

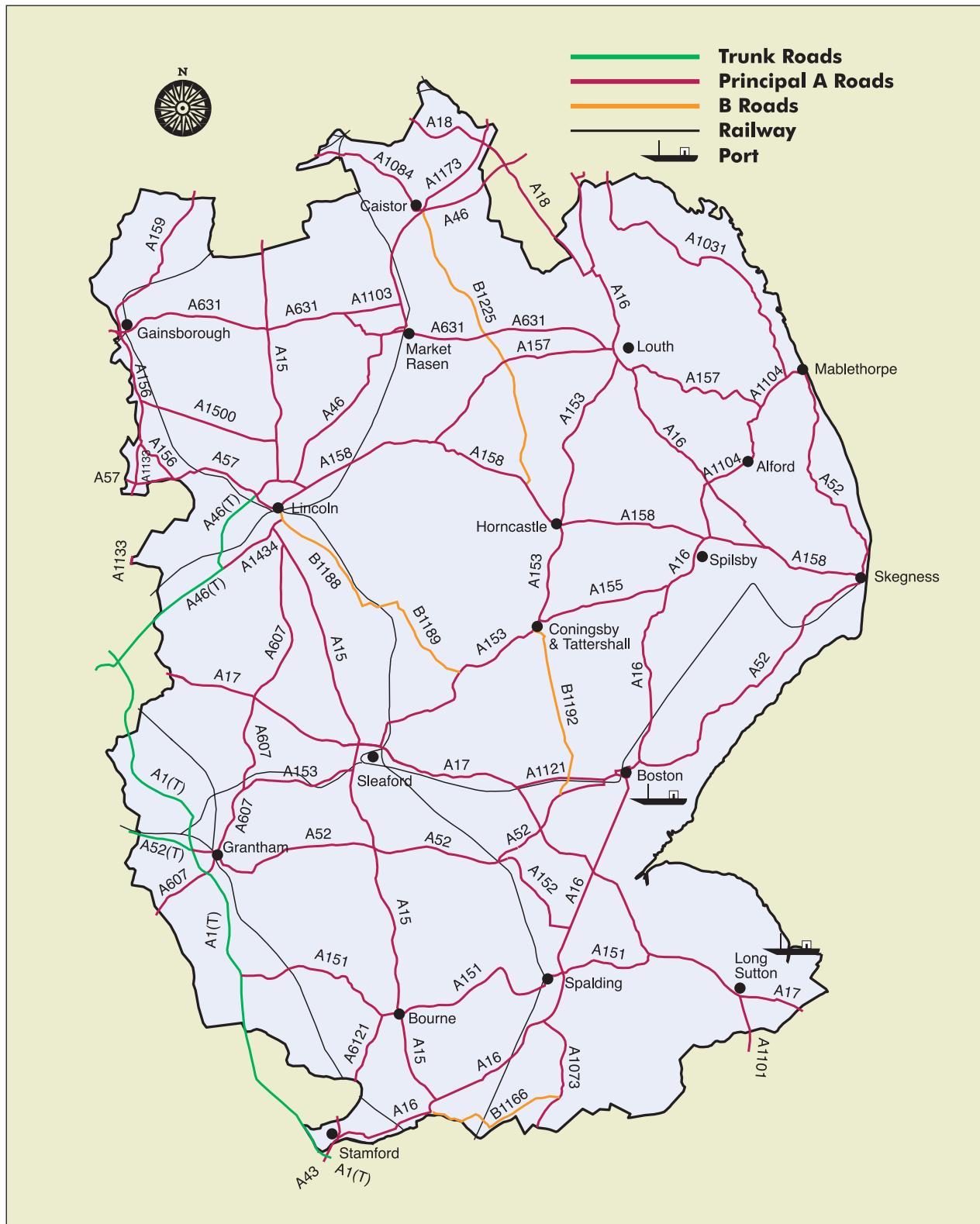
3rd Local Transport Plan

2011/12 to 2012/13



April 2011

Lincolnshire
COUNTY COUNCIL



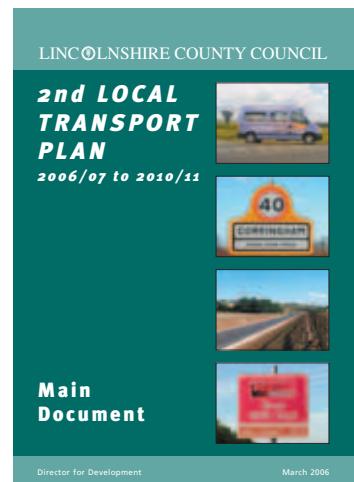
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I. Introduction

Background

- 1.1 The need for local transport authorities to prepare a statutory Local Transport Plan (LTP) was first set out in the Transport Act 2000. This required authorities to produce a 5 year plan outlining their policies and programmes for transport, together with a set of targets against which to monitor progress. The second LTP (generally known as LTP2) covered the period 2006/07 to 2010/11.
- 1.2 This document is Lincolnshire's 3rd Local Transport Plan and covers the years 2011/12 and 2012/13. The reason for this is explained in the following section.



The 3rd Lincolnshire Local Transport Plan

- 1.3 The Transport Act 2008 gave local authorities the freedom to decide for themselves how many years future LTPs should cover, including the ability to set different time spans for the strategy and implementation plan elements.
- 1.4 The development of this 3rd LTP has been complicated by the change of national government in May 2010 and the subsequent Comprehensive Spending Review announced in October 2010. For much of 2010 when the Council had hoped to be developing LTP3, there was great uncertainty around the future of transport nationally, in particular:
- the lack of an over-arching national transport policy framework within which to set LTP3, and
 - no clear guidance on the likely future levels of transport funding for local authorities.
- 1.5 As a result, Lincolnshire County Council decided to take advantage of the freedom outlined in paragraph 1.3 above to produce a "light touch" 3rd Local Transport Plan which covers just two years – 2011/12 and 2012/13. This comprises a simple roll-forward of the strategies and policies of LTP2, accompanied by an outline implementation plan for the two years.
- 1.6 Consequently, this document summarises the strategies being pursued during the LTP2 period and progress made to date. Where possible, it also highlights proposals for the next 2 years, supported by an indicative Implementation Plan for 2011/12 and 2012/13. Further details of the strategies and policies can be found in the 2nd Lincolnshire Local Transport Plan available on-line at www.lincolnshire.gov.uk/ltp or by using any of the methods of contact highlighted on the rear page of this document.

Developing the 4th Lincolnshire Local Transport Plan

- 1.7 The two years of LTP3 are to be used to produce a longer term 4th Lincolnshire Local Transport Plan (LTP4) taking into account future announcements from central government on the direction of national transport policy and funding. This will include further consultation with interested organisations and the public in due course.

- 1.8 However, what is already clear for both LTP3 and LTP4 is that levels of funding for transport will be greatly reduced from those typically available during the 2nd LTP period. This includes both capital funding for physical improvements and revenue funding for running services and routine maintenance. As a result, difficult decisions will have to be made about where scarce resources are to be focussed in the future.
- 1.9 In addition, whilst this LTP3 has been in preparation, announcements have been made by central government regarding various issues which will influence the development of LTP4. Specific areas include:
- the publication of the white paper "Creating Growth, Cutting Carbon: making Sustainable Local Transport Happen" in January 2011;
 - an increased emphasis on supporting economic growth and job creation whilst also reducing carbon emissions;
 - the introduction of a new Local Sustainable Transport Fund available for authorities to bid for funding for smaller scale schemes which support the economy and reduce carbon;
 - the formation of the new Local Enterprise Partnerships (LEPs) who will have an important role in terms of identifying and taking forward economically important infrastructure improvements using the Regional Growth Fund;
 - the new national Strategic Framework for Road Safety due to be published by April 2011;
 - the growing 'localism' agenda as outlined in the Localism Bill currently going through parliament.
- 1.20 At the time of writing the 3rd LTP, only limited guidance is available on some of these issues, whilst further details are awaited for others. However, all of these will be considered as work begins on developing the 4th Lincolnshire LTP.

2. Transport in Lincolnshire

Background

- 2.1 Transport is a means to achieving wider aims and objectives. The 2nd LTP set the Plan in the wider context of national, regional and local strategies and objectives, as well as highlighting the problems and opportunities for transport in the county looking forward.
- 2.2 Much of this is still relevant for LTP3 and the following paragraphs summarise the key elements, particularly highlighting changes since the 2nd LTP was developed.

Problems and Challenges

- 2.3 Good transport is essential for a thriving economy and social well being. Demand for the movement of people and goods across the county continues to put stress on existing transport networks. At the same time, there is increasing concern about the impact of transport on the environment, particularly in terms of carbon emissions and climate change. Table I below highlight some of the key issues impacting on transport in Lincolnshire both now and in the future.

Table I

Issues and Challenges for Transport in Lincolnshire

Issue	Challenge
Geography	<ul style="list-style-type: none">• large rural shire county (5921 square kilometre or 2286 square miles)• sparsely populated (1.2 people per hectare compared with 2.9 average for East Midlands and 4.0 for England)• only 3 urban areas in excess of 25,000 population (Lincoln, Boston and Grantham), with one third of population in settlements of less than 3000• large highway network of almost 9000 kilometres with no motorway and little dual carriageway (just 66 kilometres)• majority of county lies remote from main national transport corridors, with the A1 and East Coast Main Line skirting the western edge
Economy	<ul style="list-style-type: none">• economically underperforming with Gross Value Added (GVA) at just 81% of East Midlands and 69% of national levels (2008 data)• unemployment relatively low (3.3% in January 2011 compared with 3.5% and 3.7% regionally and nationally), but with many of the jobs low skilled and hence low paid• pockets of high unemployment, for example Gainsborough (6.1% in January 2011) and seasonal problems along the coast
Population Growth	<ul style="list-style-type: none">• population growth of 10.3% between 1999 and 2009 compared with 7.2% regionally and 5.7% nationally• a high proportion of residents of pensionable age (24.4%) compared with 20.1% regionally and 19.3% nationally, with levels as high as 29.3% in East Lindsey (2009 data)• a predicted population growth of 21% between 2008 and 2033 compared with 18% for England• substantial housing growth proposed at Lincoln, Grantham and Gainsborough through Growth Point status

Issue	Challenge
Social Exclusion and Deprivation	<ul style="list-style-type: none"> 15 of Lincolnshire's parishes are in the top 10% of deprived parishes nationally otherwise deprivation levels are generally low although life expectancy for women is lower than the English average
Health	<ul style="list-style-type: none"> the health of people in Lincolnshire is generally better than the English average levels of road injuries and deaths are worse than the English average (55.7 per 100,000 population compared with 51.3 over 2006-2008) averaged across Lincolnshire, child obesity rates (for reception classes) are slightly above the English average (9.9% compared with 9.6%), although the problem is more acute in Boston (11.1%), Lincoln (11.6%), East Lindsey (11.9%) and West Lindsey (12.5%) adult obesity rates (24.1%) are similar to the English average (24.2%), ranging from 26.4% in South Holland to 22.8% in Lincoln
Climate Change	<ul style="list-style-type: none"> increasing emphasis since LTP2 at both national and local level overall Lincolnshire's per capital emissions of carbon (7.5 tonnes per person) is less than the regional (8.6 tonnes) and national (8.0 tonnes) figures however, the proportion of carbon emissions due to road transport is slightly higher at 28.3% compared with 27.8% for the East Midlands and 26.2% in England across most of the Districts, the proportion of road transport related carbon emissions is relatively constant varying between 28.3% and 31.8%. The exception is the City of Lincoln where it represents just 12.3%
Travel	<ul style="list-style-type: none"> number of vehicle kilometres travelled in Lincolnshire has risen by 30.3% between 1993 and 2008, greater than both that for the East Midlands (26.0%) and England (22.8%) over the same period bus passenger journeys in Lincolnshire grew by almost 31% between 2005/06 and 2008/09. The growth in England over the same period was just 8%. However, growth between 2007/08 and 2008/09 slowed considerably at just 0.5%. This is in line with that experienced nationally outside of London passenger rail usage at Lincolnshire's stations grew by some 2.7% between 2004/05 and 2007/08, although there was a small fall in the last year vehicles licensed in the county has grown by 20.9% between 2001 and 2008, higher than that both nationally (16.7%) and in the East Midlands (15.1%) proportion of households in Lincolnshire without a car was 20.0% in 2001, compared with 24.3% regionally and 26.8% nationally demonstrating reliance on car in large rural shire the proportion of household in the county with 2 or more cars rose from 17.0% to 32.5% between 1981 and 2001

2.4 Further information can be founded in the LTP3 Evidence Base and the 2010 Transport Monitoring Report (both available at www.lincolnshire.gov.uk/ltp) and at the Lincolnshire Research Observatory (<http://shared.research-lincs.org.uk>).

Identifying Local Priorities

2.5 Although the Local Strategic Partnerships and the associated Local Area Agreements across Lincolnshire have now come to an end, much of the work they carried out in developing the former Sustainable Communities Strategies is still valid and provides strong evidence in taking forward the 3rd and 4th Local Transport Plans.

2.6 The preparation of the Lincolnshire Sustainable Community Strategy (adopted in 2009) demonstrated the importance that people and businesses in Lincolnshire place of transport and its contribution to wider objectives. Consultation carried out during 2008 asking residents about their key priorities for Lincolnshire showed strong support for the following:

- develop public transport in your area (58% scored as 'very important')
- develop public transport to other areas (54%)
- enable people to get to local services and facilities (52%)
- improve road safety (46%)
- improve walking and cycling facilities (42%)

2.7 Consequently, one of the 5 key themes adopted for the Lincolnshire Sustainable Communities Strategy was:

Good connections between people, services, communities and places

This theme focused on:

- improved access through a safe, well managed, sustainable transport network, and
- improved access through widespread use of digital technology

2.8 Although the Local Strategic Partnerships have been dissolved, transport issues continue to be a focus of many groups and organisations at both the county and district level.

2.9 In addition, the recently formed Greater Lincolnshire Local Enterprise Partnership (LEP) has also identified transport, and in particular infrastructure provision, as being important as it looks to deliver 'Prosperity Through Growth'. The LEP Board, comprising members from both the business and civic communities, is looking to secure support from the Regional Growth Fund for improvements to transport infrastructure.

Transport Vision and Objectives

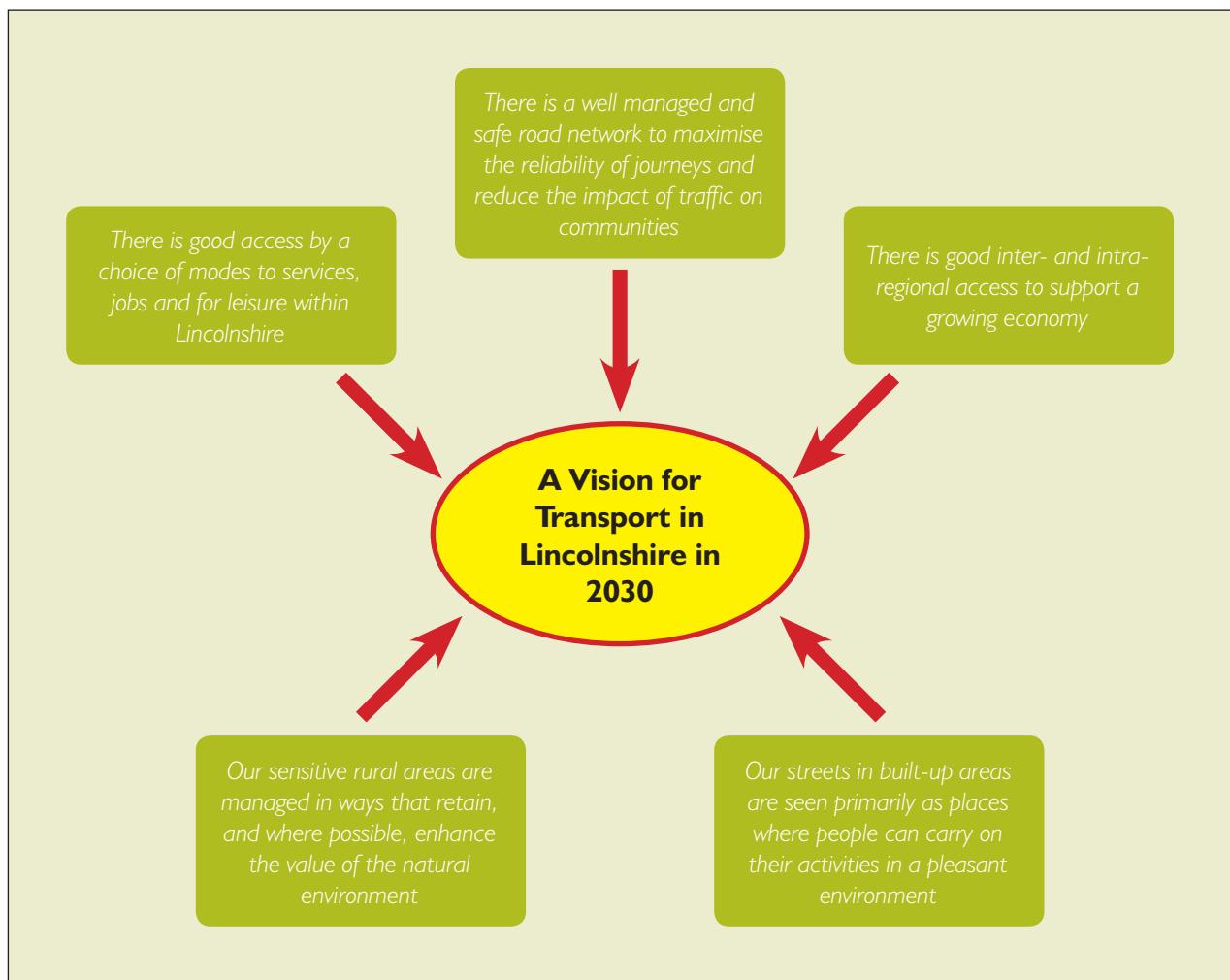
2.10 The longer term transport vision for Lincolnshire adopted for LTP2 remains relevant for LTP3 and is shown in Figure 1. Similarly, the overarching LTP2 transport objectives which were developed in consultation with stakeholders, other organisations and the public will continue to be pursued during LTP3. These are:

