

# CHAPTER 3 - THE LOCAL PROFILE, PROBLEMS AND CHALLENGES

**Summary** - The local profile, problems and challenges are considered by reviewing the existing transport network and future travel demands in North Lincolnshire.

## 3.1 Introduction

The previous chapter considered the relevant strategic planning context at the European, national, Humber and local level. This chapter will outline the local profile and consider the problems and challenges facing North Lincolnshire and how the LTP can contribute to addressing them.

## 3.2 Spatial Profile

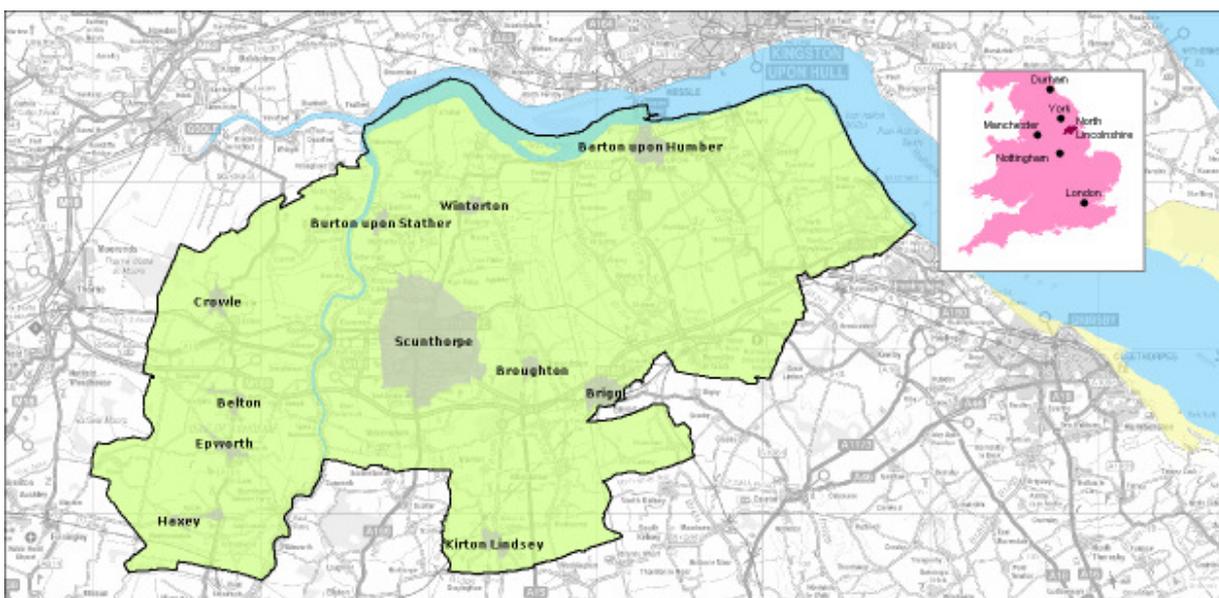
### 3.2.1 Background

North Lincolnshire is situated on the south bank of the Humber Estuary near the east coast of England, covering an area of 84,952 hectares. It is predominantly a rural area with the major centre of population in the industrial garden town of Scunthorpe.

The population of North Lincolnshire is 167,400 (2011 census), an increase of 9.5% since 2001. Approximately half of the population lives in the Scunthorpe and Bottesford urban area. The market towns of Barton upon Humber, Brigg, Crowle, Epworth, Winterton and Kirton in Lindsey provide key local hubs for the remaining rural settlements in the area. The provision of good accessible transport links to these locations is of particular importance to local communities and is a key consideration of the Transport Strategy.

It is estimated that North Lincolnshire will continue to see sustained population growth of 14% to 191,505 by 2035 and approximately 15,000 new houses will be required to accommodate this increase. North Lincolnshire is also expected to have an increasingly elderly population during the life of LTP3. The 2011 census shows that 19% of North Lincolnshire's population was 65 or over. This age group is predicted to increase significantly by 69.4% by 2035.

Figure 3.1: North Lincolnshire



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### 3.2.2 Economic Growth

The substantial government spending cuts since 2010, combined with the national economic recession has led to uncertainty in the UK economy and unclear economic growth prospects.

The outlook for North Lincolnshire is however positive, with a number of large developments already completed and others coming forward. In particular the South Humber Gateway (SHG) on the south bank of the Humber Estuary near the Ports of Immingham and Grimsby, represents a significant economic growth opportunity with around 1,000 hectares of development land available. This section of land is currently the largest underdeveloped area in England adjacent to a deep water estuary. The Ports of Immingham and Grimsby are the UK's busiest port complex. In 2012 they handled 60.1 million tonnes of cargo, which accounted for 12% of all UK port traffic. The combination of these factors means that the potential for economic development in North Lincolnshire is very good.

There has been significant investment in North Lincolnshire in recent years. Since 2007 Total Fina Elf and Conoco Philips have invested a total of £600 million in the SHG. Humber Chemical Focus estimates a further £1 billion of investment by chemical companies. Able UK are due to start work on their £100 million business and logistics park in 2013/14. Permission was recently granted for a £450 million Marine Energy Park. These developments and others are estimated to generate 10,000 new jobs directly in the SHG area during the life of LTP3 and a further 7,500 new jobs elsewhere in the UK.

There has also been investment in other parts of North Lincolnshire. For example, Canpack have opened a £600 million manufacturing plant in Scunthorpe, creating 300 jobs and Nisa Today have invested heavily at Normanby Enterprise Park. At Humberside Airport a £1.6 million perishables hub for the food industry has been developed and further development and expansion of the airport is anticipated during LTP3.

Planning permission has been granted for a £20 million retail park in Scunthorpe that is anticipated to create 300 jobs. In addition to this, smaller local businesses are benefiting from the Regional Growth Fund, which is allowing them to expand their operations and create more jobs.

Tata Steelworks in Scunthorpe is one of the most productive plants in Europe and remains North Lincolnshire's single largest private sector employer. Facilitating the anticipated new enterprise and maintaining existing private sector employers, such as Tata, will be fundamental to North Lincolnshire's future economic success. An efficient transport network is also crucial in supporting economic development.

### 3.2.3 Environment

North Lincolnshire is located on the south bank of the Humber Estuary and is predominantly a rural area with a mixture of market towns and villages. This diverse natural and built environment gives the area an interesting and varied landscape, which in turn raises a number of environmental challenges.

In particular flood risk and climate change pose key challenges both nationally and for North Lincolnshire. With rising sea levels comes an increased risk of flooding and in North Lincolnshire there is the possibility that the Humber Estuary's extensive flood plains may flood in extreme circumstances. The Environment Agency has proposals in place to improve and manage flood defences, including creating areas for storing flood water to reduce flood risk, for example Alkborough Flats. The North Lincolnshire and North East Lincolnshire (joint) Strategic Flood Risk Assessment 2011 includes climate change projections to 2115 and gives strategic guidance to developers on flood risk. The SFRA is the starting point for specific flood risk assessments in relation to development proposals that require such assessments.

