efficiency and effectiveness of our transport system

Evidence from our research into the impact of housing growth in the Leicester PUA, suggests that encouraging people to change travel behaviour, supported by improvements to public transport and walking and cycling facilities, will have benefits in terms of seeking to reduce the impacts of population growth on the performance of our transport system and road network. However, our research also indicates that the impact of these measures may not be sufficient on their own to even maintain our transport system's current economic effectiveness, let alone to improve it, or to reduce the level of CO_2 output from Leicester and Leicestershire's road network. Therefore, the evidence currently available to us points towards the need to investigate, and possibly introduce, some form of active demand management during the second half of this strategy.

MONITORING OUR LONG-TERM STRATEGY

- 5.84 During LTP2 our efforts to support the economy were largely focused on tackling congestion issues across the County, particularly those in central Leicestershire and Loughborough. We measured the success of our efforts using the previous National Indicator 167 to assess person journey time per mile on key routes in urban central Leicestershire during the morning peak, and an additional indicator to measure the time lost per vehicle kilometre on key routes in Loughborough during the morning peak.
- 5.85 As detailed earlier in this Chapter, reflecting feedback that we have received from both residents and the business community, our efforts to support the economy and growth will be focused more in LTP3 on providing more consistent, predictable and reliable journey times for the movement of people and goods, rather than efforts to simply improve levels of congestion and / or journey time.
- 5.86 In an effort to better understand the performance of our transport system, and assess the likely implications of future growth, we have invested significant resources in the last two years in developing a comprehensive suite of transport models covering all of Leicester and Leicestershire. Our Leicester and Leicestershire Integrated Transport Model (LLITM), which first became operational in early 2011, includes transport, traffic, land-use and demand models which provide a complete view of how our transport system is currently performing, and will allow us to take a holistic view of the transport impacts of growth and develop future targets for the performance indicators that we will use to assess our success in seeking to provide more consistent, reliable and predictable journey times across the County. It is proposed that we will use the performance indicators below.

Key performance indicator (KPI)

5.87 Maintain journey time reliability across the Leicestershire road network during the morning peak.

Supporting indicators

- 5.88 We are proposing to develop supporting indicators that measure journey time reliability during the morning peak in the following areas of the County. These areas of the County have been identified, principally because they are likely to remain the focus of efforts to deliver future housing growth:
 - The Leicester Principal Area
 - Loughborough
 - Melton Mowbray
 - Market Harborough
 - Hinckley
 - Coalville
 - Ashby
- 5.89 We will also continue to monitor total vehicle kilometres on our County roads given the correlation this is likely to have with general levels of economic activity around the County, the availability of disposable household income to fund shopping, social or leisure based trips, the absolute and relative costs of travel by different modes, and future growth assumptions.

Setting targets and monitoring progress

5.90 We have used LLITM to establish the baseline position and future targets for our journey time and journey time reliability indicators. In setting future targets, we have assessed the likely implications of future growth on the performance and reliability of our transport system, whilst taking into account existing and proposed LTP3 policy

interventions. We have set long-term, aspirational, targets for our KPI and have also put in place annual targets, to be set and reviewed on a three year basis, for all our performance indicators, in order to monitor progress. Details of our targets and the progress we are making can be found in our latest Implementation Plan.

- 5.91 It should also be noted that we will also use an indicator from our connectivity and accessibility indicator set in order to monitor the success we are having in seeking to support the economy and population growth. This is:
 - Access to employment by public transport, walking and cycling (for more details on this see Chapter 7).

CONCLUSIONS

- 5.92 A successful economy requires an efficient and effective transport system. During LTP2, largely through efforts to tackle congestion, we have delivered measures that have helped to provide the right conditions to support Leicester and Leicestershire's economy. Whilst our aim is to achieve the same through LTP3, the way in which we will be seeking to support the economy and population growth will differ from our approach in LTP2, driven by a range of issues, including those that are financial (i.e. continued pressure on local authority budgets), those that are environmental (the need to reduce CO_2 emissions), and those that are social (the need to cater for a growing population and improve health).
- 5.93 Our approach, at least in the shorter-term, is centred primarily around making the very best use of our existing transport system (by making targeted improvements to key parts of the walking, cycling, PT and road networks) and managing and maintaining our roads, bridges, footways and cycleways to the best standard standards that we can. This will be supported by our efforts to influence peoples' travel choices, through better marketing and promotion, travel planning, and the provision of appropriate improvements to walking, cycling and public transport facilities and services, as well as our efforts to ensure our transport system offers good access to employment centres and labour markets across the County.

- 5.94 It is recognised that there may, in certain circumstances, be a wider economic case for a major new piece of transport infrastructure. Whilst we ourselves may not have the funds to build any such schemes, where there is an evidence-based case and a potentially affordable solution, we will seek to develop a business case so that we are well placed to take advantage of any future funding opportunities, including from the LLEP. It is also recognised that the delivery of new transport infrastructure will be necessary to support housing growth (particularly the Sustainable Urban Extensions planned across the County), and we will continue to work with district councils, developers and other parties to seek to deliver this infrastructure.
- 5.95 Despite our efforts, current evidence suggests that in order to maintain a transport system that effectively supports Leicester and Leicestershire's economy and is able to contribute to reductions in its levels of CO_2 output, it is likely that we will need to investigate and deliver more pro-active and radical ways to reduce the demand for travel within the lifetime of this strategy.

This chapter:

- Reviews the strategic drivers influencing the role that encouraging more active and sustainable travel will play in our long-term transport strategy.
- Looks briefly at what we achieved in LTP2.
- Identifies the issues and challenges we will need to tackle if we are to encourage more active and sustainable travel during LTP3.
- Sets out our LTP3 approach to encouraging more active and sustainable travel.



INTRODUCTION

- It is widely reported that there is a need for nations to take urgent steps to cut 6.1 greenhouse gas emissions to reduce the most severe impacts of climate change for environmental and financial reasons. In terms of transport, whilst some hope is placed on technological innovation, developing better, more fuel efficient engines, or engines which find their energy from zero-carbon sources, re-directing demand on the local transport network to more sustainable modes of travel, such as walking, cycling and public transport, and changing public attitudes or behaviours towards travel, will play a key role. This will be even more important in the context of the level of growth that is forecast for Leicester and Leicestershire. Through its resulting upward pressure on travel demand, population, housing and economic growth will be one of the biggest single influences on levels of CO₂ emissions from transport in the County. Our analysis of the likely impacts of growth in the Leicester Principal Urban Area (PUA)⁹³ suggests that, even allowing for improved vehicle technology, improvements in public transport, and the encouragement of more people to walk and cycle, CO₂ emissions from road transport in the County could increase by approximately 5% by 2026 and only reduce by a relatively small amount in Leicester City³⁹. These predications need to be looked at in the context of legally binding Government targets, which require national reductions in carbon emissions from all sectors from 1990 levels of 34% by 2020, and of 80% by 2050²².
- 6.2 From an environmental perspective there is also the need to improve levels of air quality. Whilst the air we breathe today is of better quality than at any time since the start of the industrial revolution, and there is a long-term trend of improvement as a result of improved regulatory standards affecting industry, transport and our homes, air pollution still harms health and the environment. It has also become clear that some pollutants (such as particulates) are more dangerous than previously thought. Air pollution is currently estimated to reduce human life expectancy by, on average, seven to eight months, with an estimated health cost of up to £20 billion each year⁶⁸. It also has detrimental effects on our vegetation and ecosystems.
- 6.3 A number of objectives have been established in relation to air quality at both a European and UK level (emanating from the 1996 EC Directive)⁶⁹. This includes setting targets for reducing emissions of specific pollutants to minimise the negative

impacts on health. In Leicestershire, there are 13 Air Quality Management Areas⁴⁹. In each case, the major problem is associated with levels of nitrogen dioxide (NO₂), due in part to traffic volumes and congestion. We envisage that our efforts to reduce the need to travel (thus reducing travel demand), to encourage people to change their travel behaviour away from the private motor car and towards public transport, walking and cycling, and to support improved uptake of lower emissions vehicles will continue to play a significant part in our efforts to tackle air quality problems across the County.

- 64 As well as the environmental drivers of climate change and air quality, there are also social drivers that ensure efforts to encourage more active and sustainable travel are more important than ever. Whilst car ownership levels are generally increasing, there are still elements of the population for whom car ownership is too expensive, including for younger persons and those living in some of the most socially disadvantages areas. In such circumstances, the provision of alternative means of travel can be essential to access jobs and training. (Our Local Sustainable Transport Fund projects in Loughborough and Coalville are good examples of the sort of work we are trying to do to resolve these issues.) Further, inactive lifestyles are one of the ten leading global causes of death and disability, with around two million deaths per year worldwide attributable to physical inactivity. The Department for Health has also reported that physical inactivity causes more illness than smoking in EU countries, and compared to more active behaviour, leads to a greater risk of developing a range of serious medical conditions and diseases, including coronary heart disease, stroke, type 2 diabetes, cancer, obesity and mental health problems⁷⁰. In Britain, some 175 million working days were lost to ill-health in 2006, at an estimated cost to the economy of £100 billion (more than the annual NHS budget)⁵⁴. More locally, our evidence base highlights that adult obesity levels in Leicester and Leicestershire are above the regional and national averages, and the cost of providing health care attributable to inactivity in the sub-region is around £20 million annually⁴⁰.
- 6.5 Academic research demonstrates that 'western' countries with greater dependence on walking and cycling as modes of transport are associated with comparatively low rates of obesity, placing the provision and encouragement of more active transport at the heart of strategies to improve health. In Leicestershire, the County Council, in conjunction with the local NHS and district councils, have come together to publish

Leicestershire's Staying Healthy Strategy. This states that transport has a key role to play in contributing towards improving the health of residents in Leicestershire by seeking to involve a wider section of society in making walking and cycling part of their everyday lives.

- 6.6 There are also other significant strategic drivers that increase the focus on efforts to encourage more active and sustainable travel. We have seen that LTP3 will not just pursue an approach where we can continually seek to expand the capacity of our transport system to accommodate ever-increasing demand to do so would not only be unaffordable but would also be socially and environmentally unacceptable. Encouraging walking, cycling and the use of public transport will therefore have to play a significant part in helping to improve the reliability and efficiency of our transport system. There are also everyday considerations to take into account, such as fuel prices. Some say that we are close to, or have perhaps passed, the peak of world oil production⁷¹. If they are correct, we may be closer to exhausting fossil fuel supplies than had previously been anticipated. If so, this would apply ever greater pressure to the price of petrol and diesel as demand further outstrips supply.
- 6.7 All of these drivers present compelling reasons for us to think carefully about our travel choices, be that whether we need to travel, when we travel and how we choose to travel.

OUR EFFORTS IN LTP2

- 6.8 Efforts to increase walking, cycling and the use of public transport were at the heart of our strategy to improve local transport in Leicestershire during LTP2. Full details of our efforts during LTP2 are available in our LTP2 Delivery Report³⁴, but broadly these focused on:
 - Encouraging smarter choices⁵⁵. We delivered schemes and initiatives that reduced the need to travel and improved facilities for pedestrians and cyclists. Our Connect 2 improved walking and cycling access to areas of greenspace in Watermead Country Park, and along the valley of the River Soar. We also developed our traditional school and workplace travel planning activity to include Personalised and Area-based Business Travel Planning.

- Marketing and promotion of services. Campaigns have included providing travel information packs to new housing developments, the introduction of countywide bus and cycle maps, travel guides and timetables, the launch of the 'Leicestershire Attractions by Bus' booklet and seasonal campaigns, such as 'Spring Savers'.
- **Developing park and ride in central Leicestershire.** Two more park and ride sites were delivered in Leicestershire during LTP2. The first at Enderby, to the southwest of Leicester, was delivered in November 2009, the second at Birstall on the A6 to the north of Leicester opened in the summer of 2011.
- **Improving bus performance.** Improvements took place on bus corridors into Leicester City Centre including the B5366 Saffron Lane, and the A47 Humberstone Road.
- Improving Leicestershire's Rights of Way network. Work during LTP2 particularly
 focused on areas within, and close to, the County's main population centres. It
 included efforts to broaden access, especially for those with disabilities, through
 our 'Gap, Gate, Stile' policy (nearly 2000 stiles were removed and replaced with
 either a gap or a gate), and working with our partners to promote and encourage
 use of our Rights of Way network through initiatives such as 'Walk for Life'.
- 6.9 Combined with work we did to deliver other parts of our LTP2 strategy, the efforts outlined above helped us to make strides during LTP2 in encouraging more active and sustainable travel. Based on figures to the end of 2009/10, we achieved a 7.9% increase in bus patronage from our LTP2 baseline of 14.918m journeys (although as detailed in Chapter 3 bus patronage figures have fallen quite markedly since) and reduced the number of pupils travelling to school by car as the only pupil by approximately 2000. At the end of 2009/10 80% of the schools in Leicestershire had a travel plan in place. In addition, 47% of the employers with over 250 employees in the County had a workplace travel plan. Again based on figures to the end of 2009/10 we achieved a 16% increase in the levels of cycling at our LTP2 counting points in Central Leicestershire and Loughborough. At a scheme level, monitoring of completed sections of the Connect 2 Project showed a dramatic increase in cycling and walking levels, with over 250,000 journeys per year taking place on typical sections around Watermead Country Park. More than 50% of those surveyed as part of our monitoring exercises at Watermead stated that they were on a journey for which they could have used a car, but chose not to.

6.10 On the downside, resident satisfaction with public transport information and local bus services has remained lower than we would like during LTP2 and is an area where we compare particularly poorly to other authorities.

WHAT ARE WE SEEKING TO ACHIEVE IN LTP3

6.11 Given the significant challenges posed by the increasing threat of climate change, the social and financial consequences of poor health and the increasingly difficult financial situation for local authorities, encouraging more active and sustainable travel is one of the most important activities that we will pursue in LTP3. It will help to tackle a number of the strategic drivers that are relevant to us as both a highway authority but also to the Council as a whole. The LTP3 strategic transport goals and outcomes that encouraging more active and sustainable travel will help deliver are shown below.

Strategic transport goals	Strategic transport outcomes		
A transport system that helps to reduce the carbon footprint of Leicestershire A transport system that helps improve the safety, health and security of our residents A transport system that supports a prosperous economy and provides successfully for population growth	The negative impact of our transport system on the environment and individuals is reduced	More consistent, predictable and reliable journey times for the movement of people and goods	More people walk, cycle and use public transport as part of their daily journeys, including to access key services

- 6.12 Our LTP3 approach will also seek to ensure that encouraging more active and sustainable travel plays its part in delivering other LTP3 outcomes. For example:
 - Encouraging more people to walk, cycle and use public transport will help to reduce congestion and achieve a transport system that provides for the effective and efficient movement of people, materials and goods.

- Continuing to support bus services / alternative forms of public transport, and seeking to ensure that new developments can access a range of facilities by means other than the private car, should help to promote equality of opportunity.
- Efforts to improve information about existing sustainable transport services and facilities should help to improve satisfaction with our transport system.

WHAT DOES OUR LTP3 APPROACH NEED TO FOCUS ON?

6.13 Although LTP2 provides us with a good base on which to build, we recognise that we face some significant challenges in seeking to re-direct demand on the local transport network and change public attitudes and behaviours towards travel. This section looks at the issues that our approach must consider in order for our long-term strategy to be successful. Whilst we have an extensive evidence-base to help us establish the issues that we face, it is only a snapshot in time. Over the lifetime of our strategy, it will be important for us to review our evidence base to ensure that our approach remains both robust and credible.

The rising trend of car use

6.14 Although the last few years have seen falling car vehicle kilometres in Leicestershire (largely due to the economic downturn), there are signs that this trend is now starting to reverse with increasing traffic flows reported both locally and nationally in 2011. The long-term trend is also largely one of growth. In 2007 traffic flows were 28%

higher than they were in 1993⁷². Car ownership in the County has also increased. These are a number of reasons for this. Despite rises in world oil prices and changes in taxation, car travel (even when taking into account the cost of parking) is still becoming cheaper relative to the cost of public transport (see Figure 6.1). This is a trend that our modelling work reveals is set to continue. Train fares continue to increase, and the effects of recent Government spending reviews has had an impact on the ability of bus companies to maintain current levels of commercial services and bus fares.



Figure 6.1: Growth in passenger transport prices and motoring costs 1987 - 2009 ONS Transport Trends 2009²⁶

- 6.15 In addition to the cost differential between travelling by car and travelling by public transport, another likely reason for increasing car vehicle kilometres in Leicestershire is that there are well-established travel patterns (already causing significant congestion problems on the main corridors into Leicester and a number of the county towns), a number of which are difficult to provide for by means other than the private car, e.g. people travelling to and from work in rural areas.
- 6.16 Despite the economic downturn, the long-term aspiration for Leicestershire remains one of economic growth, alongside forecasted increases in its population and housing levels. There is a long established understanding that as population and wealth grows so does people's demand to travel, particularly by private car (something borne out by the increasing car vehicle kilometres and car ownership in Leicestershire between 1993 and 2008). The increased vehicle kilometres emanating from such growth will significantly increase pressure on our transport system and also have significant environmental implications.
- 6.17 There is little doubt that growth will be one of the biggest single influences on our levels of road transport CO₂ emissions through the resulting upward pressure on the demand to travel, particularly by private car. Should travel habits continue as they are, our research provides an initial indication of the scale of the challenge that we may face across the sub-region. In comparison to conditions in 2006, even allowing for assumptions about improving vehicle technology by 2026, our research indicates that the number of vehicle kilometres on the County's road network could increase by over a third³⁹. We have already seen that the amount of CO₂ produced by road transport in the County could increase by more than 5% over the same time period. Some hope in reducing emissions from road transport is placed on developing better, more fuel efficient engines, or engines which find their energy from zero-carbon sources. Notwithstanding the importance of these developments, re-directing demand on the local transport network will be essential. Through our long-term strategy, we will therefore seek to reduce the need to travel in the first place, or encourage the adoption of less polluting travel behaviour, whether this is by the implementation of softer measures to influence travel behaviour in the short-term, or by the delivery of more direct demand management measures in the medium-tolonger-term.

Attitudes towards travel and climate change

- 6.18 If we are to successfully change travel behaviour away from single occupancy car journeys, the support of our residents and businesses will be vital. However, existing research shows that we may face some challenges in obtaining this support. National research reveals that amongst members of the public there is a mixed and limited understanding of climate change and the role of personal travel choice and behaviour in this. In a Department for Transport study, two thirds of respondents believed that the climate was changing and that human activity was a cause of this change. Whilst 66% of respondents correctly identified that 'transport is one of the major contributors to climate change', a third of respondents incorrectly believed that 'buses, lorries and trains together emit more CO₂ than cars in the UK'. In addition, whilst most respondents were positively disposed towards taking action personally on climate change, the majority felt that what they did personally would not have an impact. The findings on respondents' actual transport behaviour tended not to reflect this apparent willingness to take action personally. Finally, whilst 58% of respondents said they would be interested in learning more about what they could do personally to tackle climate change, only 11% said that they were 'very interested'⁵⁶.
- 6.19 Further national research has also revealed that people's motivation for making changes to their travel behaviour is not linked to concerns about their carbon footprint, but more to issues such as cost and convenience²³. This research is borne out by our more local work which has revealed that the convenience of going by car and the cost of bus fares are the key factors that stop people from using the bus instead of their car⁷³. A Department for Transport commissioned study into travel behaviours also found a sense in which people would be more inclined to change their journey patterns rather than the mode they use. Avoiding unnecessary trips, combining trips and being more 'fuel wise' were all attractive options²³.
- 6.20 There are, however, some positive signs. Government research reports that people do acknowledge the health benefits of walking and cycling, with over 90% of adults considering that everyone should be encouraged to walk to help their health, help the environment and to ease congestion. It also reports that four in ten car users recognise that many of the shorter journeys they currently undertake in their car could be journeys they complete on foot⁵⁷. Locally, the results of the Leicestershire

2008 Place Survey revealed that respondents were increasingly recognising the importance of public transport. 25.6% of respondents said that public transport was important to them³⁰, significantly up from the Best Value Performance Indicator Survey undertaken in 2006.

6.21 Despite these encouraging signs it is clear that through our LTP3 we need to do more to inform and educate people about the role that personal travel choice can play in helping to reduce carbon emissions, improve levels of air quality and improve health, and the likely consequences of failing to do this. It will also be important for us to better understand locally the drivers that may encourage people to change travel behaviour and identify those people who may be more willing to change their behaviour. However, whilst it is important for us to do as much as we can to promote and encourage people to walk, cycle and use public transport, we recognise that it is not possible for these modes to represent a viable alternative to the car for all journeys, particularly for those in rural areas and for some longer or multi-leg journeys. It is important, therefore, that our approach also seeks to support national initiatives aimed at making car travel less environmentally damaging, including through the provision of electric and other low emission vehicles, and to encourage the more efficient use of cars in general.

Barriers to the use of more sustainable of travel

6.22 There are also a number of weaknesses with our current transport system that can act as barriers to people using more sustainable modes of travel. The public transport interchange in central Leicester has been assessed as poor and it has been suggested that a step change in the quality of bus services is required to provide a viable and attractive alternative to the private car for a much greater proportion of the working population. There is also often limited access by bus to centres of employment outside central Leicester, such as business parks, and limited or non-existent evening and off-peak service provision which can be particularly problematic for employees working shifts. Further, the Leicestershire Rural Transport Study reported that access to jobs and services, particularly training and education, is a major issue for residents in rural areas. Our indicators also reveal that improvements could be made in bus punctuality, and the provision of information on bus services. The role of such improvements in encouraging greater bus use is endorsed by

Government findings which place significant emphasis on the role that bus service reliability and the quality of information provision can play in encouraging people to travel by modes other than the private car.

- 6.23 On walking and cycling, local research reveals that congested roads, poorly maintained surfaces, a lack of consideration of other road users towards pedestrians and cyclists, and concerns around personal safety and security remain well cited reasons for why people do not walk and cycle more in Leicestershire.
- 6.24 In terms of rail, the Economic Assessment for Leicester and Leicestershire²² reports that there is a modest local rail network with relatively infrequent services (when compared to wider strategic links to places such as London). Whilst LTP3 is unlikely to be able to do anything to increase the number of local rail stations in Leicestershire, we will be able to encourage more local rail travel by improving access to rail stations. Based on the success of national demonstration projects, Government research highlights the importance of providing good travel and interchange information at, and accessibility to, stations for a range of travel modes. It states that where information, access and facilities are poor, this can impact on peoples' travel choices⁵⁷ and it is important, therefore, that our approach seeks to deal with these issues.

OUR LTP3 APPROACH

- 6.25 Although there are significant challenges to be met if we are to successfully encourage more active and sustainable travel, the strategic outcomes that this can help deliver ensure it is more important than ever that we overcome these.
- 6.26 Our approach to encouraging more active and sustainable travel in the short-term will be to build on our successes in LTP2. Much of our efforts to encourage modal shift in LTP2 focused on making capital-based investments in improving the infrastructure in place for walking, cycling and public transport (i.e. by building park & ride sites and by expanding the cycle networks in Central Leicestershire and Loughborough). Our intention was always that the early years of LTP3 would be about building on the work of LTP2, by raising people's awareness of the infrastructure and services that are now available to travel in a different, healthier and more environmentally-friendly

manner. Alongside this, we will use whatever capital monies are available to continue efforts to improve walking, cycling and public transport infrastructure, particularly in urban areas of the County.

- 6.27 A number of the initiatives that we developed in LTP2 remain fit for purpose. In some cases we are simply rolling these forward, in others we are seeking to apply the lessons we have learnt to further develop the initiatives and their effectiveness. This can be seen in our development of area-based business travel planning, personalised travel planning, the expansion of our School Star Travel initiatives and our work to develop the approach we take to encouraging residents of new developments to walk, cycle and use public transport.
- 6.28 The scale of the challenges faced, and the implications of failing to address them, ensure that we will be working hard in the early years of LTP3 to encourage everyone to take responsibility and ownership for their own travel actions, whether they are residents or businesses. Going forward, we all need to think carefully about our travel choices, be that whether we need to travel, when we travel and how we choose to travel.
- 6.29 Whilst evidence suggests that if we travel in a healthier and more environmentallyfriendly manner it will bring benefits, we must all recognise that these may not be sufficient alone to deliver the reductions in CO_2 levels necessary to avoid the worst environmental, social and financial impacts of climate change. In light of the sub-region's increasing population, it would appear likely that more active demand management measures will be required within the lifetime of this strategy in order to achieve the necessary reductions in car use that will be required to achieve our carbon reduction targets.
- 6.30 With the above in mind, our LTP3 approach to encouraging more active and sustainable travel will primarily focus on the key elements identified below. The focus of our approach will remain on times of peak demand and in urban areas by:
 - 1. Reducing the need to travel.
 - 2. Improving the quality of the walking, cycling and public transport services and facilities on offer across the County.

- 3. Increasing our efforts to influence travel choices and raise the awareness of residents and businesses about the impacts of their travel behaviour on their environment, their health and their quality of life.
- 4. Encouraging less polluting travel by car.
- 6.31 Our success in delivering the key elements of our approach will be influenced by the degree to which we can continue to improve our understanding of the impacts of the things that we are doing to influence travel choices and the wider health and environmental benefits that they are delivering. Initial efforts are likely to focus on continuing to develop cost-effective ways to improve our general approach to data collection, scheme monitoring, and the use and maintenance of our counting and modelling tools. Where appropriate, we will work with Leicester City Council to do this. We will also be monitoring the effectiveness of measures that are implemented to encourage sustainable travel in support of new development, in particular the Sustainable Urban Extensions⁴⁴ that are planned across the County. We will also continue to work in partnership with regional and national bodies to share and compare data and best practice on initiatives to encourage more active and sustainable travel.

DELIVERING OUR LTP3 APPROACH

6.32 The sections that follow provide more details of what we will be doing to deliver the key elements of our long-term strategy to encourage more active and sustainable travel. Whilst we recognise the vital importance of our efforts to reduce CO₂ output from our transport system and support healthier lifestyles, we cannot concentrate on all aspects of our approach at once and afford them all the same priority within our available resources. Our Implementation Plan¹⁶ identifies the things that we will be doing in a three year period to deliver our long-term strategy and explains how we will monitor and review progress to ensure that our approach remains relevant and robust. Chapter 11 of this strategy provides the context for our initial Implementation Plans, and thus the context in which we have made decisions regarding which aspects of our approach to encouraging more active and sustainable travel we take forward in the first three years of LTP3.



1. Work through the planning system to seek to reduce the need to travel

We will do this by:

a) Seeking to promote and support land-use planning policies that are developed by others that aim to reduce the need for existing residents to travel outside their local area.

For example, the provision of supported office accommodation that would enable someone to work more locally on occasions rather than travel to work outside their local area.

- b) Maximising the use of our existing transport system by seeking to deliver new developments in areas that are already able to be well served by walking, cycling and public transport.
- c) Seeking to ensure that new development proposals put forward by others are either supported by an appropriate range of facilities that reduce the need to travel off-site or, where it is necessary to travel off-site, travel distances are minimised and genuine, safe, high quality choices are available (or can be provided) for people to walk, cycle and use public transport to access facilities and services nearby.
- d) Encouraging high quality, safe facilities in new developments for pedestrians, cyclists and public transport users.

We will do this by inputting to the Masterplan process, especially for the Sustainable Urban Extensions around the edges of Leicester and our county towns.

e) Seeking to ensure that new development proposals put forward by others are supported, as appropriate, by travel plans.

Such travel plans should seek to reduce travel by car and be backed up a targetdriven monitoring and reporting programme that will allow the effectiveness of the travel plan in changing travel behaviour to be assessed. It is suggested that such travel plans should also contain the requirement for penalty charges to be introduced where targets are not met.

f) Using wider planning policies to promote and help enable travel by walking, cycling and public transport.

Ensuring land use and transport planning are properly integrated throughout the planning process is vital to reduce the need to travel and to encouraging travel by public transport, bike or on foot⁵⁰. This is particularly important given the level of growth planned for Leicester and Leicestershire.

It should be noted that through the planning system, we will, if appropriate, seek to resist proposals that would likely result in adverse impacts on our efforts to encourage modal shift away from the private motor car.



2. Improve the quality of the walking, cycling and public

transport services, facilities and infrastructure on offer across the County

In relation to <u>walking</u>, <u>cycling</u> and <u>public transport</u>, we will do this by:

Ensuring that, as part of the more area-based approach we want to take in LTP3, we review the walking, cycling and public transport



infrastructure that is in place across the urban areas of the County with a view to identifying and delivering improvements, particularly where this would support sustainable economic and / or population growth.

We will seek to do this in combination with other measures that seek to promote, encourage and enable people to travel by means other than the car. It should also be noted that we will increasingly need to seek funding from other sources in order to achieve this.

a) Seeking to improve the quality of information that we provide about existing and new walking, cycling and public transport facilities and services.

Key to our approach in LTP3 is adopting a more targeted approach to the provision of this information. This should be an approach that considers the audience we are trying to reach, the most appropriate method of communication that will allow us to do so, and the message that is most likely to result in the change in travel behaviour that we are after.