- to assist the sustainable economic growth of Lincolnshire, and the East Midlands region, through improvements to the transport network
- to increase public transport usage by improving:
 - the quality of vehicles and infrastructure
 - the reliability, frequency and journey time of services; and
 - bus/rail integration
- to improve access to key services by widening travel choices, especially for those without access to a car
- to make travel for all modes safer and, in particular, reduce the number and severity of road casualties

- to remove unnecessary HGVs from affected communities through:
 - appropriate traffic management measures
 - highway improvements; and
 - encouraging the use of alternative modes of transport
- to maintain the transport system to standards which allow safe and efficient movement of people and goods
- to protect and enhance the built and natural environment of the county by reducing the adverse impacts of traffic
- to improve the quality of public spaces for residents, workers and visitors by creating a safe, attractive and accessible environment
- to enhance air quality, particularly within declared Air Quality Management Areas

Figure 1

A Longer Term Vision for Transport In Lincolnshire



3. Supporting the Economy

Background

- 3.1 Although not directly identified as one of the 'Shared Priorities', the role that transport has in supporting the local economy was indentified as a key issue within LTP2. The current economic climate has only served to strengthen this role.
- 3.2 However, what is clear is that opportunities for funding are currently greatly reduced, particularly for major infrastructure projects. At the time of writing, the Department for Transport are in the process of making decisions regarding which major local transport schemes they will support during the current Spending Review period (i.e. through to 2014/15). They have also indicated that they will be publishing proposals to reform the way decisions are made on which major transport projects to take forward and the role that Local Enterprise partnerships will have in this process.
- 3.3 The following paragraphs outline some of the current and proposed major transport initiatives that have or will help to encourage economic growth across the county. Issues in the larger urban areas of Lincoln, Boston and Grantham are covered in Chapters 7, 8 and 9.

Majors Scheme Progress During LTP2

A158/C541 Coastal Access Improvements

- 3.4 The first phase of this initiative to improve access to the east coast and support the vitally important tourism industry was completed in August 2005 with the opening of the A16 and A158 bypasses around Partney. The scheme was delivered 3 months ahead of programme with cost savings and consequently featured as a Case Study prepared by the Office of Government Commerce identifying the achievements of using an overarching bespoke framework contract to deliver the scheme.
- 3.5 The second phase of the Coastal Access Improvement, the A158 Burgh Le Marsh Bypass opened in November 2007, over 4 months ahead of programme and significantly under budget. A Monitoring and Evaluation Study was carried out a year after completion to identify the benefits realised. The outcome was that the main aims were seen to have been achieved and particularly pleasing was the positive impact on the local community and businesses. Approximately 80% of the traffic was transferred onto the new road with all the inherent environmental, safety and congestion benefits. The results of the monitoring and evaluation study were captured in a report dated April 2009.



A158 Burgh Le Marsh Bypass

A1073 Spalding to Eye Improvement Scheme

- 3.6 This road improvement links the A16 near Spalding to the A47 near Peterborough and provides a new 22 km route running parallel to the old road. It is an important link between south Lincolnshire, the East of England and the A1 for the agricultural and food processing industry, as well as a key route for commuters. The scheme was promoted jointly with Peterborough City Council.
- 3.7 Following a Public Inquiry in November 2004 and confirmation of the orders in October 2006, the scheme was successful in securing Department for Transport funding through the Regional Funding Allocations process via both the East Midlands and East of England regions. This provided some £69.8m towards the total cost of £80.3m.
- 3.8 Work started on site with Lincolnshire County Council's Framework Contractor in March 2008. Construction was programmed for completion in Autumn 2010 and the section within Lincolnshire from A16 to Crowland was opened in August 2010. Unfortunately, the remaining section in Peterborough will not now open until summer 2011 due to geotechnical problems with the embankment on the approach to Car Dyke Bridge.



A1073 Spalding to Eye Improvement

Lincoln Eastern Bypass

- 3.9 The proposed Lincoln Eastern Bypass is a key element of the adopted Lincoln Transport Strategy which is outlined in more detail in Chapter 7. The scheme maintained its position within the regional advice submitted to Government in February 2009 as part of the 2nd round of Regional Funding Allocations with an indicative start of 2013 subject to progress of the necessary processes.
- 3.10 A major scheme business case was submitted to DfT late in 2009, but consideration of this was put on hold pending the change of national government and the outcome of the Comprehensive Spending Review. More recently, planning permission for a revised alignment was granted in October 2010.
- 3.11 In the DfT statement of October 2010 on future investment in local major transport schemes, the Lincoln Eastern Bypass was included within the list of schemes within the Pre-Qualification Pool. However, following a successful Expression of Interest submitted in early January 2011, the scheme has secured a place within the Development Pool of proposals to be considered by DfT for possible delivery during the current Spending Review period. A 'Best and Final Funding Bid' will be submitted to DfT in early September 2009, with final decisions on schemes to go forward during this parliament to be made by DfT in December 2011.

Other Longer Term Major Schemes

- 3.12 The 2nd LTP outlined aspirations for several major highway schemes across Lincolnshire. In the current economic climate, the future of all such schemes is unclear and it is not affordable to commit large amounts of funding for detailed feasibility assessments of all such schemes in the knowledge that future funding constraints will mean very few will come to fruition.
- 3.13 Therefore, once the picture as to likely levels of future government funding becomes clearer, along with the roles of the Local Enterprise Partnerships, then a re-assessment of the prospects for securing funding for major schemes will be carried out as part of the development of the 4th LTP. This will be used to prioritise those schemes where scarce resources should be focussed in order to be in a position to take advantage of any changes in future funding arrangements. Key to this decision will be future opportunities for match funding such as developer contributions via the Community Infrastructure Levy, European funding and any new central government funding mechanisms.

Supporting the Larger Market Towns

- 3.14 As well as the three largest urban areas of Lincoln, Boston and Grantham (which are covered in subsequent chapters), there are other large market towns across the county which provide a range of services to residents, visitors and those living in the outlying rural areas. Consequently it is important that the economic well-being of these towns is supported through a range of transport initiatives where possible. The following paragraphs outline recent progress and current proposals in these towns.

Bourne

- 3.15 The town centre of Bourne continues to suffer from the effects of through traffic, particularly north-south traffic using the A15. The South West Relief Road, provided via S106 funding but pre-funded by the County and District Councils, has reduced east-west flows in the centre. A number of projects have been carried out under the Community Travel Zone initiative to encourage non-car use for short journeys including a new pedestrian crossing and a number of traffic calming schemes.
- 3.16 Although the newly adopted Core Strategy suggests most housing growth in South Kesteven will be concentrated in the Grantham area, the current population of Bourne of 14,700 is expected to grow by about 50% in the next 5-10 years when the large Elsea Park development is completed on the south-western edge of town. During the life of LTP3, opportunities will be pursued to improve sustainable travel in the town with funding through S106 agreements.

Gainsborough

- 3.17 As a result of Gainsborough's designation as a Growth Point, substantial development is proposed for the town over the next 15-20 years. It is currently envisaged that this will take the form of 3 sustainable urban extensions, one of which has recently been granted planning permission for some 2,500 dwellings to the south, together with elements of employment, retail and community facilities. This approach is currently being examined through the ongoing development of the Central Lincolnshire Joint Core Strategy.

- 3.18 In support of this growth, the County Council in partnership with West Lindsey District Council has been developing a Transport Strategy for the town. This has involved widespread consultation with the public and interested organisations, together with the appraisal of a wide range of possible transport improvements. As a result, a package of proposals has been identified which includes:
- redevelopment of Lea Road rail station
 - upgrade/relocation of bus station
 - improvements for cyclists including improved crossing facilities, new cycleways and parking
 - improvements at key junctions
 - extension of the IntoTown bus service coupled with bus priority measures and improved bus stop infrastructure and realtime information
 - roll out of travel plans for schools and local businesses, together with personalised travel planning

- 3.19 The Strategy is in the process of being formally adopted by both Lincolnshire County Council and West Lindsey District Council.

Louth

- 3.20 As part of the Community Travel Zone initiative, and following detailed consultation, various minor capital works have been completed to aid both pedestrian and cycle movement. Many of the schemes have been jointly funded with East Lindsey District Council and linked to the recently constructed Meridian Leisure Centre. It is hoped that these partnership arrangements can be built upon in future years.

Skegness

- 3.21 The construction of the A158 Burgh le Marsh and A16/A158 Partney bypasses has improved the transport links to the coastal area, and Skegness in particular. In conjunction with these bypasses, the Community Travel Zone initiative has provided improved walking and cycling facilities in and around Skegness.
- 3.22 The County Council remains committed to working with East Lindsey District Council and local landowners and developers in seeking to improve the movement of traffic between and around the coastal resorts of Skegness and Ingoldmells. Opportunities to improve or alleviate existing congestion hot spots on the network remain a high priority for the area.

Sleaford

- 3.23 As highlighted in LTP 2, proposals have been in development to bring the former Bass Maltings back into use. The Maltings are a 500,000 sq ft Grade 2* complex of Edwardian malthouses and ancillary buildings. They are the largest single complex of industrial maltings in the UK and currently in private ownership. Achieving the necessary access to allow the major mixed-use redevelopment of the site has been difficult. However, through joint working with North Kesteven District Council, a new link road over the railway is being provided. This is associated with an approved planning application for a major supermarket which will also see the closure of a level crossing. It is anticipated that the new road layout will facilitate further developments in this area of the town. A revised IntoTown town bus service continues to operate successfully and this will be extended using S106 funding as the opportunity arises.

Spalding

- 3.24 Of major concern for the future economy of Spalding town centre is the proposal by Network Rail to route additional freight trains along an upgraded GN/GE Joint Line through the town. Traffic modelling has shown that the increased down time at level crossings will result in severe road network disruption. In addition, there are proposals to create a Freight Hub to the west of Spalding near the old A16. Whilst this will have significant benefits in terms of transferring freight from road to rail, it will also increase the rail traffic through the town making it imperative that some infrastructure improvements are carried out.
- 3.25 As a result of the above and the recent planning permission for 2,500 homes to the west of Spalding, a Western Relief Road is being promoted. A section of the proposed development road will form the first part of the Western Relief Road and it is intended to apply for planning permission for the section between the end of the development road and the A151 Bourne Road in late 2011/early 2012. The remaining section from the A151 to the B1356 Spalding Road will follow at a later date.

Stamford

- 3.26 The 2nd LTP described proposals to improve the Sheepmarket and Red Lion Square area. This work was completed successfully and received an award from the Civic Society. The area has been transformed and is now less dominated by vehicles. A number of Community Travel Zone schemes have been carried out, with others still being completed. These include pedestrian crossings, footways and cycleways. A feasibility study into a bypass or relief road was proposed in LTP2. Work started on this, with the traffic model being updated. However, currently work is on hold as it seems unlikely that funding for any major improvement will be available in the short to medium term. During the life of LTP3, opportunities will be pursued to improve sustainable travel in the town with funding through S106 agreements.



Red Lion Square, Stamford

4. Delivering Accessibility

Background

- 4.1 The 'Making the Connections' report published by the Social Exclusion Unit in 2003 set down the challenge of tackling accessibility to local transport authorities. Lincolnshire County Council has made strong progress in this area during the 2nd LTP period. Strong partnership working with a variety of sectors is required to tackle access to employment, education and training, health services and key service centres. These partnerships also consider how people access these services in a healthier and more sustainable way, for example: car sharing, cycling, walking, using public transport and non transport solutions such as improving local service provision and high quality broadband provision. Approaching the 3rd LTP period, a stronger focus on the role that accessibility has in supporting the economy and reducing green house gases is more vital than ever.
- 4.2 Lincolnshire County Council initially developed an accessibility strategy through a strategic multi-agency forum known as the Lincolnshire Accessibility Partnership. This work was taken forward through the Sustainable Community Strategy. Currently, accessibility is an important element of Lincolnshire's flagship project for older people, Excellent Ageing.
- 4.3 As travel patterns become more complex, those without access to a car are in danger of being excluded from participating in 'normal behaviours' without imaginative and flexible accessibility solutions delivered by the private, public and voluntary and community sector. The following chapter sets out the role of transport and non-transport solutions to improving accessibility, highlighting case studies which demonstrate the breadth of the subjects tackled and gives future direction for the period of the plan.

Public Transport: Bus Services

- 4.4 Lincolnshire continues to work in partnership with commercial operators to deliver the InterConnect/ CallConnect bus network. During the last 3 years, new InterConnect routes have been introduced on the Louth to Grimsby, Lincoln to Scunthorpe via Gainsborough and Peterborough to Spalding corridors. Working in partnerships with bus operators has had a positive effect on passenger levels within Lincolnshire, rising from 13.5m passengers in 2005/06 to 17.1m in 2009/10.
- 4.5 Alongside the InterConnect services, the demand response CallConnect services have also been expanded. These provide a prebookable flexible feeder services giving access to local service centres and enabling onward travel by connection to the larger urban centres and facilities such as hospitals. Further details, including current coverage is given in the Delivery Example shown overleaf.

Delivery Example : CallConnect Demand Responsive Services

The County Council runs the largest demand responsive bus operation in the country, currently providing 23 individual CallConnect services covering the vast majority of the county (see map below). The services are a key element of the accessibility strategy for rural Lincolnshire and link to the InterConnect primary inter-urban services at key locations where quality interchanges are provided.

All CallConnect services offer a regular 6 day a week service pre-booked before travelling through the Matrix Booking Centre either by phone or via the internet. As a result of both greater coverage and increasing patronage on individual services, the number of passengers using the CallConnect services each month continues to grow reaching just under 20,000 in November 2010.



As a result of this success, the CallConnect and InterConnect initiatives continue to attract much interest from other authorities, with the County Council regularly hosting visits, contributing to best practise media (such as publications and DVDs) and giving presentations at seminars and conferences. In the south of the county, a joint CallConnect service is operating in partnership with Rutland, Peterborough City and Northamptonshire, all managed through the Matrix Booking Centre.



The bi-annual satisfaction survey of users continues to show improvement, with 93% of users being very/fairly satisfied with the overall CallConnect service in 2010 (up from 89% in 2008) and 93% also being very/fairly satisfied with their experience of contacting the Matrix Booking Centre.