North Lincolnshire has numerous wildlife habitats, which range from the world class internationally important areas of the Humber Estuary and Crowle Moors, through to nationally and regionally important wildlife and geological sites, and sites of particular local importance. North Lincolnshire is also characterised by a variety of landscapes ranging from the clay pits of the Humber Estuary, the rolling chalk escarpment of the Lincolnshire Wolds, the Ancholme Valley, the Lincoln Edge, the Trent Valley and the Isle of Axholme.

One of the key goals of LTP3 is to assist in combating these environmental challenges through measures that protect and enhance the natural and built environment.

**3.2.4 Air Quality**

Local authorities have a statutory duty, under Part IV of the Environment Act 1995, to review air quality in their area against a number of air quality objectives.

North Lincolnshire declared its first Air Quality Management Area (AQMA) in 2005 for breaches of the particulate matter (PM<sub>10</sub>) daily objective in Scunthorpe. Local industry is responsible for the majority of exceedances. This is unsurprising as the AQMA includes the some of the main industrial areas within Scunthorpe. A subsequent AQMA was declared in 2008 at Low Santon for breaches of the PM<sub>10</sub> annual objective, which again is primarily industry related.

In 2011 potential exceedances of nitrogen dioxide (NO<sub>2</sub>) were identified along the A160 at South Killingholme. An automatic NO<sub>2</sub> analyser is due to be installed to investigate this in more detail. The high levels of NO<sub>2</sub> in this location are due to traffic. It is anticipated that the A160 scheme will reduce NO<sub>2</sub> emissions due to improved traffic flows along the route. The council and its partners are keen to develop an area wide travel plan for the South Humber Gateway. This will aim to increase the number of employees travelling to the area by sustainable modes of transport, which will reduce NO<sub>2</sub> emissions.

One of the Local Transport Goals is Environment and Sustainability, the measures outlined above will help to achieve this goal.

**3.2.5 Education**

Table 3.1 shows the level of educational attainment in North Lincolnshire is similar to both the national and regional picture at GCSE level but is noticeably lower for those with a degree or equivalent.

*Table 3.1 – Level of educational attainment in North Lincolnshire*

	North Lincolnshire	Yorkshire and Humber	England and Wales
% of population with 5 GCSEs A* - C (including English & Maths)	52	52	55
% of population with a degree or equivalent	20	23	27

The lower percentage of people in North Lincolnshire with a degree or equivalent is due to the lack of access to higher education locally and few job opportunities in the area for graduates. The increasing development of the South Humber Gateway, particularly in areas such as logistics, engineering, renewables and manufacturing is increasing the requirement for employees with specialised skills and highlights the existing skills gap.

**3.2.6 University Technical College**

Approval was recently given to the Humber University Technical College (UTC), which will represent an £11 million investment in Scunthorpe Town Centre creating 70 new jobs. The UTC will open in September 2015 and be overseen by a board consisting of: Able UK, Tata Steel, Centrica Storage, Total Lindsey Oil Refinery, North Lincolnshire Council, University of Hull, North Lindsey College and Outwood Grange Academies Trust.

The UTC will focus on providing you people with specialist skills and training to enable them to pursue careers in the engineering and renewable energy sectors, alongside traditional academic subjects.

This will be the only UTC in the currently in the Humber Region. It is therefore expected to have a wide catchment area, attracting students from North Lincolnshire, north of the Humber, North East Lincolnshire, South Yorkshire and West Lindsey. Although the UTC is in a sustainable location, close to Scunthorpe bus station, the potentially wide catchment area and long opening hours will make it more difficult to offer sustainable transport links to the site. It is important that the Transport Strategy considers these challenges and that appropriate solutions are devised as the UTC develops.

### 3.2.7 Housing

The proposed level of future housing supply in North Lincolnshire is related to the area's settlement hierarchy, as outlined in the LDF Core Strategy. The majority of new housing developments will be located in and around Scunthorpe. The remainder will be distributed between the market towns (except Epworth), with a small percentage in the rural villages. The varied nature of the different settlements allows a diverse mix of housing supply and has created an attractive environment, where many people have chosen to live. In recent years the level of residential development has significantly increased with current levels estimated to be around 70,000 dwellings. The attractive environment, coupled with the anticipated population and economic growth prospects means that an additional 15,000 houses will be required by 2026.

The area's housing stock has a different profile compared to the rest of the region, with more detached and semi-detached dwellings and fewer terraced houses or flats. North Lincolnshire also has a greater proportion of owner occupation and lower levels of renting than other places in Yorkshire and the Humber. House prices (2013 – Land Registry) in North Lincolnshire are relatively low (£97,957) compared to the regional average (£115,324)

North Lincolnshire has an ageing population, which will have a number of implications for housing and transport policy. It is likely that the next generation of pensioners will be different from previous ones as there will be a greater emphasis on independent helping people to stay in their own homes longer. This will present a new set of travel demands for this generation and it is important that LTP3 considers this and develops appropriate solutions to avoid social exclusion and isolation.

### 3.2.8 Deprivation, Health and Wellbeing

The Index of Multiple Deprivation (IMD) is the main method of comparing the level of deprivation within North Lincolnshire with other areas in England. The IMD ranks all authorities in England with the highest being the most deprived and the lowest being the least deprived.

In the 2010 IMD North Lincolnshire was ranked 120 out of 354 local authorities in England, compared to 132 in 2007. The number of neighbourhoods in the top 10% most deprived areas of the country has increased from nine to thirteen. All of these are located in Scunthorpe. Five of these areas are in the top 5% of most deprived areas in England. The most deprived neighbourhood in North Lincolnshire is the Westcliff precinct area in Brumby Ward, which is ranked in the top 1.05% of neighbourhoods in England, with a score of 344 out of 32,400. There are also pockets of rural deprivation, particularly in Barton upon Humber and Winterton. These areas generally suffer from high unemployment, low levels of income, poorer housing quality, high levels of crime and low educational attainment. However, two of the neighbourhoods in Barton and Bottesford are ranked in the 10% least deprived in England.

The main causes of ill health in North Lincolnshire are the lack of physical activity, obesity, smoking, employment status, nature and quality of work.

The implementation of the Transport Strategy will play an important role in addressing deprivation, health and well being issues in North Lincolnshire. This can include improving access to health services, training and employment opportunities in rural and urban areas.

