![Leicestershire County Council]

Network Management Plan

Contents

Foreword

I have great pleasure in presenting Leicestershire County Council's Network Management Plan.

Leicestershire is a prosperous, diverse and attractive county. Working with individuals, business, other organisations, communities and national government we have a key role to play in ensuring that it remains so. Essential to achieving this is a road network that enables the efficient movement of people, materials and goods.

The Network Management Plan explains how we will continue to manage the operation, performance and development of our road network so that it delivers an efficient and effective transport system, which supports economic activity, meets future housing and employment needs, provides a good quality of life for residents, visitors and businesses, and helps us to achieve our climate resilience and net zero carbon targets now and in the future.

Ozzy O'Shea
Cabinet Member for Highways and Transport
Leicestershire County Council

Covid-19 Statement

Much of this document was prepared prior to the outbreak of the pandemic and the profound societal, health and economic impacts it has had across the world. It is far too early to say at this time what the pandemic's long-term impacts might be on our society and for our economy.

In May 2020, the government issued its Safer Travel guidance, regarding managing travel by walking, cycling, and passenger transport as England moved out of the first lockdown. This guidance makes clear that the requirement for local transport authorities to meet the network management duty is not affected by the Covid-19 pandemic.

We have developed a separate Covid-19 Transport Recovery document, which sets out how in the short term we are seeking to respond to the pandemic's impacts and to aid recovery in line with our statutory obligations, including the network management duty. It will be updated regularly to reflect the ongoing transportation needs as the pandemic situation develops.

Leicestershire County Council's Covid-19 approach to transport recovery

1. Background and Context

1.1 Introduction

1.1.1 The Road Network

Roads are the conduit of life's activities, supporting economic activity and keeping people and places connected, especially in a rural county such as Leicestershire.

Whether it is on foot, bike, in a car or on passenger transport, the road network helps people move around on a daily basis.

Roads are also of vital importance to help the nation grow and develop. Without roads to serve them, new homes would not be built nor would new places of employment be developed, roads are an essential part of our everyday lives.

The effective management of the road network is essential, to ensure the safe and efficient movement of people, material and goods, whilst limiting negative impacts on the local environment, carbon emissions and climate change, and on people's wellbeing and opportunities and their quality of life.

1.1.2 The Network Management Plan

The Network Management Plan ("NMP") is an operational plan that supports the delivery of Leicestershire County Council's Local Transport Plan.

It sets out how Leicestershire County Council is addressing the objectives of the network management duty imposed on all highway authorities under the auspices of the Traffic Management Act 2004 ("TMA").

Whilst the production of an NMP is not a statutory requirement, the government does encourage highway authorities to prepare one.

As the local highway authority, Leicestershire County Council is responsible for managing the traffic using its road network. By effectively managing the transport system we can provide more consistent, predictable and reliable journeys for the movement of people and goods. This helps to tackle congestion and environmental pollution and improves safety and accessibility for all road users.

Given the opportunities and benefits that it provides to the economy, the environment, road users and service delivery, we remain fully committed to the delivery and implementation of this, our third NMP.

This NMP describes how we meet our network management duty in practice, by setting out the range of activities we undertake to manage the operation, performance and development of the road network. This includes:

- how we collect and use data and intelligence and how we will continue to improve our understanding of the network in the future;

- how we manage the development of the network and the impact of growth;

- how we manage planned events (such as road works and maintenance) and unplanned events (such as road traffic collisions and severe weather events);

- how we manage demand and the use of the network and encourage sustainable travel.

Environmental concerns including the climate emergency, zero carbon, and biodiversity, are a priority for both local authorities and national government. Ensuring efficient traffic flow, as required by the network management duty, has the ability to mitigate the environmental impacts of travel under certain conditions. For example, managing traffic to reduce congestion and keep traffic moving can improve air quality.

The Traffic Management Act 2004 requires us to carry out the network management duty in balance with our other statutory duties and local, regional and national policies. Therefore, the need to minimise environmental impacts (and provide benefits where reasonably practicable) is given due consideration as we carry out our network management activities.

As with many other local highway authorities, the current national economic situation and local authority expenditure constraints will have an impact on highway services and the resources available to improve and maintain the road network.

The activities contained in this plan will continue to be funded from within existing Environment and Transport departmental budgets.

Production of this plan has been an authority-wide approach, with input from different service areas whose day-to-day business impacts on the operation, performance and development of the road network and ultimately the authority's ability and approach to carry out its objectives under the network management duty.

Additional focused engagement with external parties has also been carried out to ensure the content is refined to reflect views of key partners and stakeholders. This includes district councils, emergency services, utility companies, developers, bus and rail operators, road user groups and neighbouring transport authorities.

1.2   Document Purpose

The purpose of this plan is:

- to provide a holistic overview of how we work to comply with the network management duty, set out in section 16 of the Traffic Management Act (2004), giving due consideration to our other statutory obligations, policies, and objectives;

- to provide a set of clear supporting principles under which residents and other stakeholders can expect us to operate;

- to provide a reference for Environment and Transport staff and its contractors on specific aspects of network management;

- to provide a document for council members that assists with decisions to be made about managing the operation, performance and development of the road network;

- to allow the public to gain sufficient understanding of the challenges ahead and actions to be taken to manage the operation, performance and development of the road network.

1.3   Scope

The NMP sets outs out the range of activities we undertake to help keep people, materials and goods moving on the road[1] network, now and in the future.

The scope of the NMP extends beyond the extents of the road network managed and maintained by the County Council. It describes how we also contribute towards the efficient movement of traffic on adjoining road networks; including trunk roads and motorways; managed and maintained by Highways England, or neighbouring roads outside the boundary of Leicestershire, where another authority is the traffic authority.

The NMP does not cover maintenance requirements to keep the road network in a good state of repair. Our current and long term approach to maintenance and improvement of highway[2] assets is set out in our Highway Infrastructure Asset Management Plan (HIAMP) and associated Policy and Strategy documents Highway Asset Management policy and strategy.
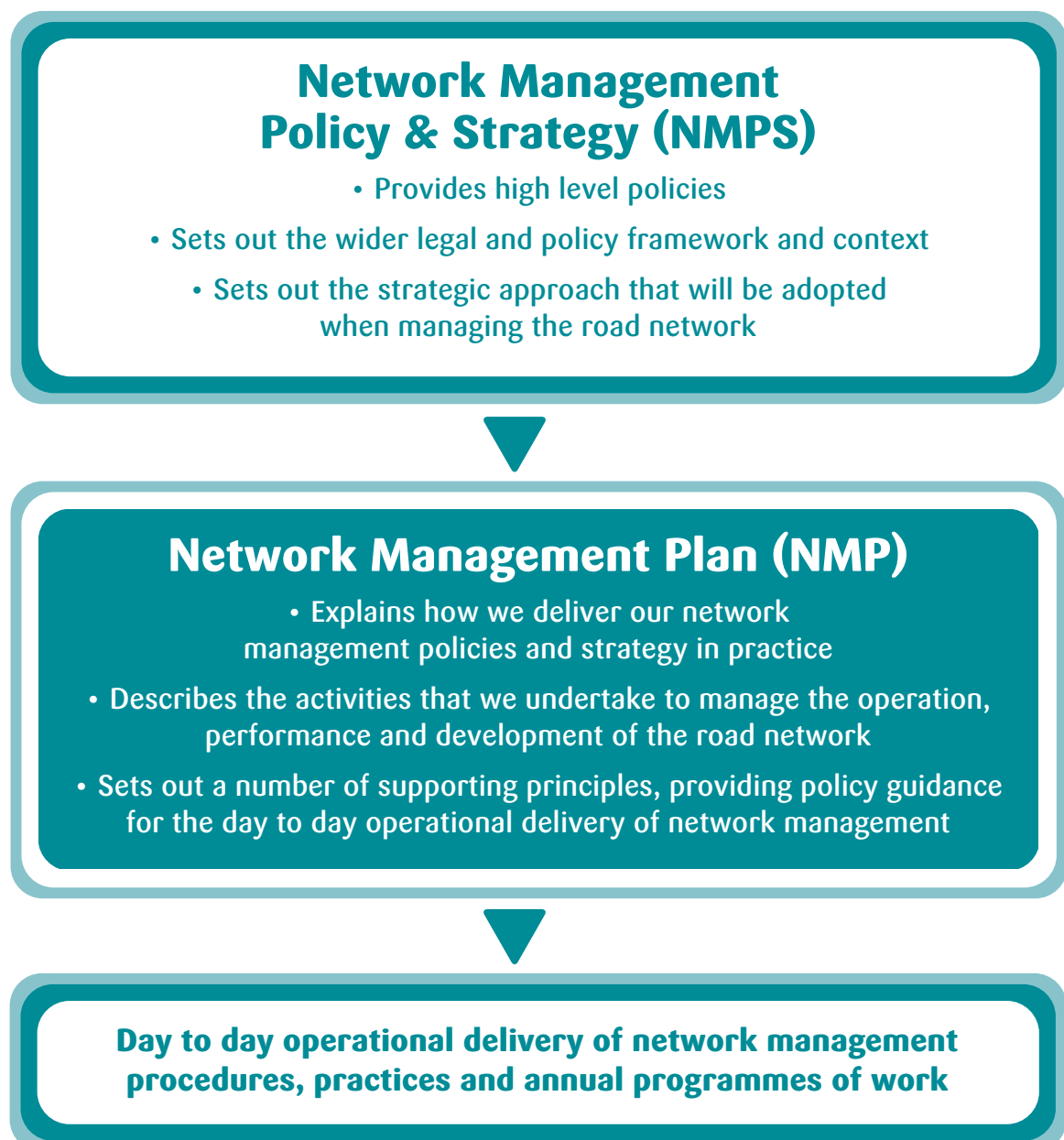

[1 & 2] For the purposes of this document the use of the terms 'road' and 'highway' should be taken to include pavements and verges, unless stated otherwise.

1.4 Network Management Framework

Our overarching framework for network management is set out in Figure 1.1 below. This illustrates how our NMP and our accompanying Network Management Policy and Strategy (NMPS) document combine to support and guide the delivery of our day-to-day network management activities.

Our high level NMPS provides the policy and legal framework and sets outs our strategic approach to network management, whilst the NMP describes at a more detailed level the work we do improving the network, managing its use, its development and the activities taking place on it.

Figure 1.1 Network management framework

Network Management Policy & Strategy (NMPS)

- Provides high level policies
- Sets out the wider legal and policy framework and context
- Sets out the strategic approach that will be adopted when managing the road network

Network Management Plan (NMP)

- Explains how we deliver our network management policies and strategy in practice
- Describes the activities that we undertake to manage the operation, performance and development of the road network
- Sets out a number of supporting principles, providing policy guidance for the day to day operational delivery of network management

Day to day operational delivery of network management procedures, practices and annual programmes of work

1.5   Aims

A number of policy statements about network management have been set out in the NMPS. These policy statements provide the broad objectives and overarching structure and direction that the County Council will continue to adopt in managing the operation, performance and development of Leicestershire's road network:

The policies will ensure that we continue to adopt and develop an approach that:

• supports our other wider obligations, policies and objectives;

• is agile and can adapt to change and future challenges and opportunities.

For the purposes of this plan these have been interpreted as our NMP aims:

1. Develop and operate a holistic network management approach;

This will ensure the optimal use of the Council's resources, strategically managing the operation, performance and development of the county's road network for the benefit of all current and future users.

2. Manage the operation, performance and development of the network based on a balanced risk-based approach, which incorporates all available evidence;

This will ensure decision making continues to support our Strategic Plan and takes account of the safety of stakeholders, customer expectations, network hierarchy, levels of use, travel demand, network resilience, environmental and climate change impacts, network condition and maintenance, and available resources.

3. In planning for the housing and economic needs of Leicester and Leicestershire's population, employ a flexible approach to reviewing, amending and developing the network;

This will ensure that the network reflects changing travel demand and traffic patterns, including any changes in the makeup of road users and introduction of new travel modes and technologies.

4. Engage and consult with all partners and stakeholders, where appropriate, and lead by example, applying the same standards and approaches to our own network activities as to those of others;

This will ensure we take account of the needs and expectations of partners and stakeholders, maintain parity and balance between the interests of the various parties and continue to build effective collaborative working relationships.

5. Have regard to our other wider obligations, policies and objectives set out in our Environment Strategy and associated Carbon Reduction Roadmap

This will ensure we continue to seek to minimise the environmental impacts of travel and transport (and provide benefits in support of our climate resilience and net zero carbon targets), so far as is reasonably practicable.

1.6 Local Policy Context

Figure 1.2 shows its context with our other key county council policy and strategy documents.
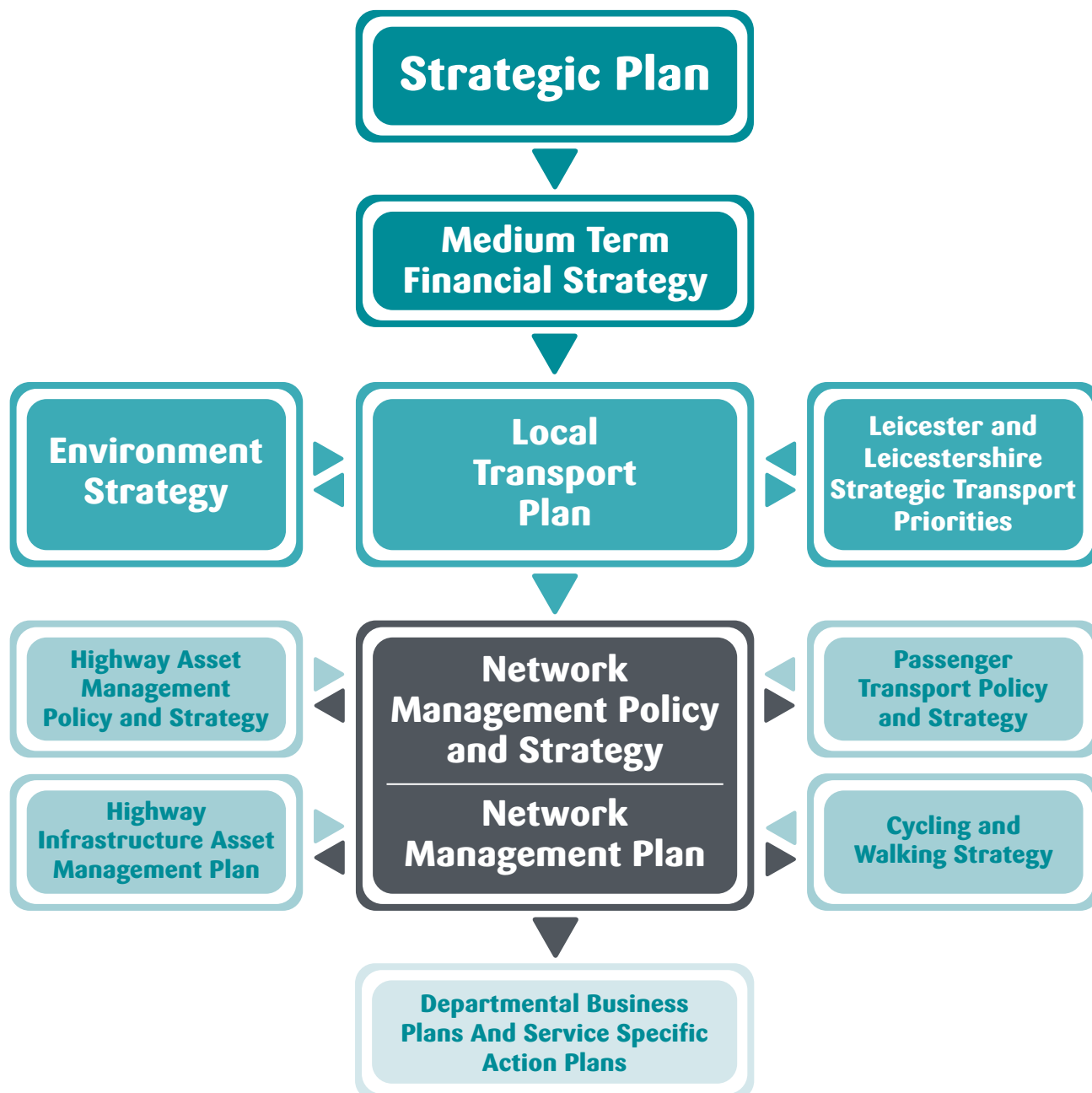
The NMP is referenced directly from our Local Transport Plan but should also be read in conjunction with our Highway Infrastructure Asset Management Plan (HIAMP), Passenger Transport Policy and Strategy (PTPS) and emerging Cycling and Walking Strategy (CaWS). This delivers a co-ordinated approach to the overall management of the road network.

Further details regarding the national, regional and local factors that influence the way in which we manage the road network can be found in the accompanying NMPS document.

1.7 Legal Context

1.7.1 Traffic Management Act (TMA)

The Traffic Management Act received Royal Assent on 22nd July 2004. Prior to the implementation of the TMA local authorities had limited powers under the Highways Act 1980, Road Traffic Act 1984 and New Roads and Street Works Act 1991 to address the issue of congestion.

The main purpose of the TMA was to give local authorities the responsibility and additional powers to deal with traffic congestion and reducing disruption on the road network.

1.7.2 Appointment of a Traffic Manager

The first requirement of the TMA 2004 is the appointment of a Traffic Manager. The role is a strategic one, championing the need to consider the network management duty in all areas of work, providing advice and assurance and oversight of network management. In Leicestershire, the Traffic Manager role lies with the Network Management Head of Service in the Environment and Transport Department.