- 4.6 In the urban areas outside of Lincoln, the bus provision continues to grow with five market towns currently having improved town services marketed through the IntoTown strategy. The existing market towns of Spalding and Sleaford have been joined by Gainsborough, Boston and most recent in April 2010, Grantham. In addition, a new town service for Louth, branded as the 'Louth Nipper' was launched in April 2010.
- 4.7 A key driver in increasing patronage on local bus services throughout Lincolnshire has been the provision of improved bus information. This includes regularly updated roadside timetable information at bus stops and improved publications highlighting the public transport network using marketing materials such as County Map & Guide and Local Area Guides. The interactive lincsbus website provides mapping and full timetables for all bus services in the County (www.lincsbus.info). The County Council's 2003 Bus Information Strategy is being updated and will be reissued for 2011. The County Council continues to work closely with other local authorities and bus operators in the region to support 'Traveline' through the maintenance and supply of an accurate database of local bus service timetables. Improved bus information will continue to be developed through use of alternative media, including electronic versions of publications.
- 4.8 Another key element of delivering improved accessibility is the provision of public transport infrastructure to support improved services. During the 2nd LTP period, good progress has been made in this respect including:
- bus stop poles and timetable displays at approximately 1900 stops in Lincolnshire (roughly 29% of all stops)
 - accessible boarding kerbs and crossing points at 1500 stops in Lincolnshire (roughly 24% of all stops)
 - solar 'LED' lighting at rural stops to help see the stop during hours of darkness.
 - real-time information systems to provide up-to-the-minute bus running information in Lincoln, Boston, Gainsborough, Grantham and on key InterConnect routes.
 - 18 new bus shelters delivered through the Parish Shelter Grant introduced in 2008.
- 4.9 During the 3rd LTP period, the authority will continue to look for ways to expand the InterConnect, CallConnect and IntoTown networks and further improve infrastructure. However, with the 'easy targets' already covered and uncertainty over future funding, both to the local authority and bus operators (via Bus Service Operators Grant – BSOG), this is likely to be extremely challenging.
- 4.10 A further uncertainty during the LTP3 period is the switch of responsibility of the English National Concessionary Fare Scheme from the seven District Councils to the County Council from 1st April 2011. With reduced funding available from the Government, this could have a major impact on provision of local bus services throughout the County with a much lower reimbursement rate to bus operators anticipated than that currently being available from the District Councils.
- ### **Community Transport**
- 4.11 During the first two LTP periods, Dial-a-Ride has played an important though decreasing role within the transport mix. As funding patterns have changed and different pressures have fallen on funding partners, Lincolnshire has needed to reconsider how it supports some of the most vulnerable travellers in the community. Unfortunately in light of reducing revenue streams, from April 2011 Dial-a-Ride across the county has ceased, with the exception of the Lincoln scheme which remains in a strong position.



Louth 'Nipper' Town Service

The needs of these travellers will therefore continue to be met in a number of ways, in particular an increase in the availability of CallConnect demand responsive services and an ever strengthening voluntary car and community transport sector.

- 4.12 The community transport sector comprises community minibuses, voluntary and community car schemes, and a social enterprise which is delivering Wheels to Work for the County (see Delivery Example below).

Delivery Example : Wheels to Work	
<p>Wheels to Work is a countywide moped/scooter loan scheme developed to improve access to employment and training opportunities across rural Lincolnshire. The scheme operates as a social enterprise 'Access Your Future' addressing access to employment, education and training for those who are most rurally isolated.</p> <p>The scheme provides an economic and environmentally friendly transport solution to those unable to access work, education or skills development due to location or lack of local opportunity. The social enterprise is developing income generating projects for long term sustainability within the first 2 years of its launch.</p> <p>Individuals that meet the eligibility criteria can apply directly and supporting agencies can signpost to the project where beneficiaries will receive training and support on road safety before they have access their scooter/moped.</p> <p>The scheme was launch in June 2010 and is on track to have 120 mopeds and scooters on the road within the first year.</p>	

- 4.13 Voluntary and Community Car Schemes provided over 50,000 journeys in 2009/10. The schemes often transport people who need additional support. Many of the journeys are made to health appointments where the volunteer driver will wait for the passenger, providing reassurance. The sector has developed significantly during the 2nd LTP period, moving from a position of patchy coverage with schemes working in isolation to a picture in 2010 where there are volunteer drivers across the County with schemes coming together under the umbrella of the Community Transport Forum to receive training and support.
- 4.14 The County Council also has an important enabling role to play. An example of this can be seen in Stamford. Following significant community travel planning work, it was clear that demand existed for a number of transport service improvements in the town and surrounding area. Part of the solution was the development of demand responsive transport and a flourishing CallConnect service is now in place. There was clearly also demand for a community based vehicle. The Christ Church Car Scheme in Stamford agreed to pilot this scheme, with a vehicle being loaned to the project by the County Council. Another project currently being developed is a car scheme for younger people in South Holland. This project follows work with Lincolnshire's Youth Cabinet who identified transport as one of their top three priorities.
- 4.15 During the 3rd LTP period, Lincolnshire County Council will pilot a vehicle brokerage system. Such a scheme will increase capacity, flexibility and sustainability of community transport. The project has the potential to work across sectors with benefits for all. Increased flexibility is particularly vital to meet the transport needs and demands created by personal budgets and changes in the provision of 14-19 transport.

Walking and Cycling

4.16 During the 1st and 2nd LTP periods walking and cycling have been encouraged through a range of Community Travel Zone and Rural Priority Initiative works. These infrastructure improvements make travel by foot and by bicycle easier. Other infrastructure improvements have taken place in partnership with Sustrans including:

- the opening of the Water Rail Way, an off road cycle route from Lincoln to Boston, as part of the National Cycle Network, and
- the Leasingham to Sleaford cycle route via the 'Connect2' initiative.
- the Toot Lane cycle route in Boston, combining CATCH and Public Health funding and a Links2School grant.



Cycling on the Water Rail Way

4.17 The County Council is building on these improvements to the network to achieve modal shift through 'softer measures' including school and business travel planning together with promotional work. For example, by working with local cycling groups to promote family cycle rides along the Water Rail Way.

4.18 In addition, the public rights of way network has an important role to play in improving access to key services, particularly on the edges of urban areas and between villages. Further information on the development and implementation of the Lincolnshire Rights of Way Improvement Plan can be found at paragraph 13.32 onwards.

4.19 National and regional work on walking and cycling has demonstrated that the schemes offer good value for money, addressing a number of outcomes including health, carbon and congestion. During the 3rd LTP period, the authority will continue to look for ways to improve facilities for pedestrians and cyclists and encourage their use, within the funding available.

Rail

4.20 Rail travel forms an important part of Lincolnshire's transport network. For some rural communities, it is the main mode of public transport to access shops and services. Rail also plays a key role in local commuting, with an estimated 24% of commuters on rail-served routes arriving in Lincoln by train. Rail also plays a key role in longer-distance commuting to Nottingham and London for occupiers of higher-value jobs seeking the quality of life offered in Lincolnshire.

4.21 During the 2nd LTP period, the County Council developed a Rail Strategy to identify how to work with the rail industry to maximise economic and environmental benefits to Lincolnshire. This document was published in 2010 and identifies the key strands which will form the basis of activities related to rail. These are:

- improved journey times to key centres
- improved station environments and accessibility
- reducing the impact of level crossings
- developing Community Rail
- improving rail freight movements

- 4.22 In the shorter term, key priorities will focus around:
- pressing the case for Lincoln – London services
 - maximising benefits from Network Rail plans to upgrade the Peterborough – Spalding – Lincoln – Doncaster line, including a focus on the High Street Level Crossing in Lincoln.
 - engaging local communities with the railway.
 - improving accessibility of, and facilities at railway stations.
- 4.23 The Poacher Line Community Rail Partnership continues to promote the Nottingham-Skegness line to increase its use and secure the longer term viability of the line. Initiatives include a range of on-board events such as 'Music Trains', better publicity and timetable information, and improved conditions and access at stations. These are coupled with more major proposals such as line speed improvements and the redevelopment of Skegness station, which are currently underway. Recent data on the number of people using the stations along the line suggest that numbers are showing signs of increasing.

Reducing the Need to Travel

- 4.24 The Department for Transport has highlighted the importance of reducing the need to travel within the accessibility mix. This can be particularly challenging at a time of financial constraints when many partners see local service delivery in rural areas as too costly. Making better use of existing facilities is a logical step. Some solutions may be forthcoming through recent announcements for the future of the Post Office. Developing the role of the post office within the local community will be invaluable for providing functions such as access to banking facilities and potentially Job Centre Plus facilities. Opportunities may also arise through the development of GP clusters.
- 4.25 During the 2nd LTP period, Lincolnshire County Council continued to recognise the value of access to local services with the development of the Rural Gain Grant. The grant is aimed at improving access to essential local services by supporting the development of businesses or community projects that maintain the economic, social infrastructure and sustainability of rural life. A recent Delivery Example is highlighted below.

Delivery Example : Rural Gain Grant

Rural Gain Grant has recently supported a project at Folkingham, in South Kesteven to improve the village store.

The owner of the store acquired the shop in November 2009. Previously the shop had become run down and trade was in decline. Colin recognised the potential of the shop and saw the grant as an opportunity to enable the stores potential to be realised. Every aspect of the business was reviewed from the shabby shelving, dark lighting, to the poor stock lines.

The project received support from the local community and successfully applied for RGG grant. The end result is a light airy and well-stocked store, with a deli section selling local meat, bread and eggs. Footfall has increased by 20% and the longer term future of this key local service has significantly improved.

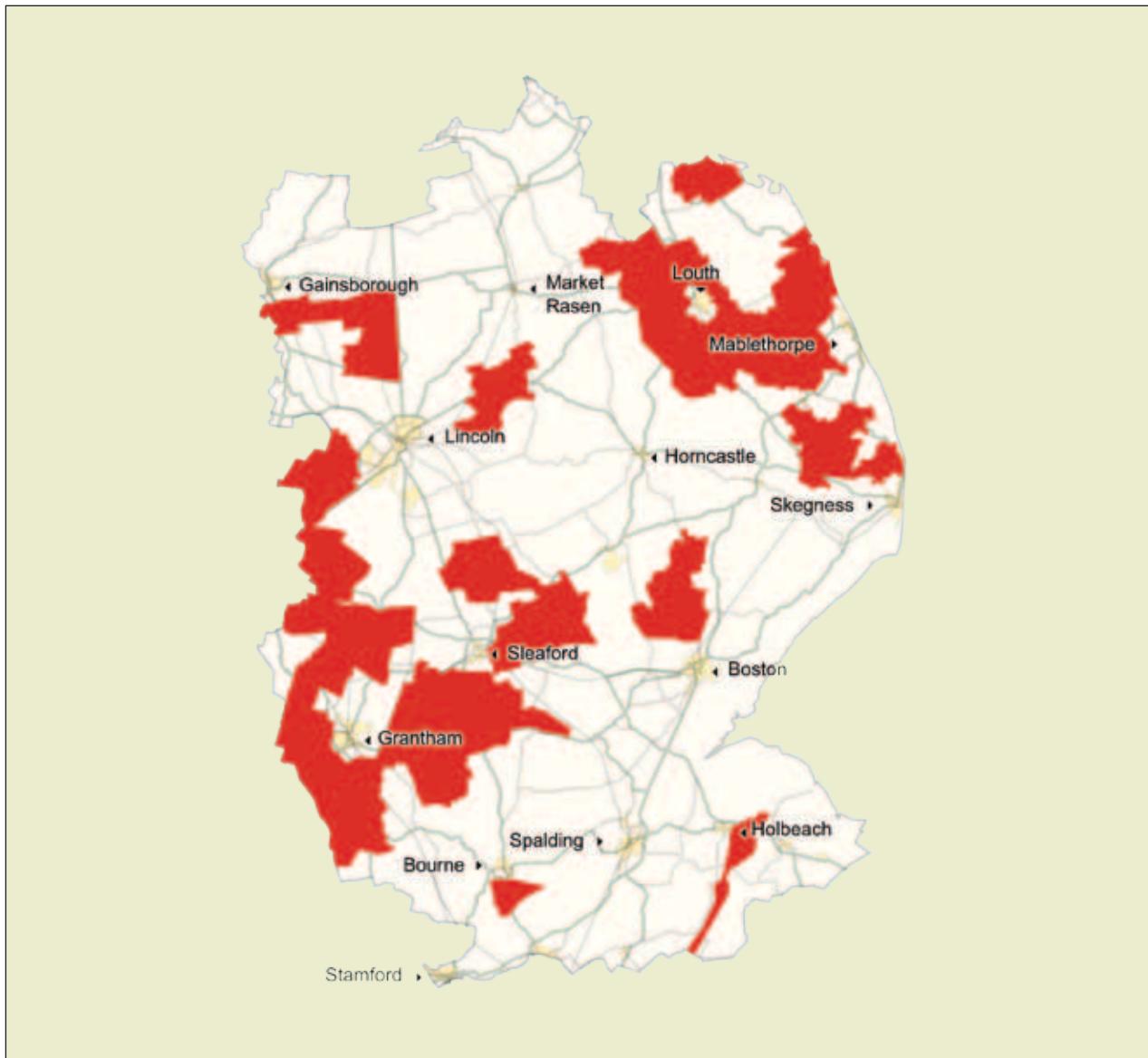
Overall, some 20 projects have been supported in the first year of the grant. Awards have ranged from £400 to £10,000, with projects coming from the private sector and community groups.



- 4.26 An outcome of the Lincolnshire Sustainable Community Strategy 2030 (under the 'Good Connections' theme) was that '**widespread use of digital technology improves lives and life chances**'. Digital connectivity plays an important part of providing accessibility without the need to travel through home working, communication, shopping and leisure. Its economic importance as well as its role in quality of life makes this a priority for Lincolnshire. However, in a large, rural shire county such as Lincolnshire, internet access (particularly by broadband connection) is not available to all, particularly those in the more remote areas. Some 57,000 people (or 8% of the population) live in areas with limited or no access to broadband internet, as shown in Figure 2 below.

Figure 2

Areas With Limited or No Access to Broadband Internet



- 4.27 Technology is developing quickly and Lincolnshire must keep pace in order to realise the benefits of digital technology. Access to digital infrastructure is the first step to maximising the impact on the economy and to achieving digital inclusion. An equally important step is ensuring that everyone has the 'ICT life skills' to take advantage of the opportunities. The Digital Connectivity project is putting plans in place to realise the outcome through developing an overarching Digital Strategy of demand and supply measures for Lincolnshire.

5. Safer Roads

Background

- 5.1 Road safety continues to be a major concern both nationally and locally. During 2009, 2,337 people were killed on the roads nationally, with a further 25,700 seriously injured. In Lincolnshire, road safety services are provided through the Lincolnshire Road Safety Partnership which comprises:



**Lincolnshire
Road
Safety
Partnership**

- Lincolnshire Police / Police Authority
- Lincolnshire County Council
- Lincolnshire NHS Partnership Trust
- The Highways Agency
- Lincolnshire Probation Service
- Lincolnshire Fire and Rescue
- East Midlands Ambulance Service

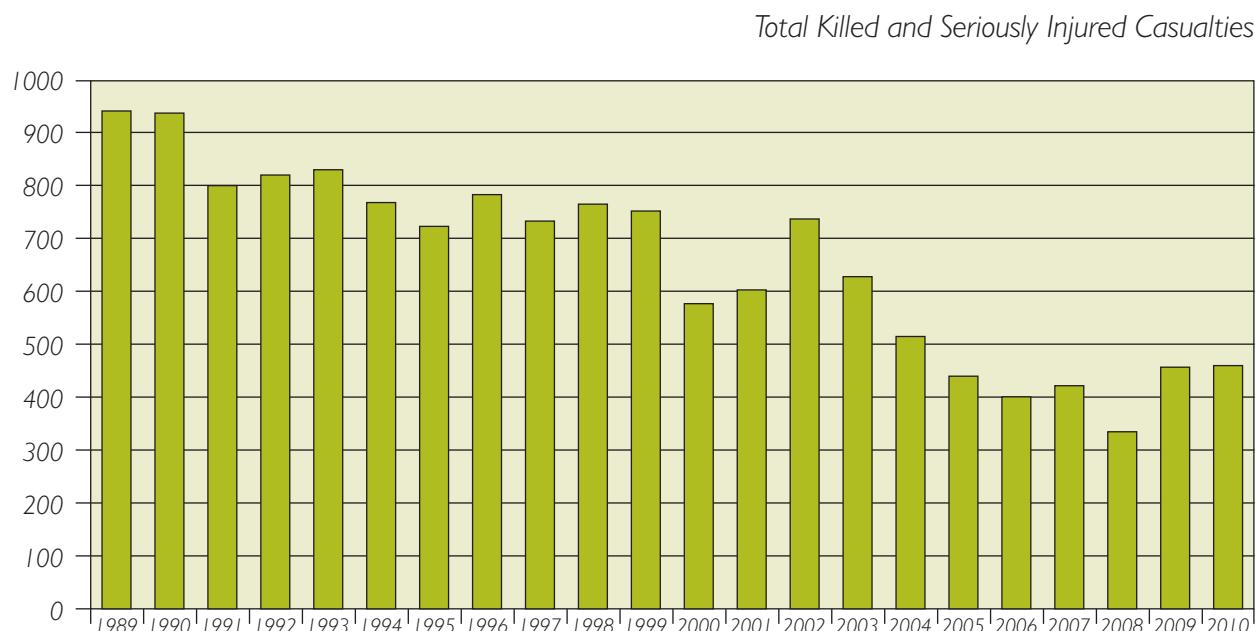
- 5.2 This Partnership approach was recognised as National Best Practice when Lincolnshire County Council was awarded Beacon Status in 2006 for its road safety services. As a direct result of this award, the authority was invited to participate in the Department for Transport's Rural Demonstration Project (see paragraph 5.17).



Recent Progress In Reducing Casualties

- 5.3 Good progress has been made in reducing casualties on Lincolnshire's roads during the 2nd LTP period. Figure 3 shows the number of killed or seriously injured (KSI) casualties since 1989. This shows that there has been a gradual decline in the number of killed or serious road traffic casualties and that, based on the provisional figures for 2010, the Partnership will achieve the Government's casualty reduction targets for 2010. The number of killed and serious injury casualties for 2008 was the lowest on record.