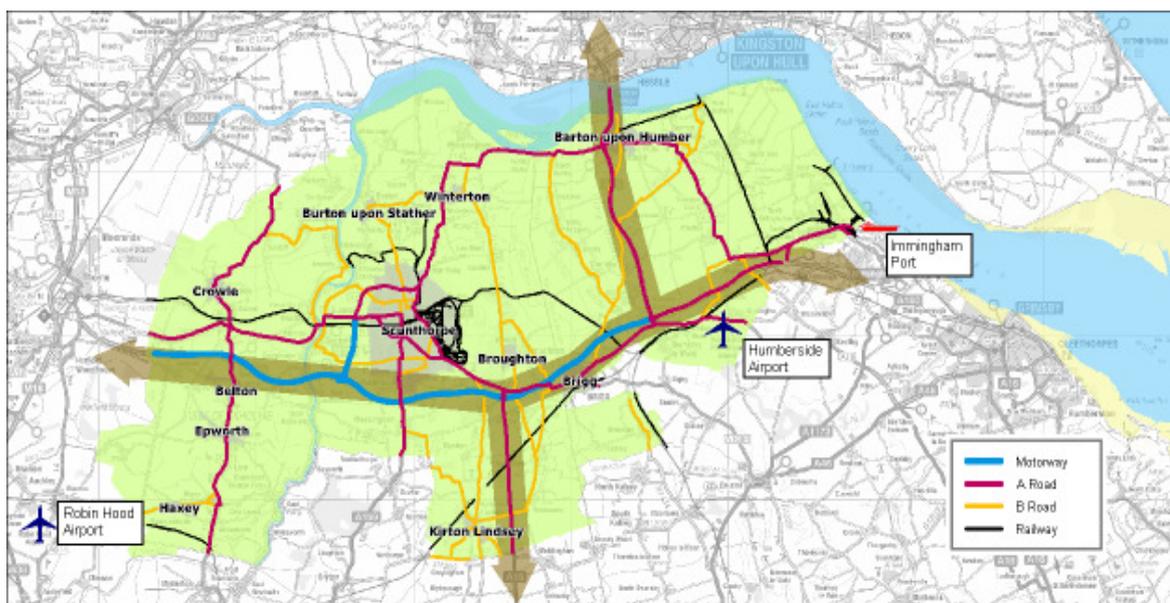
## 3.3 Existing Transport Network

### 3.3.1 Existing Network Overview

Although North Lincolnshire is a predominantly rural area, its transport network has routes of both international and national importance that also provide links for local people to a number of regional centres outside North Lincolnshire and key local hubs within. An overview of the existing transport network in North Lincolnshire is shown in Figure 3.1.

Figure 3.1 provides an indication of the existing transport network and illustrates the key strategic movements that link the area to the wider transport network. It highlights one of North Lincolnshire's greatest assets and constraints, the River Humber. The Humber provides a great economic benefit for the area, through provision of the UK's largest port at Immingham, but also acts as a physical barrier to areas situated on the northern bank with only a single crossing point via the Humber Bridge. In addition the tolls on the Humber Bridge are an economic barrier to some people and businesses, however the reduction in the toll in April 2012 will have alleviated this for many people.

Figure 3.1 – Overview of existing transport network in North Lincolnshire



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Figure 3.2 below illustrates the mode of travel to work for people in the Humber area.

Figure 3.2 – Travel to work by mode of transport in the Humber Area (2011)

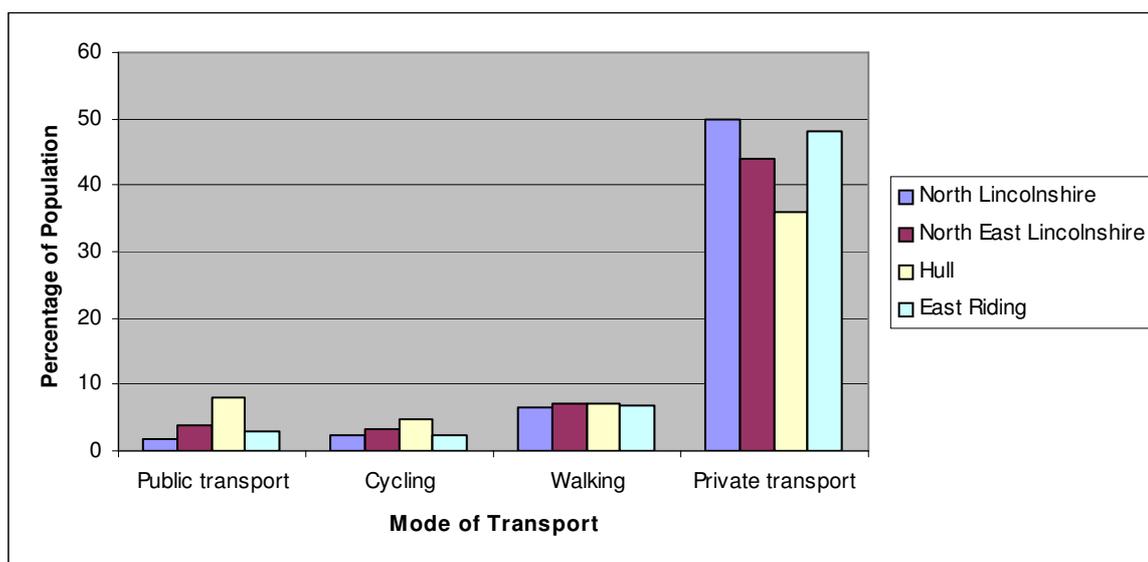
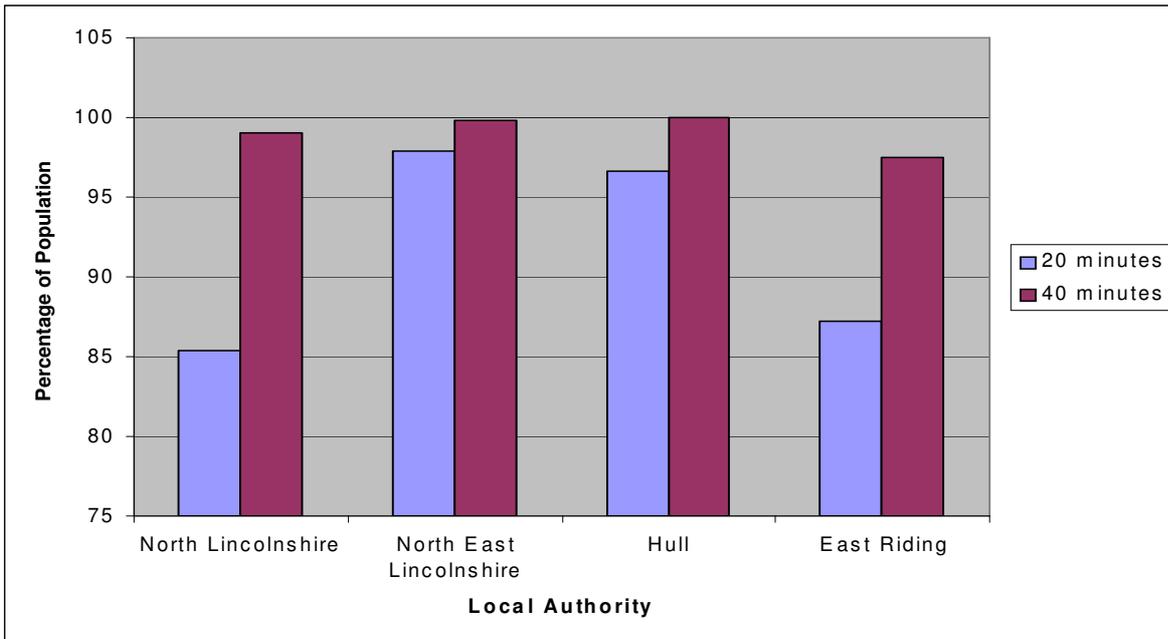


Figure 3.2 shows that in 2011 North Lincolnshire had the highest percentage of private transport usage but lowest percentage of public transport usage in the Humber area. It is therefore clear that one of the key challenges for North Lincolnshire is to reduce private vehicle usage and increase the proportion of journeys made by sustainable modes of transport.

