

CHAPTER 7 - TRANSPORT OPTIONS

Summary – This chapter outlines and appraises the various Transport Options that are being considered as part of the Transport Strategy.

7.1 Introduction

The previous chapter summarised the main transport documents for North Lincolnshire and considered the main transport options emerging from them. This chapter considers these options in more detail by organising them into three separate categories:

- Major Development Areas
- Infrastructure Schemes
- Transport Initiatives

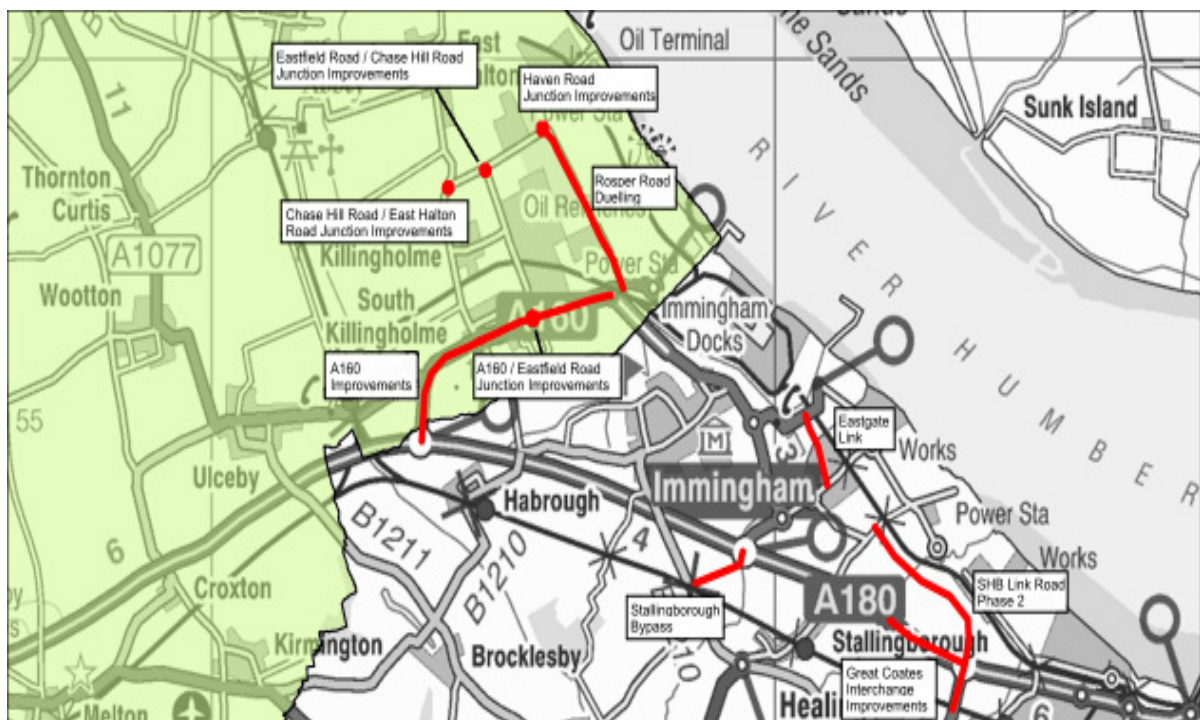
7.2 Major Development Areas

This section outlines the transport options that are being considered for implementation in North Lincolnshire's major development areas. It also briefly considers those in neighbouring authorities that will also have an impact on the area. The transport schemes proposed are either to address existing challenges or to accommodate future traffic demands. By organising the projects in relation to their spatial geography, it is intended that LTP3 will assist in delivering them as a package of transport measures for the overall benefit of the development area and North Lincolnshire as a whole.

7.2.1 South Humber Gateway

In order to fulfil the potential of the South Humber Gateway (SHG), a number of transport schemes have been identified to address both the existing transport issues and the anticipated travel demands of the area. They include both infrastructure schemes but also traffic management suggestions. Figure 7.1 shows an overview of the proposed transport schemes that are being considered.

Figure 7.1: Summary of South Humber Gateway Transport Schemes



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A160/A180 Port of Immingham Improvement Scheme – this is the largest project in the SHG and is one of the major transport schemes in the Yorkshire and Humber Region. The scheme is being promoted by the Highways Agency (HA) and is currently programmed to be constructed over an 18 month period from the spring of 2015.