Figure 3



- 5.4 Similar good progress has been made in respect of child casualties on Lincolnshire's roads with the numbers falling from an average of 76 for 1994-98 to a record low in 2008 of 16. The Government's target of 50% reduction by 2010 has been achieved for the last 5 years.

Road Safety Issues

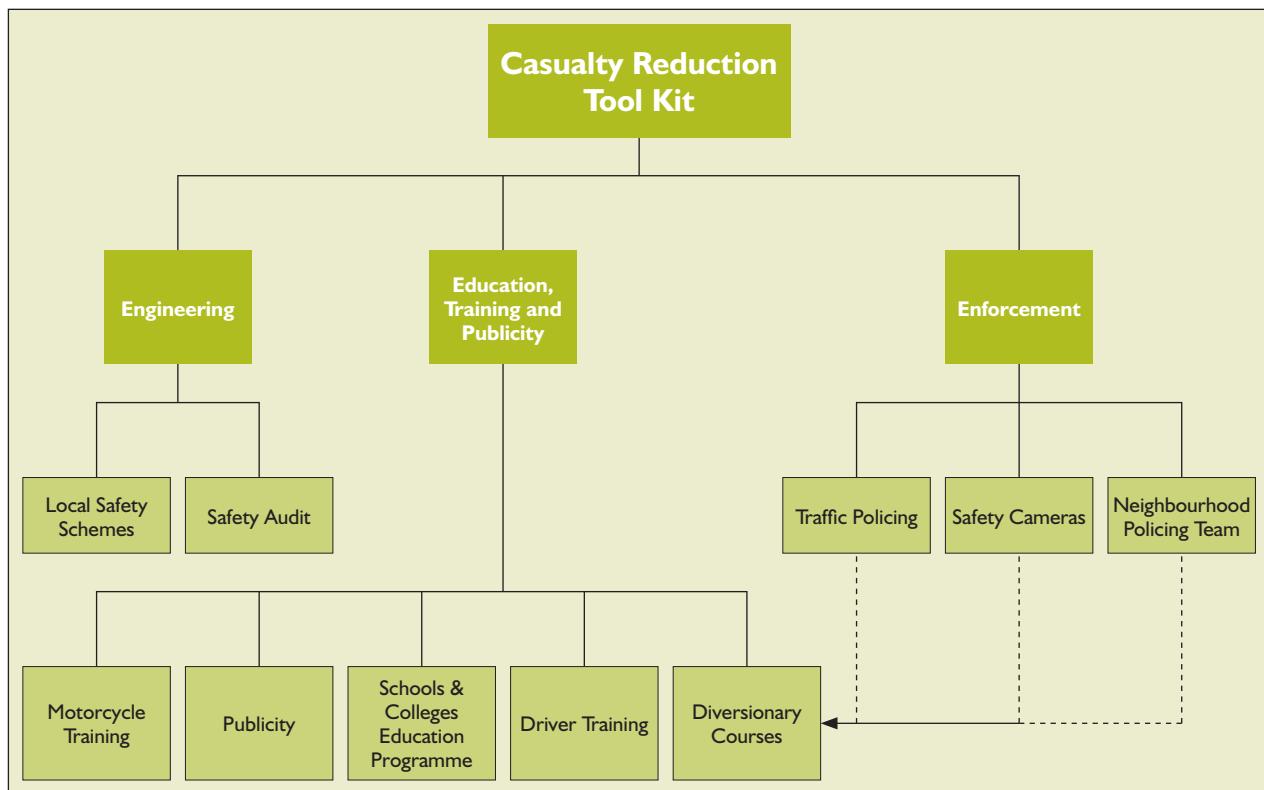
- 5.5 Most road safety activities in Lincolnshire are data-led using the joint database managed by the Partnership. Specific issue on which work has focussed during the 2nd LTP period include:
- the high proportion of car user casualties when compared to the national average (55% as opposed to 41%) and the consequentially lower proportion of pedestrian and cyclist casualties (20% combined as opposed to 32%) reflecting the rural nature of the majority of the county
 - the high proportion of casualties on the major rural roads, with the unrestricted A and B roads representing just 18% of the network, but attracting 54% of all KSI collisions
 - national evidence that people living in the 10% most deprived areas are slightly over represented in the casualty population and that this is largely due to pedestrian casualties, particularly children
 - continuing over-representation of motorcycle casualties when compared to usage, particularly among more elderly riders using larger motorcycles over 500cc
 - high levels of casualties among the 17 to 24 year old age group, which represent 8% of the population but account for 25% of all KSI casualties and 24% of all fatal casualties
 - business drivers, who are involved in 33% of all collisions nationally

Strategic Road Safety Plan For Lincolnshire

- 5.6 The LRSP has developed a Strategic Road Safety Plan for Lincolnshire which is evidence based and focuses on the three E's of education, engineering and enforcement, all underpinned by evaluation. The strategy focuses priority actions on the problem user groups mentioned above as appropriate (e.g. 17 to 24 year old drivers, motorcyclists and business drivers) and delivered through the Casualty Reduction Toolkit shown in Figure 4. It is proposed to review the Plan during the 3rd LTP period in the light of the national strategic framework for road safety due to be published in April 2011.
- 5.7 To inform this review, it is intended to carry out a Child Safety Audit. These are recommended by both DfT and in recent guidelines produced by the National Institute for Health and Clinical Excellence (NICE) guidelines. The aim is to:
- Review performance to 2010.
 - Provide in-depth analysis of child casualties and trends including those in deprived areas.
 - Review of initiatives focussed on child casualty reduction.
 - Identify priorities for child casualty reduction to 2020.
- 5.8 During the life of LTP3, it is also intended to carry out a review of the school crossing patrol service. This review will ensure it continues to provide the most effective and efficient service option.
- 5.9 In the meantime, the following paragraphs set out the initiatives, both ongoing and new, which will be pursued during the 3rd Local Transport Plan period under each of the 3E's.

Figure 4

Casualty Reduction Toolkit



Engineering

5.10 Included among the engineering initiatives which make a contribution to improved road safety are:

- Local Safety Schemes – low cost/high value schemes designed to reduce casualties where an established pattern of accidents can be effectively treated. In recent years, these have typically achieved a first year rate of return (FYRR) of 500-600%.
- Major Highway Improvements - although not necessarily their primary aim, major highway improvement schemes (such as the A1073 Spalding to Eye Improvement) also contribute to the reduction of casualties on the county's roads.
- Improvement of Skidding Resistance - an annual programme of surface treatments prioritised using accident data and also making a significant contribution to road safety.
- Minor Highway Improvements and Maintenance Schemes - minor highway improvement schemes (such as improvements for cyclist and pedestrians) and maintenance works also contribute to some extent to the overall aim of reducing casualties.



A15/B1202 junction at Metheringham Heath

5.11 As part of the engineering solutions discussed above, safety audits are also carried out on all major improvement schemes and on minor improvements that could affect safety on the highway. These provide an independent assessment of the safety implications of a highway improvement.

- 5.12 Police forensic collision investigators also liaise closely with Engineers within the LRSP to ensure that the lessons learned from the police investigation are acted upon. This ensures that trends are identified at the earliest opportunities to enable appropriate interventions to be implemented.

Education, Training and Publicity (ETP)

- 5.13 ETP services are jointly provided by County Council Road Safety Officers, Police Casualty Reduction Officers and Fire Service Road Safety Coordinators, delivering a range of initiatives from improving driver standards and awareness to providing children and young adults with a broad breadth of road safety education. Table 2 overleaf shows the ETP initiatives that have been developed during the 2nd LTP and will continue during LTP3.

Delivery Example : 2fast2soon

Launched in September 2008, the 2fast2soon initiative is directed at 6th form schools, colleges and university students. The programme combines a mix of theatre, educational workshops and practical driving targeted at reducing the number of killed and seriously injured casualties involving a driver in the 17 to 20 year old age group who are known to be a high risk group. The initiative comprises 3 phases including:

- a theatre production based on an actual collision with the cast comprising a victim (or family member) and staff from the emergency services.
- a series of post theatre workshops
- practical driver training programme



The table below shows there has been a combined reduction in the number of killed and serious injury casualties involving young drivers compared with the average number of casualties for the three years preceding the initiative. This comparison shows a decrease in casualties involving this vulnerable age group throughout the 3 years the initiative has been operating.

Casualties involving a 17 – 20 year driver

	2004-2006	2007-2009	Numeric Change	Percentage Change
Fatal	32	29	-3	9.4%
Serious	216	140	-76	35.2%

In recognition of it's innovative approach, the initiative was awarded the 2010/11 Prince Michael of Kent International Road Safety Award For Education.

Table 2

Education, Training and Publicity Initiatives

Intervention	Intention
Bikewise/Bikeability	<ul style="list-style-type: none"> • Increase level of cycling among school age children and adults • Improve rider skills to reduce the frequency of cycling casualties
Pedestrian Training	<ul style="list-style-type: none"> • Achieve 20% increase in walking amongst school age children
School Safety Zones	<ul style="list-style-type: none"> • To improve child safety outside schools • To ensure schools develop a school travel plan • To improve pupil awareness of road safety issues
2 Fast 2 Soon	<ul style="list-style-type: none"> • To reduce the number of collisions involving young and inexperienced drivers • To improve road safety awareness • See Delivery Example
Bike Safe	<ul style="list-style-type: none"> • To reduce the number and severity of motorcycle collisions
Performance Plus	<ul style="list-style-type: none"> • To improve specific riding skills identified as a primary cause of motor cycle collisions
Driver Improvement Courses	<ul style="list-style-type: none"> • To improve the driving skills and associated knowledge of offending clients referred by the police through practical and classroom based training
Safe Young Drivers	<ul style="list-style-type: none"> • To reduce the risk to young inexperienced drivers by providing training opportunities to motorists who have been driving for six months or less
Speed Awareness Courses	<ul style="list-style-type: none"> • To raise awareness of the consequences of inappropriate speeds among those who have committed a marginal speeding offence
Drink Drive Rehabilitation Courses	<ul style="list-style-type: none"> • To reduce reoffending rates of those convicted and referred by the courts for drink driving offences
Employers Charter	<ul style="list-style-type: none"> • To inform companies of their legal duty relating to the management of occupational road risk and to provide practical and classroom based training to company drivers
Driver Information Programme	<ul style="list-style-type: none"> • Practical and classroom based training for all LCC staff and Councillors who drive on behalf of the Authority
Community Engagement	<ul style="list-style-type: none"> • To engage with Lincolnshire communities at targeted events throughout the year. These range from major shows to parish events and focuses engagement with vulnerable road user groups such as two wheeled motor vehicles
Young Passenger Awareness	<ul style="list-style-type: none"> • To reduce the number of casualties for the 15 – 16 year old age group by creating an awareness of the dangers when travelling in motor vehicles driven by young drivers; equipping them with tools and coping strategies to deal with situations that put them at risk
Crash Car Simulator Experience	<ul style="list-style-type: none"> • To educate young passengers and young drivers by providing a unique experience whilst occupying a modified car that simulates a crash scenario
Skid Car Courses	<ul style="list-style-type: none"> • To educate drivers to avoid skidding and to provide the skills necessary to deal with a skid if necessary.

Delivery Example : Bikeability

Bikeability is the nationally accredited cycle training scheme, endorsed by cross-Government departments including the Department for Transport, Department of Health and Department for Education.

The scheme administered by Cycling England is designed to give pupils the skills and confidence to ride their bikes on today's roads. Levels 1 and 2 are aimed at children aged 9-11 and level 3 is delivered on a one to one basis to secondary aged pupils and adults looking to improve their cycling ability and experience.

Lincolnshire County Council registered as a Bikeability provider in 2010 and is currently delivering Bikeability directly and through the Lincolnshire School Sports Partnerships in partnership with the Sincil School, Lincoln and Ambergate Sports College, Grantham.



This cycle training scheme complements the ongoing work of the Lincolnshire Road Safety Partnership under the Bikewise scheme.

Lincolnshire's Sustainable Modes of Travel Strategy funding has supported the training of Bikeability instructors which has included Lincolnshire County Council's independent travel trainers and members of the school travel plan team so that Bikeability could also be accessible to pupils in special schools. A further £194,240 has also been secured from DfT to provide Bikeability training to an additional 5000 children during 2011/12.

Bikeability can also support work based and residential travel plans to re-fresh or promote cycling skills so sustainable travel can be actively supported and promoted in conjunction with improved cycling infrastructure and other measures such as pool bike schemes. Some initial work has taken place with local businesses through the travel plan process and demand significant for this work to be developed in the future.

Enforcement and Speed Management

- 5.14 Enforcement and speed management will continue to play an important role in casualty reduction in Lincolnshire. However, greater emphasis will be placed on providing offenders with an educational alternative to prosecution. Education has been shown to be more effective than financial penalty in changing driver behaviour and is generally favoured by the public. Consequently, it is proposed to deliver a number of diversionary educational programmes to deal with issues which are relevant to reducing casualties in Lincolnshire. These include the national speed awareness workshops, the Driver Improvement Programme, Ride Motorcycle course and three new bespoke National Offender Retraining Schemes that are being developed to target failure to wear seat belts, driver compliance and inconsiderate driving.
- 5.15 "Operation Octane" will continue whereby Police engage with Two Wheeled Motor Vehicles riders to educate and enforce the law at locations identified as hot spots for both collision and speeding offences.

- 5.16 Research has demonstrated that reducing speeds not only significantly reduces collisions but also reduces the severity of those collisions. The management of speed is therefore a key element of Lincolnshire's road safety strategy. Initiatives include:
- Safety Cameras – will continue to make an essential contribution to speed and casualty reduction in Lincolnshire. There has been an average annual reduction of 64% in the number of killed or serious injury causalities at camera sites. Public surveys in the County continue to show strong support for the use of such cameras. In line with 5.14 above however, the focus will be to provide educational opportunities to drivers by referring offending motorists to speed awareness workshops as an alternative to prosecution. LRSP will utilise funding provided by clients referred to speed awareness workshops to cover the cost of camera operations over the two year life of the LTP.
 - Priority Actions Sites – police tasking is directed by data provided by LRSP on a monthly basis which prioritises high speed locations and collisions.
 - Interactive Signs – are only deployed by LRSP in line with national guidance as an accident reduction measure, primarily at sites where engineering measures have not proved effective.
 - Parish Link - speed-indicating devices are loaned to Parish Councils to allow them to carry out their own assessment of perceived speeding problems.

Rural Demonstration Project

- 5.17 As a Beacon Authority for Road Safety, Lincolnshire was invited to work in partnership with the DfT to implement a Rural Demonstration Project. This required strategies to be developed to address rural road casualty problems. A broad range of educational, engineering and enforcement interventions were developed and are currently been monitored to measure their effectiveness in dealing with the identified problems. These include:

Education

- Life Skills Academy - to provide a centre of excellence to promote young driver education.
- Performance Plus - educational rider information programme for motorcyclists.

Engineering

- A52 Speed Reduction measures - introduction of 50mph limit and associated speed reduction measures.
- Enhanced verge maintenance – an extended programme of verge maintenance on B1188 and A15.

Enforcement

- Average camera system - implementation of the County's only speed over time enforcement system on A52 east of Grantham.
- Vehicle activated signs at mobile camera sites – increase effect of enforcement at mobile camera sites.

Delivery Example : Road Safety Red Routes

Launched in August 2003, the Red Route initiative combines a mix of engineering, education and enforcement measures targeted at reducing the number of killed and seriously injured casualties on the 12 rural routes across Lincolnshire having the highest casualty rates. The initiative includes a mix of:

- local safety schemes targeted at locations and links with high collision rates,
- enhanced police enforcement, and
- improved signing and publicity.

The table below shows there has been a combined reduction of 44.5% in the number of killed and serious injury casualties compared with the average number of casualties for the three years immediately preceding the initiative. This compares with a county wide reduction of 21% on the remaining non red route network. The red route scheme is to be reviewed during 2011/2012.



Route	All Casualties (Annual Ave 1 Aug 00 - 31 July 03)	All Casualties (Annual Ave 1 Aug 03 - 31 July 10)	Numeric Reduction	Percentage Reduction
A52	58.0	30.3	27.7	47.8
A16	44.7	25.3	19.4	43.4
A15	39.7	25.0	14.7	37.0
A17	34.3	20.3	14.0	40.9
A46	23.7	8.6	15.1	63.8
A158	26.0	16.1	9.9	37.9
A153	19.3	11	8.3	43.1
A1073	9.7	3.9	5.8	60.1
A607	14.3	8.4	5.9	41.2
B1188	8.0	8.7	-0.7	-8.9
A151	19.3	9.3	10.0	52.0
A631	21.3	9.7	11.6	54.5
TOTAL	318.3	176.6	141.8	44.5

6. Tackling Congestion - General

Background

- 6.1 The Government's key aims for transport are to encourage economic growth and to reduce carbon emissions. Tackling traffic congestion is seen as an important action to help achieve these aims. High levels of congestion have an adverse effect on local businesses through delays and higher operating costs, whilst queuing or slowly moving vehicles are a significant source of green house gas emissions and pollution that could also be reduced.
- 6.2 Although the problem of congestion in Lincolnshire is perhaps at its worst in Lincoln, Boston and Grantham (as outlined in the following three chapters), it is not restricted to just these three urban areas. The latest results of public consultation (National Highways and Transport Network Survey 2010) show that traffic congestion is seen as a major issue by Lincolnshire residents across the county. This chapter outlines the various initiatives that are being pursued which contribute to tackling growing congestion across the county.