1.7.3 Network Management Duty

Part 2 of the Act, came into force in January 2005, placing a 'network management duty' on all local highway authorities.

The duty recognises:

- the importance of managing and operating the road network;

- the importance of optimising benefits for all road users;

- the needs of those who maintain the infrastructure (both of the network itself and of the services within it).

Section 16(1) of the TMA states:

"It is the duty of a local traffic authority to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and objectives, the following objectives:

a) securing the expeditious movement of traffic on the authorities' road network; and,

b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority."

The term 'traffic' is not restricted to motorised vehicles but includes all categories of road user, including pedestrians, cyclists and equestrians.

Actions taken by an authority in performing the duty, as described in Section 16(2) of the TMA, include any action which will contribute to securing:

a) the more efficient use of the road network; or

b) the avoidance, elimination or reduction of congestion or other disruption to the movement of traffic on the network or a road network for which another authority is the traffic authority.

In essence, the duty requires local highway authorities, to take account their other wider obligations, policies and objectives and do all that is reasonably practicable to manage the network effectively to keep traffic moving. The overall aim of the expeditious movement of traffic is a network that works efficiently without unnecessary delay to those travelling on it.
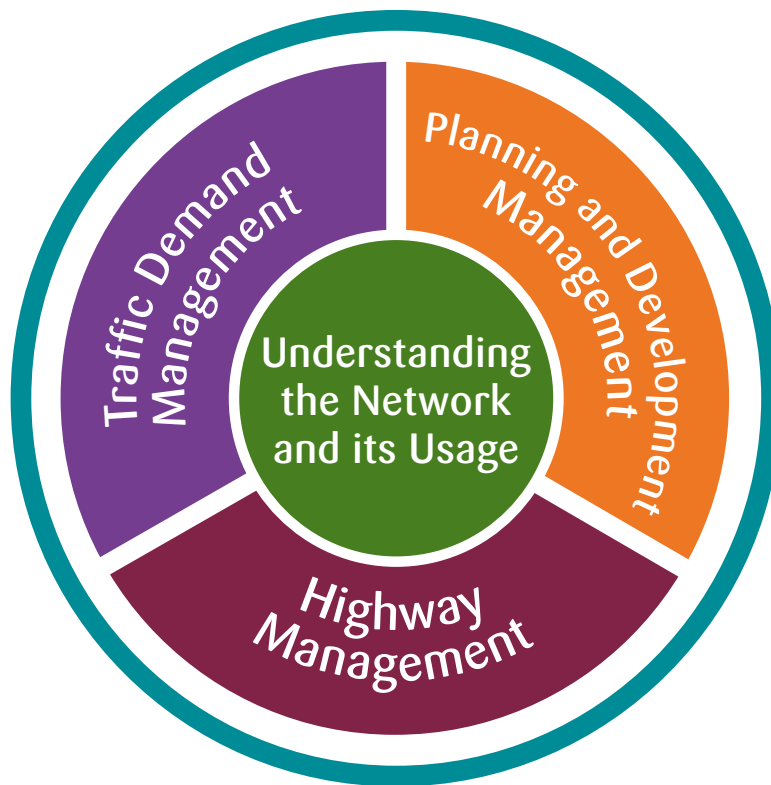
Further details with regards to the wider legal framework that relates to the NMP can be found in the accompanying NMPS document.

1.8 How the NMP is Structured

This NMP consists of four chapters, as shown in Figure 1.3, reflecting the four main components of our network management approach.

Figure 1.3. The four main components of our network management approach

- **Understanding the Network and its Usage** – our evidence collection and analysis, which underpins everything we do on the network;

- **Planning and Development Management** – how we manage the impacts of new developments required to meet the needs of the area's growing population and support economic growth;

- **Highway Management** – managing planned events (e.g. road maintenance) and unplanned events (such as road traffic collisions and severe weather events); and

- **Traffic Demand Managemen**t – how we manage how and where people travel and use the network.

Each chapter sets out a summary of how these components contribute to network management, and a broad explanation of the activities carried out.

At the end of each chapter is a set of supporting principles. These summarise the principles under which our teams operate to ensure compliance with the network management duty. Each of the chapters and the associated supporting principles carry equal weight, and the order in which they are set out in this document should not be taken to imply that individual sections carry any relative greater or lesser importance to those which come before and/or after.

2. Understanding the Network and its Usage

2.1 Introduction

This section provides information on Leicestershire, our road network, the challenges that our network faces and what we are doing to increase our understanding of how our network operates and how people use it, now and in the future.

Understanding how our network operates and its usage is a fundamental element to our network management approach and our compliance with the Traffic Management Act (2004). It is also key to our other areas of network management activity - Traffic Demand Management, Planning & Development and Highway Management.
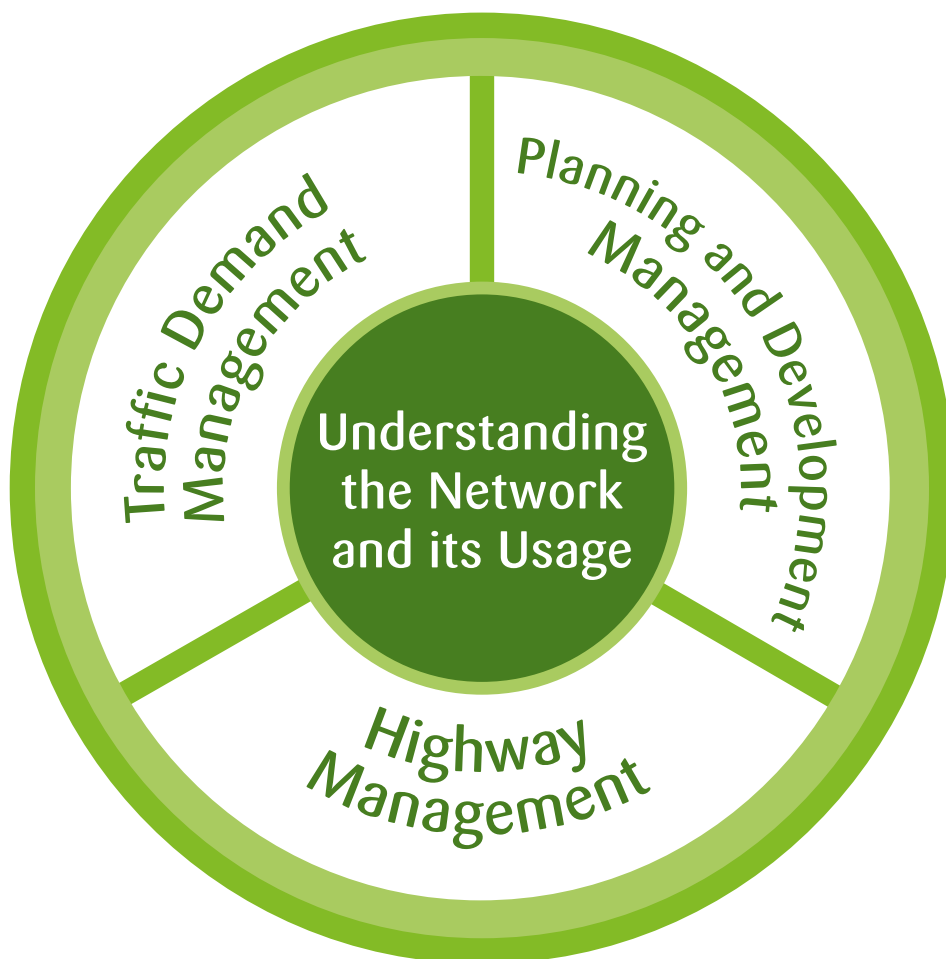
2.2   Leicestershire Now

Leicestershire is a diverse county in the centre of England.

It surrounds, and has borders with, Leicester City

Borders Derbyshire, Warwickshire, Nottinghamshire, Northamptonshire, Staffordshire, Lincolnshire, and Rutland

Has a population of approximately 680,000[3]

Covers an area of around 2,000 square kilometres

Has 2,694 miles (4,335 km) of roads which we manage and maintain

2.2.1   Road, Rail and Air

The geography of Leicestershire's road network is best described as a hub-and-spoke arrangement, where routes radiate out from the city of Leicester to the surrounding county towns.

Leicestershire has good road links with the rest of the country through the motorway network; M1, M6, M42 and M69 and a network of 'A' roads; A46, A5, A50, A47 and A14.

Bus operators provide services across the county. Most of these routes are commercial (i.e. fully funded from passenger fares). A small proportion of routes are subsidised by the County Council.

The rail network in Leicester and Leicestershire comprises four distinct elements centred around Leicester. These are:

• The Midland Mainline, 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, with stations at Hinckley, Narborough, South-Wigston and Leicester;

• The Syston and Peterborough Line, with stations at Syston, Melton Mowbray and Oakham (Rutland);

• The Leicester and Burton Line (freight only).

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[3] Office for National Statistics (ONS) Projections for 2020.

The map below in Figure 2.1, shows the relative position of the county towns and urban areas to Leicester City, and the major strategic rail and road corridors that connect them.

The East Midlands Airport (EMA) is located in the north of the county. As well as providing passenger services it is the busiest cargo airport in the UK.

Figure 2.1. County towns, urban areas and major strategic rail and road corridors that connect them
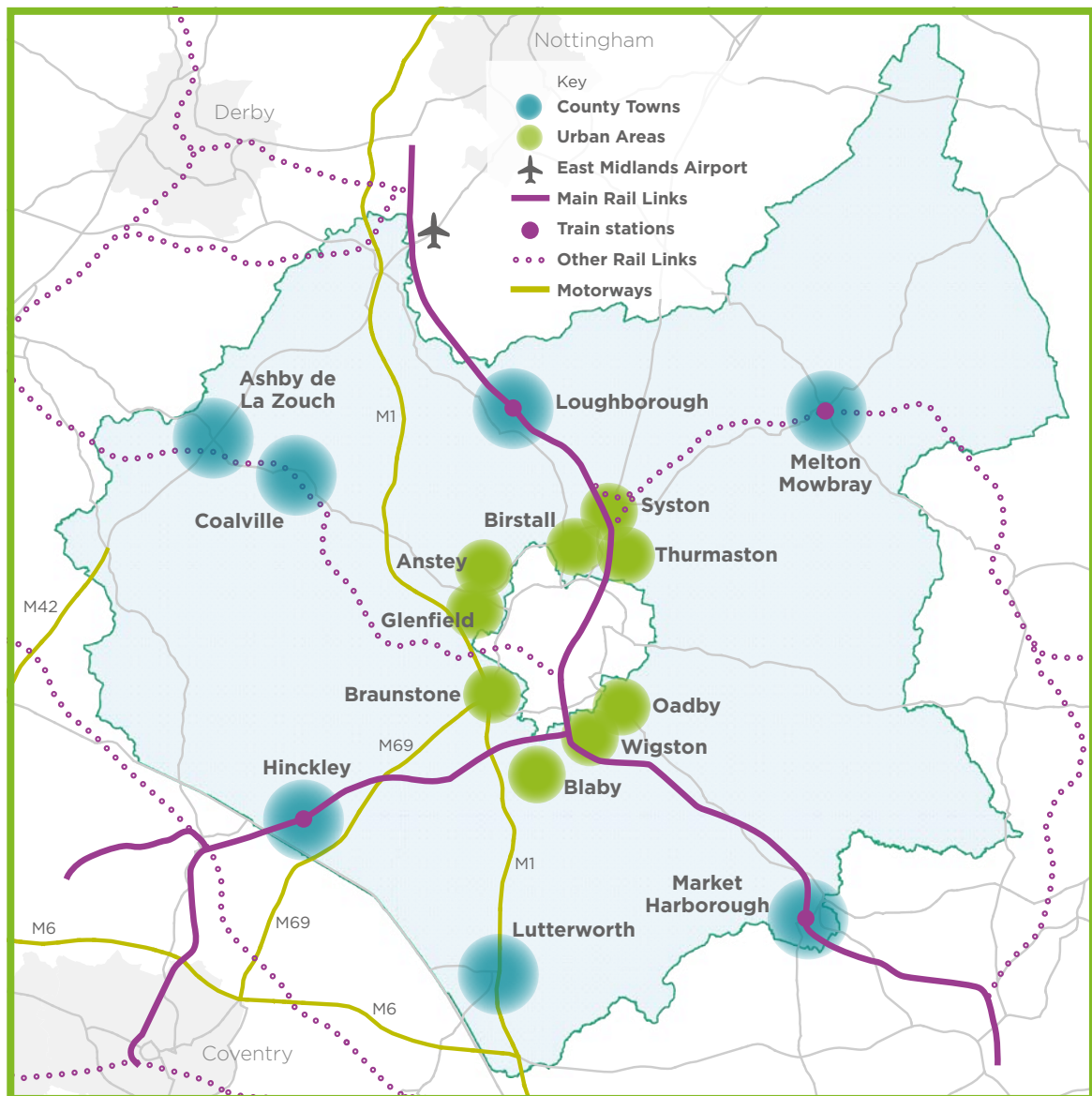
2.2.2 Demand on the Road Network

Using data extracted from the Department for Transport (DfT) the graph below in Fig 2.2, shows how traffic volume has increased in Leicestershire over the past 20 years. This pattern is reflected across Great Britain.

Fig 2.2: Annual traffic on Leicestershire's roads

Source DfT TRA8904

Leicestershire is well equipped with leisure, residential, and business opportunities which encourages demand for travel across and around the county.

Freight and distribution are important to the economy of Leicestershire. There are a number of major industrial and warehouse distribution complexes in the county that lie within, or close to, the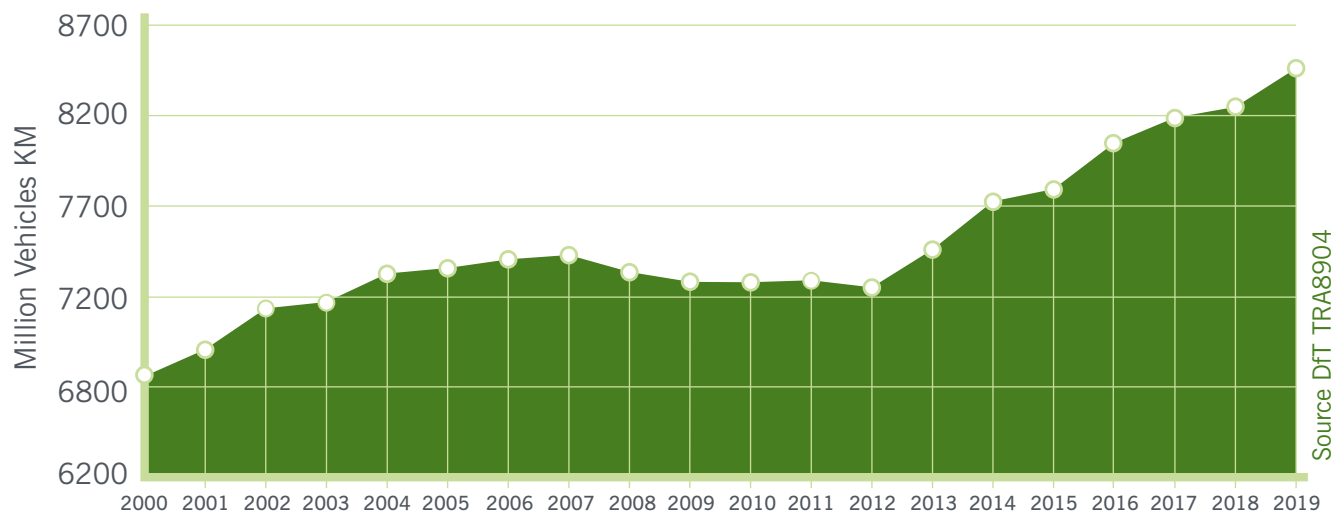 'golden triangle' (formed by the M1, M6, M69). The effective operation of the county's transport system is therefore important to the reliable movement of materials and goods.

Many residents in Leicestershire access services in neighbouring counties and further afield, or travel to Leicester, which provides a centre for key work and leisure facilities. There is also an increasing commuter pattern from the city into the county. This results in complex commuting patterns across the county, as people travel by car, bus, bike, train and on foot between the city and county for work

Within Leicestershire, each county town also has its own distinctive characteristics and provides vital services to people living in the surrounding rural area, as well as the towns' own residents. As a result, our county towns are broadly self-standing, with limited intertown travel.

The predominantly rural nature of the county presents viability challenges for medium and long-distance passenger transport, which in turn means that opportunities for residents to travel by sustainable modes are limited. Where mid or long-distance bus and rail opportunities exist, they may be infrequent, have long journey times and/or have stops located at potentially inconvenient locations.

2.3 Leicestershire- Future Challenges

2.3.1 Environment

2.3.1.1 Climate Change

Leicester and Leicestershire were among the first local authorities to declare a Climate Emergency (May 2019). We recognise that climate change is beginning to have a big impact on our services, including how our road network may operate in the future. The key predictions for climate change in the UK are set out in the UK Climate Projections: Headline Findings 2019 published by the MET Office. In summary, this predicts that:

- annual average temperatures will increase;

- summers will become hotter and drier;

- winters will become milder and wetter;

- soil will become drier;

- snowfall will decrease;

- heavy and extreme rainfall will become more frequent,

- changes in weather will become more volatile.

As the highway authority, we will need to be at the forefront of dealing with these challenges, so that the network continues to provide for the efficient, effective and safe transport of people, goods and services.

2.3.1.2 Air Quality

The environmental impacts of congestion and the impact that it has on quality of life, is a concern to many residents and road users. Air quality is often raised as a problem where congestion occurs and is already beginning to be seen as a serious public health issue.