Specifically in relation to walking and cycling we will do this by:

- b) Continuing to review the approach that we take to the maintenance of our transport system to ensure that this reflects the importance that we place on encouraging more walking and cycling. See Chapter 9 for more details of how we plan to manage the condition and resilience of our transport system during LTP3.
- c) Continuing to proactively maintain and publicise our Rights of Way (RoW) network

Our RoW network covers over 3,000 kilometres of public footpaths and bridleways across the County. In the early years of LTP3 we will be producing a new Action Plan for our RoW network. This will set out a programme for the delivery of the RoW service for the immediate future, within the context of the broader proposals for the management of the network over a much longer period. Our approach will see a continued focus on those routes that have the greatest current and potential use. As part of our efforts to respond to the localism agenda, we will also be seeking to develop more active engagement with the voluntary sector and local communities on the management of their local RoW network. Members of the public already play a key role in helping to identify and report defects on the network and this is an involvement we are looking to develop. We will continue programmes focused on waymarking and signing improvements, vegetation cuts and the removal of access barriers on the network, and will continue to work with other bodies, including tourism agencies, to actively market and promote our RoW network¹⁹.

d) Contributing to the development of the Green Infrastructure network. This will be done by:

- Ensuring that where we can afford to do so, we seek to provide green access corridors that give high quality access to green space near to where people live and near to where future large scale development may be planned.
- Seeking to work with developers and planning authorities to help them to deliver high quality access to green space as part of new developments.

The Green Infrastructure (GI) Strategy covering Leicester and Leicestershire⁵⁸ identifies a number of routes, including the River Soar corridor, as sub-regional and city-scale GI corridors. This work is being developed by a number of district councils through their Local Development Frameworks with the production of local Green Infrastructure plans.

Specifically in relation to bus services we will do this by:

e) Working with Leicester City Council and bus operators to seek to improve bus journey time reliability.

This will be achieved through the development of a Bus Punctuality Improvement Plan, through which we will work with Leicester City Council and the local bus operators to develop and deliver low cost measures designed to improve bus journey time reliability. Measures are likely to include, for example, the use of detector systems that give buses priority at traffic signal controlled junctions, better enforcement of existing bus lane operation, and minor road alterations.

f) Working with Leicester City Council and bus operators to seek to make it easier for people to use buses by improving the way in which timetable information is provided, and the ticketing and payment options that are available. See also Chapter 7 regarding accessibility to bus services.

g) Maximising the usage of our existing park and ride sites.

Park and ride sites are costly to build and also to operate. The current financial circumstances dictate that, in the short-term, our focus will be on maximising the usage of our three existing park and ride sites in the PUA, rather than building any new sites. However, that is not to say that we rule out the provision of further park and ride sites in the County in the medium-to-long-term. Where this provides value for money, and its usage can be maximised, we believe that park and ride can still play a role in helping to tackle congestion, improving sustainable access to urban areas and delivering economic growth and regeneration. We will therefore

continue to consider the provision of park and ride sites where our evidence indicates that merit could be gained in providing new sites and that this is a costeffective solution to the challenges that we face. Our view is at present that this is likely to be best achieved by promotion of any new sites as part of a package of area-based measures that seek to encourage people to change travel behaviour, including both personalised and area-based business travel planning.

h) Continuing to develop our Quality Bus Corridor Programme. This will include working with Leicester City Council and local bus operators to:

- Develop a countywide prioritised programme of bus corridor improvements (started with the Leicester A426 corridor work we are doing using 'Better Bus Area Fund' monies we have received from Government).
- Undertake investigations to establish and quantify how to overcome any issues related to the incomplete sections of our existing Quality Bus Corridors.
- Undertake assessments of the potential for new Quality Bus Corridors on routes into Leicester and other county towns.

Quality Bus Corridor (QBC) improvements provide a comprehensive approach to the improvement of a bus route. Improvements can include such things as the use of better, more modern buses, the provision of new lengths of bus lane and improved bus stops. On the basis of evidence available to us, we believe that QBCs can continue to play an important role in seeking to improve the attractiveness of public transport as an alternative to the private car. During the early years of LTP3 we will seek to take forward and implement bus corridor proposals previously identified during LTP2 (although we will increasingly need to seek funding from other sources to deliver these). As appropriate, we will also look to develop business cases for new or improved QBCs so that we are in a position to secure funding for them as and when future opportunities arise.

Working with Leicester City Council to investigate potential solutions for improving public transport access and interchange in and around Leicester City.

Whilst there are presently problems with regard to bus interchange in Leicester City Centre, which an increasing population is likely to compound, in our view, these are best likely to be addressed by primarily improving the bus based transport offer in and around the City. With regard to the provision of more radical improvements to the public transport offering, such as mass-rapid transport (MRT) schemes (i.e. trams, guided bus ways etc), our view at present is that any such schemes would not represent an affordable and deliverable solution to Leicester and Leicestershire's public transport challenges, given how expensive and difficult they can be to deliver. However, MRT schemes can have environmental benefits in appropriate circumstances, and should Leicester City Council decide to progress this option, it would be important for us to be involved in the process.

Specifically in relation to rail services we will do this by:

j) Seeking to improve connectivity to, and interchange at, local rail stations for pedestrians, cyclists and public transport users.

Our efforts to date have focused on Loughborough Railway Station as this is comfortably the busiest station in the County, attracting 1.36 million passengers annually. This reflects the size of the town and its location on the Midland Mainline, and hence better service frequency and connectivity. We have delivered the Loughborough Eastern Gateway (LEG) Scheme in conjunction with Charnwood Borough Council, Network Rail and a developer to provide improved access to Loughborough Railway Station.

k) Exploring opportunities to develop travel plans at local rail stations within the County.

A Loughborough Railway Station Travel Plan was produced in 2008 as part of the national Station Travel Plan pilot programme. The travel plan has provided valuable input into the redevelopment proposals of the interchange facilities at the station. As part of the pilot programme, best practice has been shared amongst the 23 stations and this will continue to play an important part in our learning about the most appropriate travel initiatives to use not only at Loughborough, but also at our other local rail stations as we seek to improve interchange facilities that encourage people to travel to and from stations by more sustainable modes of transport.

More information on our efforts to pursue improvements on the strategic rail network to help facilitate growth is contained in Chapter 5, Supporting the economy and population growth.

We will about the impacts of their travel behaviour on their environment, their health and their quality of life

Our efforts to influence travel choices will be delivered in tandem with our work outlined previously to improve the quality of the walking, cycling and public transport services and facilities on offer across the County. The work of our Travel Choice and Access Team will focus, at least in the short-term, on improving our marketing and promotional activity associated with more sustainable and active travel, further developing the work that that we do with our residents, businesses and schools on travel planning, and tackling safety and security issues associated with walking, cycling and the use of public transport.

In the medium-to-longer-term, our evidence tells us that the combined efforts of ourselves and our residents and businesses in doing this are likely to be insufficient to deliver the required change in travel behaviour that will be needed to offset the negative transportation impacts of population growth. We therefore anticipate that during the second half of this strategy we will need to investigate, and as necessary implement, more active demand management measures in an effort to reduce car use. More details of the work that we will undertake in the short-term follow in the sections below.

Travel marketing and promotion

The DfT's Smarter Choices report in 2004⁵⁹ examined how local authorities can reduce dependency on car use by such measures as awareness campaigns and marketing and promotional activities. It concluded that even successful campaigns may only reduce traffic flows by 10% and that a more targeted approach is needed to combat increasing traffic growth. This is something borne out by local research. As part of research into the provision of smart and integrated ticketing in Leicester and Leicestershire, 26% of respondents stated that nothing we did would encourage them to use the bus⁷³. Such research reveals that there will always be a part of society that will be unresponsive to any efforts to encourage behavioural change and modal shift. Accordingly, it is vital that our efforts are targeted at those people who may be most willing to change their travel behaviour. We will therefore:

a) Develop more targeted marketing, promotional and awareness-raising campaigns to encourage healthier and more sustainable travel. Such campaigns will focus particularly on better informing our residents and businesses about:

- The health benefits of walking and cycling, and the range of opportunities that are available for people to walk and cycle in the County for social, leisure and business purposes.
- The financial, social and environmental impacts of personal travel habits.
- The impacts that population growth could have on the performance and reliability of our transport system, on the local environment and on people's quality of life if existing travel habits continue as they are.

In terms of identifying groups of residents who may be willing to change their travel behaviour, local data is currently somewhat limited. However, nationally there has been some research into target groups that might offer the most potential for a shift-towards more low-carbon transport modes. The Merseyside 'Travel Wise' campaign⁶⁰ identified that those aged 25-44, those educated to degree or 'A' level, those employed full-time, and those living in 'urban' classified areas might offer greater potential when seeking to deliver a shift towards more low-carbon transport modes. It was also found that those who travelled under 5km to work offered more opportunity to change their travel behaviour away from the use of the private car. This is encouraging given that in Leicestershire approximately 50% of the journeys to work are less than 5 kilometres in length (3 miles)²². Despite this, the journey to work in the County is still car-dominated, offering us encouragement that there may well be scope to achieve a change from car to walking and cycling on a number of these journeys.

Elsewhere in our strategy we have revealed that levels of physical activity and obesity are not experienced equally across society, and people experiencing material disadvantage, those living in poor housing, and those with lower levels of educational attainment or with insecure employment prospects, are amongst those more likely to suffer from poor health. Leicestershire has low levels of deprivation and thus as a whole is not health deprived. There are, nevertheless, higher levels of health deprivation found in the north and west of County, particularly in neighbourhoods in Loughborough and Coalville.

Factors such as these will help inform how we can better target our marketing, promotional and awareness activities around the use of more active and sustainable travel.

Travel planning

Travel plans are an important tool for promoting more walking, cycling, and public transport use, and for helping to reduce single occupancy car use. They also encourage effective use of current transport systems and support their enhancement. Our travel planning activity focuses on three areas - personalised travel planning, business travel planning and school travel planning.

Personalised travel planning

Personalised travel planning involves working with individuals to look at their travel patterns and seek to tailor a sustainable travel solution that best fits their needs. During the latter part of LTP2 we expanded our travel planning activity to look into the benefits that could be gained from personalised travel planning. In LTP3 we will:

- **b)** Continue to develop our approach to personalised travel planning. We will do this by:
 - Building on, and learning from, our experiences in delivering a personalised travel planning pilot project in Thurmaston carried out towards the end of LTP2.
 - Identifying areas where the best opportunities exist to encourage people to choose alternative ways to travel and rolling out our personalised travel planning initiative in these areas. The areas targeted are likely to be those where there are either already frequent, reliable bus services, good quality bus stops and good walking and cycling provision, and where it is possible and affordable to improve existing facilities as part of a package-based approach.

Business travel planning

Business travel plans focus on how employees travel to, and from, work and also look at travel patterns undertaken in the course of the business day. About half of the major employers (those with 250 or more employees) in the County have a travel plan. However, this still only accounts for a relatively small proportion of the workforce. Thus, we are now seeking to focus our business travel planning activity more on groups or 'areas' of employers, irrespective of their size.

Our first initiative at Grove Park Business Park, next to the M1 and the City's ring road, involved close working with Blaby District Council, the Highways Agency and 'Prospect Leicestershire' to support around 40 firms to develop and implement an area based business Travel Plan. It promotes cycle and bus connections from Grove Park to the wider Leicester network, and existing bus services, and is also complementing employer initiatives like car-sharing schemes, secure cycle parking, salary-sacrifice schemes, tele-working and staff awareness raising campaigns.

In taking our business travel planning activity forward during LTP3 we will:

- c) Work with businesses and partners to expand our Area-based Business Travel Planning activity. This will involve:
 - Building on the experiences in developing the Grove Park Travel Plan.
 - Focusing on geographical areas that are similar in nature to those that we will be targeting for the development of our personalised travel planning activity.
 - Working with employers to maximise the benefits of travel plans. This will
 principally involve developing programmes to better measure the actual
 impacts that business travel plans have in changing people's travel behaviour
 on the journey to, from and in the course of work; exploring ways to help
 fund measures to complement business travel plans (i.e. measures to secure
 the provision of cycle storage facilities, showers and changing facilities) and
 exploring the delivery of other measures such as car-sharing schemes, home
 working and car parking management.

School travel planning

School travel plans target how pupils travel to school. Influencing the travel choices of future generations is an ongoing priority for us. However, coupled with parental choice policy, the Coalition Government's changes to education provision (including changes to planning legislation for schools and extended school status) are likely to make it even harder to provide a transport system that meets the travel needs of pupils, be that because of ever more dispersed patterns of travel or increasing distances between home and school. Also, reductions in funding have meant changes to policy that will result in fewer school children in Leicestershire qualifying for free school transport. It will be important for us to seek a close working relationship with individual schools to plan ahead for the potential impact of such changes and to

off-set the very real risk that the numbers of pupils travelling to school by car could increase significantly, with consequential impacts on pollution, congestion and safety. In taking our school travel planning activity forward in LTP3 we will be:

- d) Continuing to develop close working relationships with schools that sees them play a more proactive role in implementing sustainable travel initiatives. This will involve us:
 - Continuing to support the provision of complementary walking and cycling facilities, such as secure cycle parking.
 - Encouraging all schools to update and review their travel plans, with the emphasis on encouraging schools to take ownership of the development and delivery of initiatives that will help deliver their own Plans.
 - Targeting our efforts at individual schools, where our resource levels allow us to do so.

Based on data available through the school census it is possible to identify those schools that have high percentages of car use amongst pupils who live within a certain distance of the school that they attend (for primary schools, this is 0.5 miles, for secondary schools it is 1mile). It is envisaged that these schools offer greater potential for behavioural change and therefore demonstrate higher value for money in terms of the resource we are able to put into our efforts. However, it may not always be possible for us to adopt such a targeted approach given the increased resource this invariably involves.

- Continuing to develop our Star Travel scheme by building on the success of Star Walkers to incorporate other modes of travel, such as cycling, scooting, public transport and car share.
- Looking to improve our work with nursery and pre-school providers in order to complement the works we are already doing with primary and secondary schools. We want to ensure that our approach to promoting healthier and more sustainable travel is ingrained from an early age and continues throughout a child's education.

Our travel choices work will also be complemented by continuing work to support and deliver road safety workshops, courses and training aimed specifically at those who walk and cycle (see Chapter 8), and work that seeks to address issues relating to the fear of crime and the barrier that this can pose to those wanting walk, cycle and use public transport more (see Chapter 7).



4. Encourage less polluting travel by car

We will seek to encourage less polluting travel by car by:

a) Developing our approach to the management of our road network. See Chapter 5 in respect of our efforts to improve journey time reliability and tackle congestion, and Chapter 9 which deals with how we will manage the condition of our transport system.

It is generally accepted that stop-start traffic conditions generate greater levels of pollution than traffic that is moving at a more consistent speed. We need to be careful, however, that by delivering more consistent and reliable journey times we do not encourage more traffic onto the road network that would off-set the pollution benefits.

b) Working with the business community to look at ways to improve information and training opportunities for green driving courses.

c) Continuing to support the development of car-sharing initiatives.

Car sharing is when two or more people share a car and travel together. It allows people to benefit from the convenience of the car, whilst alleviating the associated problems of pollution and congestion. At present, the Leicestershare Car Share scheme (Leicestershare.com) provides an online service that has been developed by Leicester City Council and Leicestershire County Council, in partnership with a number of major health, education, business and sporting bodies. It is completely free to use and has been designed for both drivers and passengers. We will continue to explore how we can expand the car sharing idea across businesses and communities in the County during LTP3.

Current studies indicate that mass market penetration of electric vehicles is unlikely to happen in the near future. Significant government and industry interventions will be needed to stimulate both supply and demand. Many studies do not predict electric vehicles having a larger market share than 10% without significant reductions in price or running costs⁷⁴. A variety of incentives are possible for stimulating uptake of

electric and hybrid vehicles. They include information campaigns, financial incentives for vehicle purchase and taxation and increased amenity of low carbon vehicles through schemes such as preferential parking.

The lack of distribution and re-fuelling infrastructure is also a major obstacle to the market development of alternative fuel powered vehicles. These technologies are needed over the coming decade to achieve a significant shift away from nonrenewable fuelled vehicles with their attendant air quality issues. Electric vehicle infrastructure is currently being trialled in London, Milton Keynes and the North East. We will monitor the success of these projects in the short-term with a view to implementing electric vehicle infrastructure in the medium-to-longer-term. Although our direct influence over this is limited, we will work (with partners as appropriate) on adopting a consistent and co-ordinated approach to:

- **d)** Seeking to encourage the take-up of alternative fuel vehicles. Ways we will seek to take this forward include:
 - Looking at proposals for action that come forward to develop the distribution networks for 'alternative' fuels across the existing road network. This will not just encompass electric charging points but also charging points for hydrogen, liquefied petroleum gas and bio-fuels refuelling.
 - Working with the local planning authorities to develop planning policy that will deliver appropriate electric vehicle infrastructure as part of new development.

MONITORING OUR LONG-TERM STRATEGY

- 6.33 During LTP2 we used a number of indicators to measure the degree to which our efforts were resulting in changes in travel behaviour amongst our residents. These included bus passenger journeys per year, levels of cycling in central Leicestershire and Loughborough, and modal shift on the journey to school. Supporting indicators also measured resident satisfaction with local bus services and public transport information, and bus punctuality.
- 6.34 Our efforts to encourage more active and sustainable travel during LTP3 have been designed to encourage more people in Leicestershire to walk, cycle and use public transport as part of their daily journeys (this is one of the long-term strategic transport outcomes that we would like our LTP3 to deliver). The performance

indicators that we will use to monitor the degree to which we are delivering this outcome are shown below.

Key performance indicator (KPI)

6.35 We will put in place a performance indicator that will allow us to monitor our efforts to increase the number of people walking, cycling and using the bus in the three county towns that we are focusing our sustainable transport investment on during the early years of LTP3 (Loughborough, Coalville and Hinckley).

Supporting indicators

- 6.36 In addition to our KPI, we will also use the following supporting indicators to assess our progress. Some of these indicators are ones that we have been monitoring during LTP2, others are new indicators.
 - Bus passenger journeys (boardings) per year (previous NI 177).
 - Bus services running on time (previous NI 178).
 - Percentage of journeys to school by car as the only pupil (previous NI 198).
- 6.37 Whilst in LTP2 we assessed resident satisfaction with local bus services and public transport information, during LTP3 we intend to better monitor resident satisfaction with the range of transport services and facilities we provide for people to walk, cycle and use public transport. With this in mind, we will be monitoring the following indicators using data from the annual National Highways & Transportation Public Satisfaction Survey:
 - · Satisfaction with local bus services.
 - Satisfaction with local public transport information.
 - Satisfaction with cycle routes and facilities.
 - Satisfaction with the local Rights of Way network.
 - Satisfaction with pavements and footpaths.
- 6.38 In terms of setting targets for our supporting indicators, we have worked to establish baselines using information from LTP2 and other elements of our evidence base.

This, along with an analysis of our historical performance, has helped to inform the targets that we have set for each of these indicators. Details of our targets and the progress we are making against these can be found in our latest Implementation Plan. We monitor our progress on a quarterly basis as part of the performance management regime that is put in place to monitor delivery of our Implementation Plan.

6.39 We are also undertaking development work to establish how we can better measure levels of cycling and walking across other areas of the County, usage levels on our Rights of Way network, and modal shift on the journey to work. Once this work is complete, relevant performance indicators will be added to our PI set.

CONCLUSIONS

- 6.40 Encouraging more active and sustainable travel remains a key part of our transport strategy for Leicestershire. As we move further into our LTP3 strategy period we hope that the need to encourage more active and sustainable travel, not just as part of efforts to tackle congestion (which was the major driver for our efforts in LTP2), but as part of efforts to reduce the carbon emissions from road transport, provide enhanced access to jobs and training for those for whom car ownership is too expensive and improve people's health, will appeal to a wider section of society and allow us to achieve greater behavioural change during LTP3.
- 6.41 Many of the long-term trends on our transport network indicate that this will be difficult. The long-term trend in car vehicle kilometres is one of growth and a similar trend ensures that car ownership continues to rise. These are trends that are likely to continue to rise in the face of the significant levels of growth, development and regeneration forecast for the County between now and 2026. There are also a number of existing barriers that stop people from walking, cycling and using public transport, primarily associated with concerns around safety, convenience or cost. The current economic downturn also adds to the scale of the challenge we face. Public sector funding cuts ensure that it is going to be very difficult for us and our bus operators to maintain levels of bus service provision that ensure we are able to offer a genuine alternative to the car.
- 6.42 Despite these challenges we want our LTP3 to help provide a high quality environment in which people feel safe to walk, cycle, and use public transport, whether they are going to work, to school, shopping or just to enjoy a pleasant walk in the countryside. Our short-term approach will see increased emphasis on improving the marketing of, and information on, existing facilities and services that will enable people to travel by bike, on foot, by bus and by rail. This will enable us to build on the significant investment that was made during LTP2 to improve the infrastructure in place for walking, cycling and bus use. Alongside this, we will, where possible, continue to seek to pursue the development, design and delivery of schemes that will improve facilities for pedestrians, cyclists and public transport users, particularly in urban areas of the County as part of efforts to help facilitate sustainable economic and / or population growth. This will include continuing to investigate how we can improve the interchange at, and connectivity of, our local rail stations. Given the significant levels of growth, development and regeneration forecast for the County, we will also be placing significant emphasis during the early years of our LTP3 strategy on working with planning authorities and developers to minimise future new demand for travel through the planning system. We will also be focusing on investigating how we can encourage and enable less pollution from car travel.
- 6.43 In the medium and longer-term, an improved financial situation may allow us to explore again the role that new park and ride sites may have to play in effectively tackling congestion, improving access to urban areas and delivering growth and regeneration. We will also be looking at how we can help with the provision of the infrastructure necessary to allow for the greater take-up of alternative fuelled vehicles. Perhaps most importantly, current evidence suggests that in order to maintain a transport system that effectively supports Leicester and Leicestershire's economic growth aspirations, and at the same time helps to reduce its CO₂ output, it is likely that we will need to investigate and deliver more proactive ways to reduce the demand for travel within the lifetime of this strategy. We and our partners can only do so much in seeking to provide a transport system that promotes and encourages walking, cycling and public transport use. How our residents, our businesses and our visitors choose to travel during the first few years of our LTP3 will either bring nearer the date for this, or push it more towards the end of the strategy period.

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This chapter:

- Looks briefly at how we sought to improve accessibility during LTP2.
- Identifies the issues on which our approach to improving connectivity and accessibility will need to focus during LTP3.
- Sets out our LTP3 approach to improving the connectivity and accessibility of our transport system.



INTRODUCTION

- 7.1 An efficient and accessible transport system has a significant role to play in delivering improved economic and social outcomes. From an economic perspective, transport connectivity enables people and businesses to access services, employment centres, labour pools and key markets. Socially, transport connectivity can play a key role in helping to address those issues that put people and communities at a disadvantage in comparison to other areas.
- 7.2 In recognising that accessibility can be particularly difficult for those without access to a car (research indicates that more than a quarter of the households in the UK²³ and approximately 15% of households in Leicestershire⁹⁵ still do not have access to a car), and our wider strategic aspirations to encourage more healthy, active and sustainable travel, this Chapter focuses particularly on how some of these accessibility difficulties can be overcome by walking, cycling and using public transport. Acknowledging, however, that many people do, and will continue to, rely on travel by private car, we will continue to maintain and improve the accessibility and connectivity of our road network through our efforts to support the economy and population growth (see Chapter 5), improve road safety (see Chapter 8) and manage the condition and resilience of our transport system (see Chapter 9).

OUR EFFORTS IN LTP2

7.3 According to the Social Exclusion Unit's 'Making the Connections Report' (2003), there are four key services that people need access to – employment, education, healthcare and food stores⁶¹. It was on improving accessibility to these services that we concentrated our efforts during LTP2, both in terms of delivering general access improvements to these key services by public transport, walking and cycling, and delivering targeted access improvements to these key services for vulnerable individuals, groups and communities. The sections that follow highlight some of the initiatives we undertook to improve accessibility across the County during LTP2.

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Public transport accessibility

- 7.4 Maintaining access to jobs, education and services was a key objective of our investment in our local bus network. The provision of our hourly bus network policy throughout LTP2 meant that we were able to provide a bus network in Leicestershire that ensured 95% of people in the County, and 76% of people in rural areas, were within 800 metres of a bus service of hourly or better frequency. The cost of increasing the coverage of our hourly bus network beyond 95% is very high and so we used alternative scheduled bus routes, alongside community and demandresponsive transport schemes, to provide flexible and good levels of access for people in the most remote and rural areas. These services helped improve the lives of vulnerable people. Our 'Rural Rider' service for East Leicestershire⁴⁶ obtained a runner-up commendation in the highly competitive 'Accessibility' category at the 2007 National Transport Awards. We also worked with the Leicestershire Rural Partnership⁶² to fund and deliver the introduction of a new website to promote community transport services, and a comprehensive community transport marketing programme that supports our existing and more traditional paper-based information leaflets.
- 7.5 A number of schemes were implemented during LTP2 to improve accessibility by public transport to key facilities such as employment, healthcare and leisure. We implemented two priority bus access schemes at Coalville and Loughborough Community Hospitals which, along with the Circleline bus service, connects people to hospitals, work and shops. This Circleline service runs between Leicester General and Glenfield Hospitals, Fosse Park, and the Hamilton and Beaumont Leys shopping centres. Bus stop upgrades were delivered on a number of routes, including the service between Hinckley and Market Harborough, and routes in Glenfield, Loughborough and Thurmaston. We also worked through the Central Leicester Quality Bus Partnership⁴⁸ to influence the provision of new buses with low floors for level access as part of joint investment programmes and also by influencing renewal programmes through our contract specifications for supported local bus services. Work was undertaken with East Midlands Airport to improve access to their site. We worked with Leicester City Council to introduce an hourly bus service from Leicester to the Airport. We are also active members of the East Midlands Airport Transport Forum and share best practice on travel planning with the Group's representatives.

Walking and cycling accessibility

- 7.6 In 2006 we implemented the world's first cycle activated traffic sign crossing to assist cycle access to East Midlands Airport, which helped improve access to employment opportunities at the Airport. Our Connect 2 project also significantly improved walking and cycling access to areas of green space at Watermead Country Park and along the valley of the River Soar. We also improved access to our Rights of Way network by removing barriers to access for those with disabilities.
- 7.7 The Leicestershire Accessibility Forum was formed in 2005 to help deliver the accessibility elements of our LTP2. A key policy requirement that emerged was the need for better information provision on the availability of walking and cycling facilities. We worked via the Forum, which includes representatives from a range of stakeholders across the County, to provide walking and cycling maps for different areas of the County (including a newly commissioned 'Strolls on Your Doorstep' guide).

Access to school and further education colleges

7.8 Throughout LTP2 we invested significant efforts in developing our school travel planning activity in an attempt to reduce the number of single occupancy car trips on the journey to school. Our Star Walker⁴⁷, school cycle parking schemes, and our programme of school 20 mph safety zones are examples of some of the initiatives that we delivered in order to encourage more sustainable access to schools. We also gave advice on the support available to pupils with learning and/or mobility difficulties in order to encourage independent travel to and from the place of learning. In attempting to play a role in reducing the number of 16-17 year olds 'not in employment, education or training' (NEET), we also worked with service and education providers to deliver initiatives designed to overcome accessibility barriers that may hinder youngsters getting to and from their place of work or learning. An example is our Wheels to Work project⁶³.

Reducing the fear of crime

7.9 Fear of crime can be a major disincentive for people wanting to walk, cycle and use public transport and can affect some groups in society more than others. During LTP2 our efforts largely centred on addressing issues around walking in the dark³⁹, and in the last five years we implemented community safety lighting schemes. Police records show that this targeted approach had a beneficial effect with, on average, a 20% reduction in crime in the area in which they were installed. This figure was as high as 60% in some areas. (To reduce the energy impact of street lighting, we use lower energy lamps for all new installations, thus ensuring our approach is consistent with our ambition to reduce carbon emissions from our transport system.)

Improving accessibility through the planning process

- 7.10 We worked throughout LTP2 with the local planning authorities in the County to seek to co-ordinate better land use and transportation planning with the aim that development is located in accessible locations with appropriate improvements for walking, cycling and public transport. An example of such an approach is the work that we have done with Charnwood Borough Council, Network Rail and a developer to provide improved access to Loughborough Railway Station, and also remove through traffic from adjacent terraced streets, via the Loughborough Eastern Gateway project.
- 7.11 Combined with our work to deliver other parts of our LTP2, the efforts outlined above helped us to maintain a consistent level of accessibility for Leicestershire residents during the LTP2 period. Of those households without access to a car in the County, nearly 95% were within 40 minutes of a main centre with a range of facilities by public transport, walking and cycling, and over 97% were within 60 minutes of a main centre by public transport, walking and cycling at the end of LTP2 (March 2011). At the same time, based on DfT calculations, 80% of our working age population lived within the catchment area of a location with more than 500 jobs which was accessible by either public transport, demand responsive transport, walking or cycling³⁴.

7.12 During LTP2 we also:

- Increased the number of bus stops on our hourly network to designated LTP2 standards from 23% in 2003/04 to approximately 50% in 2010/11.
- Achieved a 28% increase in the number of journeys per week using complementary transport for disabled people.
- Increased the percentage of the combined City and County Council bus fleet with low floors for level access to 94% in 2009/10 from a 2003/04 baseline of 36%.
- 7.13 Disappointingly, despite our efforts to improve the marketing and promotion of public transport services, resident and user satisfaction with public transport information remained low throughout LTP2.

WHAT ARE WE SEEKING TO ACHIEVE?

7.14 Our efforts to improve connectivity and accessibility in the County will help us to deliver the LTP3 strategic transport goals and outcomes shown below:

Strategic transport goals	Strategic transport outcomes
An accessible and integrated transport system that helps promote equality of opportunity for our residents	More people will walk, cycle and use public transport as part of their daily journeys, including to access key services
	Effective and integrated public and community transport provision, including targeted and innovative travel solutions which meet the essential transport needs of Leicestershire residents

- 7.15 Our efforts in improving connectivity and accessibility will also play a part in delivering other LTP3 outcomes. For example:
 - They can help support economic activity and growth by providing people with access to employment, training and skills development opportunities, and by providing businesses with access to key markets and labour pools.
 - If more people walk, cycle and use public transport this will help to achieve a road network that provides more consistent, predictable and reliable journey times. This should also help to reduce CO₂ emissions across the County and help to improve the health of our residents.
 - Efforts to improve information about existing transport services and facilities should help to improve satisfaction with our transport system.