Traffic Management Act 2004

- 6.3 Under the Traffic Management Act (TMA) 2004, each local transport authority has a duty to minimise disruption to all traffic (including cyclists and pedestrians) on its network and ensure they are making the most efficient use of the network.
- 6.4 In support of the implementation of the above national legislation, the County Council has been pursuing a wide range of initiatives during the 2nd LTP period, the most recent of which are listed below:
- the Network Management Plan has been issued
 - created a Highways Alliance between Lincolnshire County Council and its design consultant, traffic signal contractor and term maintenance contractor to improve the delivery of highway services
 - implemented a fully integrated highways asset management system (Pitney Bowes CONFIRM system) to better manage the highway network
 - reviewed the operation of Traffic Sensitive Streets
 - reviewed the speed limits on priority routes
 - upgraded the UTC/SCOOT system to Siemens COMET
 - replaced the Traffic Control CCTV cameras, operating system and displays
- 6.5 Priority issues for the 3rd Local Transport Plan include:
- improving the forward planning and co-ordination of street works and works programmes
 - identifying congestion hotspots and implement improvements to improve network performance
 - identifying opportunities to work with local businesses and developers to improve local transport and reduce congestion
 - working with bus companies to improve the reliability of bus services
 - complete the speed limit review
 - keeping traffic models for the larger urban areas up to date
 - making better use of Intelligent Transport Systems
 - implementing Civil Parking Enforcement

- validating and checking the efficiency of checks on traffic signal installations and systems
 - making progress on delivering the initiatives identified in the adopted urban transport studies for Lincoln, Boston, Grantham and Gainsborough
- 6.6 These will be pursued as resources permit.
- ### Public Transport
- 6.7 Public transport, and in particular buses, have an important role to play in reducing congestion in urban areas by providing a sustainable alternative to car travel. During the 2nd LTP period, the delivery of improved buses services outside of Lincoln, Boston and Grantham has focused on:
- further rollout of fully accessible IntoTown town services in the larger urban areas, coupled with improvements to bus stops. These services now operate in Spalding, Sleaford and Gainsborough (as well as Grantham and Boston)
 - a new town service in Louth called the 'Louth Nipper' from April 2010
 - improved access to timetable information, including on-site at bus stops and realtime information available at key locations on some routes in Lincoln, via SMS text messaging and online via the Truetimes website (www.truetimes.info)
- 6.8 During the LTP3 period, opportunities to continue with the above approach will be considered as resources permit.

- ### Walking and Cycling
- 6.9 An important part of the overall strategy to reduce congestion in the urban areas is to encourage more people to walk and cycle, particularly for short trips (less than 2 miles) which typically make up almost half (46%) of all trips. During the LTP2 period, schemes to improve conditions for pedestrians and cyclist (such as new footways and cycleways, improved crossing facilities, new street lighting and cycle parking facilities) have been delivered in the larger urban areas across the county through the Community Travel Zone initiative and CATCH (see Delivery Example overleaf). In addition, the Public Rights of Way network has a role to play and opportunities to strengthen this are being taken where possible through the ongoing delivery of the Rights of Way Improvement Plan. Further details can be found in the Chapter 13.
- 6.10 The County Council recognises that there are cycle groups and organisations who can offer important partnerships to identify capital and softer measures to deliver better services for pedestrians and cyclists. With funding during the LTP3 period expected to be substantially reduced, the opportunity for tackling walking and cycling on a zone by zone basis will be much reduced. However, opportunities to continue to improve facilities for pedestrians and cyclists will continue within the resources that become available. Funding opportunities such as 'Links2School' will be explored where appropriate.

Sustainable Travel to School – School Travel Plans

6.11 The 2010 school census in Lincolnshire showed that 27,266 car journeys are made on the journey to school every day, and 3,652 of these car trips are made from within 0.6 kms of the school - a 7 minute easy walk. The benefits of changing just 1 in 5 of these journeys can be measured in terms of health, the economy, the environment and congestion. For example, if everyone who travels to school in the car in Lincolnshire changed one of their journeys to walking or cycling every week, then over 70 tonnes of CO₂ would be saved each year.



Walking Bus in action

- 6.12 Excellent progress has been made during the 2nd LTP period with 100% of schools in Lincolnshire having a nationally accredited School Travel Plan in place. As a result, over £2.1 million of capital grant has been secured through the Travelling to School Initiative which has enabled a range of infrastructure improvements to be provided (such as cycle storage and improved access arrangements) to enable children to walk and cycle to school.
- 6.13 In addition to the physical improvements, the School Travel Plan team have worked with school staff and volunteers to establish over 90 Park and Stride Sites, set up Walking Buses and engaged over 15,000 children in the Golden Boot Challenge. The LTP3 period will see the roll out of new national and local projects such as Big Bike Race and WOW (Walk Once a Week).

Delivery Example : CATCH Funding

CATCH (Choose Active Travel, Choose Health) funding is a capital grant programme available during the 2nd LTP period for all schools in Lincolnshire aimed at removing the barriers to walking and cycling to school.

With funding from NHS Lincolnshire, Lincolnshire County Council and other agencies, such as the Links to School fund from Cycling England, the project has delivered over £545,000 of investment in a range of facilities including access improvements, cycle storage, helmet lockers and parent waiting shelters.



This example shows what has been achieved at Birchwood Junior School in Lincoln with their CATCH funding. Historically the school had not allowed cycling as there was no secure storage for pupil's bikes. With CATCH funding and support from their Sustrans Bike-It officer, cycling figures at the school are now on average over 50 bikes a day.

The CATCH project's aims are to tackle the challenges of climate change and to increase activity on the journey to school, to increase activity levels and tackle obesity.

The success of CATCH has been achieved by working with the whole school community alongside other agencies such as Sustrans and the police. Sustainable Travel Officers from the School Travel Plan Team are working with targeted schools to promote the new infrastructure CATCH has delivered, and remove the behavioural and social barriers to using sustainable transport on the journey to school for pupils, staff and parents.

During the 2nd LTP period, some 50 projects have been completed using CATCH funding at schools across the county.

Travel Planning

- 6.14 The 2nd LTP period has seen significant advances for travel planning in Lincolnshire, with a more robust approach being taken through the development control process for employment developments and residential developments of more than 20 dwellings.
- 6.15 A number of large scale developments are currently being planned around the county and the need to minimise additional single occupancy car journeys is a major consideration during the planning process. Good public transport availability, the ease of movement for pedestrians and cyclists and the long term ownership of these modal shift objectives by the developer are central to achieving this. The County Council is keen to see options such as car clubs being used in the near future.
- 6.16 The County Council has also been able to carry out a range of travel plan improvements through partnership working with business and other agencies. For example, the County Council has been working with the Sleaford Business Improvement District to maximise the opportunities provided by the completion of the Connect2 cycle project. The council has also worked with businesses to assess remaining barriers to cycling which has resulted in cycle storage improvements and better provision of information, including individual travel planning. This has been funded by local businesses in partnership with North Kesteven District Council and Lincolnshire County Council.
- 6.17 The work in Sleaford also involved community travel plan work for Greylees, a development just outside of the town. This work has been undertaken through the Local Strategic Partnership and has included increased publicity about CallConnect bus services available in the area and a proposal to complete the last cycle route into Sleaford itself.
- 6.18 Community travel plans have been piloted in other locations and are proving to be very useful when consideration is being given to infrastructure and service changes. For example, the provision of cycle facilities for a school could have wider impacts for the community, the impact of timetable changes for a bus service or the location and volume of travel and transport information in a community
- 6.19 Lincolnshire County Council continues to develop its own travel plan, both recognising the importance of leading by example and valuing the role that travel and behavioural change can play in contributing to the organisations wider objectives and work streams, in particular the New Ways of Working Programme. The package of measures within the travel plan includes: car sharing, bike, walk and taxi budi schemes, discounts for public transport users, pool bikes and Bikeability Level 2 and 3, cycle training.



Cycle parking in Sleaford

Parking

- 6.20 Currently the responsibility for parking in Lincolnshire is divided between the County Council (on-street provision) the seven District Councils (off-street provision and enforcement) and the Police (enforcement of on-street restrictions). However, the County Council intends to seek authorisation from the Department for Transport to take on Civil Parking Enforcement (CPE) powers for most areas

of the county during 2011. It was initially proposed to implement a scheme that would have integrated on-street enforcement with that carried out by District Councils in their off-street car parks but it was not possible to reach agreement with all districts. However, consideration continues to be given to finding ways of ensuring the service is as cost effective as possible and this could involve joint working with some district councils. As part of the proposal, a countywide Parking Strategy is being developed for the first time.

Intelligent Transport Systems

- 6.21 A key element of any transport strategy is making best use of the existing transport infrastructure and an increasingly important contributor to this is the use of innovative transport technologies. Progress in this area during the LTP2 period includes:
- updating of the SCOOT signal control system to the Siemens Comet Urban Traffic Management Control system to improve integrated system performance, to integrate future systems using a common database and to improve the ability of system operators to respond to incidents and congestion occurring on the highway network
 - upgrading of 24 traffic signal control cameras to replace obsolete equipment and improve picture quality and speed of operation
 - further expansion of real time passenger transport information, both via the internet and SMS text messaging
 - introduction of bus priority at key signallised junctions in Lincoln and Boston using GPS technology, giving priority to those buses running behind the scheduled timetable
- 6.22 Opportunities to expand the use of intelligent transport systems will continue to be considered during the 3rd LTP period as resources and funding permit.

7. Tackling Congestion - Lincoln

Background

- 7.1 The 'Transport Strategy for the Lincoln Area' was adopted in 2006 and updated in February 2008. The strategy was developed by the County Council in partnership with City of Lincoln, North Kesteven and West Lindsey District Councils, following widespread consultation with partners and the public. More recently the strategy has been put forward to inform and provide evidence to the Local Development Framework (LDF). This is being pursued through the Central Lincolnshire Core Strategy consultation process.
- 7.2 Identified within the strategy is a programme of transport improvements looking forward to 2026 and beyond. Full details can be found at www.lincolnshire.gov.uk/lts. The following paragraphs outline progress on the key elements of the strategy.

Progress During LTP2 Period

Small Scale Walking and Cycling Schemes

- 7.3 During the LTP2 period, schemes to encourage walking and cycling have been delivered across the Lincoln area through the Community Travel Zones Initiative. These comprise 16 walking schemes, 5 cycle schemes and 2 traffic calming schemes. Examples include:
- pedestrian crossings at the busy Beaumont Fee/West Parade junction to improve safety
 - cycle route along Moorland Avenue to Witham Academy to encourage cycling to school
 - pedestrian crossings as traffic calming along Fulmar Road to reduce severance and danger perception in this residential area



Pedestrian crossing in Birchwood, Lincoln

Quality Bus Corridors

- 7.4 The transport strategy identified 4 key routes along which quality bus corridors would be developed. The focus during LTP2 has been on the busiest of these along High Street where a scheme has been developed to improve traffic movements, increase bus reliability and enhance the local environment. This scheme will commence construction in March 2011.

Park and Ride

- 7.5 During the LTP2 period, investigations have continued into the best locations for Park and Ride sites to serve Lincoln, with the A46/A57 junction to the west of the city being identified as the most deliverable in terms of general location, commercial viability and engineering feasibility. Investigations into the most appropriate site at this location in terms of accessibility and environmental impact are currently underway.

Buses

7.6 With the majority of services within the area being operated on a commercial basis, the authority continues to work with bus operators (who have made considerable improvements to the Lincoln-area bus fleet) to deliver improvements for bus services across the area. This includes:

- improvements to bus stops with raised kerbs and timetable information
- realtime information available on-street, online or via SMS text messaging
- bus priority provided at key signallised junctions for those buses running late

Rail

7.7 Some limited improvements to rail services have taken place during the 2nd LTP period with a single daily direct service (one train down in the morning and one back in the evening) from Lincoln to London now running via the Midland Main Line. In May 2011, a new weekday service to London will also start operating via the East Coast Main Line, but again just one train in both the morning and evening. Unfortunately, the originally anticipated 2 hourly direct service to London has been postponed and the County Council and partners are continuing to lobby for this to be included within the next East Coast Main Line franchise due to start in 2012.

7.8 Also of concern is the proposal to route freight traffic currently using the East Coast Main Line along the Peterborough – Spalding – Lincoln – Doncaster Joint Line running through Lincolnshire. Whilst the proposed improvements to the Joint Line may bring benefits for passenger services in terms of improved journey times and a longer operating day, the proposal will substantially increase the down time at level crossings, particularly those in centre of Lincoln and Spalding. Discussions are ongoing with Network Rail, with the potential to bring forward Phase 1 of the East-West Link (see 7.11 below) to provide an alternative route for vehicles thus mitigating the impact of increased rail usage.

7.9 In addition, the County Council, in partnership with Nottinghamshire County Council and other local business groups, is lobbying for improved services on the Nottingham-Newark-Lincoln line. The importance of this route had previously been highlighted by the inclusion of a linespeed improvement scheme within the prioritised East Midlands Regional Funding Allocations. In the current economic climate, the future of this scheme is unclear, but the authority continues to look for opportunities to press for it to be taken forward. Similarly, the Council is keen to see service improvements on the Lincoln – Doncaster line, which would help support the development of Gainsborough as a Growth Point.

Public Transport Interchange

7.10 As part of the proposed Lindongate retail development within the city centre, it is proposed to replace the existing bus station with a new facility adjacent to the railway station thereby creating an integrated public transport interchange. Detailed discussions are ongoing with the developer and a revised planning application is expected during 2011.

East – West Link

7.11 The first phase of the proposed East-West Link (EWL) would see a new link formed between the High Street via Tentercroft Street through to Canwick Road/Pelham Bridge. This would provide the opportunity to pedestrianise High Street between Wigford Way and Tentercroft Street thereby addressing some of the problems caused by the proposed increase in freight trains over the High Street level crossing mentioned in 7.8 above. It would also include bus priority measures to improve bus access to the proposed Public Transport Interchange outline above.

- 7.12 Detailed design of Phase 1 of the East-West Link is advancing with full scale public consultation being undertaken in August 2010. This showed strong public support for the scheme, with 80% of people being in favour of its construction. Work is progressing with a planning application to be submitted in the summer of 2011.
- 7.13 Future phases include possible improvements in the Canwick Road area through to South Park Avenue (Phase 2) as well as along Ropewalk (Phase 3). These are dependent upon developer funding coming forward and meaningful discussions are continuing with potential developers on Phase 2. The University of Lincoln and the owners of the adjacent St Marks Retail Park have conjoined in a joint master planning exercise to inform the shape of future development in this area and its impact on, and contribution to, the Phase 3 proposal.

Eastern Bypass

- 7.14 One the key proposals within the adopted Transport Strategy is the construction of an Eastern Bypass from the A158 round to the A15 south of Bracebridge Heath. This would create a strategic north-south route around the city centre, removing through traffic (most notably on the A15) and freeing space to 'lock-in' the benefit and enable the delivery of other sustainable travel elements of the strategy within the city centre.
- 7.15 Although the scheme was original prioritised within the former Regional Funding Allocation process for possible construction in 2013, this has now been superseded by the change in national government. A business case has recently been assessed by the Department for Transport and a revised proposal has progressed to the "Development Pool" of local schemes competing for funding during the current spending review period. The decision as to which of these schemes will be given programme entry is expected to be announced in December 2011.
- 7.16 In the meantime, planning permission was secured in September 2010 for a revised alignment and discussions continue with landowners of potential urban extensions along the route regarding funding contributions.

Cultural Quarter

- 7.17 This jointly funded, £4.5m scheme to refurbish the Cultural Quarter of Lincoln was completed in 2008 in partnership with the City of Lincoln Council. The scheme focussed on delivering a high quality public realm with substantial refurbishment of the pavements and new street furniture. This enabled the delivery a revised local traffic management regime that saw significant improvements to pedestrian movements along the High Street across, amongst others, Silver Street and Clasketgate. The revised traffic management scheme also reduced congestion at a key city centre junction, Broadgate/Clasketgate/Silver Street, reducing peak hour delays and delivering air quality improvements.

Southern Bypass

- 7.18 This proposal to complete the full orbital relief road around the city is a longer-term scheme within the Strategy. To protect the alignment from future development, a Preferred Route was adopted in December 2006.