In two-tier authority areas, as in Leicestershire, the duties placed on local government associated with air quality matters are the responsibility of district authorities. This includes identification of Air Quality Management Areas (AQMAs), monitoring and reporting on air quality, producing and delivering Action Plans, and assessing the impact of development on air quality through the planning process.

Even though we don't have direct legal responsibilities for air quality matters we recognise that the number of vehicles using the road network, and the way that they use it, will have a direct bearing on air quality in Leicestershire. Therefore as a local highway authority, we can make a significant contribution to improving air quality.

Although not specifically part of our network management duty, the following chapters, describe activities, carried out by us and our partners, which can make a significant contribution to improving air quality. This includes maintaining and managing the road network so that it operates as efficiently and effectively as possible, reducing the need to travel by car, encouraging the use of sustainable transport, influencing how people travel and introducing improvements to tackle congestion.

Notwithstanding the activities described in this NMP, Leicestershire continues to be heavily trafficked in many areas, with additional traffic pressures likely to be brought about as a result of population and economic growth. It is recognised that district councils in Leicestershire face a major challenge meeting future housing and employment needs without increasing congestion and reducing air quality.

Of increasing relevance is the Director of Public Health's statutory duty to protect the health of the local population, particularly as air pollution is more and more been viewed as a serious public health issue. In recognition of our legal duties in respect to public health, we have developed a Leicestershire Air Quality and Health Joint Action Plan, which will be delivered in partnership with the Leicester, Leicestershire and Rutland Clinical Commissioning Group, University of Leicester and the following district councils- Blaby, Charnwood, Harborough and North West Leicestershire.

The action plan will ensure all parties work together to develop their approach to addressing air quality and all necessary measures to address air pollution in their local area are included.

2.3.1.3 Carbon Emissions

One of our biggest challenges is the need for the transport system and road network to become carbon neutral, to deal with the significant current and future impacts of climate change.

The government is developing plans to accelerate the decarbonisation of transport, with its proposed Transport Decarbonisation Plan (TDP) setting out in detail what government, businesses and society will need to do to deliver the significant emissions reductions needed across all modes of transport to achieve carbon budgets and net zero carbon emission targets by 2050.

We are supportive and welcome the decarbonisation of transport and the proactive start from government.

In May 2019, we declared a climate emergency and are committed to achieving carbon neutrality by 2030 for our own operations and 2050 for wider Leicestershire emissions. We are also working with others to lobby government to make a wider 2030 target possible.

Our Environment Strategy has been revised to incorporate a Carbon Reduction Roadmap, which will set out a proposed plan for reducing the Council's own measured emissions, as well as setting out how we propose to reduce our 'unmeasured council emissions' and Leicestershire's wider carbon emissions.

As a result our Roadmap is split into two tranches;

Tranche 1; focuses on the Council's internal measured emissions and sets out a suggested profile of how emissions could be reduced by 2030.

Tranche 2; focuses on the Council's wider unmeasured emissions and the approach to reducing Leicestershire's emissions.

The challenge going forward will be how we might seek to reduce emissions from Leicestershire's road transport and how we can deliver the infrastructure needed to support the county's economy and population in a more sustainable, resilient and carbon neutral way.

Through implementation of our NMPS, and the activities set out in our associated Network Management Plan, we will continue to focus on making the most of our existing road network and reducing the need to travel, embracing sustainable modes of travel not only as a means to help manage demand on our network but also to help decarbonise transport.

2.3.2   Population Growth

Over the past two decades the population of Leicester and Leicestershire has grown faster than the regional and national rate. Going forward, the size of the population, combined with the county's three universities, vibrant communities, and location at the heart of the UK, with easy access to national and international markets via the strategic road network and East Midlands Airport, mean that the area has great potential for further population and economic growth.

Population projections generated from our Pan Regional Transport Model (PRTM) indicate that between 2014 and 2051, Leicester and Leicestershire will experience population growth of 19% (21% excluding Leicester City). Individual districts will experience anything from 4% to 29% population growth over the same period.

2.3.3   Housing and Employment

The demand for travel across the county will grow as leisure, residential, and industrial developments identified in the borough and district authorities' Local Plans, such as the East Midlands Gateway and New Lubbesthorpe, are built and occupied.

The Leicester and Leicestershire Strategic Growth Plan estimates that Leicester and Leicestershire will need 96,580 new homes and 367-423 hectares of employment land from 2011-2031. Beyond 2031, the plan identifies the need for a further 90,500 dwellings and additional employment land to support growth, largely as a result of the increasing population and the need to meet changing housing needs.

Growth on this scale across the county (no matter where the growth is located) will inevitably impact on the transport system and our ability to manage the network.

Employment projections generated from our PRTM indicate that between 2014 and 2051, Leicester and Leicestershire will experience employment growth of 16% (23% excluding Leicester City). Individual districts will experience anything from 2% to 52% employment growth over the same period.

2.3.4 Demand on the Road Network

The challenges faced by people travelling by passenger transport or active modes, mean that the private car will continue to remain the choice of travel around Leicestershire for many residents.

Network demand projections generated from our PRTM predict nearly a 40% increase in kilometres being driven by vehicles on the road network, across Leicestershire and Leicester City, between 2014 and 2051. Whilst most journeys will continue to be taken in the morning and evening peak periods the daytime interpeak period will see the biggest increase in journeys, mainly due to lower levels of congestion.

In the longer term it will be challenging to provide the level of new road infrastructure or road space required to meet the predicted level of demand identified in the Strategic Growth Plan and future Local Plans. The reasons for this includes:

• social concerns - for instance, people do not want new roads to affect them;

• environmental concerns - for instance, its impact on green space, air quality, older buildings and wildlife habitat;

• national and local priorities to cut carbon emissions;

• national and local priorities to improve health - for instance to encourage more people to walk and cycle.

It is important, therefore, that we continue to manage our existing road network as effectively as possible in order to support the area's future growth.

2.4 Network Hierarchies and Classifications

The application of network hierarchies and specific classifications is essential for both network and asset management.

It helps us to improve our understanding of our network and make better informed decisions about:

Priories for investment

Network resilience during disruptive events

Establishing levels of service, inspection and treatments

Expansion and enhancement of the network to accommodate growth

Planning and coordinating works on the network

At the highest level, roads within Leicestershire are separated into two main networks, depending upon the relative strategic importance of the route. These are:

• The Strategic Road Network.

• The Local Road Network (some of which is now classified as the Major Road Network).

2.4.1 The Strategic Road Network

Motorways and trunk roads collectively form the Strategic Road Network (SRN). These are managed by the Strategic Highway Company (currently Highways England), on behalf of the Secretary of State. Although we do not have any maintenance or operational responsibilities relating to these routes, they have close interactions with our network, bearing in mind that most journeys start or finish on the Local Road Network (often referred to as 'the last mile').

We engage closely with Highways England to ensure that we each maintain a good understanding of conditions on the other authority's network, and how our activities affect our own and each other's roads, as required by the network management duty. A map highlighting the SRN in Leicestershire can be found in Figure 2.3 below.

2.4.2 The Local Road Network

The Local Road Network (LRN) is made up 'A' roads, which do not form part of the SRN and local classified and unclassified roads. The LRN is managed and maintained by Local Highway Authorities (LHA).

In Leicestershire, the LHA is Leicestershire County Council.

2.4.3 The Major Road Network

In recognition of the role that many local A class roads play in supporting the economy, the government is seeking a new national road tier in England, called the Major Road Network (MRN). When established, it will form a new tier of approximately 3,800 non-trunk 'A' roads which are not part of the Strategic Road Network but have equal or near-equal importance in terms of connecting the regional economies and supporting growth. Local roads which form part of the MRN will:

• have an annual average daily traffic flow (AADF) of more than 20,000 vehicles;

• carry 5% HGVs traffic (if the AADF is lower than 20,000 vehicles);

• link economic centres and key transport hubs.

The primary aim of the MRN is to ensure that transition to and from the SRN is smooth, fit-for-purpose, and provides a seamless experience for road users making strategic journeys.

In December 2018, government provided an indication of which local roads across England were likely to be included on the MRN. A map highlighting the SRN and the indicative MRN in Leicestershire can be found in Figure 2.3 below.

Figure 2.3: The Strategic Road Network (SRN) and indicative Major Road Network (MRN)

Understanding the Network and its Usage

2.4.4 Local Hierarchies and Classifications

The local road network in Leicestershire can be further categorised in a variety of different ways, according to different needs.

Table 2.1 below sets out the main network hierarchies and classifications applied by Leicestershire County Council and how they are used for network and asset management purposes.

It also highlights the complexity of local road network classification, driven as it is by different and varying legislation and purposes. So, often a single stretch of road can be subject to several different categories for differing reasons.

Table 2.1: Network hierarchies and classifications

Hierarchy / classification	The key factors that contribute to the hierarchy/classification	How the hierarchy or categorisation will be used
Existing Road Network Classification (A, B, C roads etc)	• Based on road purpose and likely traffic composition	• For reporting and comparing condition data through national performance indicators and whole government accounting/asset valuation
Local Carriageway Hierarchy **Leicestershire Highways Infrastructure Asset Management Plan (HIAMP)**	• Based on Asset Management Code of Practice • Traffic Volume • Strategic purpose • Stakeholder expectation	• Foundation of LCCs HIAMP • For prioritising treatments and managing risk • To establish inspection frequencies
Resilient Network: **Leicestershire's Resilient Network**	• Traffic volume and composition • High level strategic purpose • Links to major infrastructure and emergency services • Connectivity with other key road networks	• To determine which parts of the network receives investment priority, to ensure economic activity and access to key services is maintained during disruptive events
Winter Service Network	• Traffic volume • Road classification • Strategic purpose	• Will be used to determine the extent and priority of salting across the county road network

Hierarchy / classification	The key factors that contribute to the hierarchy/classification	How the hierarchy or categorisation will be used
Traffic-Sensitive Street designation	• New Roads and Streetworks Act (1991) designates 9 criteria that can be used for defining a street as 'traffic-sensitive'	• Used to help determine road space occupation as part of LCC highway works permit scheme
Reinstatement category	• Based on number of millions of standard axles (msa) carried by the road over a 20-year period	• Used to help determine permit costing as part of LCCs highway works permit scheme
Protected Street designation	• New Roads and Streetworks Act (1991) designates.	• Used to help determine road space occupation as part of LCCs highway works permit scheme.

2.5 Evidence

To make the best use of our network we need to understand how it is being used and how it is performing, both now and in the future. For instance, knowing where congestion occurs now, where it may occur in the future, why it is occurring and the wider impacts.

To continue to meet out network management duty it is vital that we continue to maintain an evidence-led approach. We will therefore continue to collect, maintain and develop a base of data and intelligence to ensure:

• we identify which parts of the network are most important and where we need to focus investment;

• we make informed, balanced, risk-based decisions and deliver the most appropriate solutions;

• we can monitor our performance and optimise the use of the County Council's resources;

• we can develop robust business cases to secure any public funding that might be available to help to deliver transport improvements;

• our network continues to reflect changing travel demand, traffic patterns and we continue to meet the needs and expectations of our customers and stakeholders;

• our network management activities reflect our other obligations, policies and objectives (e.g. our Environment Strategy and Carbon Reduction Road Map).

2.5.1 Present Day Traffic Data

Present day traffic data is our baseline to show how the network is performing now. We use this to compare against forecast traffic volumes (see below), calibrate our transport models and identify existing problems on the road network.

We collect a wide variety of data, including from over 330 permanent automatic traffic count sites (ATCs) and 69 automatic cycle counters across Leicestershire and Leicester. We also use temporary ATCs (for example tubes, Speed Detection Radars and Automatic Number Plate Recognition technology), as well as manual counts. Manual counts can be conducted from most locations across the county. Data gathered includes, but is not limited to:

- speed surveys;

- traffic counts;

- parking surveys;

- congestion analysis;

- queue length surveys;

- journey time surveys;

- bus patronage and reliability surveys;

- cyclist and pedestrian surveys.

We also make use of data from third party survey companies through our temporary traffic survey (Section 50) licencing scheme and we operate this on behalf of the following neighbouring highway authorities; Nottinghamshire, Nottingham, Leicester and Warwickshire.

In addition, we also collect road casualty data supplied by the Police through the STATS19 reporting system. This data provides detailed statistics about personal injury road accidents, vehicles and casualties, which enables us to identify priority sites on our network and respond accordingly. This is also important for our network management duty, as it enables us to work to prevent the risk of road closures or delays resulting from road traffic accidents.

Moving forward, we will increasing seek to utilise new technology to gather and deliver traffic data and intelligence, in smarter and more cost effective ways. For example embracing the latest artificial intelligence technology in our new camera equipment, which can automatically detect and classify road users, including pedestrians and cyclists at point of capture.

2.5.2 Transport Modelling

To proactively manage the impact of future traffic growth on our network, we need to understand the scale of growth and where the impact is likely to occur. This is done through using transport models, which use existing data and approved methodologies to forecast traffic volumes and movements for future years.

We are acknowledged as a leading highway authority in the field of transport modelling, regularly providing advice to other local authorities around England and presenting at industry conferences. We use a range of different types of models, allowing us to forecast network usage and performance at different scales and levels of detail, appropriate to the specific circumstances and requirements. Each of these models (or types of model) and their uses are summarised below.

2.5.2.1 Strategic Modelling

Our principal forecasting tool is the Pan Regional Transport Model (PRTM) - a strategic transport model for Leicester, Leicestershire and the wider midlands region. The PRTM is derived and extended from our previous Leicester and Leicestershire Integrated Transport Model (LLITM). PRTM enables us to forecast future demand for usage and performance of the road network (and other modes of travel), taking account of planned development, economic and population trends, travel behaviour and committed transport improvements. By doing this it broadly identifies where there are existing congestion problems and where there are likely to be problems in the future.

The following highlights some of the key areas where we have used PRTM (and previously LLITM) to generate evidence:

- testing of conceptual potential transport policy interventions such as road tolling and passenger transport fares, where the impact of travel cost changes on modal choice can be assessed;

- conceptual scheme identification and development, e.g. early option assessment of possible schemes to support housing growth in Melton Mowbray;

- major scheme bids, such as the Melton Mowbray Distributor Road;

- transport assessments and mitigation testing for major developments such as the Lutterworth East Strategic Development Area (SDA) and the West of Loughborough Sustainable Urban Extension (SUE);

- provision of evidence to inform and support district councils' Local Plans;

- provision of traffic data to support 'area wide' environmental assessments;

- helping to identify area wide traffic management issues e.g. as part of town centre transport strategies;

- helping to identify impacts of proposed traffic management measures during construction of major strategic schemes, such as HS2.

We will continue to use PRTM to assess the high-level impact of policies, developments and infrastructure, as appropriate.

We will also seek to continue to develop our PRTM to take account of new proposed development and changing forecasts to ensure it remains fit for purpose and continues to provide the strategic evidence we need to understand how the network operates, both now and in the future.

If you require further information on the PRTM, or require a copy of the RPTM forecasting report, please contact Leicestershire County Council's Customer Service Centre.

2.5.2.2 Town / Corridor Wide Modelling

Whilst PRTM is the most appropriate tool for forecasting traffic flows and impacts across the county network as a whole, in some instances there is also a need to understand the network at a more detailed level, over relatively smaller areas such as market towns or specific corridors and routes.

As a result, we have invested in a suite of 'microsimulation' models for our county towns; where the resulting ability to carry out relatively more detailed traffic assessments is likely to be of greatest benefit to future network management.

The following highlight some of the key areas where we have used micro-simulation to generate evidence:

• development of town centre strategies such as Melton Mowbray and Market Harborough;

• supporting the development of major junction and corridor improvement schemes;

• transport assessments and mitigation testing for development proposals in and around the main county towns, including 'smaller' sites of insufficient scale to test using PRTM;

• testing impacts of road works and refining traffic management proposals, such as road closures;

• testing air quality mitigation schemes in Air Quality Management Areas (AQMAs) on behalf of district councils;

• production of visuals for public presentation/promotion, such as bus corridors, etc.

We will continue to use and develop our microsimulation models to provide the evidence we need to understand how the network operates at a more detailed level, both now and in the future. This potentially includes developing microsimulation models for other parts of the county where there is a strong case and funding is available.

2.5.2.3 Environmental Modelling

Going forward we will look to utilise and develop our suite of transport models above, to produce and monitor a range of environmental outputs and indicators through use of specific environmental modules.

2.5.2.4 Junction Modelling

At the most detailed level we will continue to use industry standard modelling tools (ARCADY, PICADY and LINSIG), to assess the capacity of existing, or proposed, junctions e.g. roundabouts, priority junctions and signalised junctions. This will help us to understand the impact of a change in traffic patterns/volumes.

2.5.3 Study Work

Congestion is caused by many different factors, as explained in the following chapters. Unfortunately, without appropriate interventions congestion is predicted to get worse as the amount of traffic on our roads increases.

Because of the different factors that contribute to congestion, there is no single best method to manage it. The combination of measures which will work best to ease congestion will depend upon the individual location, causes of congestion, and needs of the users of that particular part of the network. Therefore, we need to continue to develop our understanding of the network, the way it is used and how it may operate in the future, so that we can use the most appropriate and effective interventions to tackle congestion.

To improve our understanding of how our network functions and the impact that congestion has on it, we will continue to undertake a programme of transport studies. These studies will largely focus on the county towns and larger urban areas. The studies will help us to understand how the local network operates, what factors impact upon it and what interventions could be made to improve the performance and reliability of the road network. The evidence which they provide will be essential for developing bids for funding from central government for future improvement schemes.