However it is acknowledged that improving travel options by sustainable modes will be challenging due to the rural nature of North Lincolnshire and varying levels of accessibility between locations. As discussed in section 3.2.1, the main settlement of Scunthorpe and market towns of Barton upon Humber, Brigg, Crowle, Epworth, Winterton and Kirton in Lindsey are the key local hubs in the area for employment and services. In terms of employment there is also a large concentration on the south bank of the Humber Estuary near the Ports of Immingham and Grimsby.

This spatial profile means that a number of North Lincolnshire’s residents have limited access to major employment areas by public transport. Figure 3.3 shows levels of public transport access to employment centres in the Humber Area.

Figure 3.3 – Access to major employment centres by sustainable travel modes for people aged 16 – 74



Whilst figure 3.3 above provides a useful overview of the accessibility of major employment centres by public transport in comparison to the three neighbouring authorities, it does mask some of the underlying issues experienced by residents trying to access work by public transport. For example many of the large employment areas such as Tata, the industrial estates around Scunthorpe and the South Humber Gateway, are either located away from the main centres of population or are not served by regular bus services that coincide with shift patterns.

In order to provide a more detailed review of the existing transport network and examine travel demands, strategically and locally, the following sections identify the specific problems and challenges facing the transport network.

**3.3.2 Existing Road Network**

The Highways Agency (HA) and North Lincolnshire Council currently manage the existing road network in North Lincolnshire. The HA is responsible for all motorways and trunk roads in the area, whereas North Lincolnshire Council is responsible for maintaining all other roads, which equates to around 800 miles in total. Table 3.2 details the major roads within North Lincolnshire and identifies the key challenges facing them in the future.

Table 3.2 shows that the existing road network in North Lincolnshire generally performs well, despite some localised issues. Therefore as part of the Transport Strategy it will be necessary to target improvements in those areas with localised issues in order to bring them in line with the rest of road network.

In addition to the problems and challenges identified in Table 3.2, other issues are:

- Localised congestion at peak times
- Limited access to major employment sites, for example the South Humber Gateway, by sustainable travel modes
- Accident clusters at junctions, which are not located on North Lincolnshire’s main roads

Table 3.2: Summary of Existing Highway Network

Road	Description	Responsible Authority	Existing Conditions	Key Challenges
M180	A three lane motorway through the centre of North North Lincolnshire. It links the South Humber Gateway via the A160/A180 in the east to the M18 in the west and the wider highway network. It also provides one of the main road accesses to regional centres outside North Lincolnshire and a number of key local hubs within the authority	Highways Agency	Highways Agency	Good reserve capacity, but suffers from high vehicle speeds. Maintain existing capacity and performance
M181	A two lane motorway from junction 3 on the M180 to the A18, providing access to western and central areas of Scunthorpe and also the northern side of the town via the A1077. It is proposed to de-trunk a section of the M181 as part of the Lincolnshire Lakes project	Highways Agency	Good reserve capacity.	Maintain existing capacity and performance. Manage the de-trunking process Determining the appropriate level of usage/ movements and classification for the de-trunked section
A180	A two lane dual carriageway from the M180 junction 5 to central Grimsby in North East Lincolnshire. It also links the South Humber Gateway with the wider highway network via the A160	Highways Agency	Adequate level of reserve capacity	Maintain existing capacity and performance.
A160	Links the South Humber Gateway to the strategic road network and is a primary freight route	Highways Agency	Suffers from congestion at various locations along the route and in particular on the single carriageway section.	Support the Highways Agency in delivering the A160 Port of Immingham Improvement Scheme (see section 7.2.1 for more details)
A15 (north of M180)	A two lane dual carriageway providing an important link between North Lincolnshire and the north bank of the Humber via the Humber Bridge.	North Lincolnshire Council	Adequate reserve capacity. The reduction of bridge tolls has led to an increase in vehicles crossing the bridge.	Maintain existing capacity and performance.
A15 (south of M180)	Single carriageway linking junction 4 of the M180 to the A46 at Lincoln. This provides a link to southern England via the A1 at Newark on Trent	North Lincolnshire Council and Lincolnshire County Council	This section has the potential to act as an alternative route between the South particularly since the dualling of the A46 from Lincoln to Newark, but is constrained by the single carriageway nature of the road	Investigate the feasibility of improving capacity along this section. Humber Ports and southern England,

Road	Description	Responsible Authority	Existing Conditions	Key Challenges
A18	A key single carriageway route travelling from west to east through North Lincolnshire. It starts at Doncaster and provides links to the main urban areas of Scunthorpe and Brigg, before continuing east into North East Lincolnshire. It also provides direct access to Humberside Airport from M180/A180/A15 north.	North Lincolnshire Council and North East Lincolnshire Council	<p>High vehicle speeds at various locations.</p> <p>Traffic congestion during peak hours at Berkeley Circle, Queensway Roundabout and Ashbyville Roundabout in</p> <p>Queensway can act as a barrier to north/south movements for pedestrians and cyclists due to limited crossing points.</p> <p>Safety and capacity issues on the single carriageway section at the top of Mortal Ash Hill.</p> <p>Peak hour traffic congestion in Brigg.</p> <p>A number of personal injury accidents have occurred at the Barnetby Top junction and A18/B1211 junction.</p> <p>Adequate reserve capacity but is at risk of coastal erosion into the Humber near Reeds Island.</p> <p>Issues with high HGV movements and the potential for accidents at the A1077/B1216 junction.</p>	<p>Implement measures to reduce vehicle speeds at key locations.</p> <p>Implement schemes at Berkeley Circle and Ashbyville Roundabout to improve traffic flows.</p> <p>Identify measures to reduce severance and improve safety for vulnerable road users. A toucan crossing has been installed near Lakeside Retail Park.</p> <p>Improve safety and increase capacity of this section.</p> <p>Identify measures to improve traffic flow through Brigg. Construction of northern relief road to address this and facilitate residential development</p> <p>Implement Humberside Airport Surface Access Improvement Scheme.</p> <p>Implement measure to resolve impacts of coastal erosion near Reeds Island</p> <p>Improve the A1077/B1216 junction.</p>
A1077	A route of local importance from the M181/A18 junction which skirts the northern edge of Scunthorpe to Barton upon Humber and then eastwards to the A160 via Barrow upon Humber, Wootton and Ulceby.	North Lincolnshire Council		

# CHAPTER 3 - THE ROAD NETWORK AND CHALLENGES

Road	Description	Responsible Authority	Existing Conditions	Key Challenges
A159	An important southern link from central Scunthorpe to Gainsborough via Messingham, Scotter and Blyton.	North Lincolnshire Council	Junctions on the Ashby Road and Messingham Road sections can suffer from congestion on peak times.	Identify measures to improve junction performance.
A161	A north-south link from Goole in East Riding through North Lincolnshire and junction 2 of the M180 to Beckingham in Nottinghamshire.	North Lincolnshire Council	Good reserve capacity.	Maintain existing capacity and performance.
A1029	The A1029 allows the main north to south movements along the eastern edge of Scunthorpe.	North Lincolnshire Council	Congestion at some junctions during peak times.	Identify measures to improve junction performance along the Brigg Road corridor.
Ashby Road/ Oswald Road	The continuation of the A159 north towards Scunthorpe town centre.	North Lincolnshire Council	Congestion at some junctions during peak times.	Identify measures to improve junction performance.
Scotter Road	Scotter Road runs along the western edge of Scunthorpe, from north to south.	North Lincolnshire Council	Congestion at some junctions during peak hours, particularly Berkeley Circle	Identify measures to improve junction performance.
Station Road	Station Road runs from east to west, just to the south of Scunthorpe town centre.	North Lincolnshire Council	Congestion at some junctions during peak hours	Identify measures to improve junction performance.