WHAT ARE THE ISSUES OUR LTP3 APPROACH NEEDS TO CONSIDER?

- 7.16 In this section we identify the issues that our approach to improving the connectivity and accessibility of our transport system must focus on in order for our long-term strategy to be successful in terms of helping to support economic activity and growth and also addressing issues of social inclusion and equality. Whilst we have an extensive evidence base to help us to establish our focus, it is only a snapshot in time. Over the lifetime of our strategy, it will be important for us to review our evidence base to ensure that our approach remains robust and credible.
- 7.17 Accessibility issues are focused on people's ability to access the services they need, services such as employment, shopping and personal business, healthcare, education, and those services that provide social activity and leisure opportunities (i.e. restaurants, leisure centres, cinemas etc). To gain a more complete understanding of local accessibility, our evidence base for LTP3 included a piece of work to assess actual and perceived accessibility difficulties amongst our residents. This work consistently highlighted instances where access to services is difficult, irrespective of the geographical distance to these services. In terms of interventions, the work suggested two priority groups:

- There is still a problem of social inclusion, particularly in the more remote, rural and deprived areas of the County, and especially for those individuals in these areas without access to a car. Geographical access to key services remains an issue in rural areas to the east of the County, particularly in Melton and Harborough. There are pockets of high deprivation in urban areas of Charnwood and North West Leicestershire.
- Vulnerable groups of residents (i.e. disabled people, older people and lower–skilled people on low incomes) whose individual needs, rather than geographic location, may be a constraint to accessing services and facilities.
- 7.18 This section looks at current accessibility to some of the key services that we have identified as important. In doing so, it looks at both geographical and perceived accessibility. It then looks at wider issues we will need to consider when assessing the degree to which we can improve the connectivity and accessibility of our transport system during LTP3.

Access to employment

7.19 The Economic Assessment for Leicester and Leicestershire²² commented positively on the role that the County's hourly bus network policy has played in ensuring that 80% of our working age residents are within the catchment area of a location with more than 500 jobs by either public transport, demand responsive transport, walking or cycling. It particularly praised the dense network of high frequency bus services in Leicester, the comprehensive county town bus services and inter-urban services linking county towns, Leicester and East Midlands Airport, and the good daytime bus access to the Leicester Principal Urban Area (PUA)⁹³. However, on the downside, it reported that there is often limited access by bus to employment centres outside the urban core of Leicestershire, such as business parks, and that evening and weekend bus services are less frequent than at other times which can be particularly problematic for employees working shifts.

- 7.20 In the Leicester and Leicestershire Business Survey of 2009/10³⁵, over one in three rural businesses rated employee travel to work by public transport as a concern compared to only 16% in urban areas. In the same survey, one in five rural businesses expressed concern regarding customer access to their premises by public transport, compared to only 8% in urban areas.
- 7.21 As discussed in Chapter 5, our evidence base highlights that there are more workers in the County than jobs, and that the distribution of job opportunities relative to workers with the relevant skills to undertake these is not uniform across Leicester and Leicestershire. This presents access difficulties. In Leicester City, there is a mismatch between the high-skilled jobs available locally and the ability of the local labour market to meet the needs of these jobs. For low-skilled workers there is, overall, a better balance between workers and jobs. Many of the County's urban and semi-urban areas, particularly around Leicester City, enjoy good access to low-skilled jobs. Low-skilled workers in more rural areas of the County, however, suffer from being isolated from relevant opportunities.
- 7.22 Certain businesses located in more peripheral areas of the County (for example Castle Donington), or close to areas where low-skilled workers might be excluded (i.e. Ullesthorpe, Lutterworth Swift and Lutterworth Springs in Harborough), are likely to be restricted in the potential supply of workers to them. Our analysis has also suggested that workers in some urban communities of the County, which have possibly been left behind by the decline of local industry (i.e. in parts of Loughborough and North West Leicestershire), face competition for local jobs. Since these workers are less able to take advantage of opportunities in other parts of the County, employment rates might be lower than they could be in these areas.

Access to schools and further education colleges

7.23 With regards to access to schools, over 20% of school pupils in Leicestershire still travel to school by car as the only pupil. Chapter 6 (Encouraging active and sustainable travel) discusses the work that we are doing to understand the journeys that are made to our schools and develop close working relationships with schools to seek to change travel behaviour on the journey to school.

- 7.24 With regards to Further Education Colleges, the 2006 Leicestershire Rural Transport Study concluded that access to training and education is a major issue for residents in rural areas. The work that we have done for LTP3 highlights that this is a particular issue in the rural areas of Harborough and Melton, where a lack of public transport services and greater distances to travel are potential barriers to accessing training and education facilities. Whilst colleges provide designated transport, the Economic Assessment for Leicester and Leicestershire²² identified a number of transport issues that adversely affect access to post 16 education. These include:
 - Lengthy journey times for students on specialist courses which are only available at a limited number of sites.
 - Peak hour overcrowding on some public transport services with some students experiencing delays in getting to college if buses are full or delayed by congestion.
 - Providing transport for students with learning difficulties or disabilities is expensive.
 - For low-income households the cost of travel can be a barrier that prevents them from accessing relevant opportunities.
 - Lack of familiarity with public transport services and ticketing schemes amongst young people and parents can limit travel horizons.
 - Existing support to learners is limited to those living over three miles from their nearest college.
 - Travel passes are regarded as less flexible than commercially available operator tickets.
 - Crime and the fear of crime can deter some groups of learners from using public transport, particularly those attending evening courses.

Access to healthcare

7.25 It can take more than an hour by public transport to reach a major hospital in Leicestershire, even for people who live quite close to a hospital. Whilst the Hospital Hopper bus service, funded by the NHS, provides an affordable and regular direct bus link between the City hospital sites, access to hospitals in the County by public transport can be much more difficult. In Leicestershire, approximately 63% of the population live within one mile of the nearest GP surgery, whilst one in 10 County residents live within one mile of their nearest local hospital²³. Geographical access to healthcare in Leicestershire is linked both to the availability of public transport and access to a car. However, the general health of an individual has a significant affect on their perception of journey difficulty, irrespective of the distance required to travel. This emphasises the importance of ensuring that the access needs of services users are considered based on their physical ability to make the journey to a GP surgery or local hospital, irrespective of the potential journey distance. Geographical access to healthcare services is primarily an issue in the rural areas of Leicestershire. A lack of public transport services in these areas, combined with a relatively greater distance to travel to the nearest GP surgery and local hospital, creates a potential barrier to accessing healthcare for these areas.

Access to shopping and persoanl business

- 7.26 As local shops and post offices close, this can lead to significant difficulties for vulnerable groups of residents, including the elderly and those without access to a car. Through the provision of our supported hourly bus network, combined with other, lower frequency provision (such as demand responsive transport), we have sought to provide access to shopping in main attractors, such as our county towns, particularly for those living in more remote and rural areas. In doing so, many of the services that we have provided have also enabled access to leisure opportunities and other facilities.
- 7.27 Almost half of the County population live within half a mile of their nearest food store and only 5% of the County population live more than 5km (three miles) from their nearest food store²³. These instances are obviously more prevalent in more rural areas of the County, where difficulties in accessing food stores may be influenced

by the lack of available transport options. Though individuals in rural Leicestershire are more likely to have a car, the infrequency or complete lack of a bus service, and low satisfaction levels with the local bus service, highlight that public transport is not always a viable option to access food stores from these areas.

- 7.28 Our evidence shows that those residents in urban areas who are less likely to have a car or use the local bus service, are more likely to think access to food stores is difficult. In conjunction with this, low levels of satisfaction with a local area as a place to live, and perceptions that local shopping facilities need improving, tend to result in residents thinking that access to food stores is difficult. This suggests that the issue of access for some urban communities is not of a geographical nature but is potentially related to aspects of the food stores that are available locally, and the degree to which they meet the needs of the community. Our evidence also highlights that vulnerable groups may have difficultly accessing food stores. These include older people and those with health problems or a limiting disability or illness.
- 7.29 The issues identified in this section are clearly important and are ones that our LTP3 approach should seek to address. However, the next section identifies some significant challenges that we will need to consider when seeking to do so.

Bus service provision

7.30 The provision of effective public transport services remains important for the people of Leicestershire. Based on the 2008 Place Survey, 26% of respondents said that public transport was important to them³⁰, significantly up from results in the Best Value Performance Indicator Survey undertaken in 2006⁶⁴. As detailed earlier, our efforts in providing an accessible public transport network in LTP2 were built around our hourly bus network policy (designed to provide, in conjunction with the commercial bus network, a daytime (Monday to Saturday) hourly (or better) bus service that is within an 800 metre walk for 95% of the County's residents). Before looking at the issues associated with attempting to continue with such a policy, it is important to explain how bus services are provided. Provision can be broken down into two basic categories:

- **Commercially operated bus services.** These services operate without any direct subsidy from us as the County Council, but they do receive funds from the Government in the form of the concessionary travel reimbursement (paid towards the costs of carrying those people whose age qualifies them for reduced cost or free travel) and Bus Service Operators Grant⁴⁵ (which repays some of the duty that bus operators pay on fuel). We have an extensive network of commercial services in the County, as well as a number of services operating across the County boundary mainly linking the key urban areas of Leicester City and the county towns with other cities and towns such as Nottingham and Nuneaton. Commercial services generally operate at frequencies of better than hourly throughout the day (Monday to Saturday) in corridors with high origin and destination demand.
- Subsidised bus services. These are services that cannot operate viably on a commercial basis, whether because of low passenger numbers or the length of route compared to the number of potential customers. Where it is appropriate within current support policies, and affordable for us to do so, we are able to subsidise such services. We have had sufficient funds in the past to develop an extensive network of subsidised bus services in the County. Where these services also operate across the county boundary, they are subsidised jointly with the adjoining authority.
- 7.31 Maintaining our hourly bus network policy in LTP2 was challenging during the economic downturn, principally due to the increasing cost of contract buses, combined with a consolidation of the commercial network and the increasing cost of school contract services. Since the start of LTP3 we have faced further, even more significant, financial issues in seeking to continue with a similar policy.
- 7.32 The first and most important of these is the impact of changes in Central Government funding support for local bus services and more general reductions in local government funding. The Coalition Government has reduced the Bus Service Operator Grant (BSOG) by 20%* and also reduced the funding paid to local authorities for the Concessionary Fares Scheme. This has affected the commerciality of some existing bus services in Leicestershire (i.e. they no longer operate at a profit), which has significant implications as the burden for replacing such provision then passes to the Council. These reductions, combined with the ending of the Rural Bus Subsidy Grant⁶⁵ (worth in excess of £1m to Leicestershire), and more general cuts in local

authority funding, has impacted on our ability to support bus services and presents very real challenges in maintaining the current bus network in the County. We also know that further significant cuts in the authority's budget are required over the next five years. (*Note that some BSOG funding has been re-introduced to help local authorities with the provision of smart enabled electronic ticket machines (machines that can read concessionary travel and commercial smart card passes)).

- 7.33 Figures for 2012/13 show a 17% reduction in bus passenger numbers in the county from 2008/09 levels (their peak level). The most likely reasons for this are thought to be the impact of the recession with higher unemployment reducing the number of work trips being made, and lower levels of disposable income reducing the number of leisure trips, conclusions that tend to be supported by information we have obtained from other authorities and a fall in car travel in Leicestershire between 2009 and 2011. Declining passenger numbers can affect revenue from fares, which in turn can threaten the viability of a bus service. It is vitally important that the decline in passenger numbers that we have seen over the last four years does not become a long-term trend. The role of affordability is key in this. We have seen in Chapter 3 that, despite rises in world oil prices and changes in taxation, car travel (even when taking into account the cost of parking) is still (at present) becoming cheaper relative to the cost of public transport. With the impact of Government funding cuts likely to have an affect on the ability of bus companies to maintain current levels of commercial services and bus fares, this is a trend that is set to continue, and is something that is ultimately impacting on our ability to support and maintain a core bus network in Leicestershire.
- 7.34 Given these challenges, our ability to encourage our residents to use Leicestershire's existing bus network is more important than ever. However, this has historically been hampered by low levels of user and resident satisfaction with both local bus services and the provision of public transport information. Despite our efforts to improve bus services and the information we provide about them, our data indicates that in both cases resident satisfaction has fallen from an already low base in 2003/04. Results from the County Council's 2008 Place Survey show that only 51% of residents are satisfied with local bus services and even less, 42%, are satisfied with public transport information³⁴. On this basis, we compare poorly with other authorities. Our data has also revealed that perceived access problems are often not actually rooted

in reality. We see improving the information we provide and better targeting who it is aimed at as key to altering these perceived access problems. Seeking to improve the information we provide and maximising the performance of local bus services is important not only to delivering an accessible bus network for existing users, but to improving the attractiveness of bus use as an alternative to the car.

7.35 Despite these challenges, it is important that our LTP3 approach recognises the importance of maintaining a viable core bus network in the County, (which is affordable to us as an authority and to users), in seeking to provide residents with access to key services. We feel that it is still possible to achieve this by focusing on measures to develop the commercial bus network and by providing a small number of targeted supported bus services that offer value for money.

Other alternative transport solutions

7.36 Although Leicestershire is a rural County, which ensures that it is difficult to cater for a number of journeys by modes other than the private car, there is evidence that offers encouragement to our efforts to improve access to key services by other sustainable transport modes and initiatives (such as walking and cycling). Nearly a quarter of all trips nationally are less than 2 miles in length and over 50% of the journeys to work in Leicestershire are also less than 5km (3 miles) in length. Most of these trips could be replaced by either walking or cycling, modes of transport we anticipate playing an increasingly vital role in providing people with low cost, healthy and environmentally friendly solutions to access problems. Making people aware of the other transport accessibility solutions available to them (away from the private car or the bus network) is a key challenge, particularly in the face of the issues discussed above surrounding our ability to continue to provide a comprehensive supported hourly bus network.

An ageing population

- 7.37 According to the Office for National Statistics (ONS) 2007 mid-year population estimates, older people (those aged 55 and over) currently make up around 30% of Leicestershire's population, a figure that is expected to rise to 36% by 2031²⁶. The number of our residents aged 75 and over is projected to more than double between 2006 and 2031. It is also projected to grow at a relatively faster rate than any other age group in the County.
- 7.38 The 2008 Place Survey asked Leicestershire residents which issues, from a possible list of twenty, they feel are most important and most in need of improving in their local area. Compared with the county average, two of the things that older people (in this case classified as those 59 and over) expressed most concern about were public transport and crime³⁰. In view of this, the provision of accessible local bus services is likely to remain very important to our older residents and demand for these services may only increase as our older population increases. Indeed, for those experiencing long-term disabilities and requiring adult social care, national policy is moving away from a fixed service offer to enabling people to choose the services they want to receive through the holding of personal budgets. In respect of transport, this means that people will be able to choose how they wish to access the services and facilities that they need. This may have significant impacts on how we seek to deliver our adult social care transport service, amongst other things.

Fear of crime

7.39 Our research has revealed that fear of crime and personal safety concerns are real barriers to travel, particularly walking, cycling and public transport. Nationally, 3% of people admitted that fear of crime affected their travel choices and research indicates that if people felt more secure, around 12% more journeys would be made on public transport²³. In terms of social isolation and inequalities, fear of crime can have a disproportionate effect on more vulnerable groups of people such as lone women and the elderly.

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OUR LTP3 APPROACH

- 7.40 Leicestershire Together has set a challenging agenda for tackling accessibility problems and social inequalities. This is an agenda that LTP3 will play a key part in delivering. In seeking to do this we will be aiming to meet the essential transport access needs of Leicestershire residents through the provision of a range of transport solutions. Such solutions will include traditional bus services, walking and cycling and more innovative solutions including car sharing, Wheels to Work and demand responsive transport.
- 7.41 For the purposes of our overall accessibility aims, key services are defined as employment, education and training, healthcare, shopping and personal business, and those services that encourage social activity and wellbeing, such as leisure and recreational based opportunities.
- 7.42 In doing this, our focus will be particularly on:
 - Continuing work towards improving the overall accessibility and connectivity of our existing transport system.
 - Seeking to provide a bus-based passenger transport network that meets the essential transport needs of our residents in ways that are cost effective and affordable.
 - Continuing to try and increase resident and business awareness, and use, of other alternative modes of transport to help solve accessibility and connectivity problems.
 - Working through the planning system to co-ordinate land use and transportation planning with the aim that development is located in accessible locations with appropriate improvements for walking, cycling and public transport.
 - Addressing issues associated with the fear of crime that may prevent people from walking, cycling and using public transport more.

- 7.43 Given the issues and challenges that we have outlined above, the approach that we take to doing this in LTP3 will be different from the approach that we took in LTP2. Like other shire counties, we have to balance the accessibility needs of the more remote and rural areas of our County with those of the more urban areas. With an ageing population, the pressure on resources will make it ever more difficult to maintain current accessibility levels, particularly by traditional bus services. Thus, the County will continue to have a core bus network, but it will not be as extensive as that which existed during LTP2.
- 7.44 Given this, we will be expanding our accessibility and connectivity efforts to identify affordable transport solutions that do not involve a bus, or that might not operate as a conventional bus service would, i.e. a service that has no fixed route or timings. Embracing the Coalition Government's localism agenda, our approach must also reflect the need for us to support local communities and voluntary groups to develop and operate transport solutions that meet their own particular needs. In practice, this is likely to mean further community and demand-responsive schemes (including the use of taxis) to provide flexible and essential levels of access for people in the most remote and rural areas of the County. It is also important that accessibility solutions are developed around an evidence-based understanding of accessibility and connectivity needs in order to enable us to deliver effective services that provide value for money.
- 7.45 The sections below provide more details of what we will be doing to deliver the key elements of our long-term strategy to improve the connectivity and accessibility of our transport system. Whilst we recognise the important role that our transport system can play in seeking to promote social inclusion and minimise inequalities, we cannot concentrate on all aspects of our approach at once and afford them all the same priority within our available resources. Our Implementation Plan¹⁶ identifies the things that we will be doing in a three year period to deliver our long-term strategy and explains how we will monitor and review progress to ensure that our approach remains relevant and robust. Chapter 11 provides the context for our initial Implementation Plans, and thus the context in which we have made decisions regarding which aspects of our approach to improving accessibility and connectivity we will take forward.

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1. Continue to improve the overall accessibility and connectivity of our existing transport system

Our efforts will include:

- a) Seeking to improve the ways in which we maintain and manage our road network for the benefit of all users, through the approaches we have outlined in Chapters 5 (Supporting the economy and population growth) and 9 (Managing the condition and resilience of our transport network).
- b) Improving the way we provide information about our transport system, and in particular the services and facilities that are available for people to walk, cycle and use public transport, through the approach set out in Chapter 6 (Encouraging active and sustainable travel).
- c) Continuing with discretionary spending to fund the delivery of appropriate, minor, low cost schemes that help to improve connectivity and accessibility to key local facilities by bike and on foot.

We will

2. Seek to provide a bus-based passenger transport network that meets the essential transport needs of our residents in ways that are cost effective and affordable

As described throughout this Chapter, the provision of our hourly bus network policy has previously been the focus of our efforts to provide a passenger transport network in Leicestershire that enables our residents to access employment and other key facilities such as education, healthcare and shopping. Given recent funding reductions, the level of money that we now have to invest in our hourly bus network (and we are likely to have in the future), means that provision of our existing supported bus network is no longer affordable.

The Council has, in its Medium Term Financial Strategy, a requirement to reduce the budget for supporting bus services by £700,000. A Scrutiny Panel review of the Council's existing hourly bus network policy reported that: the existing policy (to provide, in conjunction with the commercial bus network, a daytime (Monday to Saturday) hourly (or better) bus service that is within an 800 metre walk for 95% of the County's residents), whilst having clarity of purpose, lacks the flexibility to reflect the changing needs of communities, and in the current economic climate cannot be justified.'

It concluded that; 'the "one size fits all" policy and the over reliance on scheduled bus services cannot be sustained and that the County Council and local communities need to move their thinking away from the traditional bus network (which can be expensive to provide for a few passengers) and to think about new ways of delivering passenger transport services to users through an appropriate mix of transport solutions and providers.'

The Scrutiny Panel recommended that the focus for the County's bus network should be on the retention of current commercial routes (and seeking to make these stronger), and the provision of some key supported bus routes. It suggested that these services should be augmented by alternative passenger transport solutions, such as Community Transport and Demand Responsive Transport. It described how passenger transport will be provided by a mix of conventional bus services for higher demand areas (i.e. in urban areas of the County or on key transport corridors). supplemented by the provision of less frequent services by mini-bus and taxi-type vehicles in areas of lower usage (which tend to be in the more rural areas of the County or areas away from the key transport corridors).

In making these recommendations, the Scrutiny Panel stated that it is clear that not all accessibility needs and expectations can be met by the County's bus network. The reductions in Government funding support for local bus services means that we will have to prioritise investment in a supported bus network and target it to maximise benefits in respect of wider economic, social and environmental goals. This has ensured we have had to make some tough choices. Unfortunately, where bus provision is demonstrated to be prohibitively expensive, services can no longer be guaranteed. The Panel, in developing the new Policy, concluded that whilst desirable, in the current economic climate, it was unrealistic to expect the Council to be able to provide evening, Sunday and Bank Holiday services given how expensive these are to run. That is not to say that, where viable, these services could not be run by commercial operators.

It also stated that access to training and education needs will be met wherever possible, but would not be classified as a priority when determining the provision and design of bus-based passenger transport provision. We are, however, in the process of reviewing post 16 transport to Further Education for students. Arrangements have still to be finalised but it is likely that we will provide post 16 transport for students from qualifying low income families free of charge from September 2015. Transport to Further Education for 17 and 18 year olds will be provided using a 16+ travel scheme at full cost recovery (£425 for the 2014/15 academic year). This continuous provision helps with wider efforts to try and ensure that all 17 year olds are in education, employment and training from September 2013, and 18 year olds from September 2015. We are also looking to provide better information on the transport options available for students and are engaging with Further Education suppliers and commercial bus operators to ensure their information is current and easy to understand.

In making these difficult choices, we recognise and acknowledge that any reduction in local bus services could have a disproportionate affect on some of our residents, particularly those people living in the more remote, rural and deprived areas of the County and those seeking to access training, further education and shift-based employment opportunities. Where possible, we will seek to design and deliver alternative transport solutions that help meet the accessibility needs of these people. It is likely that the first bus service changes will happen in late Summer 2014 at the earliest.

Despite these changes, we remain committed (subject to affordability and the deliverability of other aspects of our long-term transport strategy), even in times of financial constraint, to seeking to maintain a high level of passenger transport provision across the County, albeit increasingly by means other than conventional bus services. The implementation of our new bus policy will be part of our ongoing and wider efforts to maintain our commitment to meeting the essential transport needs of our communities, albeit in a more cost-effective and efficient manner. We continue to make significant efforts, and invest significant monies, to increase bus passenger numbers across the County, through initiatives such as: smart ticketing, real time passenger information, and improvements to key bus corridors, bus stops and bus infrastructure. Incorporating the implementation of our new bus network policy, our efforts will include:

a) Working with commercial bus providers to maintain a viable, affordable (both to this authority and to bus users) core bus network. Our efforts will be based around:

- Providing a network that continues to be a mixture of commercially operated and supported bus services. Where possible, we will seek to retain and build upon existing commercial services and see if we can turn supported services into commercial ones.
- A clear, evidence based assessment of accessibility and connectivity needs in the County.
- Seeking to maximise the benefits that our core bus network can provide in delivering wider economic, social and environmental goals. This will include work to ensure that access to job opportunities, employment centres and labour markets is a focus of our bus network (see also Chapter 5, Supporting the economy and growth). Where possible, it will also include efforts to provide bus services to Further Education colleges and training opportunities.
- Seeking to maximise the passenger use and hence revenue from our supported bus services as part of efforts to see if we can turn supported services into commercial ones (for details of what we will be doing to promote more bus use see Chapter 6, Encouraging active and sustainable travel).
- Continuing to seek to secure other sources of funding to support bus services, including from developers, when the potential for new and improved bus services is specifically linked to the design and delivery of new development proposals.

b) Seeking to develop alternative passenger transport solutions for our residents where the provision of a commercially operated bus service is not viable and nor is it affordable or appropriate for us to provide a supported bus service.

At present we support the provision of alternative passenger transport initiatives to conventional bus services, including the development and delivery of alternative scheduled bus routes, accessible minibus services, social car schemes, and Demand Responsive Transport Services. We will continue to work with partners from business, health, education and rural groups to identify gaps in existing passenger transport provision and what solutions might be offered. Our efforts will be based around:

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- A clear, evidence based assessment of accessibility and connectivity needs in the County.
- Ensuring potential solutions fulfil our legal obligations with regards to providing: home to school transport for children and young people, transport to social care services for adults, and socially necessary local bus services.
- Building on our experiences during LTP2 of providing flexible and good levels of access for people in the most rural areas.
- Working with communities, voluntary groups and other relevant bodies to develop and support services operated by such third parties.
- Exploring opportunities for making wider use of our own passenger transport fleet (e.g. school buses) in developing alternative transport solutions (subject to prevailing regulations, legal restrictions and affordability).

We will

3. Continue to try and increase resident and business awareness, and use, of other alternative modes of transport to help solve accessibility and connectivity problems

Our Travel Choice and Access Team will continue to work with residents, businesses and partners to promote, and encourage the use of, a range of sustainable transport initiatives to provide accessibility solutions. This includes encouraging people to walk to work and school through initiatives such as walkit.com (an urban walking route planner), 'Walk once a Week' (WoW), Park and Stride and walking buses. The Council have also produced a series of walking maps and promoted routes that connect all areas of the County. The Council also co-ordinates a wide range of activities to encourage people to cycle, whether to work, school, or to access other key services. These include cycling maps, free adult cycling courses, bikeability training and school cycle and scooter parking grants. Such investment will be complemented by the delivery of schemes to improve the walking and cycling infrastructure in the County, particularly in urban areas which provide access to a number of the key services needed by residents of the County. Significant efforts will also continue to go into promoting car sharing (through the LeicesterSHARE. com website) and Wheels to Work. The latter scheme is open to all Leicestershire residents over the age of 16 and loans out scooters for up to six months at low prices to people travelling to employment, education or training who are not already benefiting from transport bursaries. We will seek to adopt a more targeted approach to the resolution of accessibility problems through our Personalised Travel Planning efforts which will attempt to understand the accessibility needs of individual residents and households and suggest solutions that can help meet these needs.

We will

4. Continue to improve the connectivity and accessibility of our existing transport system for vulnerable individuals, groups and communities

Our efforts will include:

- a) Ensuring that our own improvement and maintenance schemes continue to include appropriate provision for those with disabilities, and seek to ensure that schemes carried out by others (e.g. developers or the Highways Agency) do likewise. This will include work undertaken on our roads, footways, cycleways and Public Rights of Way network¹⁹.
- b) Seeking to minimise the amounts of 'street clutter'. For example, large numbers of signs, with poles supporting them that are located on footways and cycleways can act as obstacles for those in wheelchairs, and people with pushchairs etc. They can also be a hazard for those with visual impairments.
- c) Continuing to implement our 'Gap, Gate, Stile' policy to remove barriers to access on our Public Rights of Way network for those with mobility problems.

d) Continuing to address barriers to the use of public transport, including:

- Directly and indirectly influencing the provision of low floor buses with level access.
- Continuing with our programme to upgrade bus stops to our LTP standard and ensure that those constructed by others (e.g. as part of a new development) are built to a similar standard.
- Working with our bus operator partners to ensure that drivers are appropriately trained to assist those with disabilities.

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- Exploring how we can provide public transport information in a wider range of more accessible formats. This will be as part of ongoing efforts to ensure that we provide information in an appropriate range of languages.
- Continuing to give advice and provide improved support to those with learning or mobility difficulties to encourage independent travel.
- Seeking to roll-out alternatives to conventional bus services to help those who are unable to use normal public transport by working with communities to identify barriers and to deliver solutions.
- e) Seeking to work with the local health authorities and social service providers to understand how our transport system might need to be adapted to meet the needs of an ageing population.



5. Work through the planning system to co-ordinate land use and transportation planning with the aim that development is located in accessible locations with appropriate improvements for walking, cycling and public transport

Our efforts will include:

- a) Working with partners to explore ways that we may be able to bring services to people (rather than requiring people to travel to services) in order to meet identified accessibility needs.
- b) Delivering new developments in areas that are already able to be well served by walking, cycling and public transport. It should be noted that we may seek to resist developments that do not do this.
- c) Inputting to the masterplanning of new developments that are put forward by others, especially the Sustainable Urban Extensions⁴⁴ that are planned around the edges of Leicester City and some of the county towns. In doing so, we will be seeking to ensure that they are designed from the outset to provide:
 - High quality, safe facilities for those who walk, cycle and use public transport.
 - Safe access for cars and other vehicles.

d) Seeking to ensure that new development proposals put forward by others are either supported by an appropriate range of facilities (e.g. new housing developments are supported by employment, schools, leisure, health, retail facilities). Where it is necessary to travel off-site, safe, high quality choices are available (or can be provided), in particular for people to walk, cycle and use public transport to access facilities and services nearby.