Delivery Example : Bailgate Restored

Bailgate is perhaps the most important street in uphill historic Lincoln, linking the Roman Newport Arch, via the ancient site of St Peter in the Bail, leading into Castle Hill, across which the Cathedral and Castle face each other.

Overseen by the Historic Lincoln Partnership, the 'Bailgate Restored' scheme has seen the increasing worn and shabby highway surfaces repaved primarily with indigenous natural York stone, with improvements made to footways and parking provision. At the same time, new raised crossing points were installed and the opportunity taken to de-clutter the area by removing unnecessary street furniture and signs. The scheme also incorporated the revival of the St. Pauls in the Bail Well on the corner of Bailgate and Westgate. The refurbished well was accentuated with lighting and a structural glass viewing panel, new seating and new stepped access provided from Bailgate.



The £1.2m scheme was jointly funded by Lincolnshire County Council and EMDA and completed in July 2010.

Proposals for LTP3 Period

- 7.19 Key to the future of the Lincoln area is the development of the new Local Development Framework (LDF). This is being pursued through the Central Lincolnshire Core Strategy being developed by the Joint Strategic Planning Committee comprising the County Council and the 3 district councils of City of Lincoln, North Kesteven and West Lindsey. Consultation on Issues and Options was carried out in late 2010. Transport will inevitably have a key role to play within the LDF process and it is anticipated that a review of the current transport strategy will be carried out at some point during the LTP3 period.
- 7.20 In the meantime, work to deliver the current strategy will continue as funding opportunities arise, bearing in mind the current financial constraints.

8. Tackling Congestion - Grantham

Background

- 8.1 The 2nd LTP outlined the work that was being undertaken at that time on the preparation of a Transport Strategy for Grantham. This was completed in 2007 and it sets out a framework for the better management of movements into and through the town in both the short term (up to 2010) and in the longer term (2011-2021) and beyond. The strategy was drawn up in conjunction with South Kesteven District Council (SKDC) and included extensive stakeholder and public involvement.
- 8.2 The recommendations in the report included proposals that would improve conditions for all modes of travel using a variety of funding sources. Further details can be found at www.lincolnshire.gov.uk/gts. A steering group was established to implement the strategy. This included representatives from the County Council, District Council, Government Office and Highways Agency. Progress on delivering the key elements of the strategy is summarised in paragraphs 8.6 onwards.

Growth Point Status

- 8.3 Grantham was given Growth Point status in 2007. As a result, the population of the town is planned to increase from the current level of approximately 40,000 to around 48,000 by 2016 and some 60,000 by 2026. Although the recent downturn in the economy may affect the pace of this growth, the County Council and SKDC are still committed to the principle of major growth in the town.
- 8.4 A governance structure has been set up to manage the Growth Point and is operating successfully. It was quickly realised that this level of growth would need very careful consideration of its effects on transport and it was decided that the role of Transport Strategy Steering Group should be expanded to include the transport issues associated with the growth. This allows all transport matters to be considered and has also allowed the growth point funding allocated for transport to be used alongside the other funding sources available.

Strategic Planning

- 8.5 South Kesteven District Council are one of the earliest local authorities in the region to have an adopted Local Development Framework Core Strategy. Transport issues were considered in considerable detail during the preparation of the draft Core Strategy and at the Examination in Public. The Transport Strategy provided the evidence that was required to support the proposals for transport in the town.

Progress During LTP2 Period

Public Transport

- 8.6 One of the priority measures included in the Transport Strategy was the introduction of improved bus services around the town. New 'IntoTown' bus routes were launched in April 2010 through an informal Quality Bus Partnership to link the outer town areas to the town centre, including the hospital and the rail station. Currently six separate routes are operating using new low floor buses. Patronage figures for August – October 2010 show a 25% increase over those for the same period in 2009, averaging just under 39,000 passengers per month. A programme of bus stop upgrades has started to provide raised kerbs at almost two hundred stops. The infrastructure improvements are funded from LTP budgets, with the County Council providing initial revenue support, mainly from S106 contributions. However, it is intended that services will become self financing in a short time.
- 8.7 One of the Growth Point initiatives is to regenerate the area adjacent to the railway station. It is likely that this will allow improvements to be made to pedestrian access to the station and better integration between bus and rail services. In the meantime, the rail industry has improved accessibility at Grantham Station (with new lifts installed) and provided a better spread of services to London throughout the day.



Grantham 'IntoTown' bus service

Town Centre Improvements

- 8.8 A number of improvements have taken place in the town centre during the LTP2 period, with annual footfall surveys carried out by South Kesteven District Council showing an increase in the number of people visiting the High Street in particular. Schemes carried out include:
- **Wharf Road/St Peters Hill Junction** - Upgrade of the junction has improved pedestrian facilities, reduced congestion and reduced street clutter. The scheme was given an award by the Civic Society
 - **High Street/The Avenue Junction** - Upgrade of junction to improve pedestrian facilities and reduce street clutter
 - **Butchers Row** - Pedestrianisation and public realm improvements. This scheme used high quality York stone
 - **Market Place and Westgate** - A start has been made to improve the Market Place and Westgate. This will rationalise parking, improve facilities for pedestrians and include public art. The majority of funding for this will come from Growth Point budgets

Improvements for Non-motorised Users

- 8.9 An audit has been carried out to determine the gaps in the facilities for pedestrians and cyclists. A priority list of improvements has been prepared and this will be programmed as funds become available.

Bridge Strikes

8.10 A high priority in the Transport Strategy were measures to reduce the very high level of bridge strikes in the town. The bridges on the A52 Barrowby Road, A607 Harlaxton Road and A52 Springfield Road (all carrying the East Coast Main Line) suffer some of the highest number of bridge strikes in the country. All of the bridge signing has been improved and Network Rail have carried out work to make the bridges more conspicuous. It is intended to implement an area-wide HGV ban once an East-West relief road is in place (see paragraph 8.12 below).

Pennine Way Link

8.11 One of the schemes identified as a priority in the Transport Strategy was the construction of a link from the A52 west of the town to the B1174 at Great Gonerby. This requires a crossing of the Grantham to Nottingham railway. It was always envisaged that this scheme would be funded through a S106 agreement associated with a major housing development. Growth Point status provided an impetus to the proposed development and planning approval has now been given. A S106 agreement is currently being finalised and the provision of this link will be included with construction being required following the completion of an agreed number of houses.

East West Relief Road

8.12 Another major scheme identified in the Transport Strategy is an East-West Relief Road to the south of the town. Again it was realised that this would be reliant on developer funding. A single landowner owns most of the land on the route of the proposed relief road and discussions have been taking place for a considerable time on how development could provide funding for the road. Planning approval has recently been given for a major distribution complex adjacent to the A1 south of Gorse Lane and this requires the applicant to construct the first phase of the relief road from the A1 to the B1174 including a new all movement junction on the A1. In addition, land to the east of the B1174 has been included in the adopted Core Strategy as a location for a future sustainable urban extension.

8.13 Work is continuing on the necessary processes that are required for this major development, including an agreed Masterplan that will allow a planning application to be submitted. Investigations are also taking place on possible delivery options that would allow the relief road to be built at an early stage rather than having to wait for a significant level of housing being completed. The scheme requires a viaduct over the ECML railway and positive discussions have taken place with Network Rail on technical matters. There are however concerns that Network Rail may request a significant fee for permission to construct the viaduct based on the uplift value of the land. This would severely reduce the funding available for local improvements, and would also seem to ignore the likely reduction in bridge strikes in the town once an alternative route for HGVs is available.

Proposals for LTP3 Period

8.14 With funding via the LTP3 expected to be extremely limited, it is likely that in the short term, most of the funding for transport improvements in the town will be limited to that coming from Growth Point Funding and S106 Agreements. The governance arrangements that are in place will ensure that all proposals are judged against the recommendations in the Transport Strategy. In the longer term, it is possible that the Transport Strategy will need to be reviewed to reflect changes to national and local priorities.

9. Tackling Congestion - Boston

Background

- 9.1 The 2nd Local Transport Plan outlined the work that was being undertaken at that time on the preparation of a Transport Strategy for Boston. Following widespread consultation, 'The Transport Strategy for Boston 2006 – 2021 and beyond' was adopted in 2006. It was developed and funded in partnership with Boston Borough Council and includes £10m of proposals for both short and long term transport improvements. Further details can be found at www.lincolnshire.gov.uk/bts and progress on delivering elements of the strategy are outlined below.

Progress During LTP2 Period

Online Widening

- 9.2 The £5.5m A16/A52 online widening scheme is programmed for completion by April 2011 and aims to reduce journey times across the centre of town by 20% by increasing network capacity and efficiency. The works include improvements at key junctions, widening of junction approaches and enhancements for pedestrians and cyclists.

Public Transport

- 9.3 An important element of the overall strategy is enhancements to public transport. Some £2m of public transport improvements have been identified with the Boston IntoTown bus service being launched in June 2008. This has seen a 300% increase in ridership and is now typically carrying 24,000 passengers per month. In addition, real time information is being provided and improvements to the bus and rail stations in terms of accessibility, facilities and pedestrian linkages are also programmed.



A16/A52 Online widening in Boston

Walking and Cycling

- 9.4 The £400,000 walking and cycling improvements (over and above those linked to the online widening scheme mentioned above) involve upgrading existing signal controlled crossing points, improving pedestrian signage, completing existing cycle networks and providing better cycle storage facilities at key points within the town.

Car Parking

- 9.5 A £200,000 car parking and signing strategy for the town has been introduced on the strategic network to make it easier for people to move around the town. This has included some de-cluttering of existing signs.

Traffic Management

- 9.6 The strategy also includes £1m of traffic management improvements at other main junctions on the A16/A52 outside of the online widening scheme. These involve updating existing facilities, banning some turning movements and introducing one way systems.

Proposals for LTP3 Period

- 9.7 The £2m Market Place Enhancement Scheme Expected is programmed to start in summer 2011 and is being delivered in partnership with Boston Borough Council, English Heritage and EMDA. The scheme will focus on improving the streetscape, refurbishment of the footways and making the area more pedestrian friendly by removing a large percentage of the car parking.
- 9.8 As part of the development of the Local Development Framework, Boston Borough Council are identifying areas of land to be allocated for future development which will help facilitate the possibility of a distributor road to the west of Boston. This forms an important part of the longer term highway improvements within the adopted Transport Strategy and the County Council will continue to work closely with the Borough Council on this during the 3rd LTP period.

10. Better Air Quality

Background

- 10.1 As required by the Environment Act 1995, the local authorities in Lincolnshire have been reviewing and assessing air quality across the county. Whilst the responsibility to carry out this work rests primarily with the District Councils, there is also a duty for the County Council to participate as local transport authority where pollution from traffic is shown to be a problem.
- 10.2 To date, four Air Quality Management Areas (AQMA) have been declared in Lincolnshire where levels of nitrogen dioxide (NO_2) levels are predicted to exceed the thresholds set down in the National Air Quality Strategy. In all cases, the primary source of NO_2 is road traffic. The four areas are:
- Lincoln centre (City of Lincoln Council – declared Dec 2001)
 - Haven Bridge, Boston (Boston Borough Council – June 2001)
 - Bargate Bridge, Boston (Boston Borough Council – March 2005)
 - Wharf Road, Grantham (South Kesteven District Council – Aug 2001)
- 10.3 In addition, following further investigations, a city-wide AQMA was declared in Lincoln in February 2008 following assessment of fine particulates (PM_{10}) at key junctions across the city.
- 10.4 Working through the Lincolnshire Strategic Air Quality Partnership (comprising representatives of the County Council and the 3 District Councils), Air Quality Action Plans have been developed which seek to address the identified problems. At the same time, the District Councils have continued monitoring air quality levels, particularly within the AQMAs.

City of Lincoln

- 10.5 The adopted Lincoln Transport Strategy identifies a number of transport initiatives which, as well as improving transport across the city, will also contribute to better air quality. These include measures to encourage walking and cycling, as well as public transport enhancements. Progress on delivering the strategy during LTP2 is highlighted in Chapter 7.
- 10.6 The original AQMA declared for NO_2 covered the majority of the major road network within the city centre. However, a Detailed Assessment undertaken in 2010 using monitoring data and dispersion model predictions has shown that, although exceedences of the threshold are still likely, there was a significant reduction in the original exceedence area. As a result, the City of Lincoln Council are considering dedeclaring large parts of the original Air Quality Management Ares.
- 10.7 Similarly, a further assessment of PM_{10} levels carried out in 2009 using the monitoring results from the permanent particulate monitor installed on Broadgate suggested that the daily mean objective was only likely to be exceeded at one road junction (Broadgate/Monk Road/Clasketgate/Lindum Hill traffic signals). Again, the City Council is considering reducing the extent of the original district-wide PM_{10} AQMA to just the area around the affect junction.



Boston Borough

- 10.8 As in Lincoln, the adopted Boston Transport Strategy outlined in Chapter 9 includes several transport projects which will contribute to improved air quality as well as providing wider transport benefits. Examples include the successful IntoTown bus service introduced in 2008 which has seen a threefold increase in patronage. Further details can be found in Chapter 9.
- 10.9 The results of the most recent monitoring show no diffusion tube sites exceeding the annual mean NO₂ objectives in either AQMA during 2009. However, as some sites are showing an increase in concentrations on previous years, monitoring is continuing during 2010 before a decision is made as to whether or not to dedeclare either of the AQMAs. This will also allow the impact on air quality of the A16/A52 Online Improvement scheme currently under construction to be monitored.

South Kesteven (Grantham)

- 10.10 Chapter 8 outlines progress on delivering the adopted Grantham Transport Strategy which is a key element of the Air Quality Action Plan, with initiatives such as the IntoTown bus service introduced in April 2010 helping to encourage more sustainable travel.
- 10.11 The most recent AQ Annual Progress Report (June 2010) indicated that in some locations within the declared Air Quality Management Area the annual mean NO₂ objective is still being exceeded. However, more recent assessment (using the results of long term continuous monitoring on which to base a local bias correction factor) suggests that this is not the case. In addition, a Detailed Assessment of NO₂ levels in the Manthorpe Road/Brook Street area carried out in June 2010 has predicted exceedences in this area of the town. As a result, the declaration of a further AQMA is to be considered in the light of the results from both continuous and diffusion tube monitoring during 2010.

III. Reducing Carbon

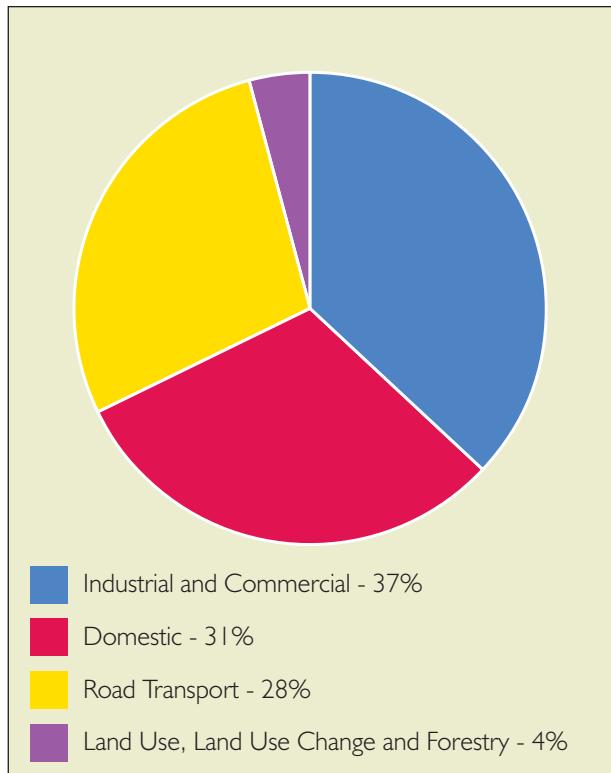
Background

11.1 The issue of carbon reduction and climate change has become the subject of increased focus since the 2nd LTP was developed. The Climate Change Act 2008 requires UK greenhouse gas emissions to be reduced by 34% on 1990 levels by 2020 and 80% by 2050. With road transport representing 26% of total UK domestic greenhouse gas emissions, action to encourage low carbon travel is an important part of achieving these targets. This has been recognised in several government documents including 'Low Carbon Transport : A Greener Future' published in July 2009 and 'Transport Carbon Reduction Delivery Plan' (March 2010).

11.2 With large parts of the county being below sea level or at threat of inundation, the County Council recognises the need to contribute to the reduction of carbon emissions from transport. The most recent government figures (for 2008) show that road transport in Lincolnshire accounts for some 28% of all CO₂ emissions as shown in Figure 5. However, this varies dramatically from 32% in West Lindsey to just 12% in Lincoln.

Figure 5

Breakdown of CO₂ Emissions in Lincolnshire 2008



Carbon Reduction Transport Initiatives

11.8 There are a wide range of transport initiatives which will help in reducing carbon emissions. Some of the measures being pursued in Lincolnshire are outlined in the following paragraphs.