The evidence generated will help us to develop strategies to mitigate existing congestion and manage future demand. These may include;

- long-term programme of minor traffic management interventions, aimed at improving network capacity, reliability and resilience;

- packages of sustainable transport measures aimed at tackling congestion (through reduced car use); in some cases, non-physical measures may be appropriate, such as publicising walking and cycling routes or adjusting bus timetables to encourage active and sustainable travel.

- larger and more strategic interventions such as a new junction, roundabout or road, which will require land acquisition or financial support from external funding;

Where appropriate, the studies will be delivered in partnership with local district councils. For example, we have recently developed a Transport Strategy for Market Harborough in partnership with Harborough District Council.

2.6   Engagement

The principal purpose of network management is to ensure that our network takes account of the needs and expectations of individuals, organisations, groups, communities and partners. To gather insight and business intelligence, promote community resilience and involve people in our services it is essential that we engage and communicate in a manner that attracts interest, involvement and cooperation.

Key stakeholders and partners include, but are not limited to:

- Road users (pedestrians, cyclists, horse riders, bus users, disabled users, motorists)
- Elected members / District authorities
- Parish councils / Local communities
- Businesses / Bus and rail operators
- Emergency services / Utility companies
- Representative road user groups
- Neighbouring local authorities
- Other transport authorities

The information we receive from stakeholders and partners (by phone, email, letter or via online scheme consultation pages and our dedicated problem / defect reporting form) can take many forms, including:

- responses to formal consultation (for example consultation on individual schemes, studies or policy documents);

- ad hoc feedback/enquiries/requests received directly from local elected members, communities, businesses, or other stakeholders;

- proactive public engagement with parish councils and local communities;

- feedback received indirectly via district authorities and parish councils.

The majority of this information is initially handled by our Highways Customer Service Centre, offering a point of contact for all advice and information. Feedback and enquiries are then managed within our 'Confirm' Highway Management System (HMS), which has been operational since 2005.

Generally, most feedback, enquiries and requests we receive regarding network performance relate to parking, road works, traffic congestion and queues. Whilst the nature of these can often be more complex and involve wider social, economic and environmental concerns, the information we receive provides evidence which is vital to help us understand how our road network is performing and how stakeholders experience it.

One area where we have adopted a particularly proactive approach to engagement is through our work with parish councils and local communities. Working closely with parish councils and local communities alongside our elected members we have set up a new dedicated webpage to provide environmental and transport news, key messages and up-to-date information. The page also provides useful guidance and work schedules, together with being the archive for reference information such as past newsletters and presentations etc. By encouraging and enabling two-way conversations with parish councils and communities we can improve relationships and help local areas maximise the opportunities available to them.

To ensure that we meet our network management duty we will continue to engage with all parties, as appropriate, whilst exploring new forms of interaction and communication. We will also continue to gather information using our established HMS to help capture, store and manage this information. In doing so we will:

- identify issues that adversely affect the performance of the network;

- develop scheme options, refine policies and understand level of support for proposals;

- supplement the data we gather as part of study work and ensure study outcomes reflect the current and future needs of the local community and other users of the network;

- take an evidence-based approach to optimise benefits for all users;

- identify opportunities to meet the needs and expectations of road users and stakeholders;

- improve our ability to manage risk and make informed network management decisions, ensuring that our activities take account of users' experiences of our network.

2.7   Supporting Principles (SP)

We will operate in line with the following supporting principles (SP) for the work that we do to understand our network. This will help to ensure that we continue to meet our network management duty whilst having due regard to our other obligations, policies, objectives and budgetary constraints.

▶ SP 1

The County Council will continue to develop a robust evidence base which considers a wide range of transport, economic, social and environmental intelligence:

- *to improve our understanding of how the network is used and how it performs now and in the future at a local and wider strategic level;*

- *to understand the impacts of growth and influence the nature and location of growth;*

- *to make informed decisions on the development of future policy interventions, priorities for investment, scheme development and the management of road/street work activities.*

▶ SP 2

The County Council will engage and consult with stakeholders, as appropriate, to understand expectations and support our understanding of the network and its usage

▶ SP 3

The County Council will continue to take account of a number of network classifications and hierarchies to help make informed network management decisions.

▶ SP 4

The County Council will continue to review and develop our network management approach across all service areas, seeking ways of working more efficiently.

3. Planning and Development Management

3.1 Introduction

As discussed in previous chapters, we face many challenges over the coming years, including how to accommodate the development required to enable economic and population growth throughout the County whilst maintaining a safe and efficient road network.

This section of the Network Management Plan sets out the way in which Leicestershire County Council (LCC) as the Local Highway Authority (LHA) will continue to seek to meet these challenges (so far as is reasonably practicable) within the confines of Government planning policies and the network management duty. It details the strategic approach the LHA will take regarding planning and development, to support future economic and population growth.

For the purposes of the Network Management Plan, planning and development are defined as follows:

Planning
Identifying and planning for strategic development needs through Local Plans and associated development plan documents

Development
Assessing individual sites to identify their impacts and any mitigation which is required, as part of our statutory role in the planning application process

3.2   Roles and Responsibilities

The statutory duties of the LHA with regards to the planning and development process are set out in the Town and Country Planning (Development Management Procedure) Order 2015.

Planning responsibilities in two-tier authority areas such as Leicestershire are split between the district and county councils as set out below.

District and borough councils:

• develop strategic plans, such as Local Plans, for their areas;

• are the Local Planning Authority (LPA) for planning applications for sites in their areas, with some exceptions (see below).

County Councils:

• re statutory consultees for Local Plans;

• as the LHA are statutory consultees for any planning applications which have the potential to affect the highway network;

• are the LPA for mineral and waste planning applications;

• are the LPA for planning applications promoted by Leicestershire County Council;

• are the Lead Local Flood Authority.

Further guidance regarding the involvement of LHA's in the planning and development process is set out in the National Planning Policy Framework (NPPF). This details how the impact of new developments should be assessed and considered throughout the planning process.

The NPPF makes specific reference to safety and the need to identify whether the impact of additional traffic on the existing network will be severe. However, it deliberately does not define "severe", as the relative severity of impacts will differ depending upon the individual circumstances of each development. It should be noted that site promoters[4] can only be required to mitigate the impacts of their own developments. They cannot be required to mitigate existing c oncerns.

As a statutory consultee we give advice on planning applications and must do this within the planning policy framework laid down by government and the other relevant local and national standards and guidance. It is important to note that it is not within our remit as a LHA to comment on the air quality impact of development proposals. Within the planning and development process it is the responsibility of LPA's for assessing the impact of development on air quality and ensuring that it is mitigated.

Ultimately, it is for the LPA to decide whether to accept our advice and to determine the acceptability of development proposals and whether to grant planning permission.

As the LHA, there are cases where we identify that new or amended infrastructure is required to support development, either strategically through a Local Plan or through developer conditions/ obligations advised as part of a planning permission. In these situations, we are an important facilitator of that infrastructure.

We also have a role in the planning process as the Lead Local Flood Authority. Our responsibilities in this role are discussed in Chapter 5, Highway Management, as part of our work to manage severe weather events including flooding.

3.3 Key Aims

The LHA's key aims when fulfilling both its wider strategic role, and its network management duties and responsibilities within the planning arena are:

• facilitate development required to support economic and population growth;

• maintain road safety;

• maintain an efficient reliable road network for all users;

• ensure suitable mitigation of traffic impacts of new development, funded or delivered by developers as appropriate;

• reduce demand for travel (particularly by private car);

• support sustainable development and achievement of net zero carbon targets;

• ensure development proposals are supported by credible and robust transport evidence.

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[4] For the purposes of this document "site promoters" refers to any person or organisation which submits a planning application or promotes development of a site.

3.4 Planning and Development in Leicestershire

3.4.1 Planning

As the LHA, we are a statutory consultee in the planning process. Our role is to ensure that the transport impacts of strategic development (including the cumulative impacts of multiple smaller sites) are properly considered during the development of Local Plans and other Strategic Planning Documents (SPDs), so that development is brought forward in a way that doesn't have a detrimental impact on the road network (as set out in the NPPF). Where sites allocated in Local Plans or other SPDs will have an impact on the road network, we will continue to seek to secure appropriate mitigation to support the future operation of the network.

By ensuring that Local Plans and their associated Infrastructure Plans include appropriate infrastructure improvements, we will continue to meet our network management duty and deliver a safe and efficient road network for the benefit of all current and future users.

Leicestershire continues to experience high traffic volumes in many areas, and future population and economic growth is likely to result in additional traffic pressures. We recognise that LPAs within (and adjoining) Leicestershire face major challenges in meeting future housing and employment needs without increasing congestion and reducing air quality. Our aim is to encourage development of the right size in the right location, with the right mitigation. This should support economic growth, reduce carbon emissions, promote sustainable transport and reduce car use and congestion on our road network.

A planned approach to dealing with growth is the best basis from which to address this challenge. The Leicester and Leicestershire Strategic Growth Plan to 2050 (which was jointly prepared and approved by all LPAs, LHAs, and the LLEP), provides a strategic and co-ordinated approach to spatial plans and strategic infrastructure provision. This forms part of the strategic framework within which we expect LPAs to develop their Local Plans, and will be part of our considerations when we are consulted on any SPD.

We work closely with all LPA's within the city and county, providing transport related input into Local Plans when they are being drafted. Using the Pan Regional Transport Model (PRTM) enables the County Council to provide strategic transport related land use evidence to support and inform Local Plans.

We will also continue to work with district and borough councils and other stakeholders at both strategic and local levels to encourage the delivery of safe, suitable and sustainable development in the most appropriate areas across Leicestershire.

3.4.2 Development

3.4.2.1 Assessing the Impact of Proposed Development

Development management is the process for assessing and mitigating the impact of new development. The LPA seeks our comments as a statutory consultee for applications which appear likely to have an impact on the road network.

Our Highway Development Management team provide responses on behalf of Leicestershire County Council as LHA to over 2,500 planning applications, and 350 pre-application enquiries per annum.

The specific circumstances under which LHAs must be consulted are set out in the Town and Country Planning (Development Management Procedure) Order 2015.

Under planning legislation, we are only able to refuse applications if the residual cumulative impacts on the road network would be severe, or on road safety grounds in our assessment of planning applications.

All applications are assessed on the basis of the risk that they are likely to pose to drivers and other people using the road network. This includes considering safety data, such as the number and nature of any road traffic collisions, existing and future traffic volumes, road geometry, and the presence of vulnerable locations such as schools. In assessing applications, we follow various local and national policies and guidelines, including the NPPF, LTP3, Manual for Streets, the Design Manual for Roads and Bridges, and our Design Guide.

This list is not exhaustive. We encourage site promoters to work with us at an early stage of the process to try to resolve highway issues before they submit their planning applications (pre-application engagement). By agreeing a way forward between both parties, we can minimise or resolve any highway concerns and hopefully avoid the need for us to object to the development.

3.4.2.2 Mitigating the Impacts of Growth

In assessing planning applications, we need to support the aims of a range of local policies on economic growth, including the Leicester and Leicestershire Enterprise Partnership (LLEP) and our own Strategic Growth Plan, whilst safeguarding the future operation of our road network.

We appreciate that growth can increase the number of vehicles on our roads, and cause congestion where the additional traffic has not been accommodated adequately. If the traffic impacts of development are not well-managed, then people may be unable to easily access development due to congestion, developments may not be successful, and economic growth may stall. The road network will not operate efficiently, and we will be failing in our network management duty.

We require site promoters to provide credible and robust transport evidence to identify what mitigation measures may be necessary to accommodate the proposed growth. The County Council's current Highway Design Guide sets out when a Transport Statement (TS) or Transport Assessment (TA) is required, and what should be considered when drafting transport related assessments and statements to be submitted in support of planning applications in Leicestershire. Where a TS or TA is required, site promoters must use appropriate transport models for the quantum of proposed growth. The exact models to be used, and what area they should cover, will vary depending upon the individual planning application. Our Highway Development Management team can provide guidance on the modelling requirements for specific applications at pre-application stage.

In accommodating growth when exercising our network management duty, we will continue to seek to maintain the safe, effective and efficient operation of our transport system. To facilitate this, site promoters are also required to ensure development proposals are designed fully in accordance with the County Council's current highway design guide, and to obtain the necessary technical approvals.

Our Infrastructure Planning team are responsible for technical approvals in connection with third party development through Section 38 and Section 278 agreements, and Section 184 licenses. They work with our Highway Development Management team, site promoters, and site promoters' consultants throughout the planning process to ensure that submitted designs comply with Leicestershire Highway Design Guide, offering guidance and support where necessary so that technical approval can be achieved. This may include consideration of road adoption requests and liaising with parish, district, and borough councils where appropriate.

Where it is identified that the transport impacts of growth must be mitigated, we will advise that suitable conditions be attached to any grant of planning permission. However, under planning legislation, LHAs do not have any power to force conditions to be applied to planning permission or to enforce them once permission is granted. If it appears that planning conditions intended to support our statutory functions, including the network management duty, are not being adhered to, we raise this with the LPA and request that the conditions are enforced.

3.4.2.3 Managing Delivery of Development and Associated Infrastructure

It is important to recognise that construction of development and associated infrastructure can affect the safe and efficient operation of the road network, albeit temporarily.

Whilst managing the temporary impacts of development and associated infrastructure works can be challenging, we aim to reduce disruption to the road network, its users and the local community so far as is reasonably practicable, by working with site promoters, to seek not only effective and timely mitigation of the highway and transport impacts resulting from occupation of the new development, but also mitigation of impacts during its construction. This includes:

• advising LPAs to include conditions/obligations on the grant of any planning permission requiring submission of construction traffic management plans (as set out in the supporting principles, below);

• advising LPAs to include specific planning conditions regarding the phasing of the development and triggers for mitigation, ensuring that site promoters are able to undertake required works in an efficient manner whilst minimising disruption to the road network;

• requiring all works promoters associated with development to apply for permission from the LHA for road space, to undertake works which affect the operation of the road network. (Technical approval will provide permission to work on the road network but will not guarantee road space availability);

• encouraging promoters to work with their design consultants and contractors to consider ways to minimise the impacts of construction work and construction traffic on the road network and local communities from the earliest practicable opportunity;

• encouraging site promoters to refer to our Road and Street Works Framework Guide, which sets out what we expect from all parties involved in the delivery of works on the road network, including details regarding our requirements for movement of construction traffic on our network.

At the same time, when planning, scheduling and managing planned activities on the road network, we will ensure site promoters and their contractors have the necessary time and space to support the safe and efficient implementation of their works on the network and if necessary to the services running underneath it.

We will also endeavour to apply the same standards and approaches to our own activities as we do to others, demonstrating parity between standards for others and ourselves (for instance our own contractors will be subject to the same restrictions and directions as third party works promoters).

In return, we will expect that when planning activities on the road network, all site promoters will engage with us as early as possible to ensure that traffic disruption is minimised, and the efficient operation of the road network is supported at all stages of the development.

Before approving road space bookings, we will expect to see evidence that site promoters have considered and understood the breadth / impact of their proposals on business, the local community and all road users, including passenger transport and adequately mitigated any adverse avoidable impacts before they are implemented.

We strongly encourage site promoters to engage with our Highway Development Management and Infrastructure Planning teams regarding the design and construction of works on the road network at the earliest opportunity, to ensure that any impacts and appropriate mitigation required can be identified prior to a planning application being submitted.

3.5   Supporting Principles (SP)

We will operate in line with the following supporting principles in relation to work we do around planning and development, to ensure we continue to meet our network management duty whilst having due regard to our other obligations, policies, objectives and budgetary constraints.

▶ SP 1 ....

In planning for future population and economic growth and the development required to support it, the County Council will seek to ensure that our road network continues to operate safely and perform as efficiently and reliably as possible.

▶ SP 2 ....

To ensure that new development (once built) does not adversely affect the movement of traffic on our network (including the ability of traffic to access the new development), we will:

- *require developments proposed through planning applications to be in accordance with our Design Guide and other appropriate planning and highway policies;*

- *expect and encourage site promoters to engage with us at the earliest possible stage.*

▶ SP 3 ....

Within the planning system the County Council, as the Local Highway Authority, will:

- *continue to work with district and borough councils and other stakeholders at a strategic level to encourage the delivery of sustainable development in the most appropriate areas;*

- *encourage promoters of development to provide credible and robust transport evidence to demonstrate the potential impact of their proposals and any mitigation measures and seek to assist them to achieve this through the provision of guidance and advice (e.g. at pre-application stage);*

- *assess the scale of impacts of proposed development on the road network using a case-by-case, balanced, risk-based approach which incorporates all available evidence, in line with NPPF;*

- *seek to secure funding from site promoters for suitable infrastructure across all transport modes, where the planning system allows, to reduce the adverse impacts of development proposals on the road network;*

- *ensure that third party improvements or additions to our network are delivered in accordance with our Highway Asset Management Policy and Strategy and do not place unnecessary financial burdens on the authority with regards to future asset maintenance.*

▶ SP 4

Limit the demand for travel, particularly by private car, by resisting development proposals that:

- *are located in inappropriate locations (e.g. residential developments with poor access to employment or local facilities);*

- *would have a severe impact on:*

  - *routes to major employment sites;*
  - *routes and linkages to major retail sites;*
  - *main commuter routes;*
  - *core bus network routes;*
  - *areas of existing congestion;*
  - *routes or junctions with recorded safety issues (personal injury collisions);*
  - *are in areas which don't have adequate walking, cycling and passenger transport facilities, unless these will be provided by the developer.*

▶ SP 5

Ensure that developments which will result in a high number of freight movements (e.g. warehousing and distribution) are located in appropriate locations, which:

- *minimise the impact of freight movements on communities, and*

- *direct freight vehicles to use routes which are suitable for large or heavy vehicles, such as those which do not have height or environmental weight restrictions.*

▶ SP 6

To minimise the short-term disruption caused by construction of new developments, including associated works on or affecting the road network (such as access improvements or service connections) and movement of construction traffic, we require site promoters to follow the principles set out in our Road and Street Works Framework Guide.