6. Address issues associated with the fear of crime that may prevent people from walking, cycling and using public transport more

Our efforts will include:

- a) Working with our partners, including the Police, and local communities to identify problem locations and potential solutions. The continuation of our community lighting safety scheme will be a part of these efforts.
- b) Continuing to ensure that safety issues and concerns are taken into consideration when looking at potential future sites for the roll-out of our street lighting 'switch-off' project (being undertaken as part of our efforts to reduce the carbon footprint of our transport system).
- c) Ensuring that our work to promote the use of more sustainable transport addresses fear of crime and personal safety issues that may be preventing people from walking and cycling more (see also Chapter 6, Encouraging active and sustainable travel).
- d) Working with our bus operator partners to assess the degree to which fear of crime is a barrier that prevents more people from travelling on buses, and for which of our residents this may be more of an issue.

In addition to these efforts, whilst it not within the role of the County Council to deliver, we nevertheless recognise the importance that information technology can play in tackling issues of social exclusion and inequality. The wider roll-out of broadband internet technology is one such example. By enabling services to

be brought to people or for them to work from home, it can also reduce travel demand. Approximately one in ten residents in Leicestershire currently works from home⁹⁵. Higher levels of home-working clearly reduce the need for travel, and hence congestion issues at peak times. However, we recognise that this can place different pressures on businesses to ensure connectivity between customers, clients and employees is not jeopardised as a result. As an authority we will continue to monitor developments in this area and where it is appropriate we will look to provide support to initiatives that help to promote improved technology as a way of increasing the accessibility and connectivity of our residents to services and facilities.

MONITORING OUR LONG-TERM STRATEGY

- 7.46 During LTP2 we used five indicators to monitor the effectiveness of our accessibility strategy. Our main indicators focused on the degree to which households without access to a car in the County were able to access main centres, and the percentage of working age people with access to employment by public transport, cycling and walking. Reflecting our efforts to ensure our transport system meets the needs of more vulnerable individuals, we also had indicators that assessed the journeys per week using complementary transport for disabled people, and the percentage of bus stops provided to designated LTP standards on our hourly bus network.
- 7.47 Our efforts to improve the connectivity and accessibility of our transport system during LTP3 have been designed to deliver the long-term strategic transport outcomes set out below:
 - More people walk, cycle and use public transport as part of their daily journeys, including to access key services.
 - Effective and integrated public and community transport provision, including targeted and innovative travel solutions which meet the essential transport needs of Leicestershire residents.

Access to key services

7.48 The performance indicators that we will use to monitor the degree to which we are delivering these outcomes for the people of Leicestershire are shown below.

Key performance indicator (KPI)

• Access to services and facilities in the County by public transport, walking and cycling.

Supporting indicators

- Access to employment by public transport, walking and cycling.
- Access to education (including primary, secondary and further education) by public transport, walking and cycling.
- Access to healthcare (including GPs and local hospitals) by public transport, walking and cycling.
- Access to food stores by public transport, walking and cycling.
- 7.49 The first KPI above and all of the supporting indicators will be calculated using Core Accessibility data supplied by the Department for Transport (DfT).
- 7.50 Following the finalisation of our new bus network policy, we will be reviewing how we assess both the overall, and rural, coverage and usage of our revised bus network. We will also be seeking to develop indicators that allow us to assess take-up of some of the alternative transport solutions we are promoting to help solve accessibility issues across the County (i.e. Demand Responsive Transport, Wheels to Work etc).
- 7.51 Reflecting our LTP2 strategy, we will continue with the indicator below to reflect efforts to ensure that our approach to accessibility continues to take into account the needs of our more vulnerable residents.
 - The number of journeys per week using complementary transport for disabled people.
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- 7.52 We also hope to be able to continue to monitor the accessibility levels of our households that don't have access to a car. If the data remains available we plan to use the following indicator to do this:
 - Countywide percentage of households without access to a car that are within 20 / 40 / 60 minutes of a main centre.
- 7.53 We are also keen to better understand the degree to which perceived accessibility problems in the County reflect the geographical accessibility issues revealed in our indicators above. With this in mind, we will be using the following indicators from the annual National Highways & Transportation Public Satisfaction Survey.
 - Ease of access to key services (for all people).
 - · Ease of access to key services (for people with disabilities).
 - Ease of access to key services (for no car households).
- 7.54 We are also undertaking development work to try and establish how we can come up with a better measurement of rural accessibility in the County. Once this work is complete it is likely that a rural accessibility performance indicator will be added to our PI set.

Access to the natural environment

- 7.55 We hope that our efforts to improve the connectivity and accessibility of our transport system will also help to ensure that the natural environment can be accessed easily and efficiently, and where possible, by walking and cycling (another of our LTP3 strategic transport outcomes). As in LTP2, we will continue to use the indicator below to monitor the degree to which we are achieving this:
 - Percentage of footpaths and other rights of way that are signposted and easy to use.
- 7.56 We are also working with colleagues in our environmental team to better understand how we can measure access to green space across the County, and in time intend to add an indicator on this to our PI set.

Setting targets and monitoring progress

- 7.57 In terms of setting targets for our connectivity and accessibility indicators, we are able to come up with some baselines using information from LTP2 and other elements of our evidence-base. However, as detailed throughout this Chapter, the outcomes of our hourly bus network review are going to bring about a change in the way we seek to ensure that our transport system continues to provide Leicestershire's residents with good levels of accessibility to the services that they need. We are still working through these changes, and until this process is complete, we are unable to set robust, evidence-based targets for our performance indicators.
- 7.58 In time, a long-term, aspirational, target will be set for our KPI around access to key services. We will also put in place annual targets (set and reviewed on a three year basis) to monitor progress. For our supporting indicators, we will put in place annual targets that will similarly be set and reviewed on a three year basis. Progress will be monitored on a quarterly basis as part of the performance management regime that is put in place to monitor delivery of our Implementation Plan.

CONCLUSIONS

- 7.59 An effective, efficient and affordable transport system can play an important role in seeking to encourage economic activity and growth by providing access to jobs and labour, and minimise social exclusion and inequalities by helping to reduce the gap between people and communities that are disadvantaged when compared to other areas of the County.
- 7.60 During LTP2 we focused on delivering and maintaining access to key services (employment, education, healthcare and food stores) by public transport, walking and cycling, and delivering targeted improvements to access to these services for vulnerable individuals, groups and communities. We spent a significant amount of money on supporting bus services and other passenger transport provision, particularly to serve those in the more remote and rural areas of the County.

Chapter 7 Leicestershire County Council Local Transport Plan 3 Improving the connectivity and accessibility of our transport system

- 7.61 Our long-term transport strategy continues to recognise the importance of improving the accessibility and connectivity of our transport system for economic and social reasons. However, there are very significant issues and challenges associated with the way in which we will be able do this during LTP3. Decreased levels of funding, balancing the accessibility needs of more remote and rural areas with those of the more urban areas, and an ageing population will make it ever more difficult to maintain current accessibility levels, particularly by traditional bus services. Thus, the County will continue to have a core bus network during LTP3 but this will not be as extensive as that which existed during LTP2. Passenger transport provision will increasingly reflect a need to expand our efforts to identify accessible transport solutions that do not involve a bus, or that might not operate as a conventional bus service would.
- 7.62 Whilst passenger transport provision remains a significant element of our approach, we will, nevertheless, in conjunction with our efforts in other areas of our long-term transport strategy, continue to focus on providing improved connectivity and accessibility for travel by foot, bike and car. Significant efforts will also be made to work through the planning system to co-ordinate land use and transportation planning with the aim that development is located in accessible locations with appropriate improvements for walking, cycling and public transport. In order to try and encourage our residents to use more sustainable modes of transport to access services we will also be doing work to develop our understanding of the factors that influence people's travel choices.
- 7.63 Notwithstanding the challenges that we face, we remain committed to ensuring that the accessibility and connectivity of our transport system continues to play a key role in helping to encourage economic activity, promote greater social inclusion and address issues of inequality across Leicestershire.

This chapter:

- Looks in detail at the progress we have made in reducing road casualties in Leicestershire.
- Identifies the issues on which our approach to improving road safety in LTP3 will need to focus.

Sets out the approach we will take to improving road safety in LTP3.

- The statistics we report in this chapter have largely been pulled together from three main sources of information:
 - Road safety reports in Leicestershire 2009 to 201267
 - LTP2 Delivery Report³⁰
 - Department for Transport, Road casualties in Great Britain: main results⁷⁵



INTRODUCTION

- 8.1 Efforts to improve road safety are important from both a social and economic perspective. As well as the obvious impacts that road accidents have on people's lives, there is the often unconsidered economic costs attached to road accidents. Road deaths, injuries and the damage caused by road accidents are estimated to cost the UK £19 billion a year.
- 8.2 For us and our partners in the Leicester, Leicestershire & Rutland Road Safety Partnership (LLRRSP)⁶⁶, improving road safety is therefore vital for both social and economic reasons. Over the period of LTP2, the partnership invested £11 million in efforts to reduce road casualties. These efforts focused particularly on:
 - Providing a safer road environment.
 - Managing speed.
 - Improving safety for vulnerable road users.
 - Encouraging safer driving.
- 8.3 As a result of our efforts in LTP2, between 2001-04 (the period used as our LTP2 baseline) and 2008-10, total road casualties in Leicestershire fell by 31%. This helped to make Leicestershire a relatively safe place in which to travel, with one of the lowest killed and seriously injured (KSI) casualty rates per number of vehicles and distance travelled of all English county and unitary authorities.
- 8.4 The indicators used in LTP2 to assess the effectiveness of our strategy in reducing casualties on our roads give more detail of the progress that we made and reveal that, based on figures to the end of 2008-10, we achieved reductions from our LTP2 baseline (2001-04) of:
 - 26% in the number of people KSI on our roads.
 - 40% in the number of children KSI on our roads.
 - 23% in the number of motorcyclists KSI on our roads.
 - 34% in the number of people slightly injured on our roads.

- 8.5 During the LTP2 period these reductions were achieved whilst the County's population increased by 2.7%, road lengths increased by 1.2% and traffic volumes fell by 0.7% (largely following reductions in the last couple of years.)
- 8.6 The overall success of our road safety strategy in LTP2 is shown in Figure 8.1. This compares the casualty trend for Great Britain against that for Leicestershire between 2001 and 2010. The improving situation in Leicestershire is particularly evident between 2006 and 2010.





8.7 In reducing road casualties over the LTP2 period by around 800, we delivered not only safety and social benefits but saved the economy money as well. The exact saving is not easy to quantify, but it is possible to give some idea of the scale. Based on an average cost per casualty of £48,000, the cost of 800 casualties is around £38m. In comparison with the £11m that we and the LLRRSP invested in improving road safety during LTP2, the difference is £27m. Improved car design and medical care will also have had a significant impact in reducing road casualties, but this simple calculation at least gives some idea of the potential scale of savings and of the value of our investment.

- 8.8 Over the longer-term, total casualties in Leicestershire reduced by 31% between 1994-98 and 2008-10, a reduction rate that is exactly the same as that achieved across Great Britain over the same period. A 31% reduction ranks Leicestershire 8th out of the 16 authorities in the comparator group used by the Audit Commission to compare our performance across a range of local government services. Other authorities in the comparator group recorded long-term changes ranging from a reduction of 47% to an increase of 12%.
- 8.9 This success has continued into the early years of LTP3. Based on figures to the end of 2012, total reported casualties in Leicestershire have decreased by 46% since 2000. Total casualties are now 25% less than the 2005-09 average (the new base used to compare local and national performance), whilst killed and seriously injured casualties are now 29% lower than the 2005-09 average. 2012 has confirmed 12 years of annual casualty reduction in Leicestershire. It should be noted that the rest of this chapter uses road casualty data to the end of 2010.

WHAT ARE WE SEEKING TO ACHIEVE?

8.10 Improving road safety remains a key priority for us and for our LTP3. It will help us to deliver the strategic transport goal and outcome shown below:

Strategic transport goal	Strategic transport outcome
A transport system that improves the safety, health and security of our residents	The number of road casualties is reduced

8.11 It will also play a part in delivering other LTP3 outcomes. For example:

- Through improving road safety for vulnerable road users, such as cyclists and pedestrians, we can help ensure that more people walk and cycle as part of their daily journeys, thus helping to improve the health of our residents. Encouraging modal shift away from the private car will also help tackle congestion and reduce CO₂ emissions across the County.
- Reducing the number of road accidents in Leicestershire will help to reduce disruption on the transport system, thereby providing more consistent, reliable and predictable journey times for both the movement of people and goods.
- Reducing the occurrence of road accidents will play a significant part in our efforts to reduce the negative impact of our transport system on individuals and communities, and will help improve satisfaction with our transport system amongst both users and residents.

WHAT DOES OUR LTP3 APPROACH NEED TO FOCUS ON?

8.12 Despite our successful record of reducing road casualties, there are still areas for improvement. In this section we identify the road safety issues that our LTP3 approach must focus on in order for our long-term strategy to be successful. This section is split in two, looking firstly at how each of our road user groups is represented in our casualty statistics, and secondly at where accidents occur, when they occur and why they occur. Whilst we have an extensive evidence base to help us to establish our focus, it is only a snapshot in time. Over the lifetime of our strategy, it will be important for us to review our evidence base to ensure that our approach remains robust and credible.

ROAD CASUALTIES IN LEICESTERSHIRE: WHICH ROAD USER GROUPS ARE INVOLVED?

8.13 Table 8.1 provides a breakdown of casualty figures in Leicestershire between 2006 and 2010 in order to help to identify the road users that our LTP3 approach to improving road safety needs to focus on.

LTP2 base	2006	2007	2008	2009	2010	2008 - 2010 average	% change
235	193	192	166	192	181	180	-24
164	151	123	149	147	160	152	-7
305	248	212	191	194	184	190	-38
2248	1900	1767	1598	1525	1486	1536	-32
36	12	11	14	49	17	27	-26
188	132	133	121	101	93	105	-44
3176	2636	2438	2239	2208	2121	2190	-31
36	31	33	34	26	35	32	-12
15	17	10	19	14	10	14	-1
66	68	56	41	57	54	51	-23
199	169	145	131	155	131	139	-30
0	0	1	0	3	2	2	
23	17	21	28	8	6	13	-39
339	302	266	253	263	238	251	-26
25	20	14	14	16	14	15	-40
	base 235 164 305 2248 36 188 3176 66 199 0 235 339 25	base 2006 235 193 164 151 305 248 2248 1900 36 12 188 132 3176 2636 3176 2636 15 17 36 31 15 17 66 68 199 169 0 0 23 17 339 302 25 20	base2006200723519319216415112330524821222481900176736121118813213331762636243836313331762636561991691451096668199169145339302266252014	base20062007200823519319216616415112314930524821219122481900176715983612111418813213312131762636243822393631333415177100196668564119916914513100102317212833930226625325201414	base20062007200820092351931921661921641511231491473052482121911942248190017671598152536121114491881321331211013176263624382239220836313334266151710191466685641571991691451311550010323302266253263339302141416	base20062007200820092010235193192166192181164151123149147160305248212191194184224819001767159815251486361211144917188132133121101933176263624382239220821213631333426351517101914106668564157541991691451311551310010322317212886339302266253263238252014141614	LTP2 base20062007200820092010-2010 werage235193192166192181180164151123149147160152305248212191194184190224819001767159815251486153636121114491727188132133121101931053176263624382239220821212190417100191410146668564157545119916914513115513113910916914528861333930226625326323825125201414161415

Table 8.1: Reported road casualties in Leicestershire, 2006 - 2010

- 8.14 Using the 2008 2010 figures in Table 8.1 it is possible to conclude that:
 - Car occupant casualties remain the largest casualty group in Leicestershire, making up 70% (of total casualties).
 - Motorcycle casualties are the second largest casualty group at 9%.
 - Pedestrian casualties are the third largest group at 8%.
 - Cycle casualties are the fourth largest group at 7%.
 - Bus occupant, goods and other vehicle occupant casualties make up the remaining 6% of casualties.

8.15 It could be argued that our approach should focus almost entirely on car drivers as our data reveals that they are involved in about 94% of accidents. This would not, however, reflect the relative vulnerability of different modes of travel. Whilst levels of car occupant casualties are broadly in line with the distance travelled by this mode, other modes are comparatively more vulnerable. Motorcyclists, pedestrians and cyclists are significantly over represented amongst casualty figures compared to the distance these road users travel, particularly amongst KSI casualties. Our LTP3 approach must, therefore also focus on these roads user groups.

Car occupant casualties

8.16 Whilst much of our work is targeted at all car occupants (given that they form 70% of all casualties), there are other factors which indicate that specific measures may need to be targeted at both young and old drivers. Figure 8.2 shows a peak in car driver casualties on our roads between the ages of 17 and 24, a trend which is mirrored in the statistics for both the East Midlands and for Great Britain as a whole.





In Leicestershire, between 2004 and 2008, car driver casualties amongst those aged 17 to 24 made up 13% of total casualties. As an example comparator, drivers in the 40 to 49 age group made up 15% of total casualties. Whilst on the face of it these percentages are quite similar, it is important to take into account the amount of travel undertaken by each of these age groups. Nationally in 2008, an average person aged between 17 and 24 was estimated to travel around 6100 miles per year, significantly less than the estimated 9000 miles per year travelled by a person aged between 40 and 49. This example highlights how the car driver casualty figure for 17 to 24 year olds is disproportionate to the distance travelled in cars by this age group, when compared with casualty rates and distances travelled by car drivers of other ages.

- 8.17 Research shows that the peak in car driver casualties amongst those aged 17 to 24 relates to the driver's relative inexperience of the vehicle and his / her role as a driver. This is borne out by national figures which show that in 2006/07 half the drivers passing their driving test were aged between 17 and 19 and that nearly three-quarters of all drivers had passed their test by the age of 25. The attitude and development of young drivers is also relevant research into adolescent brain development indicates that the skills required for risk management are still developing into the early twenties. The influence of passengers from a similar peer group is also thought to be a factor, especially for drivers aged between 17 and 18. Amongst this age group, more than half of passenger casualties are either one year younger, the same age or one year older than the driver. In addition to relative inexperience and peer influence, 23% of accidents involving a driver aged 17 to 24 between 2004 and 2008 involved a vehicle judged to have been exceeding the speed limit or driving too fast for conditions. In comparison, excessive speed was judged to have been involved in 15% of accidents involving drivers of all ages.
- 8.18 Between 2004 and 2008, casualties amongst those aged 60 and over made up 5% of the total road casualties in Leicestershire. Whilst the number of casualties involving those aged 60 and over is relatively low, Leicestershire has an ageing population. By 2031 it is estimated that a quarter of the County's population will be aged 65 or over, with the number of people aged 75 to 79 and 80+: forecast to more than double between 2006 and 2031²². This will obviously significantly increase the number of older drivers on our roads. Whilst drivers aged 60 and over tend to avoid conflict situations, because of attitudes and experience that foster

defensive driving and the avoidance of times and places of increased stress, national research has shown that advancing age can be a factor in driver error, particularly at junctions on high speed roads or in single vehicle accidents. In the event of a crash, age related frailty also increases the injury severity experienced by older drivers and car occupants.

Motorcyclists, pedestrians and cyclists (vulnerable road users)

8.19 For reasons highlighted earlier our main focus in improving road safety amongst users of our transport system needs to be on car occupant casualties. Nevertheless, our data indicates that motorcyclists, pedestrians and cyclists are at greater risk of serious injury in road accidents than those using other travel modes as they are not enclosed within the protective structure of a car, lorry or bus. Whilst the percentage of the total casualties made up by each of these road users is relatively small, all three of these groups are over represented in casualty figures based on the distances travelled by each group. This greater risk of injury for these road users is demonstrated in Figure 8.3.



Mode of travel

Figure 8.3: Percentage of KSI casualties in Leicestershire compared with percentage of distance travelled 2004-2008 average

Motorcyclist mileage typically accounts for around 1% of the total mileage covered per year on Leicestershire's roads. However, between 2008 and 2010, motorcyclists made up 20% of KSI casualties and 9% of total casualties, making motorcyclists the second largest casualty group amongst our road users. This is despite the progress we made in LTP2, which saw a 38% reduction in total motorcycle casualties and a 23% reduction in motorcyclists killed and seriously injured. There is therefore a need for our LTP3 approach to seek to reduce motorcycle casualties still further.

8.20 As Figure 8.4 shows, the peak in motorcyclist casualties occurs at age 17. The peak relates to the relative inexperience and attitude of new riders as this age group starts to travel unsupervised with initially limited experience of both the vehicle and / or their role as a rider.



Figure 8.4: Motorcyclist Casualties in Leicestershire by Age 2004- 2008 average

8.21 Interestingly, killed and seriously injured casualties amongst motorcyclists show two peak age bands at aged 16 to 17 and amongst those in their late 30s / early 40s (see Figure 8.5 below). With 16 year old riders restricted to machines up to 50cc, and higher insurance costs relating to larger capacity machines, it is perhaps not surprising that over 75% of young riders (those aged 16 to 19) sustain their injuries on machines up to 125cc. A proportion of riders in their 30s or 40s will start, or return to, motorcycling for recreational or commuting reasons. These riders can be

relatively inexperienced but are able to choose more powerful machines, and this is thought to be one of the key reasons why there is a second peak in motorcyclists killed and seriously injured amongst this age group.





8.22 Between 2004 and 2008, pedestrian casualties represented 7.5% of total casualties and 12.5% of KSI casualties in Leicestershire. Over the same period, cyclists represented 5.6% of total casualties and 6% of KSI casualties (figures similar to those at a national level). As is shown in Figures 8.6 and 8.7, casualties peak at ages 11 to 16 for pedestrians and at 13 to 14 for cyclists. Research shows that this is due to the fact that it is at these ages that children start to become more independent and travel increased distances unsupervised.



Figure 8.6: Pedestrian casualties in Leicestershire by Age 2004 - 2008 average



Figure 8.7: Cyclist Casualties in Leicestershire by Age 2004 - 2008 average

8.23 Looking simply at our latest casualty data, the case for focusing attention on pedestrians (made up 8% of the total casualties in Leicestershire between 2008 and 2010) and cyclists (made up 7% of total casualties between 2008 and 2010) is less clear. They are behind both car occupant casualties (70% of total casualties) and motorcyclists (9% of total casualties) in terms of the percentage of total casualties they make up. However, historically our efforts to reduce casualties for these road users have been comparatively less successful than for other modes, particularly amongst KSI casualties (we achieved an 12% reduction in pedestrian KSI casualties during LTP2 and a 1% reduction in cyclist KSI casualties). In addition, encouraging more active travel for health and sustainability reasons is vital to the success of our long-term transport strategy, and therefore our LTP3 approach must continue to focus on pedestrian and cycle safety issues.

ROAD CASUALTIES: WHERE, WHY AND WHEN DO MOST ACCIDENTS HAPPEN?

Where - road type

8.24 As Figure 8.8 shows, most casualties in Leicestershire occur on local 'A', 'B' and 'C' classified roads.



Figure 8.8: Percentage of total Casualties by Road Class 2004-2008 average (percentage Road Length)

8.25 Whilst local A roads are only 9% of the length of our road network, they carry 28% of the total traffic volume on our network, and 30% of the total casualties on our roads occur on these roads. More detailed analysis reveals that twice as many KSI casualties occur on rural sections of our 'A' road network (with speed limits of 50, 60 or 70 mph) than on urban sections (with speed limits of 20, 30, or 40 mph). Rural B roads are also important to the strategic operation of the network (forming part of our core lorry network). They carry a significant volume of traffic over a relatively short length of the network (15% of total traffic volume on 6% of the network length) and have comparatively high casualty levels. Whilst carrying generally lower volumes of traffic, local C roads make up a quarter of our road network. The percentage of accidents on C roads is second only to local A roads and it is important, therefore, that this is recognised in our LTP3 approach.

Where – areas of deprivation

- 8.26 National research has established a link between deprivation and road safety risk. This is largely applicable to pedestrian casualties, where there is a significant increase in pedestrian casualties in the most deprived areas. Based on national figures, there are 21 pedestrian casualties per 100,000 of the population in the least deprived areas, which rises to 70 pedestrian casualties per 100,000 of the population in the most deprived areas. Nationally, the rate of child pedestrian casualties is four times greater in the 10% most deprived areas than in the 10% least deprived areas.
- 8.27 Leicestershire is not a deprived County. In 2007 it was ranked as the 12th least deprived authority in the country. With only 14 Leicestershire neighbourhoods (less than 4%) in the 30% most deprived areas nationally, deprivation has not been a key focus of our road safety strategy to date. However, as shown in Figure 8.9, recent analysis of the location of pedestrian accidents shows a marked bias towards the more deprived neighbourhoods in the County. Such a finding will now inform the further development of our long-term strategy for improving road safety in our urban areas.



Figure 8.9: Pedestrian Accidents by areas of deprivation in Leicestershire (above or below County average)

Why – contributory causes of accidents

- 8.28 Local and national data from accidents indicate that speed is a factor in many accidents. National research shows that for every 1 mph reduction in average traffic speeds, there is an expected 5% reduction in collisions. Vehicle speeds can also act as a barrier to efforts to encourage people to travel by modes other than the car, and can be particularly intimidating to pedestrians and cyclists.
- 8.29 Key contributory factors to accidents that involve speed include exceeding the speed limit, travelling too fast for conditions, loss of control, failure to judge another person's speed and / or path, and overtaking. Table 8.2 shows the degree to which these contributory factors were involved in accidents in Leicestershire; the data is taken from a window between 2004 and 2009, as information was collected over differing time periods. (The same is also true for Table 8.3.)

Accident contributory factor	% of accidents involved in		
Loss of control	19		
Failure to judge another persons speed and / or path	16		
Travelling too fast for conditions	10		
Overtaking	8		
Exceeding the speed limit	5		
All above factors	58		

Table 8.2: Degree to which speed related contributory factors were involved in accidents in Leicestershire over the study period (2004 to 2009)

- 8.30 Whilst Table 8.2 indicates that speed is still a key contributory factor to a significant number of accidents, corresponding data from between 1994 and 1998 indicates that the work we are doing with our partners to try and reduce excessive and inappropriate speed is having an impact. Between 1994 and 1998 the contributory factors, travelling too fast for conditions and exceeding the speed limit were recorded for 24% of all accidents. Table 8.2 shows that between 2004 and 2008 the percentage of accidents in which these contributory factors were recorded had fallen to 15%. Nevertheless, with speed factors involved in 58% of accidents in Leicestershire, this figure remains high and efforts to manage and reduce speed will remain a key part of our road safety strategy in LTP3. In addition to safety benefits, seeking to address issues around vehicle speeds can also be important where vehicle speeds act as a barrier to people choosing to walk or cycle.
- 8.31 Table 8.3 shows the extent to which other driving behaviour contributes to accidents. Some of these behaviours are likely to be under-reported. Failure to wear a required seat belt is one such example as there may be no evidence of this behaviour at the scene and drivers are unlikely to incriminate themselves. Failure to wear a fitted seat belt can, however, have disproportionate consequences in terms of the severity of the accident. Whilst recorded for only 2% of accidents in Leicestershire between 2004 and 2008, failure to wear a seatbelt was a contributory factor (based on initial investigations) in 14% of fatalities and 5% of serious casualties over the same period. The situation may be even worse than this. National research reveals that approximately 30% of those killed in recent years were not wearing their seat belts

(as determined at Coroners Court and following additional investigations), and it is estimated that at least half of those killed might have survived if they had worn their seat belts. National surveys as recently as 2009 have shown that seat belt wearing rates are still below 100% - car driver and car front seat passenger rates are 95% and rear seat passenger rates are 89%. Over all age bands, female seat belt wearing rates are higher than male rates, and wearing rates for males aged 17 to 29 remain the lowest.

Accident contributory factor	% of accidents involved in		
Driving without due care and attention	12		
Drink driving	4		
Driving aggressively	4		
Seat belts not worn	2		
Disobeying a traffic signal	1		
Using a mobile phone	0.3		
Using a mobile phone	0.3		

Table 8.3: Degree to which driver behaviour was a contributory factor in accidents in Leicestershire over study period (2004 to 2009).

- 8.32 Similarly, accidents involving mobile phones are likely to be under reported but, as high profile accidents have illustrated, distraction resulting from mobile phone use can lead to tragic consequences. A national survey noted an increase in the use of hand-held mobile phones amongst car drivers between 2008 and 2009 from 1.1% to 1.4%. Other areas of concern include drivers disobeying a traffic signal. Data from Leicestershire Police shows that red light cameras at just 10 static sites detected 7359 red light running offences in just one year.
- 8.33 Research shows that human error is a factor in 95% of collisions. Enforcement by the Police is important in seeking to influence driver behaviour. However, in recognising that both we and the Police cannot directly aim to affect the causes of 95% of accidents, it is vital that a key part of our road safety strategy will be to seek to continue to educate, alert and inform road users about hazardous behaviours.

When – accidents at night

- 8.34 Our evidence shows that on average 28% of total casualties occur between 1900 and 0700 at a time when just 18% of the total traffic is on the roads. Further evidence has revealed that between 2004 and 2008, 27% of accidents occurred during recorded hours of darkness.
- 8.35 Our evidence also reveals that driver behaviour is more likely to be a bigger factor in accidents that occur at night. Police reporting suggests that driving too fast for the conditions contributed to just over 13% of darkness accidents, nearly twice that for daylight accidents. Whilst this does not fully account for the disproportional number of darkness accidents, it does highlight that driver attitude and behaviour, rather than road alignment or lighting levels, may be an issue that needs to concern us most going forward.