Encouraging Sustainable Travel

11.9 As highlighted in earlier chapters of this LTP, considerable work has been focused on encouraging greater use of walking, cycling and public transport as alternative modes of travel to the car through schemes such as Community Travel Zones and Rural Priority Initiatives, along with the improved InterConnect, CallConnect and IntoTown bus services. These are all supported with 'Smarter Choices' initiatives such as travel information, travel planning and marketing and promotion.

Alternative Fuels

11.10 For a while now, the County Council have been exploring some of the alternatives (bio-diesel; ethanol etc.) under the Carbon Management Plan. Most recently, opportunities to use dual fuel (bio gas and diesel) vehicles have been investigated as this currently appears to be the option most worth pursuing, a view that was recently endorsed by Government in their recent 'Low carbon transport – a greener

'future' (July 2009). This stated "upgraded biogas is considered to be one of the most sustainable bio fuels in terms of impact on resource depletion and has the lowest carbon intensity of all commercially available bio fuels".

11.11 To take this forward, the County Council has been exploring the opportunities with partners. Workshops were held and a study of conclusions published in September 2009 (developing Lincolnshire's low carbon transport strategy). The key conclusions of the study were:

- Dual fuelled and gas vehicles offer a minimal risk stepping stone towards a low carbon transport future (there are an estimated 10 million gas powered vehicles in use across the world based around well established technologies);
- The use of biogas as a vehicle fuel:
 - is a more efficient way of reducing CO₂ emissions than using it to generate electricity;
 - achieves significant air quality improvements including particulate and noise reduction;
 - could provide cost benefits over the use of fossil transport fuels through reduced fuel costs and fiscal incentives;
- There are potential resources in Lincolnshire that could act as feedstocks for anaerobic digestion and hence for the production of biogas;
- Initial analysis suggests that the conversion to biomethane of all 1,705 vehicles surveyed during the high level analysis would save 168,000 tonnes CO₂ per annum – over 9% of the current transport emissions in the County;
- The same analysis identified sufficient potential feedstocks within Lincolnshire to support an anaerobic digestion capacity capable of fuelling such a fleet;
- With the recent introduction and adjustment of fiscal incentives, there are now viable business models for the generation of biogas for fuel production and use;
- There are cost savings and benefits to public and private sector fleet operators and to fuel producers for producing biogas, converting it to biomethane and utilising it as a vehicle fuel;
- Sources of feedstock and location of fleets suggest that an initial fuel network of 6 sites should be provided and would be justified economically.

11.12 In addition, funding has been gained from EMDA to run a pilot, in partnership with Stagecoach, for 11 biomethane/diesel fuel buses in Lincoln. This would be the location for one of the fuelling stations, probably on Stagecoach site with access available for other fuel users. In addition, Howard Tenens (a national logistics firm with a base in Boston) is converting part of its lorry fleet and providing further accessible fuelling infrastructure.



New dual-fuel bus in Lincoln

11.13 The next steps are to:

- continue to work with partners to establish committed demand for new or retro fitted dual fuel vehicles sufficient to justify investment in fuelling infrastructure;
- continue working with partners to establish an interim fuelling infrastructure, including workshop with food manufacturers to explore opportunities;
- work in partnership with others to establish a county wide fuelling infrastructure potentially open to all. This could make use of partner's existing depots or sites or could be purpose built;
- possibly set up a grant scheme for coach and bus operators – accessing the fuel supply and paying premium;
- over time through contract specification and option tendering to start to favour lower emission alternatives;

Reducing Energy Use

11.14 The third key strand of carbon reduction is reducing electrical energy use. In Lincolnshire, this is being achieved through a variety of initiatives including:

- the continued adoption of more efficient technologies in street lighting
- the development of a new street lighting policy on dimming and part-night lighting following trials in the county
- the use of low energy LED signal heads at new traffic signal installations, along with extra low voltage microprocessor controllers
- the installation of solar powered LED lights at rural bus stops

12. Other Quality of Life Issues

Quality of Public Spaces and Better Streetscapes

- 12.1 Increasing emphasis is being placed on the need to ensure that the quality of the streetscape is enhanced where possible to improve the 'liveability' of public spaces. Documents such as 'Streets for All' and 'Manual for Streets 2' set out good practice in this area.
- 12.2 During LTP2, various initiatives have been pursued in Lincolnshire with the aim of improving the streetscape. These include:
- 'Bailgate Restored' in the historic core of Lincoln
 - New Road in Spalding
 - Butchers Row in Grantham
- 12.3 Opportunities will continue to be taken to enhance the streetscape during the 3rd LTP where funding permits.



Butchers Row in Grantham

Healthy Communities

- 12.4 During the 2nd LTP period there has been growing recognition of the role that transport has in contributing to improved health. This is most strongly highlighted in the DfT's 'Active Travel Strategy' published in February 2010. Several initiatives in Lincolnshire have contributed to the overall aim of improving health by encouraging walking and cycling during the LTP2 period including:
- improved facilities for pedestrians and cyclists through the Community Travel Zone, Rural Priority Initiative and Rights of Way Improvement Plan
 - work under the 'Healthy Schools' initiative as part of the development of school travel plans
 - the 'Choose Active Travel, Choose Health' (CATCH) initiative highlighted earlier in Chapter 4
- 12.5 In addition, several initiatives (e.g. the CallConnect demand responsive bus services) have impacted on health by improving access to hospitals and health centres.
- 12.6 Work will continue on delivering these initiatives during the 3rd LTP period, subject to funding being available.

Reducing the Impact of Traffic

- 12.7 Increasing levels of traffic and vehicles speeds are having a detrimental effect upon the quality of life of local communities. During the 2nd LTP period, some of these issues have been tackled through a variety of initiatives including:
- speed management measures including traffic calming and improved signing carried out as part of the Community Travel Zones and Rural Priority Initiatives. In addition, a review of speed limits on all A and B roads has been carried out
 - routeing HGVs away from communities through appropriate weight restrictions. This is only possible where a suitable alternative route exists
- 12.8 Similar initiatives will continue to be pursued during LTP3 as resources permit.

13. Asset Management

Background

- 13.1 Due to the geographical size of the county, Lincolnshire manages one of the largest highway assets in the country comprising:
- almost 9,000 km of carriageway
 - 3,300 km of footway/cycleway
 - 4,000 km of drainage network
 - 1,477 bridges and 2,008 culverts, 131 footbridges and other structures
 - 62,253 street lighting columns and 10,850 illuminated signs
 - 148 traffic signal junctions and 151 signalised pedestrian and/or cycle crossing facilities
 - 4,000 km of Public Rights of Way
 - 3,000km of priority winter maintenance network
- 13.2 During the 2nd LTP period, Lincolnshire County Council continued to give priority to maintaining its highways assets through targeted funding and more cost effective works contracts. However, there remains a significant backlog of maintenance and with spending constrained during the 3rd LTP period, preventing the network from further deterioration will be challenging.
- 13.3 All construction and maintenance work is externalised and subject to competitive tendering. The current Highway Works Term Contract was awarded in April 2010 for a minimum of 5 years, with a provision for annual extensions up to September 2020. This contract includes all maintenance and highway improvement works up to a value of £200,000 (except Traffic Signal installations and traffic signal computer systems, which are maintained under two separate contracts) and has an annual turnover in the region of £35m. In addition, in April 2010 the Council implemented a new Highways Asset Management system (CONFIRM) to assist in the planning and delivery of the maintenance of the highway network.
- 13.4 Efficiency in maintenance is high on the authority's agenda and it is actively investigating innovative solutions to contribute to overall authority efficiency and savings targets including:
- new forms of contracts and partnership working with our term contractors
 - development of corporate procurement strategy
 - working with regional Centre of Excellence for procurement
 - collaboration with adjacent authorities and the midlands region
 - reviewing maintenance policies and services
- 13.5 The following sections highlight some of the issues and proposed strategies that will be adopted during the 3rd LTP period in respect of asset management.

Transport Asset Management Plan (TAMP)

- 13.6 National guidance on producing a TAMP has been produced in the form of the CSS document "Framework for Highway Asset Management". Early work on developing the County Council's TAMP is based on this guidance and was further developed in conjunction with other funding partners who were highway authorities in the midlands area of the UK.

- 13.7 The County Council made substantial progress on developing a TAMP in the 2nd LTP period completing asset inventories, lifecycle plans and asset replacement cost valuations. Key areas for further development during the 3rd LTP period include agreeing levels of service for core assets and alignment corporate risk policies. The further development of a TAMP for Lincolnshire will provide a good framework to assess the impact of resource constraints on short term and long term management of the core highway assets.

Principal Roads

- 13.8 During the last 5 years, the principal road capital maintenance programme has taken a balanced approach based upon consideration of structural, surface and skidding resistance condition to secure the long term future of the network by carrying out the correct treatment at the optimum time.
- 13.9 Survey results over the past 5 years have been variable year on year but in general have shown that the network has been maintained in a steady state condition. More recent surveys have, however, indicated that the network may be showing early signs of a deterioration in condition. Table 3 below shows the average condition of the network over the past 5 years to March 2010.

Table 3

Condition of Principal Road Network over last 5 Years

	Indicator	Measured By	5 Year Average
Surface Condition	% Red - Plan Maintenance Soon	SCANNER	3%
Structural Condition	% at or below zero residual life	Deflectograph	4%
Skid Resistance	% at or below investigatory level	SCRIM	11%

- 13.10 In order to seek best value from the budget available during the 3rd LTP period, an asset management approach will continue to be taken with a balanced approach between structural, surface and skidding condition in order carry out the correct treatment at the optimum time to secure the long term future of the network. In addition, work is being undertaken to establish deterioration models for carriageways in order to further target treatments to the budget available.



Maintenance works on the A153

- 13.11 Consideration is being given to the increased use of targeted structural patching and surface dressing instead of reconstruction and surfacing works to maintain the integrity of the network over the short to medium term. It is anticipated that this strategy will assist in slowing down any structural deterioration of the network during the current period of funding constraints.

Other Roads

- 13.12 SCANNER surveys were introduced for all B & C class roads (NI 169) at the beginning of the 2nd LTP period. Surveys are undertaken on 50% of the network each year and a rolling 2 year average has been established. Analysis of these results shows that despite additional funding being diverted onto B & C class roads, the condition of the network showed a further deterioration over the period.

Table 4

Condition of Principal B & C Class Road Network

	2005 & 6	2006 & 7	2007 & 8	2008 & 9	2009 & 10
Percentage Red - Plan Maintenance Soon	4.0%	5.3%	7.7%	7.8%	dna

- 13.13 On the unclassified network, Coarse Visual Inspection (CVI) surveys have continued using accredited surveyors to achieve a consistent standard. Surveys are undertaken on a quarter of the network each year and a rolling 4 year average has been established. This shows that the condition of the unclassified network is continuing to deteriorate.

Table 5

Condition of Unclassified Network

	2003-6	2004-7	2005-8	2006-9	2007-10
Percentage of network > or = any CVI threshold	21.5%	22.8%	24.3%	25.9%	dna

- 13.14 In order to seek best value from the budget available during the 3rd LTP period, an asset management approach will be taken with a balanced approach between structural, surface and skidding condition to secure the long term future of the network by carrying out the correct treatment at the optimum time in the future. This will involve the use of appropriate structural and condition surveys and the new CONFIRM asset management system.

Footways

- 13.15 Surveys of footway condition suggest that there has been of a significant improvement in condition in recent years as a result of additional resources targeted at minimising injuries and third party claims through the replacement of non central urban flagged surfaces with flexible surfacing and specific additional allocation to fund refurbishment of central urban footways.
- 13.16 In order to seek best value from the budget available during the 3rd LTP period, an asset management approach will be taken to secure the long term future of the footway network by carrying out the correct treatment at the optimum time in the future. The target will be to maintain the footway network in its current condition in order to minimise injuries and third party claims. Consideration is also being given to the implementation of the new Footway Network Survey (FNS) across the network subject to the availability of funding.

Routine Road Maintenance

13.17 Routine road maintenance covers ongoing routine maintenance of the highway and includes areas such as grass cutting, sign cleaning, safety fencing, tree and shrub maintenance, etc. The service continues to be developed in response to changing demands. Recent examples include:

- drainage records have been improved through inventory surveys and cleaning and refurbishment programmes have been established in response to increasing public concern regarding flooding problems after heavy rainfall
- a programme of tree inventory and inspection has been started and a follow-up programmed maintenance established as a result of safety issues associated with condition of trees adjacent to the highways
- to improve the safety of all highway users, the frequency of rural grass cutting has been increased to 3 cuts each year

13.18 A new Highways Term Maintenance Contract was awarded in April 2010 which will operate for between 5 and 10 years, thus covering the whole of the 3rd LTP period. This contract is based upon the NEC 3 Term Services Contract – Option C (Target Contract with Price List) and has been developed as a flexible and incentivised contract which will enable the service to develop and respond to changes in demand, standards and resources. It is envisaged that all routine maintenance services will be subject to review during the period of the contract to ensure we are providing an efficient, cost effective service to meet public demands and to reflect the budgets available.

Bridges and Other Structures

13.19 There are some 3743 structures in Lincolnshire that are the responsibility of the County Council. These comprise 1477 bridges (over 1.5m span), 2008 culverts, 131 footbridges and 127 recorded retaining walls. In addition, there are a further 591 privately owned structures, including 356 bridges, 148 culverts and 87 footbridges, carrying county roads. The main owners of these are Network Rail, Rail Property, the Environment Agency and various Internal Drainage Boards. Approximately 60% of the bridge stock was built prior to 1922 and a high proportion of the bridges and culverts in Lincolnshire consist of brick arches, many in excess of 100 years old.



Reconstructed bridge at A1031 North Thoresby

13.20 Progress in various areas relating to bridges and structures is summarised below:

- **Bridge Assessments** – all 1101 eligible bridges have been assessed and a new standard has been introduced to identify and prioritise the future need for the assessment of highway structures. The programme of structural review will continue during the 3rd LTP period, along with any subsequent re-assessments that are identified.
- **Bridge Strengthening and Weight Restrictions** - 98% of the bridges are now capable of carrying 40/44 tonne European vehicles, with 201 bridges having been strengthened or reconstructed since 1991/92. There are currently nine remaining weight restricted bridges in Lincolnshire, with proposals to reduce this to just 3 (privately owned) structures by the end of the LTP3 period.

- **Bridge Inspections** - all bridges in the county are inspected in line with the Code of Practice for County Highway Structures, with inspection cycles dependant upon bridge importance and size. From January 2011, all data will be migrated to the new 'Confirm' Highway Asset Management System.
- **Bridge Maintenance** – During LTP2, increased funding for maintenance was targeted at addressing the backlog of large span steel structures requiring painting and parapets on A and B Roads which failed to comply with standards. The priority under LTP3 will be to carry out preventative and routine maintenance utilising two dedicated maintenance teams under the new Alliance contract. Any other further bridge maintenance funding will be targeted at those bridges identified from the bridge inspection programme and prioritised by the bridge management system.
- **Culvert/ Footbridge/ Retaining Wall Maintenance**
- over 2266 structures are owned by the County Council and the list increases every year, as additional culverts are uncovered, often as a result of a failure or a problem with flooding. The records of retaining walls are not complete but during the 3rd LTP, it is planned to collate the outstanding information. With future funding being extremely limited, the intention is to only address culvert failures when they occur, unless there is a clear indication that a culvert is on the brink of failure.
- **Safety at Bridge Sites** - vehicular impact damage on parapets in Lincolnshire is a major problem, with the main cause being substandard approaches particularly where roads run parallel to watercourses with crossings at 90 degrees. To date, the bridge strengthening/ reconstruction programme has not specifically targeted parapet failures in isolation. There is a significant number of bridges on minor roads where parapets do not conform to current standards. Similarly, there are many bridges which were not originally required to be assessed (generally those built after 1974) which also do not now meet current standards. During the 3rd LTP period, sites identified as high risk where safety is a concern will be addressed if funds become available.



Street Lighting

Table 6

- 13.21 During LTP2, the number of street lights and illuminated signs has increased by 8% due to new developments, highway improvements and safety schemes. The total as of November 2010 is shown in Table 6.
- 13.22 Progress was made on the key issues identified in LTP2 including completion of inventory data collection, review of street lighting policy with an increasing importance placed on sustainability and carbon management (as a result of which policies on dimming and part-night lighting have been adopted) and closer working with the District Councils, with agreements with 3 District Councils to maintain street lights on their behalf.

Number of Street Lights and other Illumination Equipment

Type	Number
Street Lights	62,253
Illuminated Signs	10,850
Vehicle Activated Signs	174
Feeder Pillars	595
Ancillary points	120
Subway Lights	136
Total	74,138

13.23 Ongoing street lighting issues going into the 3rd LTP period include:

- the slow rate of replacement of concrete columns
- an increased emphasis on carbon management and energy conservation, balanced against the cost of implementing significant changes across the whole asset to address both this and other general maintenance issues
- increasing difficulty in budgeting accurately for energy costs due to volatility in the wholesale market, with the price of electricity expected to continue to increase.