▶ SP 7

Seek to minimise the short-term impacts of construction traffic on the safe and efficient operation of the road network and on local communities by requiring site promoters to submit construction traffic management plans which use the most appropriate routes available, for example by:

- *using the lorry routing network wherever possible;*

- *giving first consideration to higher-quality routes such as 'A' roads and the MRN as per the local road network hierarchy set out in Chapter 2;*

- *avoiding routes that pass-by vulnerable locations wherever possible, e.g. schools;*

- *considering the use of haul roads.*

4. Highway Management

4.1 Introduction

Primarily, the network management duty is about dealing efficiently with traffic on the network, both now and in the future, and the various activities that are causing or have the potential to cause congestion or disruption to the movement of traffic.

This chapter deals with the day to day management of activities on the road network.

For the purposes of the NMP this involves:

Co-ordinating and facilitating the activities of road works promoters

Co-ordinating and facilitating the activities of street works promoters

Managing unplanned incidents, such as road collisions, emergency repairs, and severe weather events

Coordinating and managing planned events (e.g. race events, markets and sporting events

Implementing temporary traffic management, including diversion routes

Dealing with obstructions on the network (skips, café tables, chairs and advertising boards)

Undertaking our own planned and reactive highway maintenance works

Each of these are explored in more depth within this chapter.

4.1.1 Demonstrating Parity

The network management duty not only emphasises the importance of these issues, but it also emphasises the need for highway authorities to demonstrate parity between how their own work, and the works of others, are delivered.

We therefore need to ensure that we apply the same standards and approaches set out in this chapter, to our own activities as we do to others. Being able to demonstrate parity between the standards and approaches applied to our own activities (such as highway maintenance) and those applied to third-party activities is critical to maintaining effective working relationships with our partners and stakeholders.

4.2 Planned events

4.2.1 Road and Street Works

Works by utility companies and others with apparatus in the street ("street works") and works carried out by, or on behalf of, highway authorities for road purposes ("road works") are necessary in order to provide and maintain essential services and a road network on which we all depend.

Nevertheless, there are costs associated with road and street works, including:

- the financial cost of the actual works being undertaken;

- the economic cost, in terms of delays and impacts on commuters and businesses, and on the highway asset;

- the social cost to residents, in terms of delays and amenity impacts (noise, air pollution etc).

One of the key ways in which we attempt to minimise these costs and keep the road network flowing and working efficiently in line with our network management duty is through better planning, management and co-ordination of network activities. This is a vital element of our Network Management Strategy.

4.2.2 The Highway Permit Scheme

One of the key mechanisms provided within the Traffic Management Act 2004 (TMA) is to allow highway authorities to introduce a 'Permit' scheme for authorising and controlling street works and road works.

We introduced our Highway Permit Scheme on the 2nd February 2018, replacing the notice scheme that had been in place prior to this date. More details can be are found at LCC's Highways Permit Scheme.

The scheme legally obliges anyone who wishes to perform or carry out an activity (as defined by the permit scheme) on the road network to obtain a permit before they start that activity. Permits are typically only applied for and issued to utility companies and our own contractors. For details of how developer works (i.e work through Section 38 and Section 278 agreements, and Section 184 licenses) are managed see Chapter 3.

Permit applications are normally only accepted through an electronic service called Street Manager. The scheme is managed by our Network Management team, who will then grant or refuse a permit, including adding any conditions to the works.

There are times when utilities companies and others may need to carry out works of an urgent or emergency nature that need to be undertaken immediately (to end or prevent circumstances, either existing or imminent, that might cause damage to people or property). In these cases, a permit is still required, and we expect the works promoter to apply for a permit retrospectively.

The specific objectives of our Highway Permit Scheme are as follows:

• To minimise disruption and inconvenience across the county by encouraging good practice, mutual and collaborative working arrangements, and a focus on co-ordination.

• To optimise the duration of activities and reduce unnecessary occupation of the network.

• To allow work promoters the necessary time and space to complete their work safely and expediently. To ensure the safety of those using the street and those working on activities that fall under the scheme.

• To provide a common framework for all works promoters who need to carry out their activity in the county.

• To establish consistency in working practices across the county and ensure parity of treatment for all promoters of activities covered by the scheme, particularly between statutory undertakers and highway authority works and activities.

• To promote early engagement between promoters and the County Council, and encourage forward planning and visibility of long term programmes to ensure activities are designed and planned to minimise their adverse impact on all road users, and to allow the County Council to make early informed risk based decisions with regards to the co-ordination and management of activities on the road network (risks around when, how and where the works take place).

• To emphasise the need to minimise damage to the structure of the road network and infrastructure contained therein.

• To work with all promoters to improve the quality and timeliness of information to road users about planned works and those being undertaken and to explore innovative ways of working.

The scheme has provided additional powers to assist delivery of our statutory network management duty under the TMA and given us greater influence over how and when activities are carried out, however:

• It is still for promoters to fully consider the impact of their works and adequately mitigate any adverse impacts before they are implemented. As such, the prime responsibility for planning, supervising and carrying out individual activities falls on the works promoter.

• The scheme allows for works programmes and practices to be adjusted to ensure that the statutory objectives of the co-ordination provisions are being achieved.

• The scheme promotes the provision of timely, clear, accurate and complete information between promoters and the County Council as the Permit Authority.

As required by Traffic Management Permit Scheme (England) (Amendment) Regulations 2015, we carry out regular evaluation of our scheme to demonstrate whether it is achieving its objectives ,see LCC's Highways Permit Scheme.

4.2.2.1 Lane Rental Schemes

While permit schemes provide a strong incentive to avoid works overrunning beyond the end of the reasonable period, they do not provide a similar incentive to reduce durations or disruption to road users within the agreed reasonable period.

A Lane Rental Scheme allows a local highway authority to charge works promoters for the time that street and road works occupy the road network. Charges are usually focused on the very busiest streets at the busiest times and therefore incentivise work outside of peak times.

The power for LHAs to implement and operate a lane rental scheme is subject to approval by the Secretary of State for Transport.

Going forward we will give consideration to a lane rental scheme to reduce occupation on our most traffic sensitive and economically critical parts of the county road network (our Traffic Sensitive Network and Resilient Network are identified in chapter 2).

4.2.2.2 Co-ordination

The Traffic Management Act 2004 places great emphasis on the co-ordination of works on the road network.

Our co-ordination is enhanced by regular meetings between ourselves and works promoters such as the utility companies. This enables forward planning and co-ordination of all planned works that are likely to have a significant impact on the road network. The aims of these meetings are to:

• proactively seek to encourage collaborative working opportunities between works promoters;

• identify potential problems or conflicts;

• identify potential opportunities to coordinate works; and identify strategies to minimise adverse impacts.

There are many competing demands on the road network and these must be balanced, to ensure that the network continues to work safely and efficiently. In undertaking our co-ordination role, we consider the needs of all parties, including works promoters and their customers, businesses, road users and residents and manage the appropriate balance between the potentially conflicting interests.

However, co-ordination, is a two way process; we will analyse information from works promoters and consider any changes that are required to minimise disruption, works promoters must provide accurate and timely information on what is proposed and when it is happening, or what is currently happening, before a consensus can be reached. Crucially all parties must cooperate to achieve minimum disruption.

Often, it may be necessary to compromise, to support the competing needs of all parties.

4.2.2.3 Notifying People/Businesses/Bus Operators Affected by Road Works

The notification and communication of road works is an essential part of our network management duty.

The County Council actively promotes the use of One.Network platform to plan, monitor, communicate and analyse traffic disruptions. This acts as a single point of information in relation to the works taking place on the network. Works promotes are responsible for ensuring that stakeholders such as parish and district councils, businesses, local residents and passenger transport operators are provided with timely, clear, accurate and appropriate information.

Where works have the potential to be disruptive to residents, businesses or road users we will expect work promoters to provide advanced notice to nearby households or businesses or to provide advance signs for traffic. Further details can be found in our Road and Street Works Framework Guide.

We understand that road works on the road network can also cause service disruption and delays to passenger transport services.

In accordance with our Passenger Transport Policy, we are committed to supporting commercial operators in delivering high quality services that meet people's needs. This includes helping to ensure that buses do not suffer unduly from traffic congestion and planned road works, so that they can operate punctually and reliably. Our strategy for dealing with service disruptions for passenger transport services can be found in our Passenger Transport Strategy.

The notification and communication principles discussed in this section apply to both third party works promoters and our own works. Being able to demonstrate parity between the standards and approaches applied to our own activities and those applied to third-party works is critical to maintaining effective relationship with other works promoters.

4.2.3 Major works

4.2.3.1 Overview

In order to support economic and population growth, significant investment is required nationally in major infrastructure and services.

We must play our part in facilitating this growth and in undertaking our network management duty, provide the necessary time and space on our road network to support the safe and efficient implementation of major works to the network and the services running underneath it.

This includes facilitating:

- major road infrastructure delivered by ourselves (e.g. the Melton Mowbray Distributor Road and A511 corridor scheme);

- major road infrastructure delivered by developers to provide access to a new site;

- gas, electricity and water service connections and provision of new network infrastructure delivered by utility companies on or under the road network;

- road or utility works on neighbouring local highway authority roads and on the motorway and trunk road network;

- other works adjacent to the road network, which have potential to cause an impact on the county road network (e.g. works by Network Rail, or developers).

Due to their scale, these works have the potential to cause adverse consequences on congestion, the safety of the travelling public, journey time reliability and on the economy in Leicestershire and the wider country.

It is essential therefore, that major works are carried out in a planned and coordinated way and delivered, where possible, in partnership.

One example of a key infrastructure project, which will have an impact on the road network in Leicestershire and the wider country is High Speed Two.

4.2.3.2 High Speed Two (HS2) Phase 2b

HS2 is currently the largest rail infrastructure project in Europe and is a key piece of new rail infrastructure for the UK, which will bring many economic benefits and growth opportunities.

The route of phase 2b was confirmed in July 2017, running through the north west of the county. Although there are no HS2 stations in Leicestershire, it is possibly the most significant transport infrastructure project in Leicestershire since the M1 and East Midlands Airport opened in the mid-1960s and hence will present a significant network management challenge, particularly during the construction phase.

The County Council will continue to seek to mitigate the impacts caused by the construction and operation of the new railway. This will include those aspects that affect network management, for instance traffic management plans (diversion routes, closures and use by construction traffic), roadwork methodology and duration, drainage design and works methodology for temporary and permanent works affecting ordinary watercourses, detailed design and material specification.

We have a dedicated HS2 team in place to work proactively with HS2 Ltd to maximise the opportunity to reduce construction impacts on county road network. Further details can be found here at Leicestershire HS2.

Going forward we will continue to engage with HS2 Ltd to seek to minimise disruption to the road network during construction of the railway. We expect HS2 Ltd, as far as is reasonably practicable, to:

- provide evidence to demonstrate the potential traffic and transport impacts of construction proposals and any mitigation;

- design all highway construction works to appropriate standards;

- carry out construction in such a way as to safeguard the safe and satisfactory operation of the network;

- ensure adverse impacts are minimised through the provision of suitable mitigation measures;

- minimise levels of road-based construction traffic;

- reduce workforce related car movements e.g. by the use of workforce travel plans and sustainable modes of transport;

- engage with us and other stakeholders, including passenger transport operators, to provide timely, accurate and appropriate information about construction works;

- routes regularly used by emergency vehicles, particularly A&E ambulances, to be kept open and congestion free at all time;

- maintain public access, including routes for pedestrians and cyclists;

- return all local and strategic roads, which have to be used for construction traffic, to at least their original state;

- work with us to ensure that there is no impact on our ability to meet our statutory duties and apply our statutory powers, namely to:

  - maintain the local road network,

  - secure and facilitate expeditious movement of traffic on the local road network,

  - regulate activities of road users,

  - manage works, in respect of our Permit Scheme, road space bookings / New Roads Street Works Act (NRSWA) co-ordination and road closures.

4.2.4 Events - Street Markets, Music and Sporting Events etc

Street markets, sporting events, music festivals, carnivals and parades can all support the local economy. However, they also have the potential to be disruptive and cause congestion. We are committed to supporting these planned events, whilst balancing the potential positive economic and social benefits against potential negative impacts on the road network. We do this by working with our partners to develop and maintain robust processes for the co-ordination and management of planned events, alongside road works and other activities on our road network.

When helping to plan events we ensure that:

- arrangements are put in place to minimise their impact on the road network;

- any required changes to parking restrictions and enforcement costs are identified;

- there is early communication with external organisations, to aid co-ordination;

- temporary amendments to the network hierarchy are identified and prepared if required;

- changes to passenger transport provision can be prepared;

- publicity about the event is prepared and circulated in good time;

- appropriate levels of management are agreed and implemented.

After the event has finished, we review the lessons learnt from planning, managing, and implementing the event. This ensures that we continue to improve the way that events are managed and minimises the negative impact of future events on the road network.

A negative effect of events, such as street markets, festivals etc., can be illegal or inconsiderate parking. We endeavour to ensure that any potential parking issues associated with a planned event are identified and mitigated through advance planning and include parking as part of our lessons learnt review.

4.3   Unplanned events

4.3.1   General

Unplanned events and incidents on the road network, such as emergencies, road traffic collisions, breakdowns, road defects and unexpected utility repairs (for example burst water mains), are difficult to predict in terms of nature, duration, and impact on the road network.

However, strategies can be put in place to minimise the impact of these unplanned events. We will work with appropriate partners, such as the emergency services, statutory undertakers, the Environment Agency, local newspaper and radio, Area Traffic Control, parish councils and local community volunteers to seek to minimise the impact of unplanned events.

This will enable us to continue to:

- minimise response times;

- provide effective traffic management;

- keep routes clear for emergency services;

- make the incident area safe for road users;

- inform the travelling public of incidents and appropriate diversion routes;

- repair or remove hazards, where appropriate.

Unplanned events that affect the road network can include such things as road traffic accidents, debris or spillages, significant highway or utility apparatus failures requiring emergency works, and severe weather events such as flooding, high winds, high temperatures, and snow/ice.

The random nature and location of most of these incidents means that they can be difficult to deal with. However, we aim to manage these incidents as quickly and efficiently as possible, helping to contain and mitigate their negative impact on the road network.

4.3.2   Incidents (e.g. road traffic accidents and emergency works)

Incidents or hazards that affect the road network can be reported to us 24 hours a day, 365 days a year, using our website or by telephone:

- during normal office hours (Monday - Thursday 8.30am - 5pm,
  Friday 8.30am - 4.30pm) - Customer Service Centre (CSC) - Tel: 0116 305 0001
  - email highwayscustomerservices@leics.gov.uk

- outside of normal office hours - the Highways Duty Officer - dial the CSC number above and listen to the answerphone message for emergency contact details.

- When managing unplanned incidents, we will continue to seek to ensure that the actions we take are well planned and effectively coordinated and managed.

We will do this by:

- working with our partners to develop and maintain contingency plans. These support the management of unplanned events, where there are safety implications and/or where they would result in significant disruption and congestion on the road network. We are members of the multi-agency Leicester, Leicestershire & Rutland Local Resilience Forum (LRF), which includes the emergency services, the NHS and other local authorities. The LRF works as a partnership to prepare for, respond to and recover from emergencies.

- ensuring local processes and procedures are followed when dealing with routine emergencies that happen on a day to day basis on the road network, such as road traffic collision's (RTCs), as well as emergency situations/events like flooding, excessive snow, etc. It promotes effective co-ordination between the various agencies involved in managing road traffic accidents and emergency works, and any other affected parties, to minimise disruption to the network and keep traffic flowing as efficiently as possible. Our local processes and procedures also support the LRFs major incident planning.

- maintaining good communication with people who may be affected by an incident is a key part of our work to keep the network flowing efficiently. For example, where appropriate, we pass information to the Area Traffic Control Centre – Leicester City Council, who provide travel advice to the public via local radio stations and take advantage of social media sites such as Twitter to reach people before they start their journeys. We periodically review how we communicate, to ensure continued effectiveness, make best use of new technology etc. We also share information on major incidents with key partners and stakeholders, as appropriate.

4.3.3 Severe Weather

Our road network faces continual pressure from the impacts of weather. Due to climate change, incidents of severe weather events are expected to increase in number and intensity over the coming years and decades.

Severe weather can cause serious disruption to the road network and have a negative impact on the economy. We are committed to ensuring that our road network is as resilient as possible to the impacts of severe weather events. Severe weather can include snow and ice, high temperatures, flooding, and high winds.

Evidence helps us to understand how our network operates now, and how it may operate in the future. This includes identifying the parts of the road network that are most at risk of the impacts of climate change.

4.3.3.1 Snow and Ice

Snow and ice can cause network-wide problems, severely affecting our ability to travel. The economic impact can be significant, and there is a heightened risk of delays, accidents, and damage to the road network. Local procedures are in place to manage the effects of snow and ice on our road network and deliver our Highway Infrastructure Asset Management Plan (HIAMP). These include:

• precautionary salting of priority road routes;

• clearance of snow on priority road routes;

• provision of salt bins (in partnership with parish councils) on non-priority routes;

• development of a network of parish-based snow wardens, to provide information on local conditions, jointly determine and organise actions, and if necessary, supplement the operation provided by the County Council

4.3.3.2 High Temperatures

High temperatures and hotter summers are causing more road surfaces to deteriorate and subside. This can cause problems on the road network, including the need for emergency repairs, leading to disruption and congestion.