OUR LTP3 APPROACH

The focus of our approach

- 8.36 Our approach to road safety achieved much during the lifetime of LTP2, and we have no evidence to suggest a need to change it in broad terms as we move into LTP3. However, the relative proportions of engineering, education or enforcement measures that we use to improve road safety in LTP3 may vary compared to LTP2 as we look for opportunities to give greater emphasis to behavioural and attitudinal road safety work by improved data analysis and closer working as part of the LLRRSP. This is driven by a recognition that:
 - 95% of accidents involve a driver or a rider making a mistake, usually through a lack of concentration or as a result of distraction.
 - Every hazard cannot be engineered out of our road network.
 - Due to significant pressures on local authority budgets, we will increasingly need to seek funding from other sources to enable us to continue to address road safety problems through engineering interventions and road alterations.

- 8.37 Based on the evidence relayed, our efforts in LTP3 will, in particular, focus on our road user casualty reduction priorities. Car occupant casualties will therefore form our main priority in LTP3. Our approach seeks to focus most of our efforts on general road safety measures, aimed predominately at all car drivers (including both younger and older car drivers). However, we will make extra efforts to reduce casualties amongst motorcyclists, pedestrians and cyclists, given their greater vulnerability compared to car occupants, and also for network capacity, personal health and sustainability reasons (thus recognising our other LTP3 strategic drivers).
- 8.38 It is important to point out at this stage that we see LTP3 adopting an approach that delivers measures increasingly in tandem. We are currently piloting such an approach as part of a local safety scheme primarily aimed at improving signing (including the provision of a motorcycle vehicle activated sign) on the B6047 in Market Harborough. It is planned that the completion of the physical improvements will be followed by implementation of a Community Speed Watch campaign (subject to community agreement and participation), motorcyclist education at the roadside and speed camera monitoring. We will be monitoring the impact and benefits of the combined scheme to see if such an approach could be rolled out at further locations across the County.

Key elements of our approach

- 8.39 We will seek to build upon our successes in reducing total casualties through our approach in LTP2 by continuing to focus our efforts on:
 - Delivering a safer road environment.
 - Managing vehicle speed.
 - Working with the LLRRSP to deliver road safety education, training and publicity.
 - Improving safety for vulnerable road users.

Improving our understanding

8.40 Our success in delivering each of the elements of our approach will depend to some extent on the degree to which we are able to continue to develop an evidence-based approach that focuses on the analysis of road casualty statistics and the

effectiveness of national and local interventions in order to inform our programmes of work. Currently, we place a lot of emphasis on this. Each year we produce the Leicestershire Road Safety Report⁶⁷, which takes an annual look at the progress being made in reducing road casualties across Leicestershire (excluding the City and Rutland). It highlights and reviews the interventions and initiatives that have been implemented in an effort to reduce road accidents and casualties. In highlighting particular areas of success and concern, it attempts to stimulate both innovation and change in the approach that we take to improving road safety in the County.

8.41 Developing our evidence-based approach will include continuing to make use of the data that we collect to inform our understanding of the effectiveness of the measures that we use to improve road safety. This will play a significant role in helping to aid the development of future measures and programmes of work. We will also be seeking to improve our understanding of wider factors that can have an influence on how, where, and why road causalities occur through new techniques such as social marketing (MAST)⁷⁶, and to use the knowledge we gain from these to help target our future road safety efforts. The establishment of the LLRRSP Data Group in 2010 is also helping to further develop our approach, particularly in helping to identify ways to better target our efforts, not only in the County but across the Partnership. The Group aims to draw together the experience and expertise of colleagues across the Partnership to review ways in which data is collected, analysed and used. We will also continue to actively participate in regional road safety forums and work with colleagues from other authorities to identify and disseminate best practice with regard to data analysis.

DELIVERING OUR LTP3 APPROACH

8.42 Whilst we recognise that improving road safety is important for social and economic reasons we cannot concentrate on all aspects of our approach at once and afford them all the same priority within our available resources. Our Implementation Plan¹⁶ identifies the things that we will be doing to deliver our long-term strategy and emphasises how we will monitor and review progress to ensure that our approach remains relevant and robust. Chapter 11 of this strategy provides the context for our initial Implementation Plans and thus the context in which we have made decisions

regarding which aspects of our approach to improving road safety we take forward in the early years of LTP3.

We will

1. Deliver a safer road environment for all road users

This will particularly involve:

- a) Developing and implementing local safety schemes based on the analysis of accident data for all road users, and will include:
 - Analysing accident data on strategic routes between significant settlements (mainly 'A' and 'B' roads) to identify appropriate road safety improvements that are primarily targeted at the motor vehicle. In doing so, we will ensure a consistent approach to the provision of road markings and signs.
 - Continuing to monitor accident numbers on strategic routes through urban areas (mainly 'A' and 'B' roads) and, where it is justified, carrying out a package of route improvements benefiting all road users, but particularly pedestrians and cyclists.
 - Identifying and analysing accident cluster sites on the local road network and promoting an ongoing programme of safety improvements benefiting all road users.

During LTP2 we spent £4.6 million on delivering local safety schemes. Post implementation monitoring indicates their success. Across 76 schemes that have been in place for 3 years, our data indicates that accidents have reduced at these sites by approximately 50%.

b) Using our Transport Asset Management Plan¹⁸ to help improve road safety, for example by :

- Regularly inspecting and testing the condition of our roads, footways and cycleways (including street lights, road signs and traffic signals) to ensure that these are maintained to the best possible standard that we can afford.
- Publishing advice on winter driving and continuing to review and set out plans and procedures for routes to be salted each year, and making these available through a range of outlets.

- c) Using our Network Management Plan¹⁷ to continue to operate a proactive and planned approach to road works in order to minimise accident risks.
- d) Seeking to ensure that new developments do not make an existing road safety problem worse or give rise to new safety problems by continuing to:
 - Review our design standards for new developments to ensure that they reflect relevant requirements and best practice.
 - Work with developers and local planning authorities to ensure that accesses into new development sites are suitably designed and subject to independent safety auditing where appropriate; and the layout of any roads, footways and cycle routes within the site are designed to a high quality, are safe and can be readily maintained in the future.

It should be noted that we will, as appropriate, seek to resist development proposals that we consider are likely to pose a hazard to road safety.

We will 2. Manage vehicle speeds

In addition to causing casualties, we recognise that vehicles travelling at inappropriately fast speeds can, in some cases, act as a barrier to people choosing to walk or cycle and can impact on the quality of life in some communities. Our efforts to manage vehicle speeds should have benefit in this respect and will particularly involve:

a) Implementing advisory 20 mph zones in the vicinity of schools, where it is practical to do so and the school are engaged in the travel plan process.

75% of schools in the County that have produced a travel plan now have advisory 20mph zones. Between 2006 and 2008 we introduced advisory 20 mph zones outside 70 schools. As a result, the percentage of vehicles traveling at 20mph or less almost doubled and vehicle speeds reduced at around 86% of schools. Levels of walking and cycling also increased by around 5% and 1.5% respectively, thus helping efforts to encourage more use of these modes of transport.

b) Supporting and enabling Community Speed Watch.

Through Community Speed Watch⁷⁷ we assist volunteers from Parishes and Traffic Action Groups to monitor speeding issues in their area. During LTP2, over 100

communities took part, details of 56,000 speeding vehicles were passed to the Police, and up to 400 letters a week were sent to registered vehicle keepers. In an evaluation report, 79% of drivers said that as a result of receiving the letter from the Police they thought more about the speed at which they drive, and 84% of drivers thought that the scheme was a good idea. Results indicate that 55% of the schemes completed showed that there was still a reduction in average speed at the site with no signage displayed. The scheme has now been extended to include the trial of mobile vehicle activated signs.

c) Setting appropriate speed limits on new roads and reviewing and amending speed limits and signing (as appropriate).

d) Supporting the use of Safety Cameras.

There are over 100 fixed and mobile safety camera sites across the LLRRSP area, of which more than 50 are in Leicestershire. These are publicised by means of the www.speedorsafety.com website. In comparison with the numbers of accidents at a safety camera site before a camera became operational, monitoring for 2009 showed reductions in recorded average annual accidents of 40% for all accident severities, and 58% for KSI accidents.

e) Supporting the delivery of LLRRSP speed awareness workshops⁷⁸.

These workshops are available to drivers convicted of lower level speeding offences and are aimed at helping them to understand the adverse consequences of speed. During LTP2, the workshops achieved a 77% take up rate from offending drivers. Evaluation recently revealed that around 90% of the participants were putting the knowledge gained into practice, better able to identify speed limits on different types of roads, and generally driving within the posted speed limits. It also stated that 97% of participants would recommend that other offending drivers attend the workshop if offered the option.

f) Running speed related publicity campaigns, for example 'kill your speed' roadside posters and radio campaigns.

In seeking to manage speed, during the plan period we will also look into the possibility of developing, where cost effective and practical, 'sign only' 20 mph speed limits in residential areas where reduced speeds could lead to measurable casualty reductions. Our efforts to manage vehicle speeds are clearly focused around

education and enforcement. However, we recognise that in specific cases it might be necessary to implement a road scheme where there is clear evidence of a speed related road casualty problem that has not been addressed by other means.

3. Work with the LLRRSP to educate, inform and influence driver behaviour

This will particularly involve:

We will

a) Developing, supporting and running courses and workshops aimed at improving driver behaviour across drivers of all ages.

Currently, in addition to speed awareness workshops, the Partnership operate Driver Alertness Courses⁷⁸ for those driving without due care, and Traffic Light (red runner) Workshops, aimed at motorists detected by cameras disobeying a red light.

b) Developing, supporting and running driver behaviour courses and workshops targeted at particular age groups, with a focus on younger and older drivers.

Through our 'Theatre in Education' programme we commission performances to schools across the County. These focus on highlighting the responsibility that comes with car ownership, the repercussions of irresponsible driving behaviour, the importance of seat belts, and efforts to encourage modal shift. 'Theatre in Education' has been evaluated by the Department for Transport as being a strong medium for conveying road safety messages. In 2010 approximately 500 15 / 16 year olds have attended pre-driver days at Mallory Park, looking at basic driving techniques and the responsibilities that come with having a driving licence. The 'No More Lives Wasted'⁷⁹ regional web site is specifically aimed at young people and provides road safety news, first person accounts and general road safety advice.

Catering for up to 300 clients a year throughout LTP2, our 'Safer Driving with Age' (SAGE)⁸⁰ scheme is targeted at drivers aged 60 and over and, subject to an updated eyesight check, enables them to answer a health questionnaire and also undertake a driving assessment in their own vehicle along their preferred routes.

c) Offering driver training for companies and also working to develop schemes to cover drivers of vehicles that are owned and operated by service providers, or are driven, on behalf of Leicestershire County Council.

During LTP2 we contacted over 400 medium-sized companies (those with 50-250 employees) to offer driver training relating to safety and economy (greener driving). If tied-in with employer and employee responsibilities to promote safe working methods and practices, road safety messages that are effectively delivered to drivers and firms can alter behaviours relating to journey planning, speed, distraction, fatigue and fuel efficient driving.

d) Developing and supporting road safety campaigns aimed at reducing hazardous behaviour by drivers. A particular focus will be on:

- Drink driving, particularly in the winter and summer months and around significant events (such as the Olympics in 2012).
- Mobile phone use and seat belt wearing, including the safe use of child car seats.

During LTP2, as a County, and as part of the LLRRSP, we spent £2.65 million on road safety attitudinal and behavioural initiatives. These campaigns are effective in terms of raising awareness and establishing new norms of behaviour over time. Whilst our LTP3 approach builds on our successes through LTP2, it will be important for us to continue to review what we do in seeking to improve driver behaviour and to look to develop additional courses and campaigns as required. The range of road safety education and training initiatives that we put in place will continue to be identified and prioritised either to support national programmes or from local casualty statistics and will, wherever possible, also be informed by external evaluation of their effectiveness.

We will

4. Improve road safety for vulnerable road users

In doing this, we will be specifically targeting motorcyclists, pedestrians and cyclists.

MOTORCYCLISTS

Our work to try and improve road safety for motorcyclists will particularly involve:

a) Sharing best practice in motorcyclist safety education, publicity and training through membership of the regional 'Shiny Side Up' Partnership⁸¹.

- b) Supporting a range of projects that provide information to motorcyclists and promote training. A current example is the regional web based 'Bare Bones' project aimed at 16 to 19 year old riders of scooters and mopeds which promotes training and advocates appropriate use of protective motorcycle clothing.
- c) Supporting projects that deliver improved signing on routes identified as hazardous for high speed motorcycling (such as the work of the Shiny Side Up Partnership in delivering its 'Bends Dead? Ahead', 'Think Bike', and 'To Die For?' campaigns).
- d) Supporting training schemes that encourage safer and smoother motorcycle riding (current examples include Bike Safe, offered by the Police, and The Enhanced Rider Scheme, a commercially available course offered especially to those riders returning to motorcycling and / or upgrading to larger machines).
- e) Supporting schemes offering assistance to new riders to purchase protective clothing. A purchase voucher includes additional information helpful to new riders on regulations and courses and the associated questionnaire captures customer feedback.
- f) Supporting national campaigns as appropriate.
- g) Engaging with riders attending events and races at venues such as Mallory Park and Donington Park to discuss the promotion of road safety messages aimed at motorcyclists.

PEDESTRIANS AND CYCLISTS

Our work to try and improve road safety for pedestrians and cyclists will particularly involve:

h) Providing road safety training to children at an early age using nursery, preschool and school based programmes.

Current examples include 'Tiny Steps' (parent / child) in nurseries and pre-schools; 'First Steps' (pedestrian training), designed for 5/7 year olds; 'Junior Road Safety Officers', whose role is to promote road safety awareness to 10 or 11 year olds, as well as adults, at their school; and the nationally accredited Bikeability⁸² course offering training at three levels: basic off–road training for 8/9 year olds, on road training for 10/11 year olds and advanced road training for those aged 12 and older.

During LTP2 we ran pedestrian training for 12,702 children and cyclist training for 24,600 children. Our Junior Road Safety Officers scheme has operated for 25 years. In 2009/10, 80% of our primary schools were members of the scheme. The Transport Research Laboratory evaluated our scheme and praised it as being a good example of peer training. Measures such as these reduce casualties. The TRL report, 'An evaluation of options for road safety beyond 2010', published in April 2009, estimated that a national education programme aimed at pedestrians and pedal cyclists aged 5 to 16, could save between 10 and 30 fatalities a year.

- i) Supporting and providing School Crossing Patrol services and encouraging the involvement of our school crossing patrol staff in wider aspects of road safety education.
- j) Providing cycling training for adults.
- k) Developing programmes of works (such as central islands, crossings, pedestrian phasing at traffic lights, cycle lanes, toucan crossings, cycle phasing at traffic lights) to improve pedestrian and cycling facilities for all ages where it is affordable to do so and there is an evidence-based need.

In the light of evidence that suggests pedestrian casualties (both adult and child) are higher in areas of deprivation, we will explore the need and desirability of focusing proportionately more of our efforts in such areas, and review the outcomes should we do so.

MONITORING OUR LONG-TERM STRATEGY

- 8.43 Over the LTP2 period (2006 to 2011) we used four targets to monitor the effectiveness of our road safety strategy. Using the 2001-04 average figures as a baseline, our LTP2 targets were to reduce:
 - The total number of killed and seriously injured casualties on our roads by 26% (26%).
 - The number of children killed and seriously injured on our roads by 33.3% (40%).
 - The number of motorcyclists killed and seriously injured on our roads by 20% (23%).
 - The number of people slightly injured on our roads by 31% (34%).
- 8.44 As shown in brackets, we have achieved or exceeded all of these targets.
- 8.45 Our LTP3 road safety strategy has been designed to ensure that the number of road casualties in Leicestershire is reduced over the lifetime of LTP3. We intend, at least initially, to use the following long-term target to monitor the effectiveness of our road safety strategy during LTP3:
 - Using the 2005-09 average as a baseline, we will reduce total casualties on our roads by 29% by 2020 from 2490 to 1772.
- 8.46 In addition to this key performance indicator, and again using the 2005-09 average as a baseline, we will also be seeking to:
 - Reduce **killed and seriously** injured casualties (KSI) on our roads by 40% by 2020 from 278 to 167.
 - Reduce slight casualties by 27% by 2020 from 2212 to 1605.

- 8.47 A target for total casualties affords a greater focus on slight accidents, recognising that people are injured in such cases and that all injury accidents are important in forming the basis of our various road safety programmes and activities. Although car occupants still account for the majority of killed and seriously injured casualties on our roads, the vulnerability of motorcyclists, pedestrians and cyclists is reflected in the contribution they make to KSI casualties. A KSI indicator, especially one based on achieving a greater rate of reduction than is proposed for total casualties, gives due weight to more serious casualties and to relative vulnerability.
- 8.48 As part of our LTP3 Implementation Plan we will put in place annual targets for each of these indicators (set and reviewed on a three year basis), thus allowing us to monitor the progress that we are making. Progress will be monitored on a quarterly basis as part of the performance management regime that is put in place to monitor delivery of our Implementation Plan. Although we are only proposing to set one road safety key performance indicator and two supporting indicators at this time, our performance management regime will see us continue to monitor and report locally on road casualties across a range of road users.

CONCLUSIONS

- 8.49 Given the proactive and evidence-based approach we take to improving road safety in Leicestershire it is perhaps not surprising that our approach in LTP3 will look to build upon the successes we have had in both LTP2 and LTP1. Car occupant casualties will continue to be our top priority during LTP3. However, we will again continue to direct additional resources and measures at the more vulnerable users of our road network, namely motorcyclists, pedestrians and cyclists.
- 8.50 In terms of the measures that we will employ to tackle our road safety priorities in LTP3 we will again be looking to use a mixture of engineering, education and enforcement measures. However, where our strategy may differ in LTP3 is in the relative weighting we apply to the delivery of each of our measures. This is predominantly because our data shows that 95% of accidents in the County involve a driver or rider making a mistake, usually as a result of a lack of concentration or a distraction. More often than not, these are contributory factors that are not down to

the design, state or condition of the transport system but instead a result of driver behaviour and attitudes. With engineering-based interventions having been at the core of our road safety approach over the last decade, there is also an ever-smaller number of accident cluster-sites on our network and thus the potential for reducing levels of return on our investments in road schemes to improve road safety. Further, we will increasingly need to seek funding from other sources in order to make improvements to our transport system.

- 8.51 However, subject to the ongoing availability of funding, local safety schemes will remain a key part of our strategy and we will still be developing and delivering an annual programme of such schemes in the early years of LTP3. However, this programme may be smaller than has been the case in previous years and will rely more than ever on our investigation, recording and monitoring of accident data to develop schemes that ensure the efficient use of available resources.
- 8.52 Although we will be increasing the relative emphasis we place on education, training and publicity campaigns in LTP3, the current financial situation means that, in the early years of LTP3 at least, we are likely to have less money available than we have had before to spend on these initiatives. Whilst we will continue to deliver the majority of the initiatives that have proved so successful during LTP2, we will be looking to further develop our approach to analysing road safety data to ensure we can deliver ever more targeted road safety education and training initiatives, and ensure our road safety messages are tailored specifically to the road users we need to target if we are to achieve the desired change in behaviour.
- 8.53 Speeding vehicles contribute significantly to the cause of road accidents and can be intimidating to pedestrians, cyclists and communities. Unlike some authorities we remain committed to the use of speed cameras given the effective role these have historically played in helping to tackle excessive and inappropriate speeds in Leicestershire. However, reflecting the approach outlined, our speed management strategy will be more targeted on enforcement, education, and training activities aimed at drivers and riders, rather than on building schemes designed specifically to tackle speeding issues.

8.54 In addition to casualty reduction funding we will also look to obtain other funding sources to deliver our road safety strategy. In doing so, we will particularly emphasise the key role that our road safety strategy will play in helping to encourage more walking and cycling throughout the County, thus contributing to wider strategic efforts to reduce congestion and CO_2 emissions, and improve the health of the County's population.

This chapter:

- Looks at the progress we have made in managing the condition of our transport system during LTP2.
- Identifies the issues on which our approach to managing our transport system during LTP3 is to focus.
- Sets out the approach that we will take to managing our transport system during LTP3.

Note: In this chapter we talk about our approach to managing the condition of our transport system. In Chapter 5 of this strategy we talk about our approach to the management of traffic on our transport system.

INTRODUCTION

- 9.1 The approach we have taken to the maintenance of our transport system during LTP2 ensured that we made good progress in improving the condition of our transport assets. The condition of our roads is amongst the best in the country and our approach to maintenance, and the good condition of our road network, has helped to minimise disruption to users from maintenance works or emergency repairs.
- 9.2 Despite the progress we have made, there remain significant challenges ahead. Our asset management strategy has ensured that the condition of our transport assets is particularly good, and it is important that we do not squander past investments by neglecting them. However, the current financial situation means that we may not be able to maintain the levels of expenditure that we currently put into maintaining the condition of our transport system. We will need to review the implications of this for our asset management strategy, particularly in the context of the levels of growth planned for Leicester and Leicestershire.
- 9.3 In seeking to manage and maintain our transport system, work is also ongoing to better understand how it will cope with the impacts of climate change. 'Adaptation' is the process of making changes to our transport infrastructure and its maintenance regimes, so that it can tolerate the more extreme weather conditions which are expected to result from climate change. Over the last decade, the UK has suffered a higher number of extreme weather events than would normally be expected, especially in terms of intense and prolonged rainfall. In addition, the six hottest years in the UK since recording began in the 1850's have all been in the last thirteen years⁹¹, and conversely the winters of 2009/2010 and 2010/11 were particularly cold. Climate change modelling predicts that these extremes will become more frequent, and even more extreme.

WHAT ARE WE SEEKING TO ACHIEVE IN LTP3?

9.4 Managing the condition and resilience of our transport system will play the principal role in delivering the LTP3 strategic transport goals and outcomes that are shown below.



Strategic transport goal	Strategic transport outcomes
An efficient, resilient and sustainable transport system	Our transport system and its assets are effectively managed and well maintained Our transport system is resilient to the impacts of climate change

- 9.5 It will also play a part in delivering other LTP3 outcomes. For example:
 - Continuing to review our approach to the maintenance of our transport system will ensure that it reflects the importance that we place on improving facilities to encourage walking, cycling and use of public transport in the County.
 - A well-maintained highway, footway and cycleway network can help improve road safety, reduce accidents and improve satisfaction with our transport system.

WHAT DOES OUR LTP3 APPROACH NEED TO FOCUS ON?

- 9.6 The effective management of our transport assets plays a vital role in enabling our transport system to function efficiently and effectively. For example, cycle tracks with bumps and ruts become less used, uneven footways may deter people from walking, and poor road surfaces not only impact on car travel but have a magnified effect for bus passengers, making travelling by bus a less pleasant experience and can pose particular safety hazards to those who travel by bike or motorcycle. Such issues can undermine the effectiveness of the alternatives to car travel. Similarly, carrying out unplanned or emergency repairs on the network, or the poor planning of routine repairs, can contribute significantly to traffic congestion.
- 9.7 The key tool in managing and maintaining our transport assets is our Transport Asset Management Plan (TAMP)¹⁸. Our TAMP has been developed in accordance with the prime objective of the Network Management Duty to 'secure the expeditious movement of traffic on our road network.' The ultimate aim is for a far more planned and proactive approach to asset management that will move away from reactive interventions to ensure that we can better plan for maintenance of the network and further reduce the impact of any disruption. Ultimately, we are aiming to implement

our TAMP to maximise the availability, capacity, resilience, reliability and performance of our transport system. This section of the chapter looks at the key things we will need to focus on in order to achieve this. It includes sections on:

- Our approach to asset management.
- Our approach to improving our Rights of Way network.
- Our delivery of highway works.
- Meeting the expectations of customers.
- Road safety.
- Levels of network usage.
- Sustainability.
- Our approach to winter maintenance.
- Climate change.

Asset Management Strategy

- 9.8 As detailed above, our asset management strategy to date (our first TAMP was developed in 2007) has ensured that the condition of our transport assets, particularly our roads, is amongst the best in the country. However, the current financial situation, the anticipated levels of both population and housing growth in the County (see Chapter 2) and the need to ensure that the condition of our transport system encourages people to make the most of opportunities to travel in a more active and healthy manner (see Chapter 6), have led to us reviewing our existing asset management strategy.
- 9.9 The approach adopted during LTP2 focused on achieving the asset condition performance targets we had set ourselves. This ensured that much of our work was reactive and focused on treating those assets that were in the worst condition first. The financial situation ensures that we cannot adopt such an approach in LTP3. Whilst seeking to maintain the condition of our transport assets in such a way as to meet the needs of both current and future users, our second TAMP anticipates that, over the next few years, the reportable condition of some of our transport assets,

particularly our road network, may decline relative to their current high level. This is principally because we will have to make the same, or potentially less, funding treat more of the network during LTP3. We are not accepting this casually, however. Rather, our LTP3 approach will recognise that, in order for us to attempt to maintain the overall condition of our transport assets to the best standard that we can afford, we must undertake work on a more evidence-based, policy driven and proactive basis.

Rights of Way Improvement Plan

- 9.10 A key supporting document to our TAMP is our Rights of Way Improvement Plan (ROWIP)¹⁹. Our existing ROWIP was published in 2011 and sets out a framework to develop and manage the network of paths to meet the current and future needs of the community. The Plan also sets out a detailed list of improvements for the rights of way network. The Plan covers the period 2011-2016.
- 9.11 Our approach to managing the network will see a continued focus on those routes that have the greatest current and potential use and will continue to focus on the programmed management of the network, including waymarking and signing, barrier removal, vegetation clearance, crop monitoring and inspections. Maintaining an accessible and attractive ROW network is also a key element of our LTP3 approach to encouraging more active and sustainable travel see Chapter 6 and improving the connectivity and accessibility of our transport system see Chapter 7.

Highway Works

- 9.12 We are currently assessing and revising the way our highway works are commissioned and delivered. A key driver of this review is to improve our approach to the delivery and co-ordination of highway works. We are seeking to move away from delivering expensive reactive maintenance projects and adopt a more planned and co-ordinated approach to the delivery of highway works. The project will deliver the following benefits:
 - Improved service efficiency will reduce the number of 'return' visits, saving time and reducing mileage, carbon emissions and disruption on the network from our works.

- Better utilisation of resources will see us share use of plant, labour and materials between works, thereby minimising costs.
- Treatment optimisation will better ensure that we use the right material in the right places.
- Through better works prioritisation and co-ordination with third party works we
 will seek to ensure that different works within the same closure/restriction are
 undertaken at the same time.
- 9.13 Aside from efficiency and cost benefits, it is important that our approach to delivering highway works provides wider benefits for road users. Road users will ultimately benefit, with less disruption on the road network delivering improved journey time reliability.

Customer Expectations

9.14 There is an increasing demand from our customers for safe and reliable journeys, which will mean careful planning of highway works to minimise disruption. Effective maintenance also contributes significantly to wider quality of life objectives. In particular, well-maintained infrastructure can be a real asset in the appearance of our towns and villages as well as in the rural landscape. Our street lighting column replacement programme, and our speed in repairing faulty street lamps, also plays a key role in reducing fear of crime in communities. Our asset management strategy also aims to maintain a good level of network serviceability, thus reducing congestion and delays. All of these are customer expectations that our efforts to manage our transport system during LTP3 must look to meet. At the same time, increasing financial scrutiny and accountability also ensures that our funding requirements must be clearly justified.

Road Safety

- 9.15 An important highway maintenance activity is to maintain the roads in a safe condition for all types of road user. Our wider highway maintenance policies take this important issue into account. Maintenance activities designed to ensure safety include:
 - Seeking to keep carriageways and footways free from potholes and other defects.
 - · Maintaining drainage systems to eliminate standing water on carriageways.
 - Gritting and snow clearance.
 - Street lighting.
 - Grass cutting to maintain visibility.
 - Tree maintenance.
 - Maintaining signs, lines and road studs.
 - Treating roads to ensure adequate skid resistance.
- 9.16 To ensure that our maintenance activities play a full part in helping to achieve our targets to reduce road casualties, our maintenance policies are regularly reviewed. Changes identified which can help to reduce road casualties are implemented where possible.

Network Usage

9.17 Dealing with the traffic growth that is expected to emanate from future population and economic growth is likely to present particular challenges in how we maintain our network and its assets during LTP3. Maintenance treatment options will have to allow for significantly heavier traffic flows (see Chapter 3 and predictions about the growth in vehicle kilometres that are forecast in the next 15-20 years). A wider objective of LTP3 which has an impact on our asset management strategy is modal shift. By continuing to review our approach to the maintenance and improvements we carry out on footways, footpaths and cycleways it will be important for our LTP3 approach to reflect the importance we place on encouraging road users to change their mode of transport away from the private car. If successful this will help reduce road congestion, improve health and reduce CO2 emissions.

Sustainability

9.18 The manufacture and transportation of construction materials, and the disposal of used materials, can have significant impacts on our environment in many ways, including the generation of CO₂. Sustainability appraisals are fundamental to highway maintenance to stimulate innovation and creativity. Our materials, products and processes are routinely appraised for environmental and wider sustainability contributions and as we head into LTP3 there is an ever increasing need to consider their suitability in relation to future climate change predictions (This is also true in the case of improvement schemes. We need to be sure that the material being used offer clear benefits when considered against the environmental impacts of their use and their maintenance costs in the future). Setting an example, our depots and materials are being managed to minimise pollution and avoid visual intrusion.