**3.3.3 Existing Rail Network**

The UK’s rail network is managed by Network Rail and passenger rail services are provided by a number of Train Operating Companies. In terms of rail freight there are currently four main national companies, which provide the bulk of rail freight deliveries as well as several other smaller providers in operation. Figure 3.4 shows the existing rail network in North Lincolnshire and the wider area. Table 3.2 provides more detail on the rail services in North Lincolnshire.

*Figure 3.4: Existing rail network in North Lincolnshire and wider area.*



*Source: Yorkshire and Humber RUS 2009*

*Table 3.3 – Rail lines in North Lincolnshire*

<b>Line</b>	<b>Origin and Destination</b>	<b>Service Frequency Lincolnshire</b>	<b>Stations Served in North</b>
Trans-Pennine	Cleethorpes – Manchester Scunthorpe – Sheffield	Hourly Hourly	Scunthorpe, Barnetby Scunthorpe, Althorpe, Crowle
Barton Line	Barton upon Humber to Cleethorpes	Two hourly	Barton, Barrow Haven, New Holland, Goxhill, Thornton Abbey, Ulceby
Lincoln Line	Grimsby – Lincoln (and beyond)	Approximately two hourly	Barnetby
Brigg Line	Cleethorpes - Sheffield	3 trains on Saturday	Brigg, Kirton Lindsey

Table 3.3 shows that North Lincolnshire is well served by rail, with the Trans-Pennine line providing direct links to the East Coast Main Line at Doncaster. However, despite these links rail is not viewed as a primary means of travel, particularly for commuting purposes.

There are significant rail freight movements through North Lincolnshire with over 20% of all UK rail freight passing through the area, see figure 3.5. According to Network Rail, two of the regions largest freight traffic generators are in North Lincolnshire. The Port of Immingham generates approximately 300 trains per week transporting coal and ore to various locations in the UK. Tata Steelworks in Scunthorpe has 150 trains per week transporting coal and metals to Immingham and Lackenby.

The high levels of freight traffic and lack of associated infrastructure means routes to and from the South Humber Gateway are congested. This has been recognised by Network Rail, who along with their partners, have invested £13.8 million on improvement works to the Doncaster to Immingham and

Brigg lines and more investment is planned during LTP 3. If these improvements are not undertaken, it will be difficult to increase the volume of rail freight to and from the South Humber Ports.

Figure 3.4: Number of rail freight trains per day



Source: Yorkshire and Humber RUS 2009

### Route Utilisation Strategies

Network Rail is responsible for producing Route Utilisation Strategies (RUSs) which consider existing capacity, infrastructure capability and train operations and compare this against forecast future demand. The strategies then identify the priorities for future rail improvements and investment.

Route Utilisation Strategies have been published for the entire rail network and sit under three headings:

- National Strategy
  - Network RUS
  - Freight RUS
- Geographical RUS – Generation 2
  - North
  - London and South East
  - Scotland
- Geographical RUS – Generation 1
  - Covering smaller more specific regions, including Yorkshire and the Humber.

The Northern RUS was published in May 2011 and takes into account the relevant recommendations from Generation 1 RUSs, including the Yorkshire and the Humber, published in 2009. The Northern RUS sets out the priorities for rail improvements and investments in the North of England for the next 30 years. The recommended options will meet the increased demand for the passenger and freight markets, which will help to support and grow the northern economy.

The RUS identified nine gaps in demand which need to be addressed, this included insufficient freight capacity on the Immingham – Scunthorpe – Knottingley Corridor. There is currently sufficient capacity on all sections of this corridor to meet the demand of the 2019 forecast. However, the following sections /locations will have insufficient capacity to meet 2030 forecasts/emerging Freight Market Study conditional outputs, particularly if the volume of biomass traffic increases as indicated by the Port and Power Generators.

- Immingham to Brocklesby
- Wrawby Junction to Scunthorpe Foreign Ore Junction
- Knottingley East Junction

Two schemes are proposed to address this:

- Enhanced signalling between Scunthorpe and Immingham
- Track layout improvements at Knottingley Station

Ensuring there is sufficient network capacity on this corridor is essential in encouraging increased rail freight to and from the South Humber Gateway. The council will work closely with Network Rail to deliver the improvements. They will be particularly important should the loading gauge improvements to the corridor be completed (see Chapter 7 for more detail).

### Long Term Planning Process

Network Rail's Long Term Planning Process (LTPP) builds on the capacity gaps and the proposed interventions to address them identified in the various RUSs. The LTPP comprises a series of studies that will help Network Rail and its partners plan the long-term capability of the network for the next 30 years and to promote the efficient use of the rail network and its capacity. The following studies will identify 'conditional outputs' (priorities) for delivery:

- Market studies
- Cross boundary analysis
- Route studies

Network Rail are currently working on market studies across the following themes:

- Freight
- Regional Urban
- Long Distance
- London and the South East

The council and neighbouring authorities are working closely with Network Rail to identify the main conditional outputs for the Humber Area.

Network Rail will be the main organisation responsible for implementing future rail infrastructure projects identified through the RUS and LTPP. However the council and its partners can play an important role in delivering improved accessibility to passenger and freight services through effective spatial planning and transport measures identified in LTP3. They will also ensure that rail freight opportunities are maximised with effective planning and access to rail freight terminals. The aim of LTP3 will be to maximise the modal shift from private vehicles to rail for community, long distance travel and freight where possible.