We must continuously make decisions about when, how and where to intervene and undertake repairs or renew/remove the assets. These decisions are becoming increasingly difficult due to the challenging economic circumstances in which we are currently operating.

We have a responsibility to make the best use of limited maintenance resources, focussing on minimising disruption on the higher-volume and more economically critical parts of the network. We will therefore primarily focus our resources on our Resilient Network, identified in Chapter 2. This is in accordance with the approach set out in both our Network Management Policy and Strategy and Highway Asset Management Policy and Highway Asset Management Strategy.

4.3.3.3 Flooding

Flood events can also cause network wide problems, if associated with main watercourses. More localised impacts may occur when flooding is the result of surface water not being able to enter the ground or a drainage system. Both widespread and localised flooding can cause disruption and congestion and have a negative impact on the economy and local communities.

We are aware of the roads that are most at risk of flooding. As a result, when adverse weather is expected these roads are regularly inspected and, where appropriate, contingency plans are put in place.

There are a number of organisations involved in relation to flooding. The following table, table 4.1, summarises the key organisations involved in flood risk management in Leicestershire, including their main roles and responsibilities.

Table 4.1- Key organisations involved in flood risk management in Leicestershire

Flood - Risk Management Authorities (RMA)	Roles and responsibilities
Leicestershire County Council	• Lead Local Flood Authority (LLFA). Specific powers and duties for coordinating the management of local flood risk. This is the flood risk from local sources, which are: ordinary watercourses (e.g. ditches, streams and small rivers), surface water (overland runoff) and groundwater in the geographic area of Leicestershire • Statutory consultee in the planning process for major development proposals, which have surface water implications • As a Local Highway Authority - providing and managing highway drainage systems
Government: DEFRA	• Policy lead for flood risk management in England and sets national policy & legislation. Provides governance through the Regional Flood and Coastal Committees (RFCC)
Environment Agency (under DEFRA)	• Strategic overview of all flooding, is responsible for 'Main River' management activities • Provides flood forecasts and warnings, facilitates and operates the RFCCs
District / Borough Councils	• Often first response for flooding events (non-statutory), and are a Land Drainage Authority (LDA), retaining some powers under the Land Drainage Act (LDA) 1991
Water / sewerage companies: (i.e. Severn Trent Water and Anglian Water	• Manages flood risk from supplies (reservoirs and pipes), and public sewerage/drainage systems
Highways England	• Providing and managing drainage systems on the Strategic Road Network (SRN)

In order to fulfil our statutory duties as a LLFA we:

- prepare and maintain a strategy for local flood risk management for Leicestershire - LCC Flood-Risk-Management Strategy. This sets out how organisations and communities should work together to manage flood risk;

- maintain a register of assets that are physical features that have a significant effect on flooding;

- prepare Surface Water Management Plans, used to identify areas where there is a high risk of surface water flooding, LCC Surface Water Management Plan;

- carry out flood investigations and publish the results - LCC Local investigations. These inform Flood - Risk Management Authorities (RMA)s of their duties to exercise their flood risk management functions. Each investigation includes a summary of the issues found, any actions and potential mitigation. As the LLFA we do not have a duty to implement a solution to a flooding incident and do not have funding allocated to deliver flood related works. We also do not have powers to force other RMAs to undertake flood related work under their responsibility. If the cause of the flooding is the responsibility of others (for instance the Environment Agency) we will liaise with the responsible RMA;

- play a key part in emergency planning and recovery after a flood event. For Leicestershire County Council, Leicester City Council and Rutland County Council, this function is fulfilled by 'LLR Prepared.'

There is a common misconception that the County Council as LLFA has a duty to resolve all flood related matters. The LLFA role is intended to give one organisation a strategic overview of flood risk within a local geographic area.

Below are some of the tasks that LCC does not have a role in:

- resolving flooding issues: whilst the LLFA investigates certain flooding events, there is no obligation on the LLFA to implement a solution as this would normally sit with the affected landowner;

- maintain ordinary watercourses: the responsibility of maintenance falls to the landowner adjacent to the watercourse;

- planning enforcement: there is an expectation that the LLFA enforces on developments that they have provided advice on. This function sits with the Local Planning Authority (district or borough councils);

- respond to emergencies: whilst an investigation may start during an event, emergency response is coordinated by Leicester, Leicestershire and Rutland (LLR) Prepared and emergency services.

4.3.3.4 High Winds

Incidents of high winds and storms can result in severe disruption and danger to road users. On exposed sections of the road network in particular, high winds have the potential to cause damage to roadside trees, road signs and gantries. High winds can also cause difficulties for high-sided vehicles.

Local procedures are in place for dealing with the impact caused by high winds to damaged road signs, trees and gantries.

Due to climate change (e.g. drying out of soil & saturation of soil) and tree diseases, such as Ash Dieback, there is an increasing likelihood of trees becoming weak and falling on to the road. We have a project in place to help identify such trees before they become a problem, although this can not remove all risk.

We would therefore encourage local communities to continue to report any concerns about the safety of trees through our online defect reporting form.

4.4   Temporary Traffic Management

When designing temporary traffic management, or reviewing temporary traffic management which has been designed by a third-party for their works, we take account of national legislation and guidance including Safety at Street Works and Road Works: a code of practice 2013, and the Traffic Signs Manual 2009, Chapter 8.

The aim of temporary traffic management at roadworks is to strike the right balance between providing the work promoter (or their contractor) with sufficient space to carry out the works efficiently and safely and minimising delays to road users.

All proposals for temporary traffic management at any site must be considered by the works promoter to ensure that they minimise disruption to the public consistent with public safety. Environmental considerations (e.g. noise in residential areas) may outweigh other factors in making decisions on allowable methods of working.

Temporary traffic regular orders will be made, where appropriate, to prevent any unnecessary disruption or delays, for safety reasons affecting both road users and also people working on the road network, and on environmental grounds. The suitability of a temporary order at any site will be judged on its individual merits and implemented at the expense of the promoter for all works other than those being carried out by ourselves or our contractors.

4.4.1   Road Closures

As part of managing planned and unplanned events, we aim to find the best balance between the length of disruption, the volume of traffic affected, and the number of individual incidences of disruption. For example, there may be an occasion where it would be less disruptive to close a road for a longer period to make several repairs at once, rather than have separate closures that cumulatively would be more disruptive. Alternatively, we may identify a situation where the volume of traffic affected means that several, shorter, sets of works would be more appropriate.

There is a presumption against 24-hour closures (even one-way) unless the works are continuous or cannot be opened due to safety reasons. Every effort will be made to arrange a method of working to avoid the need for closure.

The cost of carrying out the works will not be accepted as a factor in determining the need for closure and the cost of preparing and implementing an order will be borne by the scheme promoter.

Public safety and convenience are the main considerations. If a closure is necessary, it must be for the shortest possible time and avoid peak hours if at all feasible. Any works which need to be carried out under a closure or other form of traffic management will, where possible, be carried out at times of low traffic flow and avoid peak traffic times.

For unplanned events such as a water or gas leak an emergency road closure or road restriction may be required. On these occasions we make every effort to coordinate other works on the network to reduce the impact of the restriction.

Where we need to close roads for planned or unplanned works, we implement diversion routes which have been identified in line with the principles set out below.

4.4.2   Diversion Routes

Diversion routes are a key network management tool to keep traffic flowing efficiently around the road network during road works, incidents, and events.

Diversion routes fall into two categories: those for planned works/events, and those which are used for emergency works and incidents.

There are occasions when our diversion routes include a road which is managed by a neighbouring highway authority. There are also occasions when other highway authorities, such as Highways England, need to divert traffic onto our roads. We liaise closely with all of our neighbouring highway authorities to make sure that our works are carried out in a co-ordinated manner and that so far as is reasonably possible the use of the diversion routes does not result in any unforeseen issues.

As a general principle, diversion routes must be appropriate and legal for the volume and nature of traffic which will be diverted onto them. For example, we cannot divert non-motorway traffic such as cyclists onto a motorway. In addition, use of the routes must be risk-assessed for safety for diverted traffic, people who would usually travel on that route, including pedestrians, and anyone else affected by its use.

4.4.2.1 Routes for Routine (non-emergency/ planned) Works

Diversion routes for planned works and events are developed on a case-by-case basis for individual works. The exact route of the diversion route will be planned in advance, taking into consideration such issues as the timing of the works, volume of traffic, safety, presence of any vulnerable structures, such as a low bridges and the length of the diversion route. Once the diversion routes and dates of road closures are confirmed, we publicise these using targeted notices, advance traffic signs, and letter-drops to affected houses.

Where other highway authorities, such as Highways England or neighbouring local highway authorities, wish to use parts of our road network as diversion routes for their planned works, we liaise with them in advance of the works to identify and resolve any potential issues, and to ensure that people affected by the diversion are kept informed. This includes challenging the timing or use of these routes when appropriate, to ensure compliance with our network management duty.

4.4.2.2 Diversion Routes for Unplanned (emergency works, collisions etc)

Emergency Diversion Routes (EDRs) is the term used for these diversion routes. EDRs are agreed between ourselves (via the designated Traffic Manager), the Police, Highways England and any neighbouring local highway authorities, as necessary.

We have agreed EDRs for unplanned incidents affecting the Strategic Road Network (i.e. motorways and trunk roads) with Highways England. These have been risk-assessed in advance and utilised at short notice when parts of the SRN is closed for emergencies or unplanned incidents.

The routes make use of the surrounding SRN as much as possible but also use local A and B classified routes.

Generally, they are signed with a combination of permanent signs (black/yellow symbols) and temporary signs, as shown below in Fig 4.1.

Fig 4.1 –Emergency diversion signing for motorway/ trunk roads

Diversion routes need to be reasonably direct but also ensure wherever possible that disruption and the use of local roads is kept to a minimum.

However, we recognise that on the occasions when traffic has to be diverted on to EDRs this can impact on the users of those EDRs and the local communities through which they run

EDRs are advisory only, motorists and HGVs can choose to use other routes provided they are not in contravention of Traffic Regulations Orders, such as weight access restrictions.

EDRs are different to diversion routes associated with Highways England's planned works, these are agreed with the Police and ourselves when required using temporary signing.

It should also be noted that, although these are agreed routes, all parties recognise that minor changes may be required on a case-by-case basis.

Prior to use, they should be checked to ensure that they are safe for use for that particular incident and that no changes or additional measures are required.

We will look to develop a similar network of EDRs in discussion with any other affected highway authorities, the emergency services etc, for unplanned events on critical parts of the local road network (e.g. 'A' roads or the Major Road Network). These plans will help us to minimise disruption, reduce congestion and help to protect local bus services during such unplanned events.

4.5   Obstructions on the Road Network

We have a duty to maintain the road network in a safe condition. Any activity, signs, advertising boards (A-boards), roadside trader's operation, etc that is considered to be compromising the safety of any road user will be removed in pursuance of its powers under the Highways Act 1980.

We are committed to keeping our road network free of obstruction, particularly pavements alongside the road network, for the benefit of all road users.

This fully aligns with the Traffic Management Act 2004 and our network management duty. Having an efficient and effective network is not just about the movement of private cars and goods vehicles, it is also vital for walking and cycling. Placing furniture such as skips, café tables and chairs, advertising boards, or scaffolding on the road can cause congestion.

We try to balance the street scene and the needs of the public, including those with visual or mobility difficulties, when assessing the degree of obstruction or nuisance.

The County Council may licence certain activities within the highway under its powers in the Highways Act 1980, subject to the applicant complying with the conditions set out in the relevant licence. See LCC highways-permits-and-licences for further details.

Where these activities are undertaken illegally, without a licence or permit, we have the option of using our statutory powers to deter or minimise these activities and, where appropriate, take enforcement action.

4.6 Highway Maintenance

A significant part of how we meet our network management duty will be how we maintain our road network.

As the local highway authority, we have a statutory duty under the Highways Act 1980 to maintain the local road network in Leicestershire.

Highway maintenance involves undertaking programmed and reactive works to ensure that the road network remains as safe, serviceable, and resilient as is reasonably practicable.

Highway maintenance can improve network efficiency, through careful programming and co-ordination of maintenance works, especially on key routes so as to minimise congestion and disruption. It can also reduce the likelihood of incidents on important routes and help encourage modal shift by improving conditions for pedestrians and cyclists.

Activities within the road network resulting from highway maintenance can, however, affect how available and efficient the network functions is.

Maintenance can be broadly categorised into five treatment types; these are defined as:

Reactive restorative
Unavoidable, unplanned, immediate treatments necessary to restore a safe and serviceable condition e.g. potholes

Planned restorative
Scheduled repairs, required to restore local deterioration e.g. planned patching

Preventative
Intended to extend serviceable life and desirable to stop or delay further deterioration e.g. surface dressing

Improvement
Intended to bring the asset to an improved level e.g. strip widening

Renewal
Full replacement of an asset deemed beyond a serviceable / maintainable condition, e.g. full width resurfacing

Our current and long term approach to maintenance and improvement of highway assets is set out in our Highway Infrastructure Asset Management Plan (HIAMP) and associated Policy and Strategy documents. These documents have been developed in accordance with the main objective of the network management duty; to secure the expeditious movement of traffic on our road network.

This NMP is referenced directly from our Local Transport Plan but should be read in conjunction with our highway asset management documents to deliver a co-ordinated approach to the management of the network.

When planning and undertaking maintenance works, the structural condition of the highway asset is first and foremost a major consideration, but prioritisation should also be informed by other factors, for instance our duty to keep traffic moving on the network.

In order to ensure that our network management duty is a key consideration when planning and delivering our highway maintenance functions, we will continue to seek to;

1. Make strategic decisions based on our understanding of both network condition and its function.

- Having access to more robust asset and network data and intelligence and the identification of road hierarchies (as set out in Chapter 2) allows us to better understand risks associated with our maintenance works.

- Taking account of network hierarchy / classification and network purpose and use, rather than focusing resources on simply the highly trafficked parts of the network, when prioritising maintenance treatments and treatment choices. For example, an identical pothole on two different carriageways, both carrying the same volume of traffic would have the same impact if a vehicle collides with it. However, it would have a higher priority if one of the carriageways was part of a link with more strategic importance.

Focus on minimising congestion, particularly on those routes which form part of priority networks, our designated resilient network, and traffic sensitive routes, identified in Chapter 2.

2. Make strategic decisions on treatment type

- Moving decision making away from the imminent and the urgent to a planned regime where the needs of the asset and network are better understood, so that appropriate 'preventative' maintenance treatments can be planned within a wider whole-life approach. This enables decisions to change from those based on a 'worst-first' priority to those that deliver more effective long-term solutions.

- Minimise the number of unplanned repetitive 'reactive restorative' treatments by;

  - targeting 'preventative' work in the right place and at the right time to extend the serviceable life of the network,

  - doing as much as possible in a planned and coordinated way to reduce cost and create efficiencies (accepting that safety critical maintenance will take precedent).

3. Reduce our network occupation

• Focusing on planning, co-ordination and scheduling of maintenance work.

• Considering the timing and duration of works and how this will affect the network, for example, can changes to the timing and duration be made to limit the impact or avoid peak time.

• Aiming to carry out our works outside traffic sensitive periods, where possible. Limiting large scale maintenance works to school holidays or other off-peak times where practicable, in order to minimise disruption and reduce congestion incidents related to road works.

• Considering network management factors into our decision making on treatment types. This may on occasions result in delaying maintenance works in order to coordinate with other planned works or opting (subject to funding) to a different more costly treatment type, for example a renewal treatment rather than planned restorative.

4. Demonstrate parity

• Adhering to the processes and procedures set out in the Highway Permit Scheme and the principles outlined in the Road and Street Works Framework Guide, with regards to our expectations of works promoters, planning and delivering work on the network.

4.7   Supporting Principles (SP)

We will operate in line with the following supporting principles in relation to work we do around highway management, to ensure we continue to meet our network management duty whilst having due regard to our other obligations, policies, objectives and budgetary constraints.

▶ SP 1 ....

To support planning, scheduling and the management of planned activities on the road network (e.g. the Highway Permit Scheme) the County Council will;

- *apply the same standards and approaches to our own activities as we do to others, demonstrating parity between standards for others and ourselves (for instance our own contractors will be subject to the same restrictions and directions as utility companies);*

- *provide the necessary time and space to support the safe and efficient implementation of maintenance and improvement work to the network and the services running underneath it;*

- *continue to manage the appropriate balance between the potentially conflicting interests of road users and activity promoters and their customers;*

- *maintain close co-operation and collaborative good practice working arrangements with all stakeholders, including road users and works promoters.*

▶ SP 2 ....

The County Council will expect that third-party improvements or additions to our network are delivered in accordance with our Highway Asset Management Policy and Strategy and do not place unnecessary financial burdens on the authority with regards to future asset maintenance.

▶ SP 3 ....

The County Council will expect all promoters of planned activities on the road network to:

- *provide early engagement and timely, clear, accurate and appropriate information to stakeholders such as parish and district councils, businesses, local residents and passenger transport operators;*

- *provide evidence that they have considered and understood the breadth / impact of their proposals on all road users, including passenger transport and adequately mitigated any adverse avoidable impacts before they are implemented.*

▶ SP 4 ....