Winter Maintenance

- 9.19 We have a statutory duty to provide a winter maintenance service on all highways maintainable at public expense within the County, except for motorways and trunk roads (which are the responsibility of the Highways Agency). The main focus of our winter maintenance service is on the precautionary salting and snow clearance of the road network.
- 9.20 The winters of 2008/9, 2009/10 and 2010/11 had long periods of lying snow and weeks of sub-zero night-time temperatures. Scientific investigation into why these severe winters occurred is ongoing. If this suggests a high probability that such winters may occur again in the next few years this will need to be taken into account in our TAMP. Icy weather requires salting and gritting to keep people moving, but road salt causes its own problems of water pollution, chloride damage to reinforced concrete structures, and increases in levels of particulate matter in the air. Repeated thawing and freezing cycles cause damage to highway surfaces, most often seen as potholes which are hazardous to drivers, pedestrians and cyclists, and cost a significant amount of money to repair.

Climate Change

- 9.21 Climate change is becoming an ever more important driver of our efforts to manage the condition and resilience of our transport system. The major threat of climate change to our transport system is not the temporary (although very inconvenient) effect of closing parts of the system during extreme weather conditions, but of substantial damage to key pieces of infrastructure (including roads, pavements and bridges) which are expensive and time-consuming to repair or replace, and cause prolonged disruption of the usual network as the route undergoes repairs.
- 9.22 Flooding and intense rainfall affects transport by blocking routes, making travel more dangerous, and damaging infrastructure through water scour. In extreme cases, bridges may be destroyed or so seriously damaged that a route has to be closed until a safe replacement is built. Prolonged wet conditions cause soil heave which can disrupt structures such as bridge parapets or concrete pavement (and the utility pipes and cables within the roads). Prolonged dry conditions cause soil shrinkage which can have similar effects. Drought also increases the risk of fire in vegetation on highway land, whilst extreme heat can melt some types of road surfaces causing routes to be closed, and may also lead to differential expansion of steel-reinforced concrete structures which causes cracking. Steel railway lines may buckle if they expand too far.
- 9.23 Extreme cold is considered less likely to occur with long-term climate change. We have discussed our approach to winter maintenance above but a key concern to delivering our TAMP is the unpredictability of extreme weather. We increasingly have to ensure contingency funding and reserves are available until the end of the public sector financial year in April, in case of severe late winter weather. As a result, planned maintenance programmes can suffer and we can incur significant additional costs. Extreme weather also often requires precautionary work to avert potential disruption, emergency work to clear any obstacles, and rapid remedial work to minimise consequential delay.
- 9.24 In 2009, the 3 Counties Alliance Partnership (3CAP) commissioned research into the likely medium-term effects of climate change on transport infrastructure across Leicestershire, Derbyshire and Nottinghamshire⁸³. Outcomes of this work indicate

that the most likely / major impacts of climate change on the highway network include:

- Pavement (road and footway construction) failure from prolonged high temperatures.
- Increased length of the growing season for grass verges and hedges.
- Lack of capacity in the drainage system and flooding of the network.
- Surface damage to structures from hotter and drier summers.
- Scour to structures from more intense rainfall.
- Damage to pavement (road and footway) surface layers from more intense rainfall.
- Subsidence and heave on the highway from more intense rainfall.
- Scour and damage to structures as a result of increased incidents of heavy rainfall.
- Damage to lightweight structures from increased incidents of stronger wind and heavy rainfall.
- 9.25 In addition to these impacts on infrastructure, the County Council's Climate Change Team has identified further risks that may impact on our ability to encourage modal shift away from the private car and towards more sustainable travel choices.
 - Overheating on buses.
 - Lack of shelter from sun and rain at bus stops.
 - Lack of shade on footpaths and cycleways to protect walkers and cyclists from high temperatures.

OUR LTP3 APPROACH

9.26 The context in which we are seeking to manage the condition and resilience of our transport system is changing as we move from LTP2 to LTP3. In seeking to manage and maintain our transport system in LTP2, there were sufficient funds available to both increase the capacity of our transport system and improve the condition of our transport assets from an already high base. However, as we continue to move

through our LTP3 period the financial situation remains challenging, with significant pressure on local authority budgets. Through our Medium Term Financial Strategy we have sought to adjust our spending approach to seek to avoid a marked deterioration in the condition of our highways. However, this will still be challenging given the forecast increases in traffic levels we expect to see as a result of population growth (more vehicles mean greater wear and tear on road surfaces).

- 9.27 The financial situation also ensures that delivering measures and interventions to maintain the condition of our transport system that are both effective and which offer value for money, is more important than ever. In the past, maintenance programmes have included a significant element of reactive work, with schemes introduced to meet both performance targets and local requests. For fairness and transparency, priority ranking systems were used that required significant effort in gathering and analysing data to inform decisions. These projects were scattered about the County and did not make a useful contribution to taking a strategic approach to managing the performance of our overall transport system. It is no longer tenable to have such request-based and performance driven maintenance programmes and they will not form part of our asset management strategy in LTP3. Instead, our priorities in managing the condition and resilience of our transport system in LTP3 will be to:
 - Use a policy-led and proactive approach to managing and maintaining the condition of our transport system and its assets.
 - Seek to ensure that the condition of our transport assets means that our transport system is able to meet the needs of current and future users.
 - Respond to the challenges posed by climate change and traffic growth.
 - · Continue to monitor and review our approach to winter maintenance.
- 9.28 Whilst we recognise that the effective management of our assets plays a vital role in enabling our transport system to function efficiently and effectively, we cannot concentrate on all aspects of our approach at once and afford them all the same priority within our available resources. Our Implementation Plan¹⁶ identifies the things that we will be doing to deliver our long-term transport strategy and explains how we will monitor and review progress to ensure that our approach remains relevant and robust. Chapter 11 provides the context for our initial Implementation Plans, and

thus the context in which we have made decisions regarding which aspects of our approach to managing the condition and resilience of our transport system we take forward in the early years of LTP3.



1. Use a policy-led and proactive approach to managing and maintaining the condition of our transport system and its assets.

Our efforts will focus in particular on:

- a) Ensuring that decisions on how to allocate funds within, and across, different types of investments (e.g. reactive maintenance versus programmed maintenance, carriageways versus bridges, footways or cycleways) are:
 - Properly informed, taking account of possible options and are based on an analysis of how different allocations will impact upon the achievement of relevant policy objectives, including the need to reduce CO₂ emissions, promote more active travel and adapt to climate change.
 - Evidence-based and make use of quality information and data reflecting the usage, operation and performance of our transport system and the condition of our assets.

We will also be investigating the degree to which we may be able to focus interventions on delivering a range of co-ordinated measures in specific geographical areas in support of wider economic, environmental and social priorities, rather than spreading resources thinly across the County.

b) Raising the profile of, and developing, our asset management strategy, including by:

- Continuing to emphasise the importance of our Transport Asset Management Plan.
- Continuing to demonstrate the results and performance of our asset management strategy both internally and to partners to ensure that we continue to move away from the historical proportional allocation process, and high cost, short-life reactive maintenance processes.

c) Providing a process to ensure the delivery of the most cost effective maintenance regime by continuing to review the use of asset management treatments and performance, including by:

- Continuing to review and develop our Transport Asset Management Strategy.
- Ensuring that continuous monitoring of our interventions and investment is undertaken to ensure value for money and best use of resources in delivering a cost effective maintenance regime. Performance results will be monitored and reported for both impacts and effectiveness of treatments and actions.
- Continuing to ensure our techniques for managing assets are adjusted regularly on the basis of developing national best practice through the Midlands Service Improvement Group.
- Continuing to implement waste management plans for individual schemes to ensure waste is minimised and to make recycling normal practice within our asset management and maintenance activities.
- d) Ensuring that, within available funding, assets are maintained in a condition that is 'fit for purpose' and potential safety hazards are minimised as far as is reasonably possible. This will be done through a programme of inspection, condition monitoring, and survey data. In particular it will focus on;
 - Ensuring that we regularly inspect, test the condition of, and seek to maintain to the best condition that we can, our roads, footways and cycleways (including street lights, road signs, traffic signals, bridges and Public Rights of Way network).
 - Ensuring that we carry out grass cutting of verges in towns and villages, control weed growth on footways and kerbsides, and clean our roadside drains at least once a year, more in problem areas.
 - Ensuring that we carry out carriageway and footway renewal (repair / reconstruction and resurfacing and slope stabilisation) as well as maintenance (patching repairs, surface dressing, slurry sealing and other surface treatments).
 - Ensuring Leicestershire Highways Operations and our partner contractors continue to provide value for money through the Highway Works Alliance.

Whilst we will seek to avoid a marked deterioration in the condition of our road network, this will be challenging given the predicted increases in traffic levels

resulting from population growth. But, given the importance of a well-maintained transport system to the successful achievement of our LTP3 goals and outcomes, we are not accepting a decline in standard as something that simply has to happen. Rather, in order to seek to address this challenge we are changing our approach from the performance indicator driven worst-first, guick-fire reactive maintenance approach of LTP2. Instead, appropriate maintenance treatments in LTP3 will be targeted at longer lengths of our networks that are exhibiting defects that are below the reportable intervention levels. This will see the adoption of a more programmed approach to our maintenance works for all but essential emergency repairs. We recognise that this may result in some small lengths of our networks with defects that are just below the intervention level deteriorating further and adding to the reportable figure. However, our aim in LTP3 must be to make our repairs more efficient by treating more of the network with defects, consequently delivering better quality for users, longer serviceable life and better value for money. Such an approach will reduce the costs of the reactive maintenance operation, reduce the numbers of temporary repairs on the network, and allow a higher proportion of first time repairs to be completed.

We will

2. Seek to ensure that the condition of our transport assets means that our transport system is able to meet the needs of current and future users.

Our efforts will focus in particular on:

- a) Assessing the demands for the use of our transport system and adjusting resources accordingly. In doing so, we will continue to:
 - Use both information on the condition of our assets and user satisfaction to ensure that our transport system is meeting the needs of our stakeholders within available budgets.
- b) Enabling the best use to be made of our existing transport system and any improvements by reviewing operational policies and working procedures. In particular we will:
 - Ensure that our Highway Maintenance Policy and Strategy⁸⁴ is reviewed and updated to reflect best practice.

3. Respond to the challenges posed by climate change and traffic growth.

Our efforts will focus in particular on:

a) Mitigating and adapting to the effects of climate change and traffic growth by:

- Implementation of the Action Plans emanating from the 3 CAP Study into the impacts of climate change, including:
 - Assessing the suitability of road and footway surfacing materials/treatments.
 - Managing the capacity of drainage and watercourse systems and drain cleaning to cope with higher rainfall.
 - Adjusting the frequency of grass cutting, weed spraying and tree maintenance to cater for longer growing seasons.
- Incorporating the findings of the 3 CAP Study into our TAMP and highway maintenance policies and operational standards.

The 3CAP study identified the most effective ways in which we could start to work towards adapting our policies, standards, operations and strategies to the effects of current and future climate change. Many of the responses identified as potentially being the most effective involve the undertaking of a risk assessment and/or asset review. In order to adapt to the effects of climate change, we must be aware of the level at which different parts of our network are vulnerable and most in need of attention. This indicates that by ensuring that we have a clear idea of the location, condition and vulnerabilities of our assets (whether it be structures, roads, or verges), a more targeted programme of action and improvement can be developed. By taking action now and identifying the work that needs to be carried out (whether it be monitoring, maintenance, strengthening, reconstruction etc), the network will be more resilient to the effects of the changing climate and it will reduce the cost and inconvenience caused by any necessary emergency or reactive work in the future.

As a result of the 3 CAP Study, Action Plans have been put in place to better equip our transport system to be able to cope with the impacts of climate change. Implementation of these is underway and includes work focused on: asset management, the maintenance of bridges and other structures, drainage,

road maintenance, vegetation and grass cutting, emergency planning for extreme weather and alternative route planning on the road network.

Arguably the most immediate issue is hardening the network against flash flooding caused by more intense rainfall. Following the enactment of the Flood and Water Management Act (FWMA), Leicestershire County Council, as Lead Local Flood Authority (LLFA), is now responsible for local flood risk management, and must develop, maintain, apply and monitor a strategy for flood risk management in Leicestershire. To do this, we have established a Flood Risk Management Board to ensure a co-ordinated approach with district councils, the Local Resilience Partnership, Severn Trent and Anglian Water companies, the Environment Agency and also Leicester City Council and Rutland County Council. A Preliminary Flood Risk Assessment (PFRA) was carried out in 2011 to better understand the surface water flood risk across Leicestershire and to identify areas which need to be considered for further measures to improve flood risk management. As LLFA we are currently developing the local flood risk management strategy for Leicestershire. The next phase of strategy development is to improve our information and understanding of local flooding issues and risks. This is being done through an Engagement and Communication Plan aimed at raising awareness of flood risk (particularly from surface water), identifying local concerns and encouraging reporting of issues.

The Engagement and Communication Plan will also promote the use of Sustainable Urban Drainage Systems (SuDS), which manage rainwater. Under the FWMA the County Council becomes the SuDS Approval Body (SAB) and any development which drains more than one property will need to have its drainage approved by the SAB. However, recent consultation has proposed that only major developments (over 10 dwellings) will require SAB approval for the first 3 years following commencement of the SAB role (April 2014).

As part of our adaptation activities, the register of our transport assets is being continuously reviewed to determine where adaptation is most required. For example a risk assessment to determine vulnerable areas on the drainage network identified priority maintenance areas at Blackfordby, Syston (under the railway bridge), and in Market Harborough which has led to £1m being invested on improvements needed to highway drains systems to reduce the risk of flooding.

This will be a gradual process over a number of years as climate change becomes more and more evident. Environmental and financial implications will have to be considered.

- Reviewing our Incident Management, Emergency Planning and Contingency Planning procedures as part of resilience assurance.
- Reviewing our asset management plan, to ensure maintenance treatment options allow for heavier and more variable traffic flows in light of expected traffic growth across the County.
- Assessing the viability of providing shade on key walking and cycling routes, particularly in places where this would support modal shift.
- Reviewing measures that could be taken to reduce temperatures on buses and provide additional bus shelters to support public transport use particularly as it is predicted that we will experience higher peak temperatures and hotter periods overall.
- Continuing to review our approach to the maintenance of our transport system to ensure that it reflects the importance that we place on improving facilities to encourage more walking, cycling and use of public transport in the County.

b) Minimising the environmental impacts of our maintenance activities, including by:

- Continuing to review maintainability and sustainability checklists to keep maintenance operations and the design of future schemes up-to-date.
- Continuing to use waste management plans for individual schemes to ensure that construction waste is minimised and to make recycling normal practice within our asset management and maintenance activities.

4. Continue to monitor and review our approach to winter maintenance. Our revisions will seek to ensure that our winter maintenance service:

- · Meets the statutory requirements of the County Council.
- Ensures as far as reasonably practicable, possible and affordable, the safe movement of vehicles, pedestrians and cyclists on the highway network.

- Minimises delays, accidents and damage to the highway resulting from ice and snow.
- Is undertaken effectively and efficiently.

The need to carry out winter maintenance service operations is triggered not just when it is actually snowing or icy but when such conditions are predicted. A number of factors affect how and where we salt and grit, including temperature, local topography and wind speed.

To deliver the service within the available resources, the routes that we salt reflect their relative importance in the local road network hierarchy and are adaptable to the prevailing weather conditions. Normal precautionary salting is carried out on 45% of our road network. Each route is a combination of Priority 1 and 2 roads. Priority 1 roads (P1) comprise main distributor roads, commuter roads and major bus routes. Priority 2 roads (P2) comprise secondary distributor and locally important roads in the carriageway hierarchy and at least one route into all villages as far as is reasonably practicable. Routes with steep hills at junctions or a school on the road area are also treated where possible. The routes are reviewed annually taking into account any complaints or comments received during the previous winter season.

MONITORING OUR LONG TERM STRATEGY

- 9.29 During LTP2 we used a number of indicators to measure the condition of our transport system and our transport assets. These included indicators to assess the condition of our roads, footways, rights of way network, bridges, street lights and traffic signals.
- 9.30 Our efforts to manage the condition and resilience of our transport system during LTP3 have been designed to deliver the long-term strategic transport outcomes set out below:
 - Our transport system and its assets are effectively managed and well maintained.
 - Our transport system is resilient to the effects of climate change.

Management and maintenance of our transport system and its assets

9.31 We will use the following performance indicators to monitor the degree to which we are delivering a well managed and maintained transport system.

KEY PERFORMANCE INDICATOR (KPI)

• Percentage of the classified road network ('A', 'B' and 'C' class roads) where structural maintenance should be considered (SCANNER).

SUPPORTING INDICATORS

- Percentage of the principal road network ('A' class roads) where structural maintenance should be considered (SCANNER).
- Percentage of the non-principal road network ('B' and 'C' class roads) where structural maintenance should be considered (SCANNER).
- Percentage of the unclassified road network where maintenance should be considered (visual inspection).
- · Percentage of the footway network below our condition threshold.
- Percentage of the Category 1, 1a and 2 (the busier) footways with significant deficiencies.
- · Percentage of bridge spans with a BCI critical value below our condition threshold.
- Percentage of bridge spans with a BCI average value below our condition threshold.
- · Percentage of street lighting columns needing replacement.
- Percentage of traffic signal installations requiring complete renewal.
- Percentage of footpaths that are signposted and easy to use.
- 9.32 As part of LTP3, we are also keen to better understand the degree to which our maintenance programmes are meeting the expectations of our residents. With this in mind, we will be monitoring the following indicators using data from the annual National Highways & Transportation Public Satisfaction Survey.

- Overall satisfaction with the condition of highways (i.e. roads and pavements).
- Overall satisfaction with street lighting.
- Overall satisfaction with pavements and footways.
- Overall satisfaction with the local rights of way network.
- 9.33 We will use our second Transport Asset Management Plan (TAMP 2) to set targets for each of our asset condition indicators. We have seen that our ultimate aim in developing TAMP 2 is for a more planned and proactive approach to asset management that will move away from reactive interventions to ensure that we can better plan for maintenance of our transport system and reduce the impact of any disruption. TAMP 2 also considers other factors that might impact on the condition at which we can maintain our transport assets. As well as the current financial situation, these include the anticipated levels of both population and housing growth in the County, and the need to ensure that the condition of our transport system encourages people to make the most of opportunities to travel in a more active and healthy manner. Over the next few years, it is anticipated that these factors will result in a decline in the reportable condition of some of our transport assets, particularly our road network (relative to their current high level). However, through our LTP3 approach we remain committed to maintaining the condition of our transport assets to the best standard that we can afford and to a standard that meets the needs of current and future users of our transport system.
- 9.34 In time, a long-term target will be set for our KPI around the condition of our classified road network. We will also put in place annual targets to monitor progress these will be set and reviewed on a three year basis. For our supporting performance indicators, we will also put in place annual targets that will be set and reviewed on a three year basis. The work to set these targets for all our asset condition indicators was completed during 2011/12. Progress will be monitored on a quarterly basis as part of the performance management regime that is put in place to monitor delivery of our Implementation Plan.

Resilience to climate change

- 9.35 As a County Council we are currently undertaking a piece of work to try and devise a methodology for assessing the resilience of the County to climate change. Developing a way to measure the resilience of the transport system to climate change will be a key part of this work. This work is very much in its infancy and until it is complete we intend to assess the progress that we are making in attempting to ensure that our transport system is more resilient to climate change by the contribution that our efforts make towards the delivery of the wider County Council objective shown below.
 - Continue to work towards Level 4 of the former NI 188 Planning to Adapt to Climate Change.
- 9.36 We will also be monitoring our progress in delivering the actions in the 3 CAP Climate Change Adaptation Action Plan.
- 9.37 It should also be noted that our success in effectively managing the condition and resilience of our transport system and its assets will ultimately be judged by how resilient and reliable our transport system is. Chapter 5 provides details of how we will monitor the performance of our transport system by assessing levels of both journey time and journey time reliability across the County.

CONCLUSIONS

9.38 Managing the condition and resilience of our transport system will help deliver a number of the long-term strategic transport goals and outcomes that are contained in LTP3. Strengthening our planned approach to the management and maintenance of our road network will help to minimise disruption to users from maintenance works or emergency repairs, thus reducing congestion and supporting the economy. Success will ensure our transport system and its assets are effectively managed and well maintained and will help ensure that Leicestershire is more resilient to the impacts of climate change. Through continuing to review our approach to the maintenance of our transport system we can ensure that it reflects the importance that we place on improving facilities to encourage more walking, cycling and use of public transport in the County. A well-managed and maintained highway, footway and cycleway network can also help reduce road accidents and increase satisfaction with our transport system.

- 9.39 However, we recognise that there are many challenges that will need to be overcome if we are to successfully manage the condition and resilience of our transport system. Principal amongst these is the need to understand the impacts of climate change and how we can mitigate against these if we are to avoid increased disruption on our transport system due to the adverse weather conditions that are becoming increasingly prevalent as a result of climate change.
- 9.40 These challenges must be faced in the context of the current financial situation, particularly the cuts in local authority spending. This ensures that our approach to managing the condition and resilience of our transport system in LTP3 will need to change from the approach that we adopted in LTP2. Whereas in LTP2 we had sufficient money available to expand our network to meet increasing demand and improve the condition of our transport assets from an already high base, our efforts in LTP3 are going to be much more about adopting a policy-led and far more proactive approach to trying to maintain the condition of our transport assets, something that will be particularly challenging in the light of the predicted transport impacts of population growth.
- 9.41 In terms of the measures that we employ to manage the condition and resilience of our transport system these will be made up of a mixture of:
 - Using a policy-led and proactive approach to managing and maintaining the condition of our transport system and its assets.
 - Ensuring that the condition of our transport assets helps our transport system to meet the needs of current and future users.
 - Responding to the challenges posed by climate change and traffic growth.
 - Continuing to monitor and review our approach to winter maintenance.

- 9.42 As we move thorough LTP3, we will be looking to increasingly adopt an approach that allows us to deliver a number of these measures in tandem. In doing so, we will investigate the degree to which we may be able to focus maintenance interventions on delivering a range of co-ordinated measures in specific geographical areas in support of wider economic, environmental and social priorities rather than spreading resources thinly across the County.
- 9.43 Whilst funding pressures mean that we might not ultimately be able to maintain the condition of all our transport assets at their present level, particularly our road network, in recognising the wider economic, social and environmental performance of a well-maintained transport system, we will nevertheless attempt to maintain the overall condition of our assets to the best standard that we can afford and to a standard that meets the needs of current and future users of our transport system.

This chapter:

- Discusses the impact of travel and transport on quality of life.
- · Describes how our efforts in LTP2 helped improve quality of life.
- Identifies the quality of life issues our LTP3 will focus on and what we will be doing to address these issues.

Note: This chapter also makes a number of references to work that we are doing to deliver our other LTP3 activities given the impact that these will have on the quality of lif of our residents.



INTRODUCTION

- 10.1 Quality of life is a relatively broad term and is often used as an umbrella concept to measure different social and health aspects of people's well-being. The impact of traffic and transport infrastructure on people's quality of life is twofold. Whilst on the one hand, an effective and efficient transport system can improve and ease quality of life by helping to improve the safety and quality of the streets in which we live and by providing access to green space (which has been shown to bring both mental and physical health benefits), it can also have negative impacts on people's quality of life in a number of different ways. These can vary in intensity and significance from, for example, the noise generated as traffic passes over a broken manhole cover in the road, to the longer-term consequences of CO_2 emissions from transport on our climate and environment.
- 10.2 It is our intention that many of the things that we will be doing to deliver our other LTP3 activities (as have been outlined in the rest of our long-term transport strategy) will help to improve quality of life, particularly by reducing the negative impact of traffic and transport on individuals, communities and our environment. For example, efforts to tackle congestion and reduce CO₂ emissions from road transport will play a significant part in helping to tackle the challenge posed by climate change, and will help improve air quality and improve people's health. As such, we have already covered a number of the things that we can, and will, do to improve quality of life. However, we feel it is important to bring these together as a separate area of activity in order to:
 - Assess all of the transport activities that have an impact on quality of life in one place.
 - Identify and discuss issues that affect quality of life that haven't been covered in previous chapters (such as air quality, biodiversity, access to green space).
 - Provide a clear focus for our quality of life efforts, ensuring that the impact of transport and travel on quality of life is afforded appropriate weight and consideration when developing our future proposals and programmes.

OUR EFFORTS IN LTP2

- 10.3 In a similar approach to the one we are taking in LTP3, our LTP2 sought to ensure that the six objectives we developed for local transport all contributed to wider efforts to improve the quality of life for people in Leicestershire. Examples of how we did this in LTP2 include:
 - Seeking to provide a high quality transport environment which restrained vehicle dominance and encouraged people to walk, cycle and use public transport and feel safe doing so.
 - Ensuring that, where possible, improvements to our transport system enhanced the appearance and character of the landscape by recognising the value that biodiversity and wildlife plays in the lives of local people.
 - Promoting healthy communities by encouraging physical activity through walking and cycling, prioritising access to healthcare facilities, providing socially necessary travel to older and disabled people, and improving road safety.
 - Decreasing the impact of traffic through speed reduction measures, maintenance of our lorry route network, and tackling high volume traffic hotspots.
 - Reducing road transport's contribution to carbon dioxide emissions by persuading motorists to change to other modes of transport, and to moderate their car use generally.

WHAT ARE WE SEEKING TO ACHIEVE IN LTP3?

10.4 Managing the impact of our transport system on quality of life will play the principal role in delivering the LTP3 strategic transport goals and outcomes that are shown below.

Strategic transport goal	Strategic transport outcomes
A transport system that helps to improve the quality of life for our residents and makes Leicestershire a more attractive place to live, work and visit	The negative impact of our transport system on the environment and individuals is reduced
	There is improved satisfaction with the transport system amongst both users and residents
	The natural environment can be accessed easily and efficiently particularly by bike or on foot

WHAT DOES OUR LTP3 APPROACH NEED TO FOCUS ON?

10.5 In attempting to define the things that we will focus on in managing the impact of our transport system on quality of life, this section looks at each of the strategic outcomes above and discusses some of the key issues associated with the delivery of these, as well as what we plan to do tackle these issues.

Reducing the negative impact of our transport system on the environment and individuals

10.6 The three areas where the impact of travel and transport on people and the environment is most significant are in relation to climate change, air quality, and vehicle speeds and noise, and these are discussed in some detail below. There are a number of other impacts travel and transport can have. These include the impact on biodiversity, landscape and the historic environment, and the streetscape.

10.7 Before we look at each of these issues, it must be recognised that the population of Leicester and Leicestershire is forecast to grow considerably, resulting in the need for more houses and new jobs. This presents us all with significant challenges in seeking to maintain transport and environmental conditions that are no worse than they are at present, let alone in seeking to achieve improvements. It is vital, therefore, that whilst our LTP3 places a strong emphasis on encouraging, supporting and facilitating the growth of Leicestershire, we must also work to ensure that the impacts of the new development required to support population growth are minimised. Whilst it is the ultimate responsibility of the planning system to shape and regulate development patterns, in seeking to safeguard peoples' quality of life and our environment, part of our role must be to seek to minimise the adverse transportation impacts of growth.

Climate change

10.8 Britain is taking a leading role in pressing for strong measures to reduce the emission of greenhouse gases. Whilst there is uncertainty about the ultimate impact of greenhouse gas emissions on the climate, there is a strong consensus that if emissions are not reduced, there will be significant changes to the climate within the century, with consequential impacts on all aspects of our lives and the environment. There are two aspects to addressing the impact of climate change - mitigation (reducing greenhouse gas emissions) and adaptation (taking steps to adapt responses to the predicted changes to the climate). Each of these are discussed below.

Mitigating climate change

10.9 Carbon dioxide is the main greenhouse gas emission from transport and travel. The UK government has set a legally binding target to reduce carbon dioxide emissions by 34% compared to 1990 levels by 2020 and 80% by 2050. Nationally, the road transport sector accounts for 24% of carbon dioxide emissions (see figure 10.1 below). In Leicestershire it is estimated that road transport accounts for 33.1% of carbon dioxide emissions⁸⁵.



Figure 10.1: Carbon dioxide emissions from different sectors in the UK Source: AEA / DECC 2011⁸⁵

10.10 Two factors will determine the level of carbon emissions from road transport in the future. These are traffic volumes, and average carbon emissions per mile. We have seen that in the future population and economic growth has the potential to drive traffic volumes in Leicester and Leicestershire up very significantly. Based on modelling undertaken with Leicester City Council to assess the potential impacts of housing growth in the Leicester Principal Urban Area (PUA)³⁹, we are estimating that, compared to conditions in 2006, by 2026 the number of kilometres travelled by vehicles on the County's road network could have increased by over a third delays across the County's road network (i.e. the total amount of time spent sitting stationary in traffic) could have increased by 50%, and the amount of CO₂ produced by road transport in the County could have increased by more than 5%.

- 10.11 There are, however, some positives. Over the last few years, average carbon emissions per mile for road transport have fallen as the result of vehicle design and technological improvements⁸⁶. These advances continue both for conventional vehicles and for alternative fuel vehicles, such as duel fuel and electric vehicles. Nationally, there are developing approaches both to encouraging and supporting the development of these technologies, and to creating market conditions that encourage the take-up of very low carbon emission vehicles. However, a significant barrier to the take-up of alternative fuel vehicles is the infrastructure needed to provide refuelling for them.
- 10.12 The approach that we have mapped out in Chapter 6 to encourage more active and sustainable travel will help to reduce carbon emissions from travel and traffic by:
 - Developing travel choice options and infrastructure to encourage people to shift their mode of transport from the private car to public transport, walking and cycling. Initiatives being put forward include the better promotion of park and ride services, improvements to bus corridors, new, improved and safe cycling and walking routes, travel planning, and personalised travel advice. In the medium-tolonger-term, consideration will be given, as appropriate, to using other more active demand management mechanisms to encourage modal shift.
 - Working through the planning system to seek to ensure that new development includes an appropriate mix of supporting facilities, or is located in areas that already contain supporting facilities, such as employment opportunities, schools, healthcare and shops. The aim is that such an approach will reduce travel demand from new developments.
 - Supporting national policies to encourage the use of more carbon efficient vehicles, for example by continuing to support and promote car-sharing initiatives and working through the planning system to put in place planning policies to encourage the provision of the necessary supporting infrastructure (such as charging points) for more carbon efficient vehicles.
- 10.13 We also recognise that the use of street lighting, lit highway signs and traffic signals contributes to carbon emissions and whilst these are small compared to the emissions from vehicles they are not insignificant. We have already begun to deliver a programme of part-night lighting and dimming to reduce emissions from our street

lights (whilst taking account of safety issues), and solar powered signs have also been deployed. Through our general day-to-day management of the transport system we will continue with such policies.