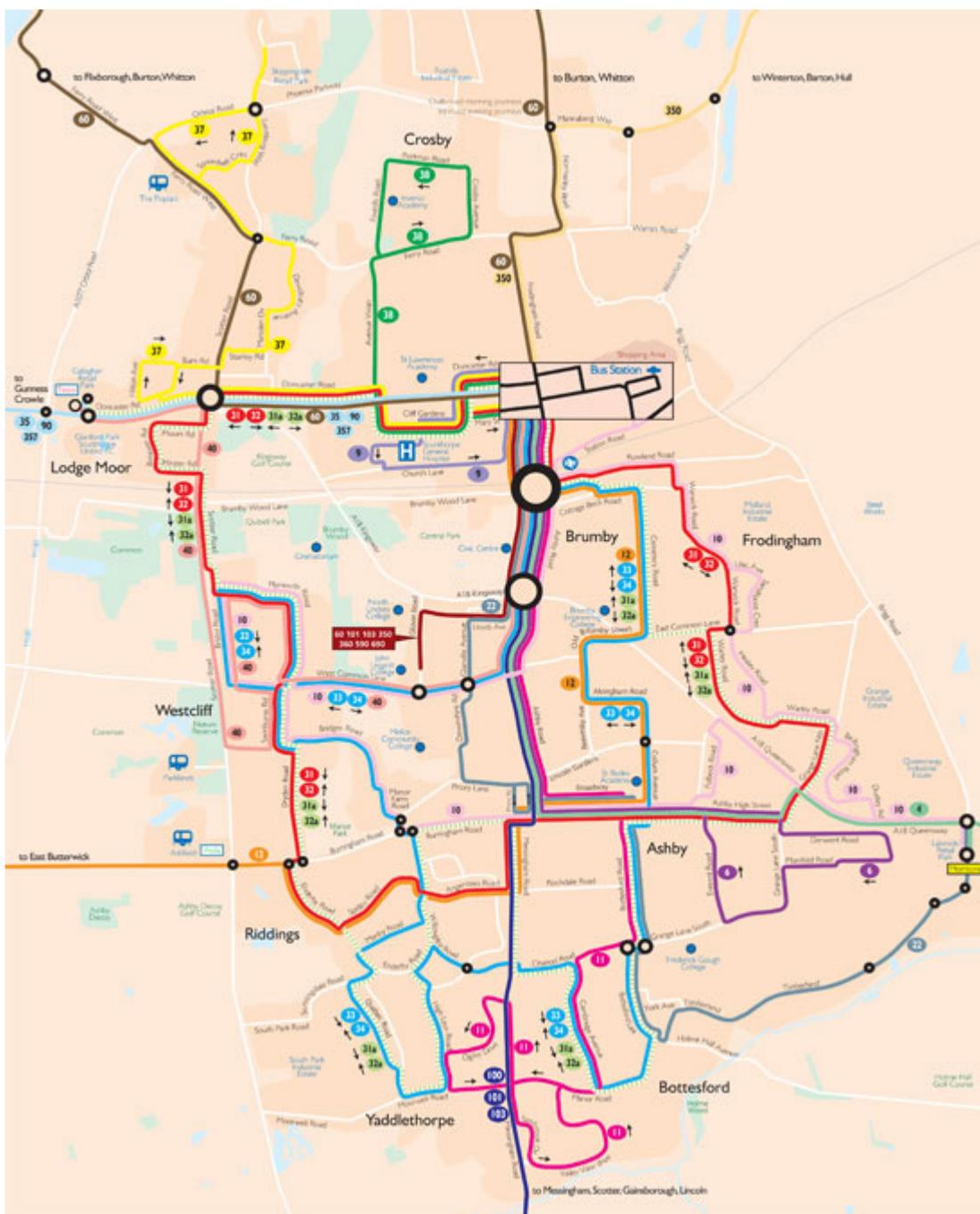
#### 3.3.4 Existing Bus Network

The majority of North Lincolnshire's bus services are operated from Scunthorpe Bus Station and are provided by two main bus operators, Stagecoach and Hornsby Travel. The existing bus network is split into urban services and rural or inter-urban services.

The urban bus services operate within the main Scunthorpe area and the rural/inter-urban services operate throughout North Lincolnshire, linking the more rural settlements in the area, as well as places outside the authority with urban locations. Figure 3.6 shows the bus network in Scunthorpe.

The main bus corridors in Scunthorpe are along Doncaster Road and Oswald Road/Ashby Road. The majority of urban services operate as a circular route to and from Scunthorpe Bus Station, which provides easy and direct access to the main retail area. The majority of services also pick up and drop off passengers on either Mary Street or High Street and this provides good access to the western part of the main retail centre.

Figure 3.6: Existing bus network in Scunthorpe



Source: Stagecoach

The other main locations served by buses within Scunthorpe are:

- |           |              |            |          |
|-----------|--------------|------------|----------|
| Ashby     | Berkeley     | Bottesford | Brumby   |
| Crosby    | Frodingham   | Lodge Moor | Riddings |
| Westcliff | Yaddlethorpe |            |          |

The main areas served within North Lincolnshire by rural and inter-urban services are:

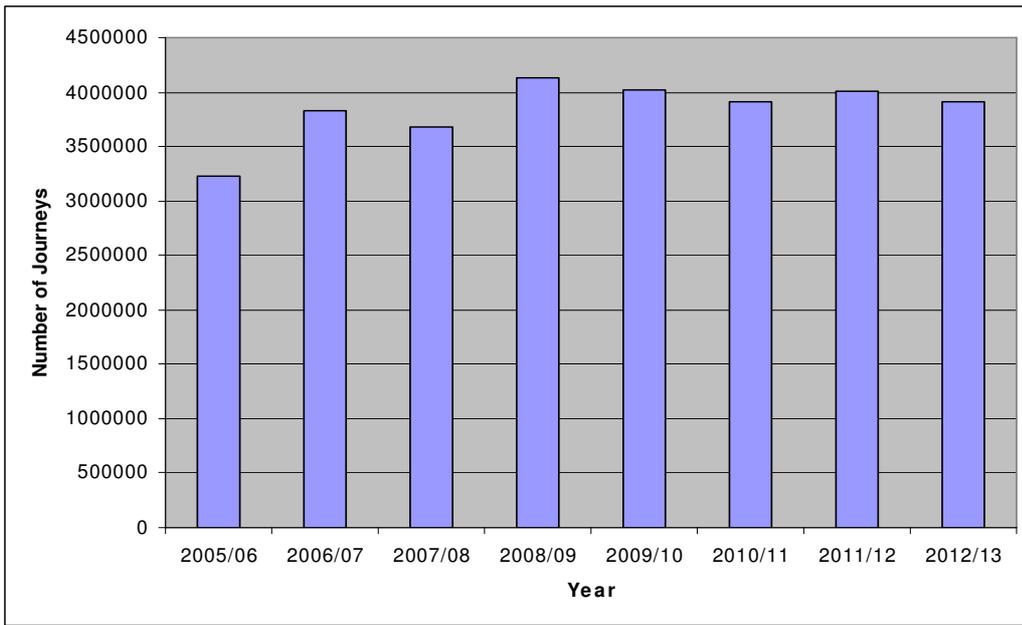
- |                    |                    |           |                     |
|--------------------|--------------------|-----------|---------------------|
| Barton upon Humber | Brigg              | Crowle    | Epworth             |
| Messingham         | Humberside Airport | Winterton | Burton upon Stather |

The main towns served outside the authority with direct services from North Lincolnshire are:

- |             |                    |              |       |         |
|-------------|--------------------|--------------|-------|---------|
| Cleethorpes | Doncaster          | Gainsborough | Goole | Grimsby |
| Immingham   | Kingston upon Hull | Lincoln      |       |         |