The County Council will seek to minimise the impact of unplanned disruptive events, such as road traffic accidents, flooding and snow and ice by ensuring that the actions we take are well planned and effectively coordinated and managed, so as to minimise disruption to the network.

▶ SP 5 ....

In dealing with activities and obstacles on the road network the County Council will we try to balance the street scene and the needs of the public, including those with visual or mobility difficulties, when assessing the degree of obstruction or nuisance. We will use our statutory powers where appropriate and take enforcement action in relation to unnecessary and illegal occupation of the road network.

▶ SP 6 ....

In carrying out in duties and exercising its powers under the Highways Act 1980 to maintain the local road network, the County Council will;

- *ensure that our network management duty is a key consideration when planning our highway maintenance functions;*

- *as far as is reasonably practicable, ensure highway maintenance treatments are delivered in accordance with our network management duty and do not cause any unnecessary delays to those travelling on our road network.*

5. Traffic Demand Management

5.1   Introduction

The development of strategies to help manage congestion, provide more reliable journey times and direct traffic onto the most appropriate roads are key to us meeting our network management duty and achieving our other wider obligations, policies and objectives.

One way we do this is through Traffic Demand Management (TDM). TDM covers a wide range of measures, (set out in this chapter) which are aimed at reducing the adverse impacts of car use, minimising congestion and helping traffic move more freely now and in the future.

We take a multi-modal approach to TDM in Leicestershire, with our approach categorised into three broad themes:

- reducing the level of demand on our road network by encouraging sustainable travel and influencing travel behaviour;

- making the most of our road network by managing vehicular traffic movement and parking;

- increasing the capacity of our existing road network by increasing the size of the network.

5.2 Reducing the Level of Demand on our Existing Road Network

Left unchecked, demand for single occupancy car travel creates issues that extend well beyond the daily commute including environmental, social impacts and financial costs on people and businesses. This has growing importance as we seek to reduce carbon emissions from transport, switch from the car to other transport modes and encourage more active travel to improve health and wellbeing.

Reducing the demand (particularly single occupancy car use) on our existing network and the need to travel is therefore a primary focus of our Network Management Plan. We recognise this as an opportunity to manage the network but also to deliver on several of our wider objectives and priorities including, public health, local accessibility, climate change and carbon reduction.

In keeping with our holistic approach to network management we will consider a range of options to reduce demand on the road network from single occupancy car use on the road network, including:

Sustainable transport infrastructure
(for walking, cycling, passenger transport, electric vehicles and micromobility transport)

Behaviour change measures
(travel plans, car sharing, media campaigns, home working, cycle training, transport information and demand responsive transport)

Direct travel and demand restraint interventions
(including road user charging and passenger transport subsidies)

These three areas are explored in further detail below.

5.2.1 Sustainable Transport Infrastructure

Our road network is used by a wide range of people, including car and lorry drivers, pedestrians, wheelchair/mobility scooter users, cyclists, bus passengers, motorcyclists and equestrians.

We recognise therefore that having an efficient and effective road network is not just about the movement of private cars and goods vehicles. It is also vital for walking, cycling and passenger transport. They are all important in ensuring the efficient and safe movement of people and goods within the county.

Encouraging more people to use sustainable transport (particularly active travel modes) is important for several of our wider objectives and priorities including public health, local accessibility, economic growth, climate change and carbon reduction.

Encouraging walking, cycling and passenger transport use, where it can offer a viable alternative to the car, also supports our network management duty, by easing local traffic pressures and tackling congestion (through reduced car use), helping to make for more reliable journey times.

One way that we can support and encourage more people to use sustainable transport is through the provision of suitable (well planned, well developed and designed) infrastructure, such as footways, cycle tracks, crossing facilities, and bus stops and interchanges.

This includes prioritising investment in walking and cycling infrastructure, especially in areas where this would have the greatest benefits in encouraging and facilitating active travel to schools and workplaces in areas of high urban density.

Work undertaken in developing and securing government and third-party funding over recent years has effectively enabled sustainable transport infrastructure to be delivered on the ground, for example, in Loughborough, Coalville, Hinckley and corridors into Leicester.

Opportunities will continue to be developed as part of further pipeline bids for future funding i.e. Melton Mowbray Transport Strategy, Market Harborough Transport Strategy and Coalville Transport Strategy.

We will also look to ensure that cycling, walking and passenger transport is inherent within the design process of our own road improvement and maintenance schemes, and where possible seek to take opportunities to improve existing infrastructure and cater for sustainable travel options as part of any road schemes we undertake, e.g. widening of footways when undertaking surfacing, introducing dropped kerb crossing points etc.

The recent North West Leicester Transport project that was introduced jointly with Leicester City Council is a good example of where cycling and walking infrastructure has been enhanced as part of a scheme to improve traffic capacity along the A50. As part of this project, footways were widened to cater for cycling, shared use facilities were constructed across roundabouts and toucan crossings were introduced. Bus stop infrastructure was also improved.

In addition to incorporating sustainable travel infrastructure as part of road improvement and maintenance schemes, the County Council continually looks for opportunities to improve future sustainable travel infrastructure provision through its role as a statutory consultee in the planning process:

- ensuring new development layouts have suitable and adequate cycle, walking and passenger transport infrastructure to ensure their long-term sustainability;

- seeking to ensure that new developments are designed to provide safe, high quality walking and cycling routes;

- seeking to secure funding through the planning process developer contributions (Section 106 Agreements) towards cycling, walking and passenger transport improvements.

The emergence of new technological innovations, such as electric vehicles (EVs) and micromobility (e-cars, e-bikes, e-scooters and e-skateboards), are beginning to play a significant role in helping people, materials and goods move around the county more cleanly, reducing the environmental impact, whilst also opening new opportunities for the efficient operation of our road network.

We are committed to embracing these opportunities and look forward to working with government, district councils, businesses and others to enable people to travel on the road network more effectively, sustainably and efficiently. We recognise the role we can play encouraging the uptake and use of electric vehicles and micromobility, including through provision of infrastructure.

With regards to EVs and ultra-low emission vehicles, we are following the progress of the market closely including changes in technology, government policy and any suitable funding opportunities which arise. Further information can be found at LCC electric-vehicles-page.

Going forward we will also continue to monitor the development of micromobilty and develop our approach as further legislation emerges and evolves.

5.2.1.1 Infrastructure Design

When designing road improvement schemes we seek to implement a hierarchy of sustainable travel which prioritises walking and cycling above other forms of transport. We work to various design standards such as the Design Manual for Roads and Bridges; Manual for Streets; Traffic Signs Regulations and General Directions, as well as taking guidance from Department for Transport Local Transport Notes. Whilst working to these standards the County Council has internal processes to ensure that cycling, walking and passenger transport is inherent within the design process of schemes e.g. non-motorised users audits are a key part of the design process to ensure that all modes are fully considered in the scheme design.

In 2017, the Government published its first Cycling and Walking Investment Strategy (CWIS). The Strategy set out the Government's ambition to make walking and cycling the natural choices for shorter journeys or as part of a longer journey. Local Cycling and Walking Infrastructure Plans (LCWIPs), are a new, strategic approach to identifying cycling and walking infrastructure required at the local level are set out in the CWIS.

We are now in the process of producing its first LCWIP for Melton Mowbray utilising this support. The skills and knowledge gained from this support will be used to develop further LCWIP's across the county, providing the framework for walking and cycling infrastructure investment and any funding bids for such infrastructure in the future.

Moving forward we will continue to design and develop infrastructure using the very latest design standards, processes and procedures, in light of emerging national guidance and in response to any future Government announcements.

5.2.2 Behavioural Change Measures

We have a dedicated team that focuses on delivering behavioural change measures across the county. Their work includes:

- promoting walking, cycling, car share and passenger transport initiatives;

- actively working with businesses and schools to support them in developing travel plans and delivering safe and sustainable travel initiatives;

- working with partners, stakeholders, communities and employers to provide information provision, training and equipment to enable groups and individuals to make informed travel choices which bring, health, wellbeing and financial benefits;

- working closely together with our Public Health department to encourage active and sustainable travel and physical activity.

This work is promoted and publicised under the County and City Council's dedicated website 'Choose How You Move' which is constantly updated.

The delivery of successful behavioural measures can make a positive contribution towards our network management duty. It helps reduce the demand on Leicestershire's road network by encouraging and incentivising residents, employees and visitors to travel using sustainable transport (particularly active travel modes), reducing single occupancy car trips and maximising the use of new and existing sustainable transport infrastructure. By working in partnership with Leicester City Council, Public Health, District Councils and other stakeholders we are able to align and maximise opportunities and benefit from the economies of scale that partnership working brings.

This work is becoming increasingly important as we look to play our part in reducing carbon emissions from transport and addressing climate change.

The following are examples of the type of typical behavioural changes measures we will continue to explore and focus on:

- sustainable travel business grants;

- business travel engagement;

- BetterPoints rewards scheme;

- electric-bike try outs;

- bike maintenance with Dr Bike;

- bikeability cycle training for year 5 and 6 pupils and adult cycle courses;

- junior road safety officer scheme;

- personalised travel planning (PTP);

- providing up-to-date bus timetables, leaflets and online information;

- updating Traveline, bus timetables and stop information;

- real-time bus information;

- demand responsive transport (DRT) and community transport services;

- targeted bus promotions.

We will also continue to work with government, Leicester City Council, district councils, telecommunication companies and other partners to invest in the roll-out of superfast broadband across Leicestershire. Not only will this continue to be an essential driver for business growth and ensure residents have improved access to services but it will also increase the potential for remote working and reduced levels of commuting demand on the county road network. Further details on superfast broadband in Leicestershire can be found at superfastleicestershire.org.uk.

5.2.3 Direct Travel and Demand Restraint Interventions

Local highway authorities and governments both within the UK and internationally are continuously searching for ways to balance the objectives of economic growth and effective movement of traffic with the increasingly urgent need to improve air quality and reduce the impacts of transport on climate change. This is leading to the identification of new ways of managing demand on the road network through more direct travel and demand restraint interventions, such as congestion charging and road charging in additional to those more traditional interventions such as passenger transport subsidy.

At present, we subsidise passenger transport services in Leicestershire that are not able to operate on a commercial basis, where it is appropriate and affordable for us to do so, in line with the approach set out in our Passenger Transport Policy and Strategy (PTPS). This ensures there is provision of essential passenger transport throughout the county where there is insufficient need to make services commercially viable.

In doing so, this helps support our wider network management duty by encouraging modal shift away from the private car to passenger transport, thereby reducing the number of vehicles and demand on the network.

Whilst, we currently do not employ any other specific interventions to influence travel demand or restrain demand we may investigate these in the future, if we identify that they could provide significant benefit in managing traffic on our network.

However, this will be considered carefully in the context of:

• the availability of genuine and viable alternatives to the car;

• the impact that demand restraint would have upon local economies;

• our other wider obligations, policies and objectives;

• our existing budgets.

5.3 Making the Most of our Existing Road Network

In many cases, the most cost-effective and environmentally friendly way to keep traffic flowing is by making best use of our existing road network. Without resorting to substantial new road construction, we can adjust or adopt the use of the existing road network to meet specific objectives and manage the way in which vehicular traffic uses the network and the routes that drivers choose to take.

5.3.1 Traffic Regulation Orders

The Road Traffic Regulation Act 1984 (RTA 1984) gives local highway authorities (LHA's) the power to introduce Traffic Regulation Orders (TROs) on the local road network. A TRO is a legal document that enables us (as a LHA) to manage the speed, movement and parking on the local road network. Examples of TROs include one-way systems, speed limits, weight limits, movement and waiting restrictions. For more information on temporary TROs please see chapter 4.

All TROs introduced by the County Council are made in accordance with the RTA 1984 and follow the procedures outlined in the Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations 1996.

Where appropriate we will consider the introduction of TROs for the following network management related reasons:

- to direct traffic and limit the use of roads by unsuitable traffic;

- to reduce congestion and delays;

- to improve access for emergency vehicles and passenger transport due to fewer obstructions on the road networks;

- to encourage a higher turnover of vehicles in parking spaces.

In line with legislation and our other obligations, policies and objectives we will also consider TROs for following reasons:

- to improve road safety;

- to preserve or improve the character or amenity of an area;

- to prevent serious damage to roads, bridges etc.

We maintain a portfolio of TROs across the county, which have developed over many years. Where the opportunity arises, we will seek to review the appropriateness, adequacy and relevance of our TROs and make efforts to ensure that our TROs (such as roadside controls preventing loading or parking or banning particular traffic movements, changes in speed limits) continue to exist where there is a need for them.

Traffic Regulation Orders are only one method of dealing with network management problems. Other solutions may be more appropriate. An alternative way to manage traffic movement and parking is by introducing new physical measures and making amendments to the existing network, either alone or in combination with other measures. For example, this may include:

- traffic calming in residential areas to deter through traffic;

- signing to direct traffic onto the most appropriate routes on the network;

- lining and surfacing to alter the appearance of the network or to provide key information to the road user;

- bollards/guardrails to deter parking or manage pedestrian and cyclist movement.

In general, many of the features above will also be introduced for other reasons, such as to address local safety or quality of life concerns. Whilst the majority of these measures may be introduced without the need for TROs, any potential measure would be investigated and assessed against current regulations, guidance or good practice, and against the availability of funding, for both installation and long-term maintenance costs. It is likely that many of these physical measures would require third party funding to be implemented.

5.3.2 Parking Controls

The ability to control parking on our road network is critical to the effective management of traffic and congestion. Parking has the potential to cause congestion and the disruption to the movement of vehicular traffic. This is especially true in our county towns, where illegal or inconsiderate parking in peak hours can have a significant impact on areas already prone to congestion and under growing pressure for road space due to population and employment growth.

Illegal or inconsiderate parking can also introduce safety risks, impede the movement of pedestrians, cyclists and passenger transport and cause quality of life concerns for local communities.

We want to encourage sensible and safe parking across the county. This will:

- keep all traffic moving;

- make our road network safer;

- improve access for the emergency services;

- reduce pollution and help to improve air quality; and,

- make our county more attractive to businesses and visitors.

It is essential therefore that the provision of parking controls (or their removal) is conducted in a manner which considers the needs of all road users and provides a suitable balance of facilities and restrictions to best meet the needs of communities. At the same time consideration needs to be given to road safety, the maintenance of the free flow of traffic and other pressures on the use of road space.

In response to this challenge the County Council has developed a parking policy which brings together all relevant policies and working practices for the management of parking and parking enforcement in the county. The document can be found at Leicestershire Parking Policy. The Leicestershire Parking Board, a partnership body of the county and district councils, helped shape the final document, which was agreed in March 2016. The document also sets out a range of controls (legal and advisory) available to the County Council for the management of on-street parking and how these are considered and applied across the county.

This includes the provision of:

- loading and waiting restrictions;

- limited waiting and loading bays;

- disabled parking bays;

- ambulance / coach/bus / taxi bays;

- motorcycle parking;

- shared use bays;

- school keep clear markings;

- bus stop clearways;

- resident / business permit only parking zones.

The provision of Red Routes (to prohibit stopping) is not covered in our current Parking Policy. However, using powers set out in the Traffic Management Act 2004, we have introduced Red Route - no stopping restrictions on the A453 near East Midlands Airport. A camera-equipped car is used to monitor and capture evidence to enforce these restrictions.

We are also working closely with Leicester City Council to consider the potential introduction of Red Routes on key radial corridors into Leicester, where this is appropriate.

In general, the need for parking controls (or alterations to existing controls) will be identified as a result of:

- correspondence from members of the local community and road users;

- responding to needs identified from larger area wide studies of parking restrictions;

- responding to alterations to the local area e.g. following new development.

In acknowledgment of the relatively high level of correspondence we receive and in recognition of our other wider obligations, policies and objectives, we have provided further guidance and direction below, for how we manage parking outside schools and in our county towns.

5.3.2.1 School Parking

For school parking our overall approach is set out in the following document, Parking Near Schools.

This describes our multi-faceted approach based around education, enforcement and engineering to address local congestion, safety and quality of life concerns. This includes:

• implementing parking controls where appropriate (including TROs);

• implementing physical measures to manage road users (e.g. signing, lining, bollards and guardrails);

• working with schools and parents, the Police, local community and district council and Public Heath colleagues, to support safe and sustainable travel initiatives which influence behaviour (e.g. school crossing patrol, Bikeability training, park and stride sites and anti-idling campaigns).

5.3.2.2 County Towns - Parking Reviews

To improve the way we manage traffic in our local communities and continue to meet our network management duty, we will continue to review parking controls across the county, as necessary, as part of our traffic management programme Managing Traffic in Leicestershire Communities.

In general, reviews will focus on parking in our county towns such as Ashby-de-la-Zouch, Castle Donington, Coalville, Hinckley, Loughborough, Lutterworth, Market Harborough, Melton Mowbray, Oadby and Wigston. The reviews will be carried out as part of our on-going day-to-day traffic management work and will help to establish if any changes need to be made to help keep traffic moving. Changes will also be aimed at contributing to the County Council's strategic outcomes, by delivering a range of benefits for communities, key stakeholders and partners such as:

• supporting the local economy;

• improving air quality and reducing carbon emissions;

• minimising the impact of parking on residents, businesses and communities;

• addressing road safety concerns.

To ensure we continue to provide stakeholders with up-to-date information about our countywide on-street parking controls we have set up an interactive map-based webpage, which provides road users, local communities and businesses with more information with regards to the location of controls, their type and the times of operation etc. See on-street parking controls.

5.3.3 Parking Enforcement

As well as the network management duty, the Traffic Management Act 2004 also introduced civil enforcement powers for highway authorities. In July 2007, we took over responsibility (from the Police) for the enforcement of all on-street parking restrictions across Leicestershire.