Adaptation to climate change

- 10.14 The outcome of research into the probable effects of climate change in the UK was published by UK Climate Projections (UKCP09)³² in June 2009. This set out the following predicted changes in climate over the next 40 years:
 - Annual average temperatures will increase.
 - Summers will become hotter and drier.
 - Winters will become milder and wetter.
 - · Soils will become drier on average.
 - Snowfall will decrease.
 - Heavy and extreme rainfall will become more frequent.
- 10.15 In 2009 a report was prepared on behalf of the 3 Counties Alliance Partnership (3 CAP, incorporating the county councils of Leicestershire, Derbyshire and Nottinghamshire and the transport consultant, Scott Wilson) to assess the effect of climate change on the highway policies and standards of the partner organisations⁸³. The report was set against the predictions made in UKCP02 and will lead towards the development of an adaptation plan using a risk and probability management approach. The report highlighted the following potential impacts of climate change on the highway network:
 - The failure of road construction due to prolonged high temperatures and as a result of more intense rainfall.
 - Increased length of growing season leading to prolonged and / or more rapid growth, for example on road side verges.
 - Lack of capacity in the drainage system and flooding of the road network.
 - Surface damage to bridges and other structures from hotter and drier summers.

- Scour to structures from more intense rainfall.
- Less disruption by snow and ice due to warmer winters.
- 10.16 Since our strategy was first published in 2011 we have experienced extremes of weather that have caused significant flooding, property damage and disruption to travel and peoples' lives.
- 10.17 This project provided a much needed, comprehensive, local risk and probability based assessment of the vulnerabilities of the highway network to climate change, both now and in the future, and has identified the most effective adaptation responses in order to achieve Level 2 of the previous National Indicator 188 for Local Authorities: Adapting to Climate Change⁸⁷. An adaptation action plan has been developed by 3 CAP to address the biggest risks posed by climate change on their highway network. An outline timescale has been agreed for implementation of this adaptation action plan.
- 10.18 The predicted impacts of climate change have been considered in all aspects of our long-term transport strategy. However, they are particularly relevant to how we manage the condition and resilience of our transport system. Through our efforts to do this (set out in Chapter 9), we will be working to incorporate the findings of the 3 CAP project into our more detailed highway maintenance policies and procedures.

Air Quality

- 10.19 A number of transport-related factors impact on air quality. These include traffic volumes, vehicle technology, and levels of traffic congestion.
- 10.20 As we have seen in Chapter 3 and throughout our long-term strategy, there is the potential for increased levels of congestion in Leicestershire as a result of the additional housing and other developments that are expected in order to support both population and economic growth. In terms of climate change, higher average temperatures and dry and higher peak temperatures in the summer may result in a greater awareness of poor air quality. There is also the possibility that air quality could deteriorate as the result of smog generated by higher temperatures. On the positive side, advances in vehicle technology have reduced emissions from vehicles

and it is likely that technology improvements and regulation will tend to reduce emissions from vehicles in the future.

- 10.21 A number of objectives have been established in relation to air quality at both the European and the UK level (emanating from the 1996 EC Directive)⁶⁹. This includes setting targets for reducing emissions of specific pollutants to minimise negative impacts on health. The Environment Act (1995)⁸⁸ introduced a new system for strategically reviewing and assessing air quality. The Government produced a series of National Air Quality Strategies (NAQS)⁸⁹ and set objectives for eight pollutants to protect human health.
- 10.22 Data shows that the level of emissions from transport is one of the most significant contributors to poor air quality in Leicestershire. The main causes of poor air quality from transport are congestion, large traffic flows and the presence of heavy vehicles. For a long period of time, we have worked closely with district councils in a programme of air quality monitoring across the County. There are currently 13 Air Quality Management Areas (AQMAs)⁴⁹ in Leicestershire (not including the AQMA for Leicester City). In the vast majority of cases, the issue is associated with levels of nitrogen dioxide (NO₂).
- 10.23 Our LTP2 Air Quality Strategy focused on those areas of the County where the Government's air quality objectives have not been met due, at least in part, to road traffic, namely in Loughborough, Lutterworth and Kegworth. Air Quality Action Plans were developed for these areas with actions designed to reduce the level of nitrogen dioxide (NO2). In each case, the Action Plan proposed significant new road-building as part of the solution to the air quality problems. As we have discussed elsewhere in our strategy, work has started on the Loughborough Town Centre Transport Improvement Scheme and we are hopeful that the completion of this scheme (including the provision of an Inner Relief Road) will help resolve the air quality problems in the town. There is no prospect of a Lutterworth Bypass being deliverable in the foreseeable future, but plans for a Strategic Rail Freight Interchange at Castle Donington include a proposal for a Kegworth Bypass. However, this represents a long-term solution. Thus, the Action Plan for Lutterworth needs to be reviewed as it is no longer viable, and we also need to consider if there is anything we can do in Kegworth in the short-term to improve air quality.

- 10.24 To inform this review work, it will be important for us to develop a better and more robust understanding of how our transport system impacts on air quality in these particular areas, both now and in the future. In doing so, we will continue to work with the district councils, who are responsible for monitoring air quality, and use modelling tools to examine future scenarios. This will enable us to take a more evidenced-based approach to identifying potential solutions that are likely to be effective. We will be adopting a similar approach to the resolution of air quality problems that may emerge in the other AQMAs across the County.
- 10.25 Other parts of our long-term transport strategy contain a range of measures which will help to address air quality issues. These include:
 - Efforts to reduce congestion and improve the performance of our road network (see Chapter 5, Supporting the economy and population growth, and Chapter 9, Managing the condition and resilience of our transport system). A number of schemes have been completed, or are nearing completion, that will contribute to reducing congestion, principally the Loughborough Eastern Gateway, Birstall Park & Ride and the Loughborough Town Centre Transport Improvement Scheme. In the short-term, investment in additional major projects is unlikely. However, air quality hotspots will continue to be taken into account as part of our efforts to prioritise smaller works to reduce congestion. Continued attention to managing the road network, with a view to improving its operational efficiency and reliability, will also make a contribution to reducing congestion and improving air quality.
 - Influencing people to make less use of the private car, supporting less polluting car travel and seeking to reduce the need to travel in the first place (see Chapter 6, Encouraging sustainable and active travel). In terms of reducing travel demand, this will be achieved through the inclusion of requirements within the planning process to ensure that development takes due consideration of the demand for travel and the opportunity to reduce the need for travel that development will create. The planning process will also need to take account of the potential contribution the location of developments could have on known Air Quality Management Areas. The modal shift initiatives outlined above and initiatives to encourage a shift to more carbon efficient vehicles as part of efforts to reduce carbon emissions, will also help us to tackle air quality problems.

Noise and vehicle speeds

- 10.26 There is limited evidence on noise issues from transport in Leicestershire. What evidence there is indicates that, unsurprisingly, the communities most affected by noise pollution are likely to be those located near major roads and those close to railway lines and East Midlands Airport. Nationally, noise maps have been developed and these will provide evidence on which to base future action.
- 10.27 Noise from road transport in Leicestershire often increases with increased road speed and traffic volumes. In addition, localised noise issues arise from the presence of heavy goods vehicles and buses. A number of factors will impact on noise pollution from transport in the future. These include traffic speeds, the presence of heavy goods vehicles in populated areas, the condition of road surfaces, and the provision of noise barriers.
- 10.28 Vehicle speeds can be intimidating to pedestrians and cyclists, and the community can feel divided by the severance effect of the road. Considerable work has already been undertaken in Leicestershire to reduce traffic speeds (e.g. by road surfacing, traffic signs and road markings, gateway treatments, vehicle activated signs, minor alterations to the road layout, travel plans and routes to school schemes). Speed management will continue to play a major part in our efforts to improve road safety in Leicestershire, but with a greater emphasis on affecting driver behaviour through education and enforcement (as set out in Chapter 8). We recognise, however, that in some specific cases there may be a speed related road casualty problem that might require changes to the layout of the road in order to address it.
- 10.29 In terms of the noise generated by heavy goods vehicles on our roads, considerable work has already been undertaken in Leicestershire, through the development of our Lorry Route Network (LRN), to concentrate goods vehicles on the most suitable roads available in the County. We recognise, however, that there remain a number of communities where the LRN has not enabled a reduction in lorry movements. In addition, levels of road freight are predicted to grow between now and 2020.
10.30 LTP2 talked about investigating a number of village bypasses to address issues of noise and other traffic related issues. However, the delivery of major new road infrastructure to remove traffic from areas of the County on purely environmental grounds has become untenable in the current economic climate. Such schemes are only likely to be progressed now if they can provide benefits to the local economy or they will form an essential part of the infrastructure needed to help support and deliver population growth. Further, we will increasingly need to seek funding from other sources to make improvements to our transport infrastructure; whether this be through bidding opportunities or from the Leicester and Leicestershire Enterprise Partnership's Single Local Growth Fund. All opportunities that we do pursue will need to be backed by robust business cases that demonstrate clear value for money. In this situation, such environmentally-focused schemes may not attract sufficient priority in comparison with competing schemes locally and nationally. Thus, our efforts to address noise and other traffic-related issues will be focused on continuing to invest in the condition of our LRN in order to seek to minimise noise levels relating to poorly maintained road surfaces. Note that Chapter 5 presents more details on our work with freight operators.

- 10.31 Where it is appropriate we will also continue to work through the planning system to seek to resist new development that would involve significant lorry movements in locations not on our LRN, where it would aggravate existing, or create new, air quality problems, or where it would give rise to operational problems on our road network, including to the detriment of road safety. Our efforts will also include seeking to secure and coordinate the provision of the transport infrastructure required to support housing growth (see Chapter 5) in such a way as to minimise its impacts on communities.
- 10.32 With regards to climate change and its impact on noise, a concern for the future is the predicted increase in average temperatures and in particular the peak temperatures in the summer. This may lead to households and businesses wanting to have more windows open at these times, with a consequential increase in the impact of existing noise pollution. This highlights further the importance of efforts to change travel behaviour to help to minimise the impacts of climate change.

10.33 It will also be a priority for us going forward to consider how better evidence of noise issues across the County can be gathered, and to continue to consider the inclusion of noise abatement in the design of physical infrastructure, such as new road schemes.

Biodiversity

- 10.34 Due to development and changes in agricultural practices over the past 100 years Leicestershire has amongst the poorest levels of biodiversity of any county in England²⁰ (based on the percentage of land with a recognised national designation, such as Sites of Special Scientific Interest).
- 10.35 With regards to our transport system, major transport infrastructure schemes are likely to have the most significant impact on biodiversity as a result of habitat loss and fragmentation. As we have explained elsewhere, we are unlikely to be in a position to deliver any major schemes ourselves in the early years of our long-term transport strategy, but proposals may come forward for delivery later in our strategy to support Leicester's and Leicestershire's economic growth. Also, some significant new transport infrastructure is required to support new housing growth, in particular at the Sustainable Urban Extensions⁴⁴ around the edge of Leicester and some of our county towns.
- 10.36 Through national legislations, procedures are in place to ensure that due consideration is taken of the biodiversity impacts of all major schemes. This includes through Environmental Impact Assessments⁹⁰ and other statutory planning processes. However, these schemes also provide the opportunity for habitat improvement, for example, through the use of native planting and the creation of wetland areas as part of an approach to flood protection.
- 10.37 There can also be threats to biodiversity from minor schemes and maintenance work. For example, there are risks to bats through disturbance from bridge works and to valuable flora from works conducted close to road verges. Through the way that we manage and maintain our transport system (see Chapter 9), processes are in place to ensure these are considered in the design of minor schemes and included in the risk management approach to implementing them. This is supported both by inspections prior to work starting and reference to the County's ecological records.

- 10.38 Climate change is predicted to impact on biodiversity. Likely impacts include a lengthening of the growing season and more vibrant growth. This could also include changes in the mix of flora and fauna. The impact of these changes are most likely to be experienced in relation to road side verge maintenance, where changes in procedures may need to be made in respect of ongoing road safety.
- 10.39 Overall, however, with the exception of major transport infrastructure development, the threat of our transport system to biodiversity in Leicestershire is considered low. That is not to say that we will ignore it. The threat will be managed through the use of our existing procedures and information, and through adopting good design and maintenance principles. For example, we will continue to ensure that:
 - The 6Cs design guidance (6CsDG)⁵⁰ gives advice to developers on the use of appropriate seeds, plants and planting.
 - Our maintenance, spraying and cutting of roadside verges and hedges is geared to enhancing biodiversity.
 - · We make specific provision for wildlife in new road schemes.

Landscape and the historic environment

10.40 The principal impact of transport on the landscape and the historic environment is from new transport infrastructure. Considerable care is taken to minimise intrusion from these developments, and planning processes are in place to ensure due consideration is given to them in infrastructure development. Appreciation of the historic environment can also be reduced as a result of congestion and traffic volumes. The impact of these issues is considered in the section on streetscape below.

Streetscape

10.41 Road layouts, the design of roundabouts, the provision of pedestrian and cycling facilities, the signs and signals used to manage all modes of traffic (motor vehicles, pedestrians and cyclists), and the shared use of space all have an impact on the streetscape and the quality of the street environment.

- 10.42 For existing streetscapes, the opportunities for improvement are often somewhat constrained. The existing pattern of use and the sharing of the streetscape, particularly in town and village centres has evolved over time. This has resulted in increased signage and traffic management tools, such as traffic signals, roundabouts, pedestrian crossings, bus and cycle lanes, and signs in general that can despoil the streetscape. The projected increase in traffic will increase the pressure on some streetscapes, and in seeking to promote alternatives to the use of the private car, our approach to encouraging more active and sustainable travel, as set out in Chapter 6, should be of benefit in this respect.
- 10.43 In addition, we have recently developed guidance related to the improvement of town centre streetscapes and will use opportunities that arise from town and village centre developments, proposed or put forward by others, to support improvements in streetscape quality.
- 10.44 The design of the street environment for new development, proposed by others, is usually less constrained. Through our approach to encouraging active and sustainable travel (see Chapter 6), and improving road safety (as set out Chapter 8), we will be seeking to ensure that the planning process creates desirable streetscapes that support the wider goals of LTP3, and in particular the desire to increase levels of walking and cycling.
- 10.45 The design of new streetscape, and the continued evolution of existing streetscapes, will also need to respond to the predicted changes in climate. Hotter summer temperatures and higher peak temperatures may increase the need to create shade within the streetscape through engineering or natural interventions, such as the provision of additional street trees. This will be a particular issue in places which already exhibit the 'heat island' effect. The location of such places in Leicestershire is not yet clear, but they are likely to be in town centres, and work separate from our LTP3 is being undertaken taken to identify where these are. Another predicted change to the climate is more intense rain events. Again, interventions in the streetscape may be required to manage surface water during these events. These will be addressed through existing design guidance and procedures and, if necessary, the preparation of additional guidance for new development.

There is improved satisfaction with the transport system amongst both users and residents

- 10.46 Our LTP2 strategy did not contain any specific indicators to measure quality of life, principally because of the umbrella nature of the term itself and the many varied elements that contribute to improving quality of life. However, our evidence base reveals that 85% of Leicestershire residents are 'satisfied' or 'very satisfied' with their local area as a place to live¹². In seeking to identify the degree to which transport-related issues and travel experience play a role in making somewhere a good place to live, our evidence base has also sought to identify how much of a concern transport-related issues are in Leicestershire. The transport issues raised most often by residents are:
 - Levels of traffic congestion. 33% of residents in Leicestershire feel that levels of traffic congestion in the County need improving.
 - Public transport. 26% of Leicestershire residents feel that public transport is important, and over 20% think public transport needs improving in Leicestershire.
 - Road and pavement repairs. Although only 6% of Leicestershire residents feel that road and pavement repairs are important, almost a quarter think they are in need of improving.
- 10.47 In terms of resident satisfaction with the transport system in Leicestershire, we have already seen in other chapters that satisfaction with local bus services and public transport information is disappointingly low. Resident satisfaction is also low with the management of road works, but is encouragingly high around issues associated with ease of access and the management of our roads, paths, cycle routes and street lighting.
- 10.48 In terms of identifying how we might improve resident satisfaction with each of these areas, our long-term strategy has already highlighted that these are key areas for us to focus on and what we will be doing to try and improve people's experiences of these. For example, Chapter 5 details how we will be looking to tackle existing congestion problems as part of efforts to improve journey time and journey time reliability in the County. Chapter 6 details what we will be doing to improve public transport as part of efforts to encourage more active and sustainable travel in order

to both reduce CO_2 emissions from road transport and improve the health of our residents. Chapter 9 identifies how we will take a more proactive approach to the management of the condition of our roads and pavements (and the work that is undertaken on them) as part of efforts to improve the resilience of our transport system.

The natural environment can be accessed easily and efficiently, particularly by bike or on foot

- 10.49 Increased access to green space can have multiple benefits for individuals, improving well-being, and physical and mental health. For an area, it can provide opportunities for improved biodiversity, air quality, flood management, climate change adaptation and use of sustainable transport.
- 10.50 Leicestershire has good general access to the natural environment. There is an existing network in the County of footpaths, bridleways, and canal tow paths, of over 3,000 km providing access to the natural environment. In Chapter 6 of this strategy (Encouraging active and sustainable travel) we explain our approach to the maintenance and development of the County's Public Rights of Way¹⁹ network. This is further complemented by the country parks, nature reserves and accessible open space that make up large parts of the County (particularly the National Forest) Access to these areas is generally very good, particularly for those with private transport or an adventurous spirit. However, these locations are often, though not exclusively, in the more rural and remote parts of the County and access to them by public transport can be more difficult.
- 10.51 An assessment of people's access to green spaces in Leicester and Leicestershire illustrates the need for additional access for residents in and around Leicester and other urban areas, as well as the Soar Valley Leicester Loughborough and Charnwood Forest. For individuals, current barriers to access to green space in Leicester and Leicestershire include poor health, limited access to independent transport and levels of deprivation⁵⁸.

10.52 The approach being taken to provide more people with ready access to the natural environment is to extend the provision of Green Infrastructure (GI) in Leicestershire. The County Council was a partner in a recently developed strategy for Green Infrastructure⁵⁸ for the 6Cs (councils of Leicester, Leicestershire, Nottingham, Nottinghamshire, Derby and Derbyshire). This proposes the development of GI networks to support sustainable communities, including by providing green access corridors that provide links to high quality green space near to where people live and as part of future large scale development, and improving access to the local environment. The GI Strategy identifies a number of routes, including the River Soar corridor, as sub-regional and city-scale GI corridors. This work is being developed by a number of district councils through their Local Development Frameworks with the production of local Green Infrastructure Plans. Chapter 6 again explains how we will seek to support these efforts.

MONITORING OUR LONG-TERM STRATEGY

- 10.53 We stated earlier in this Chapter how our efforts to manage the impact of our transport system on quality of life will help deliver the following strategic transport outcomes during LTP3:
 - The negative impact of our transport system on the environment and individuals is reduced.
 - There is improved satisfaction with the transport system amongst both users and residents.
 - The natural environment can be accessed easily and efficiently, particularly by bike or on foot.

Reducing the negative impact of our transport system

- 10.54 We will use the following key performance indicator (KPI) to assess our progress in delivering this outcome:
 - Reduction in total CO₂ emissions in the local authority area originating from road transport.

- 10.55 We will also use the following supporting performance indicator to monitor our progress:
 - Per capita reduction in CO₂ emissions in the local authority area originating from road transport.
- 10.56 We will measure these indicators using data from the Department of Energy and Climate Change and have established the baseline data for each indicator. We have set a long-term, aspirational, target for our KPI and have also put in place annual targets for both our KPI and our supporting performance indicator in order to monitor progress. These will be set and reviewed on a three year basis.
- 10.57 In addition to these performance indicators, we are also working with district council colleagues to collect and monitor supporting information on air quality across the County, and will also be monitoring locally the number of newly registered ultra low emission vehicles and the percentage of the local bus fleet that use low emission engines. We are also undertaking further work to look into the establishment of Noise Action Zones by the Department for Environment, Food and Rural Affairs, and will consider the need to develop an indicator to monitor noise levels in the County as part of this work.

Satisfaction with our transport system

10.58 As part of efforts to deliver our other LTP3 activities we will be monitoring levels of resident satisfaction with the following aspects of our transport system using the annual National Highways & Transportation Public Satisfaction Survey⁹²:

Satisfaction with	LTP3 activity
Ease of access to key services for all people	Connectivity and accessibility
Ease of access to key services for people with disabilities	
Ease of access to key services for those households with no car	
Local bus services	Active and sustainable travel
Local public transport information	
Cycle routes and facilities	

Local Rights of Way network Pavements and footpaths	Active and sustainable travel / Condition and resilience of transport system
Condition of highways	Condition and
Street lighting	resilience of transport system

Access to the natural environment

- 10.59 As in LTP2, we will continue to use the indicator below to monitor the degree to which we are providing access to the natural environment, particularly by bike or on foot:
 - · Percentage of footpaths and other rights of way that are signposted and easy to use.
- 10.60 We are also working with colleagues in our environmental team to better understand how we can measure access to green space across the County, and in time intend to add an indicator on this to our perfomance indicator set.

Setting targets and monitoring progress

10.61 In addition to the long-term target that we have put in place for our KPI associated with CO_2 reduction from road transport in Leicestershire, we will also put in place annual targets for each of the indicators above. These will be set and reviewed on a three year basis. Progress will be monitored on a quarterly basis as part of the performance management regime that is put in place to monitor delivery of our Implementation Plan.

CONCLUSIONS

10.62 We have seen that quality of life is a relatively broad term and is often used as an umbrella concept to measure different social and health aspects of people's wellbeing. This ensures that transport is far from the only impact on quality of life. However, what is clear is that transport can have a significant impact on quality of life and can affect how residents feel about a place. This impact can be both positive and negative.

- 10.63 Our long-term strategy has a quality of life theme running throughout it. Our efforts to deliver all our key activities in LTP3 are designed to improve the quality of life for people in Leicestershire and to make the County a more attractive place to live, work and visit. This Chapter has sought to demonstrate how the things that we will be doing to deliver our key LTP3 activities will help improve quality of life. It has also sought to bring together all the transport activities that have an impact on quality of life to ensure that the impact of transport and travel on quality of life is afforded appropriate weight and consideration when developing our future proposals and programmes.
- 10.64 Our approach seeks to deal with both the negative and positive impacts of transport and our transport system on quality of life. In seeking to reduce the negative impact of transport on our individuals, communities and environment it maps out what we will be doing to focus in particular on helping to tackle climate change, improve air quality, address safety issues related to vehicle speed, and reduce noise from transport. These efforts will principally be based on reducing the demand to travel, influencing people's travel behaviour (including to encourage more people to walk and cycle), and tackling existing congestion problems on our transport system. It also sets out how we will seek to reduce the impact of transport, particularly of major transport infrastructure, on biodiversity, landscape, streetscapes and the historical and natural environment in the County. In recognising the beneficial impact that the transport system can have on quality of life, this chapter sets out that we will be seeking to encourage the provision of more green infrastructure to improve access to green space and the natural environment in Leicestershire. It also highlights that people's travel experiences have an impact on their guality of life. Our data tells us that efforts to improve people's travel experiences in Leicestershire could most usefully focus on reducing levels of traffic congestion, improving public transport and improving the management of road works.
- 10.65 Through the monitoring of our long-term transport strategy and Implementation Plan we will assess the success of our approach to managing the impact of our transport system on quality of life and the contribution it is making towards Leicestershire continuing to be an attractive place in which to live, work and visit.

Chapter 11 Leicestershire County Council Local Transport Plan 3 Turning our strategy into reality

This chapter:

- Sets out the link between our long-term transport strategy and our Implementation Plan.
- Describes the context for our initial Implementation Plans.
- Describes how we will develop future versions of our Implementation Plan.



INTRODUCTION

- 11.1 Earlier chapters of this strategy have set out our goals for Leicestershire's transport system over the coming years to 2026. These are to provide:
 - Goal 1 A transport system that supports a prosperous economy and provides successfully for population growth.
 Goal 2 An efficient, resilient and sustainable transport system that is well managed and maintained.
 Goal 3 A transport system that helps to reduce the carbon footprint of Leicestershire.
 Goal 4 An accessible and integrated transport system that helps promote equality of opportunity for our residents.
 Goal 5 A transport system that helps to improve the guality of life for our residents and makes Leicestershire a more attractive place to live, work and visit.
- 11.2 Chapters 5 to 10 set out the key activities that we will need to undertake during the lifetime of our strategy in order to deliver our strategic transport goals. These are shown below.

Chapter 5	To support the economy and population growth.
Chapter 6	To encourage active and sustainable travel.
Chapter 7	To improve the connectivity and accessibility of our transport system.
Chapter 8	To improve road safety.
Chapter 9	To manage the condition and resilience of our transport system.
Chapter 10	To manage the impact of our transport system on quality of life.

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- 11.3 Our Implementation Plan¹⁶ describes the actions that we intend to carry out over the life of that particular Plan in order to deliver our goals. Each of our Implementation Plan, cover three years. Each will, however, be refreshed on an annual basis.
- 11.4 Our first Implementation Plan marked the transition between LTP2 and LTP3. It would not have been practical, nor desirable, to immediately bring to an end the things that we had committed to doing during the LTP2 period and that, most crucially, still remained valid and appropriate to do in the light of our LTP3 long-term transport strategy and the funding that we had available. Further, the context in which our first Plan was developed (summarised later) imposed some constraints on our ability to move forward as quickly as we might otherwise have wished.
- 11.5 Thus, our first Implementation Plan, covering the period 2011-2014, was something of an evolutionary step towards where we want to be. Ultimately, our Implementation Plan will not only describe the immediate year's activities, but will more fully set out the preparation work for the following year and the research and intelligence work that will lead to programmes for the third year. This will allow for programmes to develop that are based on research relating to needs, the local economic context and the impact of earlier programmes.

The context for developing our Implementation Plans

11.6 The context in which our first Implementation Plan was developed and delivered has been set out in earlier parts of this strategy but can be summarised in terms of Leicestershire's LTP3 being produced originally at a time of marked change in local government, both from the point of view of finances and its relationship with central Government and with residents. Spending allocations announced in December 2010 posed significant challenges to the established way of doing things and it was clear that opportunities for significant investment in new transport infrastructure to expand the capacity of our transport system to support economic growth was unlikely to be available, at least in the early years of LTP3. This renewed the emphasis on making the best use of the transport system that we have, by improving its performance and reliability (for example by tackling congested junctions), improving the choices available for transport users to walk, cycle or use public transport by improving these facilities, and helping users make more informed choices about when and how to travel.

- 11.7 Things have moved on, however, since our strategy and first Implementation Plan were published in 2011. The Government has made more money available for new transport infrastructure as part of its attempts to support and stimulate economic growth. This has enabled us to make some significant investments in improving walking, cycling and public transport infrastructure in urban areas of Leicester and Leicestershire. In turn, this has enabled us to use our LTP3 money, plus that secured through partners such as the Leicester and Leicestershire Local Enterprise Partnership, to begin to invest in carrying out some significant schemes to tackle congestion hot spots at key junctions.
- 11.8 We have, therefore, perhaps been able to move forward more quickly to a position where we are able to deliver infrastructure-based schemes and improvements of a scale necessary to make a difference to our businesses and residents, and to help us achieve our LTP3 strategic goals. The Government's actions have also given us the renewed confidence to begin to explore the possibility of delivering new infrastructure, such as new roads. However, our approach to new road building still remains different to that from LTP1 and LTP2, insofar as any proposal must be backed by an evidence-based case that it will enable economic growth. Building new roads solely to address environmental issues is not economically or financially tenable. We say this for three reasons. Firstly, the amount of money available to us remains limited in comparison with the scale of the transport challenges posed by the amount of population growth forecast for Leicestershire. Secondly, evidence shows that adding road capacity can encourage additional road traffic, which in turn can increase CO2 emissions. Thirdly, our evidence shows that we will never be able to build sufficient road space to accommodate predicted demand. Thus, we will need to be selective and careful in any choices that we make about promoting new road schemes.
- 11.9 In addition, the role of Local Enterprise Partnerships has continued to evolve. The Leicester and Leicestershire Local Enterprise Partnership's (LLEP) Strategic Economic Plan provides a strategy for delivering economic growth, and it will be important that we play our part in ensuring its successful delivery. The LLEP will also increasingly become a key source of funding for the delivery of transport improvements through its Single Local Growth Fund.

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- 11.10 Some things have not changed, however, evidence from consultation and research demonstrates that there is a growing need for better information about how and when to travel in Leicestershire. We will be placing greater emphasis on travel choices and the provision of information to help make better use of the network. This will require different skills and a redistribution of resources in the context of councils reducing in scale and the localism agenda.
- 11.11 Government sees a change in relationships between local authorities and residents, seeking to place powers more in the hands of communities. Transport provision, especially for vulnerable people, will need to adapt to this new context. This may well mean that services are delivered more through local people and organisations than through traditionally contracted services. We will need to ensure that such developments are enabled to happen, whilst also working to maintain a balance of provision across the County and across sections of society.