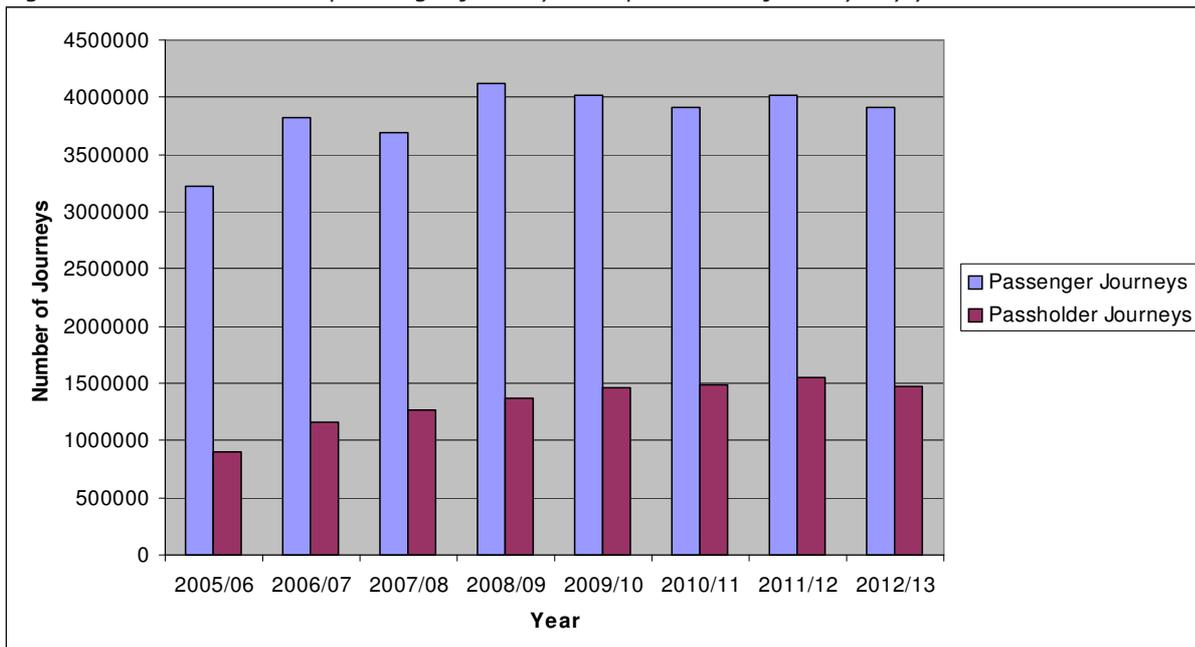
Figure 3.7 shows the total number of passengers per year in North Lincolnshire between 2005/06 and 2012/13.

*Figure 3.7: Total number of bus passengers by year*



The number of bus passengers in North Lincolnshire has increased significantly from 2.8 million in 2003/04 to 3.9 million in 2012/13, with a peak of 4 million. Whilst this increase is extremely positive, the introduction of free travel for older and disabled people from 2006 is a significant factor in this increase. Local authorities are required to provide free travel on local buses throughout England between 9.30 am to 11 pm Monday to Friday and all day Saturday, Sunday and bank holidays on production of a valid pass. Within North Lincolnshire residents may travel free on any local bus service at any time of the day. This also applies to journeys on local buses starting in North Lincolnshire to Hull, Grimsby, Lincoln, Gainsborough, Doncaster and Goole. North Lincolnshire residents are also entitled to travel at reduced fare on local trains with North Lincolnshire and as far as Doncaster and Cleethorpes or to Lincoln and Gainsborough, via Barnetby.

*Figure 3.8: Number of bus passenger journeys and passholder journeys by year*



In December 2009 the government confirmed that between 2010 and 2020 the qualifying age for free travel would increase from 60 to 65. It is anticipated that this change will have an effect on the number of pass holders and is likely to lead to a reduction in pass holder journeys undertaken by bus. Figure 3.8 above compares the number of passholder journeys made against the total number of bus passenger journeys. This shows that passholder journeys account for approximately one-third of all bus journeys and since the introduction of free travel there has been a significant increase in the number of passholder journeys made.

The provision of free travel has played a significant role in increasing accessibility to key services for this section of the population. It is important that LTP3 continues to have a positive impact on this for all of the population through developing and implementing appropriate transport options. The key problems and challenges for the bus network in North Lincolnshire are:

**Availability and frequency of rural bus services** – The relatively low levels of development density in some of North Lincolnshire’s market towns and rural villages, often results in low levels of passenger demand and this impacts on the viability of commercially operated services. Bus services in these locations are often reliant on subsidises and a balance is needed between providing available and frequent services in rural locations, the practicality of delivering such services and delivering value for money. Bus services in rural areas can also be seen as less convenient and more time consuming than travelling by car.

**Journey time reliability on bus routes travelling within and through Scunthorpe** – Whilst North Lincolnshire benefits from a relatively congestion free highway network, there are a few locations in Scunthorpe where congestion does occur and where bus journey times and reliability are affected. The primary junctions where bus journey time reliability is affected are as follows:

- Britannia Corner - Doncaster Road / Oswald Road / High Street
- Berkley Circle – A18 / Doncaster Road / Scotter Road
- Ashbyville Roundabout – A18 / Brigg Road / Wisteria Way
- Ferry Road / Froddingham Road / Old Crosby
- Scotter Road / Bristol Road
- Minster Road / Scotter Road

**Real Time Bus Information** – Whilst real time information would help to improve the overall experience for bus users and be beneficial to operators, the lack of appropriate technology in North Lincolnshire means that this is not currently available. As such, in order to improve the overall bus experience, a key challenge for the future is to develop options that facilitate technology to deliver real time bus information.

**Bus Stop Infrastructure** – Whilst a number of bus stops have been improved in recent years, there are a number of locations where improvements would be beneficial.

### 3.3.5 Existing Cycle Network

The existing cycle network in North Lincolnshire includes a number of signed routes on roads and footpaths. The cycle routes on footpaths are either shared facilities or segregated from pedestrians. The remainder of off street routes are on specially designated cycle paths.

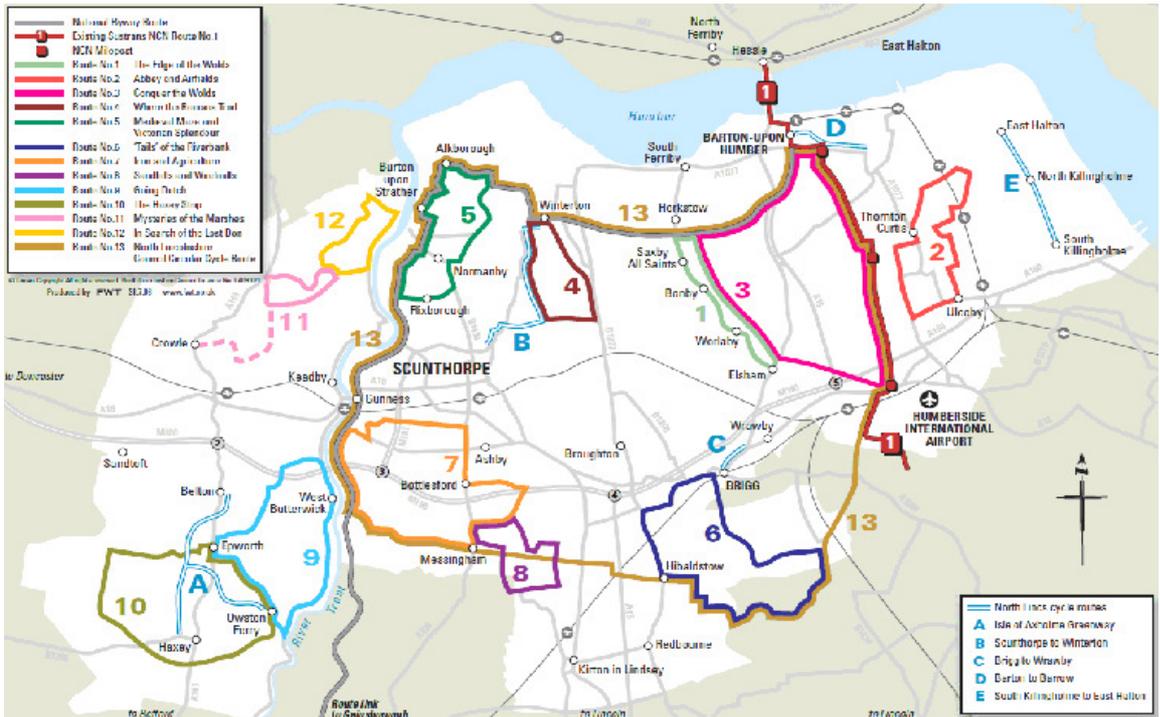
Sustrans Route 1 is part of the National Cycle Network that passes through the area and a further 13 other routes ranging from 6 to 50 miles in length have also been developed in North Lincolnshire, specifically for recreational cycling, see figure 3.9.