Civil parking enforcement (CPE) is an important part in meeting our network management duties. The aim of CPE is to make sure parking restrictions are followed so that fewer vehicles are parked illegally. This will help to:

- reduce congestion;
- make it easier for people to access parking spaces closer to shops and services;
- improve journey times on passenger transport;
- improve access for the emergency services;
- allow residents parking schemes to run effectively.

CPE is currently undertaken in partnership with the seven district and borough councils in Leicestershire, who employ Civil Enforcement Officers (CEOs). CEOs can issue Penalty Charge Notices (PCN) when parking restrictions aren't followed. The service provides:

- CEOs on patrol around the streets and off-street car parks (managed by district and borough councils) in Leicestershire;
- support for the repair, repainting and renewal of traffic signs and road markings around the county;
- a centralised administration service for processing PCNs.

The table below outlines our current responsibilities for on-street parking enforcement, in conjunction with the Police.

	Police	CEOs
On-street parking restrictions	No*	Yes
Dangerous / obstructive parking	Yes	No**

* If deemed dangerous / obstructive and observed, the Police may enforce.
** CEO may enforce for obstruction of pedestrian or cyclist dropped kerbs.

More recently we have introduced a camera-equipped car to monitor and capture evidence to enforce parking restrictions outside schools. Using automatic number plate recognition technology (ANPR), the car is used to collect the necessary evidence to issue a PCN to vehicle owners who park on school keep clear markings. The car is equipped with an intelligent enforcement system that uses GPS to recognise where restrictions begin and end as the vehicle is driven though a restriction zone.

We are also a member of The Joint Committee of England and Wales for the civil enforcement of Parking and Traffic Regulations Outside London (PATROL) Patrol UK.

Funds raised from penalty charges are used in accordance with RTA 1984 and TMA 2004. All monies generated are used to run the service, with any surplus funding improvements to parking and general traffic management in Leicestershire. We publish information showing revenue collected from on-street parking and PCNs, including a breakdown of how we've spent a surplus on our parking account.

5.3.4 Control of Heavy Goods Vehicles (HGVs)

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. As a result, the road network around Leicestershire experiences a high volume of HGV traffic.

In recognition of the economic importance of freight traffic, and to ease the movement of HGVs around Leicestershire's road network, we have put in place a network of lorry control measures (a countywide system of signed weight 'limits' and 'restrictions'). These longstanding controls encourage HGVs to use more appropriate 'A' and 'B' roads in the county and limit the impacts of such traffic on our road infrastructure and assets and on local communities, so far as is reasonably possible.

Our weight 'limits' are usually used for a structural weight limit, for example a weak bridge, where a heavy vehicle passing over may cause structural or other damage. It is an offence for ANY vehicle over the weight displayed on the sign to pass.

Our weight 'restrictions' consist of a prohibition for vehicles over a certain weight (usually 7.5 tonnes), but with exceptions. Sometimes known as an environmental weight restriction, these prohibitions are usually in the form of a zone and are designed to prevent the regular passage of HGVs not requiring access for collection from, or delivery to, premises within the zone. Any vehicles over 7.5t within the weight restriction zones and not conforming to the above is committing an offence. A plan outlining our county wide weight restriction zones can be found in Figure 5.1.

For more detailed information on weight restrictions on specific roads or within local communities please contact: customerservices@leics.gov.uk

Enforcement of weight restrictions is notoriously labour intensive and time consuming, as a potentially offending vehicle has to be observed by police entering and leaving a zone without having delivered or collected any goods.

Whilst the police do not have the resources to provide a reactive response to infringements of a weight restriction a mechanism is in place for residents to report potential abuse of weight restrictions by reporting details directly to the Police or by contacting their parish, town, borough or district council. Any incidents reported to them will be logged and collated and, if there are significant numbers of reports in any one location, a targeted operation may be initiated.

Figure 5.1- Indicative Lorry Restrictions in Leicestershire
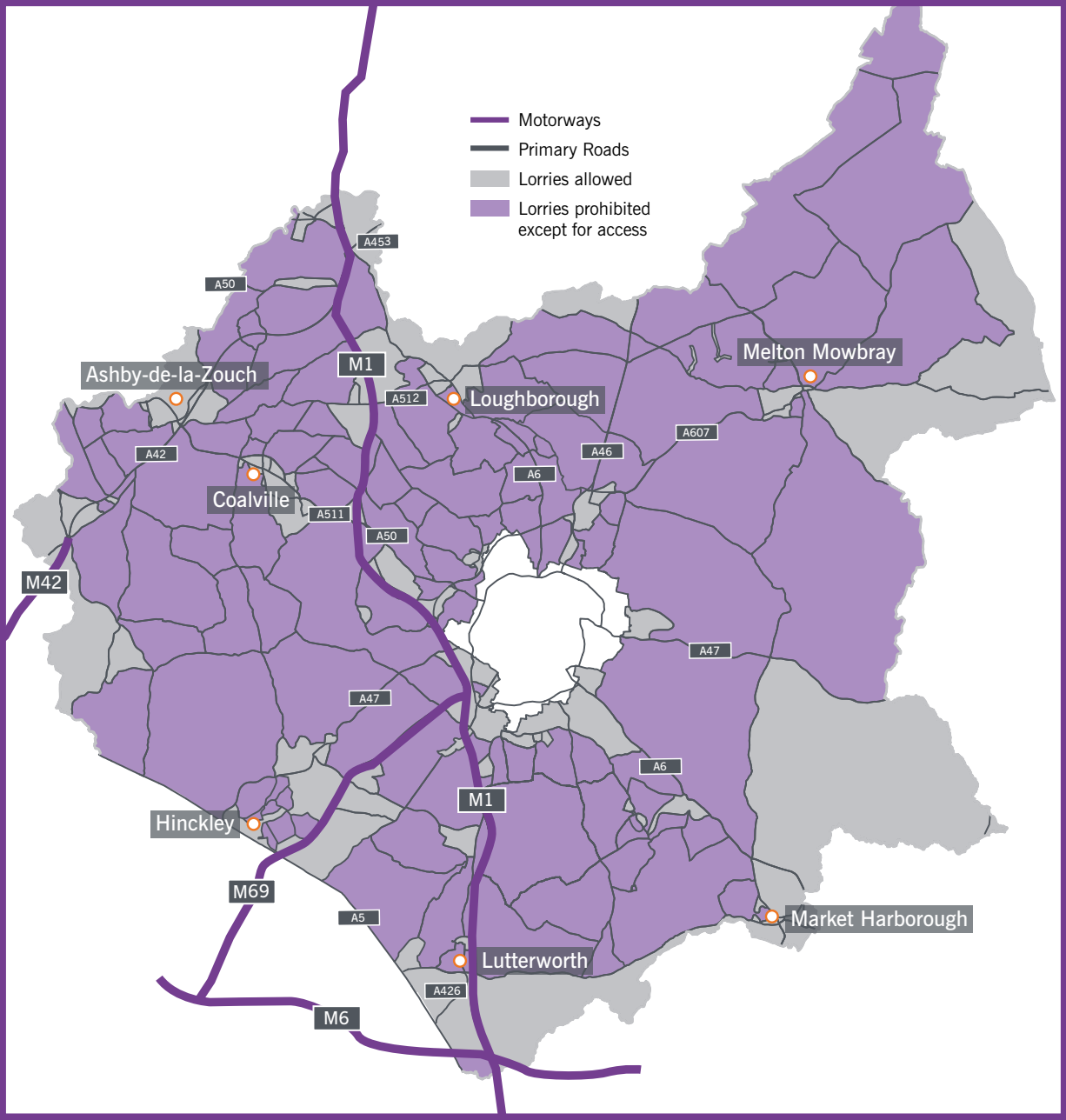
5.3.5 Management of Abnormal Loads

Abnormal loads are defined by Government as "a vehicle that has any of the following:

- a weight of more than 44,000kg;

- an axle load of more than 10,000kg for a single non-driving axle and 11,500kg for a single driving axle;

- a width of more than 2.9 metres;

- a rigid length of more than 18.65 metres.

Loads over 150 tonnes, 6.1 metres wide or 27.4 metres long require Special Orders from the Department for Transport.

Companies or individuals transporting abnormal loads are required by law to obtain approval from the relevant highway authorities, as well as the police and any other relevant parties (e.g. structure owners such as Network Rail) and follow a pre-agreed route. Guidance on applying for approval and the expected timescales is available from central government.

We work closely with Leicestershire Police to coordinate efforts and ensure that each abnormal load journey passes through Leicestershire safely. Abnormal loads will be routed as far as possible on strategic routes. The choice of route will be made to minimise inconvenience to other road network users and the local community and to avoid damage to the structure of the road network and any street furniture.

We are also part of the Highways England Regional Abnormal Loads Forum where we work with neighbouring highway authorities and Police forces to share best practice and adopt a consistent approach.

5.3.6 Intelligent Transport Systems

Making the best use of technology can provide significant benefits to network operation for relatively low cost. Intelligent Transport Systems (ITS) is a collective term for all types of technology used to manage traffic on the road network. ITS take advantage of advances in transport, computing and communications technologies to improve the efficiency of the road network.

The ITS used across Leicester and Leicestershire are primarily managed by one authority – Leicester City Council, through the Area Traffic Control (ATC) centre. We maintain a close working relationship with ATC and have a Service Level Agreement in place for ATC to provide a range of ITS services, including:

- pro-active management of the traffic signal installations across the county;

- technical advice on new or modified junctions;

- the provision of traffic and travel broadcasts and information;

- dealing with complaints and faults;

- providing guidance on future traffic management strategies.

The urban traffic control and fault management system used at the ATC is jointly owned by the LCC and Leicester City Council. The systems currently used include:

- Traffic Signal System, UTC and SCOOT;

- CCTV cameras;

- Comet;

- Traffic Information Service (TIS);

- Fault Management System;

- Car Park VMS signs.

Traffic Signal System & SCOOT Traffic signal installations are used across the county to manage the competing demands of vehicles and pedestrians at junctions, and to improve safety. Whilst they can be seen as a cause of delay they are essential to the management of the road network and can help to optimise the efficiency of signals.

The majority of traffic signals at junctions across the county can be controlled from the ATC centre, particularly those in the main towns and urban areas (these signals are often linked to each other). The ATC centre receives real-time information (for instance from loop detectors and cameras at key junctions) on congestion across the road network. This allows the ATC centre to manage the traffic signals, giving priority to particular roads so that traffic flows are maximised, and congestion managed.

Moving forward we will continue to seek to utilise new traffic signal technology to better manage the network. Examples include:

- using more intelligent temporary traffic signals, where we can, to assist the safe and efficient movement of all road users including pedestrians and cyclists

- upgrading and digitising our communication systems to ensure our network of traffic signals are fit for purpose in the future.

5.4 Increasing the Size of our Existing Road Network

As far as possible, our approach to network management will focus on making the best use of our existing road network and reducing unnecessary demand on it, through reducing the need to travel and promoting walking, cycling and passenger transport alternatives.

However, this approach is unlikely to be sufficient to address the county's critical network performance issues in all cases, given the predominantly rural nature of the county and the challenges faced by people travelling by public or active modes, with the private car continuing to remain the choice of travel around Leicestershire for many residents.

A need will remain for more major enhancements or additions to the county's local and strategic road networks (such as the introduction of new junctions or road links) in certain circumstances, especially in locations where significant housing and employment developments are planned and additional capacity is essential to facilitate such growth.

It will therefore be important to ensure that any new roads or substantial improvements to existing roads are built only where they have a clear purpose; new roads are often needed to provide for major growth, such as that identified in the Leicester and Leicestershire Strategic Growth Plan, enabling new communities to be delivered on a scale that can contain the necessary range of societal and economic facilities to provide for 'sustainable growth'. Major road improvements can also play a role in addressing air quality and other environmental problems.

Major enhancements to the road network however are expensive, to the extent that the County Council generally does not have sufficient funds of its own to build new infrastructure on this scale. The delivery of such infrastructure is therefore increasingly reliant on securing funding from the following key third-party sources, both of which carry significant financial implications and risks for the County Council as described:

- **Government funding** - most often through competitive bidding processes, which normally come with a requirement for scheme costs to be partially 'match funded' locally by the County Council and its partners

- **Developer funding** - in the form of contributions negotiated and secured through the planning process; albeit which in practice often have to be 'forward funded' in advance and at risk by the County Council and its partners to ensure timely scheme delivery

As such, any future expansion of the county's road network will need to be carefully targeted towards schemes that would deliver the greatest benefits and value for money, supporting growth and meeting our wider strategic outcomes.

5.5 Supporting Principles (SP)

We will operate in line with the following supporting principles in relation to work we do around TDM, to ensure we continue to meet our network management duty whilst having due regard to our other obligations, policies, objectives and budgetary constraints.

▶ SP 1 ....

The County Council will seek to make the most effective use of our existing road network by;

- *exploring opportunities to improve the operational capacity and efficiency of the road network including the operation and management of controlled signal junctions;*

- *making the best use of new technology and innovations to manage traffic on the road network;*

- *seeking to ensure that the most appropriate TROs are in place and suitably enforced with the powers and resources available;*

- *developing future programmes of traffic management interventions supported by robust evidence and stakeholder support, to help manage congestion, provide more reliable journey times and direct traffic onto the most appropriate parts of the network.*

▶ SP 2 ....

The County Council will seek to reduce the level of demand on the existing road network by;

- *ensuring that the needs of all road users are taken into account when road capacity improvements are considered;*

- *developing infrastructure and initiatives to influence travel choice in order to support and encourage walking and cycling, where these can offer a viable alternative to the car;*

- *continuing to support and encourage the use of the passenger transport network by working with stakeholders, including commercial operators;*

- *considering the introduction of interventions to restrain demand, where this could provide significant benefit in managing traffic on our network.*

▶ SP 3 ....

The County Council will also explore the possibility of increasing network capacity by increasing the size of network, where it can be justified as the only viable option; where there is robust evidence of a realistic deliverable solution; and where it helps to deliver housing and economic growth and meets the County Council's other, wider strategic outcomes

6. Actions and Performance Monitoring

The previous chapters have explored the various actions and activities we will undertake to meet the requirements of the Traffic Management Act (2004) and our network management duty.

These network management related activities and actions, along with the other environment and transport services we deliver are captured as part of Environment and Transport (E&T) departmental business planning.s

All our E&T Departmental Business Plan is reviewed, updated and progress reported on, on an annual basis in line with the County Council's wider business plan reporting process and corporate planning framework.

This ensures our departmental actions, including network management related actions, continue to reflect the goals and objectives of our Strategic Plan, Medium Term Financial Strategy (MTFS) and Environment Strategy.

In addition, to help us measure and evaluate our performance in relation to our strategic goals and objectives there are also a number of performance Indicators (PIs) embedded within the E&T Departmental Businesses Plan. This includes several PI's that relate to the delivery of our Network Management Plan, including:

- Average vehicle speeds during the weekday morning peak (7am-10am) on locally managed 'A' roads in Leicestershire (mph);

- Satisfaction with traffic levels and congestion (NHT satisfaction survey);

- Percentage of businesses citing concerns about traffic congestion;

- Satisfaction with cycle routes/lanes and facilities (NHT satisfaction);

- Overall satisfaction with local bus services;

- Number of bus journeys.

Their progress and their suitability will be reviewed, updated and reported on, on an annual basis as part of the E&T departmental business plan and within the wider corporate planning framework.

The NMP is closely aligned to other developing policy and strategy documents across E&T services. It will require regular review and sense-checking while these documents are in development.

Thereafter, it will be considered for review within 5 years or earlier if there are significant changes in legislation, local circumstances, national policy or guidance that affects network management.

7. Contacts

Name	Responsibilties include	Contact details / information
Leicestershire County Council (LCC) **Traffic Manager**	Performs the tasks that are necessary for meeting the network management duty.	Head of Service Network Management highwayscustomerservices@leics.gov.uk Tel: 0116 305 0001
Leicestershire County Council (LCC) **Local Highway Authority (LHA)** **Lead Local Flood Authority (LLFA)**	Local roads within County boundary: Road traffic collision investigation, bridges and structures, development control (highway, flooded roads, footway (pavement) repairs, grass cutting, highway drains, major development proposals, new estate roads adoption, potholes, public rights of way, passenger transport, road closures, road repairs, road safety, road surfacing, sections 38, 184 and 278, sign and lines, snow clearance, street lighting, traffic management, traffic signals (traffic lights), transport improvements, transport policy and strategy, winter salting / gritting.	All enquiries: Customer Service Centre County Hall, Glenfield, Leicestershire LE3 8ST customerservices@leics.gov.uk Tel: 0116 305 0001 Leicestershire County Council webpages: Roads and transport Roadworks Accident data and information Public rights of way Cycling Walking Planning and new development Travel advice and information
Local Planning Authority (LPA)	Car parks (off road)	District / Borough Councils

Name	Responsibilties include	Contact details / information
District / Borough Councils	Environmental health Housing Leisure and amenities Local planning applications Recreation Refuse collection Fly-tipping and litter picking Air Quality matters	
Leicester City Council	Local roads within city boundary.	All enquiries: City Hall, Leicester City Council 115 Charles Street, Leicester, LE1 1FZ customer.services@leicester.gov.uk Tel: 0116 454 1000 www.leicester.gov.uk
Highways England	Responsible for the operation, management and maintenance of motorways and trunk roads.	https://highwaysengland.co.uk Email: info@highwaysengland.co.uk Tel: 0300 123 50