Rolling forward our Implementation Plan

- 11.12 Our first Implementation Plan contained schemes and activities developed under the transport policy set out in LTP2. These were ready to implement and had been tested against their ability to deliver our LTP3 long-term transport strategy.
- 11.13 From 2012-13 onwards, the continued research and preparatory work being undertaken as part of our LTP3 efforts has had an increasing influence on future programmes. Given the scale of the strategic challenges that we face in LTP3, and the uncertain and changing environment in which it has been prepared, our programmes will also be influenced by:
 - The ongoing implementation and development of the LLEP's Strategic Economic Plan.
 - Monitoring of the effectiveness of our activities, building on the robust and successful performance management regime put in place for LTP2.
 - Future three year reviews of our long-term transport strategy.

- Maintaining a robust evidence-based understanding of wider economic, social and environmental issues and the role that our transport system can help to play in addressing these issues.
- Continued engagement with partner organisations, businesses, voluntary gsroups and other important stakeholders, and our residents and their community representatives.
- 11.14 By ensuring that our LTP3 long-term transport strategy remains relevant and robust, and that the things it delivers provide effective, value for money solutions to meet evidenced-based needs, we will be well placed to achieve the vision for the County's transport system in 2026.

1 Leicestershire Together

The Local Strategic Partnership (LSP) for the County of Leicestershire comprising a variety of sectors - public, private, community and voluntary - that aims to improve the quality of life for Leicestershire people and to improve the quality and co-ordination of public services in the County. www.leicestershiretogether.org

2 Leicestershire's Sustainable Community Strategy 2008 – 2013 (SCS)

The Sustainable Community Strategy identifies local priorities bringing together the three elements of sustainability – economic, social and environmental. www.leicestershiretogether.org/index/strategy_and_delivery-2/leicestershires_community_strategy.htm

3 One Leicester 2008 - 2033

Leicester City's Sustainable Community Strategy. www.oneleicester.com/one-leicester-vision

4 Comprehensive Spending Review 2010 (CSR)

The Spending Review is the HM Treasury led process that allocates public expenditure. www.hm-treasury.gov.uk/spend index.htm

5 **Transport Policies and Programmes (TPP) system** Prepared on an annual basis and included lists of scheme proposed to be built in future years.

6 Local Development Framework (LDF)

Replacing Local Plans, LDFs aim to speed up the planning process. They outline how planning will be managed in an area, creating strong, safe and prosperous communities through local spatial planning.

www.planningportal.gov.uk/planning/planningsystem/localplans

7 Regional Planning bodies

The East Midlands Regional Assembly (emra) was the regional planning body for the East Midlands. It was

a voluntary regional body established with a view to influencing and co-ordinating regional strategy development in the East Midlands.

8 Regional Spatial Strategies (RSS)

The Regional Spatial Strategy is a statutory document which provides a broad strategy on development for the region. It identifies the scale and distribution of provision for new housing, priorities for the environment, transport, infrastructure, economic development, agriculture, minerals extraction and waste treatment and disposal. The RSS incorporates the Regional Transport Strategy (RTS). www.emregionalstrategy.co.uk/Regional-Spatial-Strategy

9 Local Enterprise Partnerships (LEPs)

Partnerships introduced by the 2010 Coalition Government to support business growth and the economy. The first wave of 24 LEPS included the Leicester & Leicestershire LEP (see LLEP). LEPs replace the Regional Development Agencies. www.communities.gov.uk/localgovernment/local/ localenterprisepartnerships/

10 Regional Development Agencies

Statutory bodies set up in 1999 to promote economic development in the regions. The East Midlands development agency (EMDA) will be superseded in 2011 by the Leicester and Leicestershire Local Enterprise Partnership.

11 Leicester and Leicestershire Local Enterprise Partnership (LLEP)

The Partnership will be a strategic commissioning body which will lead sustainable economic growth through investment in enterprise and innovation, employment and skills, housing, planning, infrastructure and the rural economy.

www.leicester.gov.uk/your-council-services/ep/regeneration/ sub-regionalpartnership/local-enterprise-partnership/

12 LTP3 Evidence Base

The collective term used to describe facts, figures and

statistics that are used to inform the preparation of planning and community policy. The evidence base for LTP3 considers wider economic, social and environmental issues in addition to our transport system's performance. It consists of a suite of documents, and is available on the County Council's web site at: www.leics.gov.uk/ltp3_ sources of evidence

13 Multi Area Agreement (MAA)

A multi area agreement is designed to be a cross-boundary local area agreement (LAA). They bring together key players in flexible ways to tackle issues that are best addressed in partnership – at a regional and sub- regional level. www.leicester.gov.uk/your-council-services/ep/regeneration/ sub-regionalpartnership/leicester-leicestershire-maa/

14 MAA Transport Strategy and Performance Group

The role of the Transport Group is to advise the Leicester and Leicestershire Leadership Board (LLLB) on, for example, the performance of the MAA/LAA transport-related targets and oversee the development and implementation of a co-ordinated approach to transport planning.

15 Government Office for the East Midlands (GOEM)

Government Offices' had responsibility for delivering policy in the regions, and their multi-Departmental constitution, made them ideally placed to implement cross-cutting initiatives, and to advise Departments on successful implementation strategies at regional and local level. The transport function of GOEM has returned to the Department for Transport.

16 LTP3 Implementation Plan

The Implementation Plan for Leicestershire's third Local Transport Plan (LTP3) documents the transition in our approach from our second LTP to LTP3 and sets out how the outcomes required from the strategy will be delivered, over a rolling three year period.

Link to Implementation Plan

17 Network Management Plan (NMP)

A plan that sets out how the network should be managed to meet the requirements of the Traffic Management Act 2004 and improve co-ordination between stakeholders in delivering works programmes.

18 Transport Asset Management Plan (TAMP)

A Plan which sets out the process for managing and maintaining transport assets in an area. In Leicestershire this is the key mechanism to drive forward delivery of our asset management objectives and targets. Supporting strategies include our Network Management Plan and Rights of Way Improvement Plan. The second edition of our TAMP was published in April 2011. Link to TAMP2

19 Public Rights of Way Improvement Plan (RoWIP)

Our RoW Improvement Plan, finalised in 2006, identifies a five year rolling programme of inspection and works, focusing on the urban and edge-of-urban areas of the County. A new Action Plan will be published in 2011. www.leics.gov.uk/index/rights_of_way_improvement.htm For general information on Rights of Way - www.leics.gov. uk/paths

20 LTP3 Strategic Environmental Assessment (SEA)

An impartial assessment of the transport policy and strategy proposals contained in the LTP3. It sets out the significant environmental effects of the LTP3 proposals, and makes a judgement on the extent to which the transport policies will help to achieve Leicestershire's environmental, social and economic objectives, which are set out in Leicestershire's Sustainable Community Strategy and its supporting strategies.

Link to SEA

21 LTP3 Equality Impact Assessment (EqIA)

Local Authorities have a duty under race, disability and gender legislation to carry out an EqIA on their plans,

policies and services. It is a systematic assessment of a proposed or existing function, policy, procedure or practice. Its purpose is to help us find out what impact or consequences our functions, policies, procedures and practices have on specified groups of people. Link to EqIA

22 Leicester and Leicestershire Economic Assessment, 2010

The Local Democracy, Economic Development and Construction Act 2009 placed a duty on county councils and unitary district councils to prepare an economic assessment of the economic conditions of their area. This new duty came into force on 1st April 2010, at which point upper tier local authorities were expected to begin to prepare their assessments. The purpose of an economic assessment is to provide a robust evidence base that will underpin strategic planning, investment decisions and delivery plans.

www.lsr-online.org/reports/leicester_and_leicestershire_ economic assessment

23 Delivering DaSTS in Leicestershire, June 2010

A report for the LTP3 evidence base produced by Leicestershire County Council's Research and Information Team. The document draws on a mix of national contextual data sets, local survey and performance monitoring information and larger transactional data sets. It is a multidisciplinary study and considers transport in the context of:

- Leicestershire's economy and labour markets;
- social and economic inequality;
- road safety and the health agenda;
- climate change; and
- quality of life.

www.leics.gov.uk/finalreport_18.06.10opt.pdf

24 Department for Communities and Local Government -Updating the evidence base on English cities. Final Report, January 2011

This report provides an update to the 2006 'State of the

English Cities' report, which provided a comprehensive analysis of city performance. Four years after its publication, and with major changes in the economic and political context, this report seeks to take stock of new evidence and developments on the most critical urban issues. It reviews how the quantitative and qualitative evidence has developed since the publication of the State of the English Cities report, updates the key indicators relating to city performance, and identifies gaps in the evidence base in order to support future policy making

www.communities.gov.uk/publications/regeneration/ updatingevidencecities

25 Leicester and Leicestershire Strategic Housing Market Assessment – Final Main Report December 2008 (SHMA)

The Leicester and Leicestershire Strategic Housing Market Assessment (SHMA) was commissioned to allow the Councils to look at what influences the housing markets, both from within the area and from the surrounding areas. The SHMA is part of the Government's requirements for planning and housing policy and will allow a greater understanding of the complexities of the housing markets and the interactions of supply and demand. It will allow policy to better reflect the requirements for affordable and open market housing in the future.

www.lsr-online.org/reports/leicester_and_leicestershire_ strategic_housing_market_assessment

26 Office for National Statistics (ONS)

The Office for National Statistics produces independent information to improve our understanding of the UK's economy and society.

www.statistics.gov.uk/default.asp

27 Annual Survey of Hours and Earnings 2010 (ASHE 2010)

The Annual Survey of Hours and Earnings provides information about the levels, distribution and make-up of earnings and hours paid for employees within industries, occupations and regions.

www.statistics.gov.uk/statbase/Product.asp?vlnk=1951

28 Census 2001

Since 1801, every ten years the nation has set aside one day for the census - a count of all people and households. It is the most complete source of information about the population that we have. The latest census was held on Sunday 29 April 2001.

www.statistics.gov.uk/census2001/census2001.asp

29 Leicester and Leicestershire Housing Market Area Employment Land study (PACEC, 2008)

Consultants PACEC, Warwick Business Management Ltd and Mather Jamie were contracted by the Leicester Shire Economic Partnership in March 2008 to undertake an employment land study for the Leicester and Leicestershire Housing Market Area. The brief sets out the need for:

- Joint employment land planning and delivery up to 2026.
- Employment land policies and allocations through Local Planning Authorities' Core Strategies.
- Investment priorities and targets for Local Area Agreements and the Multi Area Agreement.

www.leicester.gov.uk/your-council-services/ep/planning/ plansandguidance/plansandpolicy/employmentland/hmaemployment-land-study/

30 Place survey 2008

The 2008 Place Survey provides information on people's perceptions of their local area and the local services they receive. This release summarises the headline findings for England and Government Office regions with results for individual local authorities shown in the accompanying tables. www.communities.gov.uk/publications/corporate/statistics/ placesurvey2008

31 Joint Strategic Needs Assessment (JSNA) 2009

The JSNA is a process that identifies the current and projected health and wellbeing needs of the local population. The JSNA is a key building block in enabling the understanding of the needs of local people. It contains our collective intelligence about local health and well being need, and forms a key element of Leicestershire Together's overall understanding of community need outlined in the Sustainable Community Strategy (SCS). The JSNA is designed to underpin the commissioning priorities and strategic plans of the Local Authority and Local NHS. Specifically it should be used to inform the Sustainable Community Strategy, the Local Area Agreement and the NHS Operating Plan.

www.lsr-online.org/reports/leicestershire_joint_strategic_ needs_assessment_jsna1

32 UKCP09 scenarios

The UK Climate Projections (UKCP09) provide climate information designed to help those needing to plan how they will adapt to a changing climate. The data is focussed on the UK, and is free of charge.

ukclimateprojections.defra.gov.uk

33 Leicestershire County Council's Medium Term Financial Strategy 2011 – 2014 (MTFS)

The aim of the MTFS is to provide information for members, officers and the public on the County Council's planned revenue and capital expenditure and its financing. www.leics.gov.uk/index/your_council/budget/medium_term_financial_strategy.htm

34 Leicestershire's LTP2 Delivery Report

A review of what Leicestershire County Council delivered during LTP2 (2006-2011) and the impact that this had. Link to Delivery Report

35 Leicester and Leicestershire Business Survey 2009/10 (April 2010)

The Leicester and Leicestershire Business Survey has been carried out by a partnership involving Leicestershire County Council, Leicester City Council and other key local agencies over the last 10 years. The survey provides a comprehensive picture of local business optimism and performance. Interviews were conducted in November and December 2009 to provide an update on views of local business in the current economic climate, while continuing to monitor issues such as skills shortages and training. Questions on apprenticeships, graduates, parking and alcohol misuse were added to reflect current interests in these areas. www.lsr-online.org/reports/leicester_and_leicestershire_ business survey 20092010

36 85th percentile speed

The maximum speed that 85% of all vehicles are observed to travel under free flowing conditions. This is a nationally recognised method of assessing traffic speeds.

37 Homes and Communities Agency (HCA)

The HCA is as an enabling and investment Agency, creating opportunity for people to live in high-quality, sustainable places. It provides funding for affordable housing, brings land back into productive use and enables local authorities to achieve housing and regeneration ambitions for their own areas. www.homesandcommunities.co.uk

38 Leicester and Leicestershire Local Investment Plan (LIP)

The Local Investment Plan provides a strategic framework for co-ordinating and concentrating partner investment across the housing market area (HMA) to meet local needs and deliver maximum economic benefit for the HMA using minimal financial resources. It is the delivering mechanism of the LLEP.

www.leicester.gov.uk/your-council-services/ep/regeneration/ sub-regionalpartnership/economic-strategy/local-investmentplan-2011-2026

39 PTOLEMY: Impact of Housing Growth in the Leicester Principal Urban Area - Final Report (April 2010)

In August 2009, Leicester City Council commissioned WSP to implement PTOLEMY model runs to assess the travel related impacts of dwelling growth in the Leicester Principal Urban Area (PUA). The study focuses on the impact on travel in Leicester from trips generated by dwelling growth within the city and adjoining districts in 2026.

www.leics.gov.uk/leicester_pua_final_report_rev_3_1_.pdf

40 Be Active Be Healthy, Department of Health 2009

Be active, be healthy establishes a new framework for the delivery of physical activity alongside sport for the period leading up to the London 2012 Olympic Games, Paralympic Games and beyond. Programmes outlined in the plan will contribute to Government's ambition of getting 2 million more people active by 2012 and have been designed to leave a lasting legacy from the Games.

www.dh.gov.uk/en/Publicationsandstatistics/Publications/ PublicationsPolicyAndGuidance/DH_094358

41 Leicester and Leicestershire Housing Market Area Growth Infrastructure Assessment (April 2009)

This assesses the infrastructure required to deliver proposed regeneration and growth across the HMA up to 2026. The assessment shows, at a high level, the infrastructure requirements that arise from growth; how much this infrastructure costs; its funding, and implications for delivery.

www.leicester.gov.uk/your-council-services/ep/planning/ plansandguidance/ldf/ldfevidence-base/ldf-growthinfrastructure

42 Leicester Shire Promotions

Leicester Shire Promotions is a private, not for-profit company formed in July 2003 as a partnership between Leicester City Council, Leicestershire County Council and the Leicester Shire Economic Partnership. The company is committed to delivering a coordinated place marketing strategy that focuses on destination leadership and coordination, attracting investors and visitors, services for investors and visitors, and services for the tourism industry. http://tourism.goleicestershire.com/lt/main.nsf/lookupareas/1 f1562beda25e2af80256faa0052b879?opendocument

43 The Eddington Transport Study, 2006

Sir Rod Eddington was jointly commissioned by the Chancellor of the Exchequer and the Secretary of State for Transport to examine the long-term links between transport and the UK's economic productivity, growth and stability, within the context of the then Government's broader commitment to sustainable development.

http://webarchive.nationalarchives.gov.uk/+/http://www.dft. gov.uk/about/strategy/transportstrategy/eddingtonstudy/

44 Sustainable Urban Extension (SUE)

SUEs involve the planned expansion of a city or town. They can contribute to creating more sustainable patterns of development when located in the right place, with well planned infrastructure. They can include a mix of employment, housing and community facilities and provide local shops, employment land, schools, open space and other community facilities.

45 **Bus Service Operators Grant (BSOG)**

The grant was introduced under the Finance Act 1965 and is now paid under powers in the Transport Act 2000. It is available to all bus operators whose services are registered with the Traffic Commissioner and which meet the strict criteria and rules of the scheme. It is a Fuel Duty Rebate (FDR) scheme, under which bus operators who operate local registered bus services are already entitled to a grant, paid by the Department for Transport, to reimburse the major part of the excise duty paid on the fuel used in operating local registered bus services.

www.dft.gov.uk/pgr/regional/buses/busgrants/bsog

46 Rural Rider

www.leics.gov.uk/index/highways/passenger_transport/ rural_transport.htm

47 Star Walkers

The 'Star Walker' Scheme rewards pupils for walking to school. Each walked journey is recorded in a 'Star Walker' passport or on a wall chart and a reward is earned each term when sufficient journeys have been made. Walked journeys also contribute towards the 'Star Walker' Class Award. www.leics.gov.uk/index/highways/road_safety/school_travel_ plans/star walker scheme.htm

48 Quality Bus Partnership (QBP)

A joint approach between local authorities (LAs) and bus operators to improve services. The LA invests in transport infrastructure, passenger facilities and/or information and the bus operator invests in higher quality services and/ or newer vehicles. Aimed at increasing bus patronage and improving customer satisfaction.

49 Air Quality Management Area (AQMA)

All Local Authorities are required to review and assess the air quality in their areas. If, as part of this assessment, it is found that an area is, or is expected to, exceed/breach recommended air quality levels, the Local Authority is obliged to declare it as an AQMA. A Local Air Quality Action Plan (AQAP) is then put in place to improve air quality.

50 6C's design guide 'Highways, transportation and development' (Htd)

The 6Cs design guide has been, or is in the process of being, adopted by the 6Cs councils. This document, which is web based, sets out guidance for the design of new developments and travel plan requirements including styles and standards required.

www.leics.gov.uk/htd

51 Loughborough Town Centre Improvement Scheme

The Loughborough Town Centre Transport Scheme is being promoted by Leicestershire County Council. The whole life cost of the Scheme is estimated at approximately £20M and consists of the following components:

- Closure of A6 Swan Street/Market Place to through-traffic to allow an improved pedestrian environment combining the shopping and commerce areas in the heart of the town centre.
- Provision of new high quality bus waiting/interchange facilities both in High Street/Baxter Gate and The Rushes/ Derby Square areas.
- Completion of the remaining section of the Loughborough Inner Relief Road, and upgrading junctions on the existing

relief road to carry traffic flow diverted from the closed A6.

• Junction improvements on the Loughborough Ring Road (A6004/Forest Road) to reduce traffic demand on the relief road and the town centre road network.

www.leics.gov.uk/index/highways/road_pathway_ maintenance/road_schemes/major_transport_projects/ loughborough town centre transport proposals.htm

52 Prospect Leicestershire

Prospect Leicestershire is the new economic development company charged with delivering physical regeneration and growth, business innovation and support and inward investment across Leicester and Leicestershire. www.prospectleicestershire.co.uk

53 Local Super Output Areas (LSOA's)

Super Output Area (SOA) is a geographical area designed for the collection and publication of small area statistics. SOAs give an improved basis for comparison throughout the country because the units are more similar in size of population than, for example, electoral wards. Lower layer super output areas (LSOA's) have about 1000 residents.

54 Dame Carol Black's review of the Health of Britain's Working Population, 2008

Carol Black, National Director for Health and Work, was commissioned in March 2007 by the Secretaries of State for Health and Work and Pensions to undertake a wide-ranging review of the health of Britain's working age population. The purpose of this commission was to develop a baseline understanding of the health of working age people and the impact this has on government, the economy and society; and to make recommendations to Government and wider stakeholders on how to improve the health of the working age population.

www.dwp.gov.uk/docs/hwwb-working-for-a-healthier-tomorrow.pdf

The collective name for a family of techniques to encourage, inform and promote the use of sustainable transport modes e.g. public transport, walking, cycling, reduced single occupancy car use.

www.dft.gov.uk/pgr/sustainable/smarterchoices

56 Transport's Climate Change and Transport Choices Segmentation Study – interim report, December 2010

This study aims to segment the adult (age 16 and over) population of England in terms of both attitudes to climate change and also actual transport behaviours. This interim report from that study and accompanying dataset present the findings from a robust large-scale survey of the general public which has been conducted to inform the development of the segmentation model.

www.dft.gov.uk/pgr/scienceresearch/social/ climatechangetransportchoices

57 Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen, January 2011

The Local Transport White Paper sets out the Government's vision for a sustainable local transport system that supports the economy and reduces carbon emissions. It explains how the Government is placing localism at the heart of the transport agenda, taking measures to empower local authorities when it comes to tackling these issues in their areas. The White Paper also underlines Central Government's direct support to local authorities, including through the Local Sustainable Transport Fund. www.dft.gov.uk/pgr/regional/sustainabletransport

58 6Cs Growth Point Green Infrastructure Strategy

The Strategy's long term vision is to protect, enhance and extend networks of green spaces and natural elements in and around the three cities of Leicester, Nottingham and Derby, connecting with their surrounding towns and villages. www.emgin.co.uk/default.asp?PageID=192 Volume 5 covers Leicester and Leicestershire www.emgin.co.uk/images/PDF_Files/6Cs/ Strategy/11109009R Volume%205 Final 06-10.pdf

59 Smarter Choices – Changing the way we travel: main document (Department for Transport, 2004)

This report draws on earlier studies of the impact of smarter choice measures, new evidence from the UK and abroad, case study interviews relating to 24 specific initiatives, and the experience of commercial, public and voluntary stakeholders involved in organising such schemes. Each of the smarter choice factors is analysed separately, followed by an assessment of their combined potential impact. www.dft.gov.uk/pgr/sustainable/smarterchoices/ctwwt

60 Merseyside Travelwise Campaign

http://www.letstravelwise.org/content140_About-Us.html

61 Social Exclusion Unit (2003), Making the Connections: Final Report on Transport and Social Exclusion. Office of the Deputy Prime Minister, London

62 Leicestershire Rural Partnership

The Leicestershire Rural Partnership (LRP) comprises 22 diverse organisations who work together to improve the quality of life of those living and working in rural Leicestershire.

It's aim is to deliver a better quality of service to rural communities and businesses and to use public money and other resources more effectively. It's also keen to help bring communities together and to help empower them at a local level to change their own fortunes. www.oakleaves.org.uk

63 Wheels to work

www.leics.gov.uk/index/highways/passenger_transport/ wheels_2_work.htm

64 Best Value Performance Indicator Survey 2006

www.leics.gov.uk/index/your_council/budget/annualplan/ b_v_0506_annual_plan/b_v_0506_creating_a_better_ transport_system_performance_indicator_tables.htm

65 Rural Bus Subsidy Grant

The Rural Bus Subsidy Grant was introduced in 1998/99 and provides for additional local bus services to rural communities previously not well served. The grant is distributed to English local authorities and allocations are based on numbers living in a rural area. Decisions on which services to support are essentially for the local authority.

www.dft.gov.uk/pgr/regional/buses/busgrants/ introductiontobusgrants

66 Leicester, Leicestershire and Rutland Road Safety Partnership (LLRRSP)

The LLRRSP was formed in 1999 between Leicester City Council, Leicestershire County Council, Rutland County Council, Leicestershire Constabulary, and Health for Leicestershire, with the objective to provide a safer environment on the roads of Leicester, Leicestershire and Rutland, using education, enforcement and engineering to enable all road users to travel in confidence, free from fear of death or injury.

67 Leicestershire Road Safety Report (Annual)

The Road Safety in Leicestershire reports include casualty numbers and trends, progress towards targets, and engineering, education, training and publicity measures carried out in the report year. The latest report is 2009.

www.leics.gov.uk/index/highways/road_safety/ casualtyreport.htm

68 House of Commons Environmental Audit Committee, Fifth Report - Air Quality (March 2010)

www.publications.parliament.uk/pa/cm200910/cmselect/ cmenvaud/229/22902.htm

69 1996 EC Directive

European Air Quality Limit Values www.environmental-protection.org.uk/air-quality-andclimate/air-quality/policy/europe

70 Department of Health 2009 Annual Report of the Chief Medical Officer

The report draws attention to major health challenges requiring immediate action and details progress made in key areas identified in previous annual reports. The annual report addresses the benefits of physical activity, preparation for cold weather to reduce health risks, treatment for rare diseases, grandparenting and health, and the link between climate change and health. www.dh.gov.uk/en/Publicationsandstatistics/Publications/ AnnualReports/DH 113912

71 House of Commons Environmental Audit Committee, ninth Report (March 2006)

www.publications.parliament.uk/pa/cm200506/cmselect/ cmenvaud/981/98104.htm

72 National Road Traffic Survey

Department for Transport's National Road Traffic Survey, Estimated traffic flows for cars by local authority: East Midlands: 1993 - 2008 www.dft.gov.uk/pgr/statistics/datatablespublications/nts

73 Smart Ticketing Report

Smart and Integrated Ticketing Market Research for Leicester City and Leicestershire County Councils, AECOM Transportation, December 2010

74 Toner, J. (2005), Investigating Household Demand for Alternative Fuel Vehicles, ESRC Research Report.

75 Department for Transport, Road casualties in Great Britain: main results

www.dft.gov.uk/pgr/statistics/datatablespublications/ accidents/casualtiesmr

76 **MAST**

This web-based data analysis engine provides integrated crash and socio-demographic analysis, facilitating decisions about intervention strategies to reduce casualties and increase efficiency. The MAST Project was originally developed under the auspices of the Department for Transport between April 2008 and March 2010. www.roadsafetyanalysis.org

77 Community Speed Watch

Community Speed Watch enables volunteers to work within the community to raise awareness of the dangers of speeding and to help manage the problem locally. www.leics.gov.uk/index/highways/road_safety/bealocalhero. htm

78 Speed Awareness and Driver Alertness Workshops

Speed Awareness Workshops were launched in October 2004 as an alternative to prosecution for drivers caught speeding. The aim of the workshops is to change people's attitudes towards speeding and to show why speed limits are needed. The offer of attending a course is only made for low-level speeding offences.

www.speedawarenessleicester.com

79 No more lives wasted regional website www.nomoreliveswasted.com

80 Safer driving with age (SAGE)

SAGE is a driving assessment for mature drivers. The assessment is based on common sense, safe, skillful, everyday driving.

www.leics.gov.uk/index/highways/road_safety/sage.htm

81 Shiny Side Up Partnership

The Shiny Side Up Partnership is working to reduce the number of sports bikers involved in crashes on roads. The Partnership wants to ensure that sports bikers continue to enjoy their riding and keep their bike's shiny side up and the rubber firmly on the road.

www.shinysideup.co.uk

82 Bikeability

Bikeability is cycling proficiency for the 21st century, designed to give the next generation the skills and confidence to ride their bikes on today's roads. www.dft.gov.uk/bikeability

83 3 Counties Alliance Partnership (3CAP) report on Climate Change

www.leics.gov.uk/index/highways/transport_plans_policies/ highway_maintenance_policy.htm

84 Highway Maintenance Policy and Strategy

www.leics.gov.uk/index/highways/transport_plans_policies/ highway_maintenance_policy.htm

- 85 **2009 Final UK greenhouse gas emissions** www.decc.gov.uk/en/content/cms/statistics/climate_change/ gg_emissions/uk_emissions/2009_final/2009_final.aspx
- 86 www.smmt.co.uk/2011/03/Co2report
- 87 National Indicator 188: Adapting for climate change www.defra.gov.uk/corporate/about/with/localgov/indicators/ ni188.htm
- 88 Environment Act 1995 www.legislation.gov.uk/ukpga/1995/25/contents
- 89 National Air Quality Strategies (NAQS) www.defra.gov.uk/environment/quality/air/airquality/strategy

90 Environmental Impact Assessment www.communities.gov.uk/publications/planningandbuilding/ environmentalimpactassessment

- 91 Climate change statistics www.ipcc.ch
- 92 National Highways & Transportation Public Satisfaction Survey http://nht.econtrack.net/Default.aspx

93 Leicester Principal Urban Area (PUA)

The Principal Urban Area of Leicester stretches beyond the City administrative area into Leicestershire and encompasses Oadby and Wigston, as well as parts of neighbouring Blaby, Charnwood and Harborough.

94 National Planning Policy Framework (NPPF)

Publishedin March 2012, the NPPF consolidates over two dozen previously issued documents called planning Policy Statements and Planning Ploicy Guidance Notes for use in England. The NPPF streamlines the planning system and is intended to encourage development. www.gov.uk/national planning policy framework

95 Census 2011

Since 1801, every 10 years the nation has set aside one day for the census - a count of all people and households. It is the most complete source of information we have. The latest census was held on 27 March 2011.

www.ons.gov.uk/census/2011

96 Office for National Statistics

Headline GVA 2011 and current basic prices tables 3.1 and 3.2. www.ons.gov.uk

97 Office for National Statistics

Nomis officiallabour market statistics www.nomisweb.co.uk

98 Business Register and EmploymentSurvey (BRES) 2011 Office for National Statistics ww.ons.gov.uk

ww.ons.gov.uk

99 Office for National Statistics

ONS Annual Population Survey, July 2012 - June 2013 www.ons.gov.uk

100 Leicestershire Joint Strategic Needs Assessment, March 2012 www.lsr-online.org