13.24 Key issues for the management of street lighting in LTP3 include (as resource permit):

- completing the links between inventory, works ordering and performance reporting systems
- full implementation of the street lighting asset management plan
- application of street lighting policy to slow down the proliferation in the number of street lights to minimise future maintenance liabilities by using new technology and seeking commuted sums wherever appropriate
- plan to address the risks inherent in an ageing asset base, whilst continuing to target capital funding to mitigate as much risk as possible
- extending the shared services project to other District and Town councils

Traffic Signal Systems

Traffic Signal Control Systems

13.25 The operation of traffic signal installations is carried out at a control centre in City Hall Lincoln. The traffic signal installations are linked via telecommunications to the computer systems in the control centre. The computer monitoring systems have been updated recently (i.e. Siemens Comet UTMC) to improve integrated system performance, to integrate future systems using a common database and to improve the ability of system operators to respond to incidents and congestion occurring on the highway network.

Traffic Signal Installations

13.26 There are currently some 300 traffic signal installations across the county, comprising:

- 148 junctions
- 130 pedestrian crossings (including 1 combined horse crossing)
- 21 combined pedestrian and cycle crossings
- 1 tidal flow system (i.e. 3 lane road with variable direction centre lane)

13.27 All new traffic signals are provided with low energy LED signal aspects and new energy efficient microprocessor controllers. Extra low voltage installations are used where appropriate to reduce the risk of electrocution.

13.28 Typically traffic signals have a design life of 15 years. In terms of safety and reliability the County Council sees the replacement of traffic signals which are 20 years old or greater as a priority. There are currently 5 traffic signal installations which are 20 years or older. It is expected that this number will grow to 29 over the next 5 years unless action is taken to replace them.

Traffic Control CCTV Cameras

- 13.29 The County Council controls 24 traffic control cameras which are used to monitor traffic flows and support the operation of the Traffic Signal Control Systems by identifying incidents on the highway and allowing appropriate action taken to be taken. These have been recently upgraded to improve picture quality and speed of operation, replacing obsolete equipment and enabling further expansion in future.
- 13.30 The CCTV images are shared with City of Lincoln, South Kesteven and North Kesteven District Councils and the Police for crime reduction operations carried out in. In return, images from 36 district council CCTV cameras have been added to the traffic control centre in Lincoln.

Traffic Signal Future Issues

- 13.31 During the 3rd LTP period, it is proposed that the following improvements will be pursued, subject to funding being available:
- further develop the traffic signals systems to assist with faster responses to incidents and to minimise the impact of congestion
 - replace obsolete and time expired traffic signal equipment to prevent unplanned loss of control over the traffic signal installations
 - provide additional systems to help manage the highway network (e.g. car park information signs, air quality monitoring and traffic information to the road user)
 - investigate possible savings in carbon emissions and operating costs as new technology is developed
 - publish CCTV images from traffic control cameras on the internet to help road users to plan their journeys
 - extend the sharing of camera images with additional District Councils
 - upgrade the capacity and quality of telecommunication facilities for traffic control CCTV cameras

Public Rights Of Way

- 13.32 The Public Rights of Way network in Lincolnshire is extensive with just over 4000 km of routes spread across 550 parishes. It serves a number of roles within the community forming a significant means of gaining access to the countryside for locals and visitors, as well as providing transport links in and around towns and villages. This places a key responsibility on the highway authority to keep the rights of way network open for usage.
- 13.33 Lincolnshire's statutory Countryside Access & Rights of Way Improvement Plan 2007-2012 (RoWIP) reflects the varying roles that the rights of way network plays and is written across four distinct themes of Sustainable Transport, Health & Well-Being, Rural Economy & Tourism and Social Issues and has linkages to various themes in the County Council's Sustainable Communities Strategy.
- 13.34 The management of the rights of network is underpinned by the RoWIP which was formulated following extensive consultation and community involvement. The Lincolnshire plan was a 2009 National RoWIP Award Winner and one of only five plans to be given "Excellent Status" by Natural England.
- 13.35 Good progress has been made on delivering the Lincolnshire RoWIP in recent years as highlighted in the Delivery Example overleaf.

Delivery Example : Rights of Way Improvement Plan (RoWIP)

The Lincolnshire County Council RoWIP covers four key themes; Sustainable Transport, Health & Well-Being, Rural Economy & Tourism and Social Issues. A great deal of work has been undertaken since the RoWIP was adopted in 2007 but some key highlights for each theme are outlined below:

Sustainable Transport - the improvement of off-road routes linking communities with schools, employment centres and local services. Examples include surface improvements on a footpath in Louth to give better access to a local school and a project with the Environment Agency alongside the River Glen which has removed all the stiles on a popular walk and replaced them with more accessible kissing gates.

Health & Well-Being - in partnership with the Lincolnshire Primary Care Trust, the County Council has delivered many improvements to rights of way utilised for the "Walking for Health" schemes around the County. Works have included the removal of many stiles and other unnecessary barriers to access as well as the surfacing of key routes, including in Skegness and in Horncastle. Alongside this the general management of the network has seen the removal of 198 stiles and the replacement of a further 216 with more accessible gates.



Skellingthorpe – Before



Skellingthorpe – After

Rural Economy & Tourism - production of publications promoting the use of the network including 30 new circular walks leaflets and 8 cycling leaflets, as well as extensively contributing to the Lincolnshire Outdoor Guide and 15 Walking Discovery Guides produced by Lincolnshire Tourism. Assistance has also been given to the promotion of routes by others including the support of the Lincolnshire Wolds Walking Festival and the establishment of the Spires & Steeples trail by North Kesteven District Council.

Social Issues - an audit of all potentially dangerous road and rail crossings has been undertaken and recommendations made to the Highways Agency and Network Rail regarding significantly affected routes where improvements could be made. In addition, an accessibility policy has been developed in conjunction with disability groups outlining where management of the network can achieve improvements for less able users.

- 13.36 In order to effectively manage the large network which is extensively spread across the County, the following prioritisation system is in place:

Priority 1 routes; recreational routes promoted by the County Council or entire paths included in a Parish Paths Partnership agreement (inspected every year).

Priority 2 routes; recreational routes published by other bodies and endorsed by the County Council or paths which serve (or which would serve) regularly as a communication between centres of population or an important local route (inspected every 2 years).

Priority 3 routes; paths less vital than those in 2 above or paths used seldom, or if at all, where there is no indication that there would be any significantly greater use if improvement works were carried out (inspected every 3 years).

- 13.37 This Priority System will be reviewed in 2011 to reflect the changing demands on the network and the resources available to manage it.
- 13.38 Since the signing of a Public Service Agreement (PSA) with Government in 2002, good progress has been made in increasing the percentage by length of rights of way that are open and available to use by the public, with the figure rising from 57.8% in 2002/03 to 74.4% for 2009/10. The current target is to ensure that the percentage of rights of way open and available does not fall below an average of 71% over any four year period, with the most recent period averaging 71.4%.
- 13.39 The County Council prepared the RoWIP with a view to the Plan being reviewed after a five year period has elapsed in 2013. This review will make assessments regarding the successes and any shortcomings of the existing Plan and as to the extent the network provides for the current and likely future needs of the public.

Winter Maintenance

- 13.40 During adverse weather conditions in the winter months, the winter maintenance service underpins all services and activities within the county. The authority currently treats some 34% (or 2990km) of the total highway network under its control utilising a fleet of 42 dedicated spreaders.
- 13.41 Lincolnshire is at the leading edge of precautionary salting of highways using the pre-wetted technology together with GPS controlled spreading. Only 2 depots out of the 8 operational winter maintenance depots now remain with uncovered salt storage.
- 13.42 One of the major issues for highway authorities is the treatment of footways and cycleways. Lincolnshire has worked with other county authorities (through the Midlands Service Improvement Group) to achieve a practical solution that is both achievable, affordable and meets the requirements of current legislation.
- 13.43 During the 3rd LTP period, opportunities will be sought to continue to improve the Winter Maintenance service. Initiatives to be considered include:

- continue with the process of placing the storage of all salt within salt barns
- implement the use of brown salt in snow conditions to raise public awareness
- continuing to take an active role in national winter maintenance research
- reviewing and implementing the advice contained within the Quarmby report, "The Resilience of England's Transport System in Winter", undertaken during 2010



14. Implementation Plan 2011/12 & 2012/13

Background

- 14.1 Due to the uncertainties around future levels of funding for transport highlighted earlier, the development of an Implementation Plan for the next two years (2011/12 and 2012/13) has been perhaps the most difficult element of preparing the 3rd Local Transport Plan.
- 14.2 The programmes that follow are therefore based upon the best information available at the time of writing, but may be subject to change as further information is received.

Capital Programme

- 14.3 Capital funding allocations for local transport authorities covering 2011/12 and 2012/13 were announced in the Local Transport Settlement in December 2010. Direct comparison with previous years is not possible due to the changes in the way that funding is provided for transport nationally, with 26 different grants and funding streams being reduced down to just 4. In general, the Maintenance Block allocations for Lincolnshire are generally similar to those received in the latter years of LTP2. However, the Integrated Transport Block allocation is substantially lower, with the 2011/12 allocation being just over half (55%) of that received in 2009/10.
- 14.4 Table 7 opposite summarises the proposed capital programme for 2011/12 and 2012/13.

Revenue Funding

- 14.5 Table 8 overleaf summarises the proposed transport-related revenue budget for the two LTP3 years.

Future Funding Streams

- 14.6 As indicated above, the programmes above are based upon the Local Transport Settlement announced in December 2010, coupled with the County Council's own funding. However, the authority will be looking to pursue further opportunities for securing funding for transport over this period including:
- the new Local Sustainable Transport Fund, detailed guidance for which was announced by DfT in January;
 - the Regional Growth Fund to be co-ordinated through the Local Enterprise Partnerships;
 - the emerging Community Infrastructure Levy process to secure appropriate contributions from new developments, and
 - joint working with other partners, district and parish councils, and voluntary groups

Table 7

Proposed Capital Programme 2011/12 and 2012/13

Service Area	2011/12 £000	2012/13 £000
Integrated Transport		
Lincoln	850	850
Boston	216	220
Grantham	550	550
Local Initiatives	1,600	1,600
Rights of Way	50	50
Road Safety	750	750
Public Transport	300	300
Town and Village Centre Enhancements	100	100
Local Sustainable Transport Fund matchfunding	0	405
Sub-total	4,416	4,825
Maintenance		
Principal Roads	5,362	5,111
Non-Principal Roads	12,700	12,105
Bridges & Other Structures	2,100	2,002
Footways	3,656	3,485
Street Lighting	750	715
Traffic Signals	600	572
Signs	50	48
Sub-total	25,218	24,038
Total	29,634	28,863

Table 8*Proposed Revenue Programme 2011/12 and 2012/13*

Service Area	2011/12	2012/13
Maintenance		
Structural	7,107	7,012
Environmental	2,948	3,013
Safety	8,933	9,128
Other	769	786
Winter	4,452	4,550
	Sub-total	24,209
		24,489
Road Safety		
Safety Camera Partnership	2,049	1,998
Public Transport		
	13,796	13,921
Other		
Traffic Regulation Orders	56	56
Traffic Counts and Surveys	134	134
	Sub-total	190
		190
Overall Total	40,244	40,598

15. Monitoring

Background

- 15.1 The 2nd Local Transport Plan contained a comprehensive set of indicators and targets against which progress has been monitored. Some of these indicators were set nationally (and hence mandatory), whilst others were developed locally.
- 15.2 More recently, the government has rescinded the national indicators set (including those for transport) and has adopted a more ‘hands off’ approach in terms of monitoring, including for Local Transport Plans. It has published for consultation a ‘Single List’ of data which it will require from local authorities on a routine basis. This list is much reduced from previous requirements.
- 15.2 Although the mandatory need to set LTP targets has been relaxed, many of the current indicators still have a role to play in terms of day to day operational management. Therefore, subject to funding being available, monitoring of those indicators in use at the end of the 2nd LTP period will continue during LTP3. A full list of these and the current position is shown in Table 9 below. However, in view of the uncertainties surrounding future funding levels, no targets are being set at this point in time. The issue of indicators and targets will be more fully considered as part of the subsequent development of LTP4.

Table 9

Proposed Revenue Programme 2011/12 and 2012/13

Indicator	Current Value	Year	Comments
Condition of Principal Roads (Former NI 168)	4%	2009/10	This indicator gives an indication of the proportion of the principal road network that may require structural maintenance.
Condition of Non-Principal Classified Roads (Former NI 169)	8%	2009/10	This indicator gives an indication of the proportion of the non-principal classified roads that may require maintenance.
Condition of Unclassified Roads	26%	2009/10	This indicator gives an indication of the proportion of unclassified roads that may require structural maintenance.
Condition of Footways	8%	2009/10	This indicator gives an indication of the percentage of the more important footways that might require structural maintenance.
Total Killed and Seriously Injured Casualties (Former NI 47)	462	2010	
Child Killed and Seriously Injured Casualties (Former NI 48)	22	2008 - 10	Based on a 3 year rolling average as numbers are small
Total Slight Casualties	2,924	2010	

Indicator	Current Value	Year	Comments
Public Transport Patronage	17.1m	2009/10	
Accessibility	90%	2009/10	Represents % household within 30 mins of a local service centre
Change in area wide road traffic	5,141	2009	Measured in million vehicle kilometres. Provided by DfT
Cycling	108	2010	Measured as index where 2003 = 100
Mode of Travel To School	30.5%	2008/09	Percentage arriving by car
Bus Punctuality – at starting point	83%	2010	
Bus Punctuality – at intermediate timing points	61%	2010	
Changes in Peak Hour Traffic to Urban Areas – Lincoln	22,824	2010	Average inbound vehicles crossing town cordon between 0700 and 1000
Changes in Peak Hour Traffic to Urban Areas – Boston	14,389	2010	Average inbound vehicles crossing town cordon between 0700 and 1000
Changes in Peak Hour Traffic to Urban Areas – Grantham	11,571	2010	Average inbound vehicles crossing town cordon between 0700 and 1000
Congestion	35.6 mph	2009/10	Average speed on A roads in morning peak. Data provided by DfT
Air Quality (Levels of NO ₂ on Canwick Road, Lincoln)	53.9 µg/m ³	2009	National objective is 40 µg/m ³ . Monitored by District Council
Air Quality (Levels of NO ₂ on Haven Bridge, Boston)	33.3 µg/m ³	2009	National objective is 40 µg/m ³ . Monitored by District Council
Air Quality (Levels of NO ₂ on Bargate Bridge, Boston)	30.0 µg/m ³	2009	National objective is 40 µg/m ³ . Monitored by District Council
Air Quality (Levels of NO ₂ on Wharf Road, Grantham)	34.9 µg/m ³ 2009	2009	National objective is 40 µg/m ³ . Monitored by District Council
Condition of Principal Roads (Deflectograph)	4.4%	2009/10	This indicator gives an indication of the proportion of the principal road network that may require structural maintenance based upon residual life
Skidding Resistance on Principal Roads	11.0%	2007-09	This indicator measures the proportion of the principal road network with skidding resistance lower than the national investigatory level as a 3 year rolling average
Killed and Seriously Injured Collisions involving Young Drivers (17-24 years old)	117	2010	
Road Safety Driver/Rider Education for 17-24 Year Olds	4,510	2009/10	Number of 17-24 year olds given training since 2006/07

Indicator	Current Value	Year	Comments
% bus stops with timetable displays	29%	2009/10	Number of 17-24 year olds given training since 2006/07
% bus stops with raised kerbs	22%	2009/10	
Ease of Use of Public Rights of Way	74.5%	2009/10	
Pedestrian Crossings with Facilities for the Disabled	82%	2009/10	
Schools with Adopted Travel Plans	100%	2009/10	
Traffic Flows in Lincoln AQMA (on Canwick Road)	29,971	2010	Flows are average 12hr flows based on 3 counts in Sept/Oct each year
Traffic Flows in Haven Bridge, Boston AQMA	30,681	2010	Flows are average 12hr flows based on 3 counts in Sept/Oct each year
Traffic Flows in Bargate Bridge, Boston AQMA	20,498	2010	Flows are average 12hr flows based on 3 counts in Sept/Oct each year
Traffic Flows in Wharf Road, Grantham AQMA	10,828	2010	Flows are average 12hr flows based on 3 counts in Sept/Oct each year

For any inquiries relating to the 3rd Local Transport Plan, please use one of the following methods to contact us:

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By E-mail: ltp@lincolnshire.gov.uk

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This document and other supporting documents are also available to view on the County Council website at www.lincolnshire.gov.uk/ltp. Copies can also be made available in other languages and formats upon request.

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