The main urban area of Scunthorpe has a number of existing cycle routes that provide good links to key facilities within the town. These routes are made up of a combination of both on and off-road facilities, see figure 3.10.

The council has also worked closely with Sustrans to provide dedicated pedestrian and cycling links between Baysgarth School in Barton upon Humber and the National Cycle Network.

In April 2013 the council completed the “Ridgeway” a six mile off road facility for pedestrians and cyclists. The route runs north from Manor Park in Scunthorpe to Bagmore Lane at Normanby and was funded by the council, Sustrans and the Big Lottery Fund. See Chapter 7 for more information on the “Ridgeway”

Figure 3.9: Rural cycle routes in North Lincolnshire



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The key problems and challenges for cycling in North Lincolnshire are:

- Heavy traffic flows and fast moving traffic raising concerns about safety
- Lack of secure parking facilities
- Lack of cycling infrastructure and facilities
- Lack of integration with other modes of travel and access to services
- Lack of awareness about opportunities to cycle

LTP3 will seek to develop a number of options to address these issues.

Figure 3.10 over the page, shows the cycle network in Scunthorpe.

**3.4 Future Travel Demands**

This section outlines the main areas in North Lincolnshire that are likely to see a significant change in their future travel demands, based on the spatial planning proposals in the LDF. This will enable LTP3 to develop a number of transport options that will aim to accommodate the anticipated travel demands in these locations.

**3.4.2 South Humber Gateway**

The South Humber Gateway represents a significant development opportunity for North Lincolnshire and the wider area and is allocated for employment use in the LDF Core Strategy. It is estimated that the area will generate around £3 billion of investment and create 10,000 new jobs directly over the next 10 years, with a further 7,500 jobs created indirectly elsewhere in the UK. The development potential of the SHG is as a result of it being the largest section of undeveloped land in the UK adjacent to a deep open water estuary and it is inevitable that the future demand for transport in this area will be significant.

To accommodate the development proposals, the existing transport infrastructure needs to be enhanced. Without this the SHG will not be able to fulfil its potential.

Figure 3.10: Cycle routes in Scunthorpe



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To estimate the potential level of traffic that could be generated by future development, a detailed transport study was undertaken. This calculated the level of traffic generation from both committed developments and land allocated for development and how it would be distributed onto the existing highway network. The study demonstrates that there will be a significant increase in traffic in the area in future years and identified constraints on the highways network and potential mitigation measures. Accommodating future travel demand in this area will be a key priority of the Transport Strategy, see Chapter 7 for more details.

Rail freight traffic is also expected to increase on the SHG in future years, provided improvements are undertaken on the existing rail network to address capacity issues. See Chapter 7 for more details.

### 3.4.2 Lincolnshire Lakes

The Lincolnshire Lakes involves the creation of a sustainable mixed land use urban extension to the west of Scunthorpe. The project will provide high quality, well designed sustainable new homes, as well as major opportunities for business, tourism, leisure, recreation, sport facilities and biodiversity and habitat creation, set within a unique waterside setting. It is anticipated that the project will supply approximately 50% of the authority's housing needs over the period until 2026 and it is estimated that around 6,000 new dwellings will be constructed during the life of LTP3. The Lincolnshire Lakes will also provide the opportunity to construct a new business park (ranging from 5.6 – 6.8 hectares) and measures addressing the issues of flood alleviation, foul and surface water, transport infrastructure and a sustainable energy supply.

The scale of the proposals means there will be a significant increase in travel demand in the area and an appropriate level of transport needs to be provided as an integral part of the development.

The key themes that need to be addressed as part of the Lincolnshire Lakes development are:

- **Connectivity** with the existing town centre and urban environment
- **Impact** of the development on the existing wider transport network and necessary mitigation measures
- **Sustainability** not only in influencing how people travel to and from the existing wider network but also in the planning and design of the internal layout of the development itself
- **Balance** between the excellent but dominant motorway access by raising standards of sustainable travel to similar levels

The specific trends relating to the existing network are:

- The area is surrounded by a relatively congestion free and lowly trafficked network
- It has an excellent strategic highway network
- There is an existing rail line through the northern section of the site, providing both a barrier and opportunity
- There is currently poor existing sustainable access
- There is the potential for a large scale development and associated infrastructure investment, including improved rail links to Scunthorpe station or possibly at a new station further west, although the latter is likely to be technically and operationally challenging.

### 3.4.3 Humberside Airport

Humberside International Airport currently has the second largest heliport in the UK as well as flights to holiday destinations. It has flights to Aberdeen with Eastern Airways, and daily flights to and from Schiphol Amsterdam Airport, the fifth largest passenger airport and one of the four most important airport hubs in Europe.

The projected growth in passenger numbers was initially assessed prior to the onset of the UK economic downturn as part of the Humberside Airport Masterplan (2007). In January 2013, the Department for Transport published new Aviation Forecasts for all of the UK's airports. Humberside International Airport is shown as having the capability of serving 3 million passengers per annum by 2030.

To cope with the demand for growth, both by 2030 and in the shorter term alongside the targeted employment development in relation to the allocations within the LDF, surface access to the airport must be considered.

*'Humberside Airport is another economic strategic development site where 20 hectares of land will be allocated for development.'*

In addition to this, Bristows has recently announced plans for a UK Search and Rescue Helicopter Base at Humberside Airport, operational from April 2015. This will increase the amount of employees at Humberside Airport, and require a new access off Caistor Road, into the site.

To determine the impact of future development at the airport, the Humberside Airport Surface Access Strategy was produced in line with the first LTP3. This was followed by the Humberside Airport – Transport Strategy, (March 2011). These documents identified key measures to facilitate extra growth, including highway improvements and access by sustainable modes.

The council will work with the airport and its partners to implement both Highways improvements and sustainable access to enable the airport to fulfil its potential and accommodate the predicted growth.

### **3.5 Summary**

This chapter has outlined North Lincolnshire's spatial profile in terms of its population, economic growth, environment, housing, deprivation and health and wellbeing. It has also identified specific problems and challenges facing the existing and future transport network, based on future travel demands.

The next chapter will identify the Local Transport Goals that will form the basis of the Transport Strategy.