The proposals involve:

- Upgrading Brocklesby Junction to an oval roundabout layout
- Improving the single carriageway section of the A160 to dual carriageway standard
- Relocating Habrough Roundabout to the west of its current position, with new links provided from the A160 to Ulceby Road, Top Road and Harborough Road
- Closure of the central reserve gaps at the Town Street junction and the entrance to the oil refinery
- Provision of a new road bridge at Town Street to provide vehicle, pedestrian and cyclist access between the two parts of South Killingholme
- Improvement of Manby Road roundabout to a signal controlled roundabout, with a new link directly to Rosper Road

The main aim of the scheme is to improve access to the Port of Immingham by relieving congestion and improving journey time reliability on the A160. The proposals also aim to improve safety for both road users and local residents by upgrading the existing single carriageway to dual carriageway, which will include improvements to junctions along the route. There is also a clear knock-on-effect in terms of the wider economic impacts that the scheme will bring.

As part of the New Approach to Transport Appraisal, the HA has undertaken a detailed review of the scheme in terms of its costs and benefits. This work revealed that the A160 has a significant cost benefit ratio and will be an important part of delivering the South Humber Gateway.

The key challenge for North Lincolnshire Council and its partners is to therefore support the delivery of the A160 scheme during LTP3.

Rosper Road Dualling – this involves dualling Rosper Road, which is one of the key existing roads in the SHG. The aim of the scheme is to develop a strong north-south corridor between the A160 and the development land to the north.

The existing single carriageway carries high levels of HGV traffic and traffic levels are expected to increase further as the land is developed. To accommodate this, there is a need to start planning for the upgrade of the existing road to dual carriageway standard. This scheme would complement the A160 improvements which have been designed to ensure that Rosper Road can be converted to dual carriageway at a later date.

Haven Road/Rosper Road Junction Improvements – a number of improvement works have been completed on Haven Road in recent years, but there are also proposals to improve the junction with Rosper Road by constructing a new roundabout. The primary reason for upgrading the junction is to cater for HGV turning movements, which make up a significant proportion of the overall traffic on Rosper Road.

As can be seen in the photograph below, the existing junction has a number of skid marks that have been caused by HGVs undertaking turning manoeuvres and overrunning the central island. The proposed roundabout would allow HGVs to turn more easily and would also support the proposals to dual Rosper Road.

A160/Eastfield Road Signal Improvements – the main aim is to improve capacity at the A160/Eastfield Road signalised junction for existing and future traffic, through minor widening to Eastfield Road. This scheme is being funded through a Section 106 agreement for the Able Business and Logistics Park to the north of the SHG and will complement the overall A160 improvements.

Eastfield Road/Chase Hill Road Junction Improvements – this involves constructing a new roundabout at the junction to replace the existing priority arrangement and will be funded through Section 106 agreements. The main reason for a new roundabout is to provide access to development land to the north. The scheme therefore includes provision for an additional fourth arm directly opposite Eastfield Road. As with the Haven Road junction, the introduction of a roundabout will help to facilitate HGV movements in this location.

Chase Hill Road/East Halton Road Junction Improvements – this scheme involves constructing a new roundabout at the Chase Hill Road/East Halton Road junction. As with the proposed roundabouts at Haven Road and Eastfield Road this scheme will improve turning movements for HGVs.

Road Improvement Schemes in North East Lincolnshire

There are also a number of proposals to improve access to the SHG within North East Lincolnshire. These proposals will have an impact on the success of the SHG and a positive impact on economic growth in North Lincolnshire. LTP 3 recognises their importance and, where appropriate, will support their delivery. The proposed schemes are:

- A18 Stallingborough Link Road Scheme
- South Humber Bank Link Road
- Great Coates Interchange Improvements
- Eastgate Link Scheme
- Stallingborough Interchange Signalisation
- A1173/Kiln Lane Junction Improvements

Traffic Management Measures

Variable Message Signing – an issue that has been raised is the impact that peaks in demand at the port have on the A160 and surrounding highway network. These are generally associated with the arrival of ships and the port and the timing is not related to typical peak hours on the network.

A potential solution is Variable Message Signing (VMS) on the approaches to the ports. This would provide drivers with advanced warning of congestion and allow port traffic to be better managed at peak times. The provision of VMS signs on the A180 would allow drivers potentially to utilise either the east (Stallingborough) or west (A160) gateways into the port. This assumes that both approaches to the ports are suitable for all vehicles and therefore the effectiveness of this scheme will be largely dependent upon the internal workings of the ports at Immingham, Grimsby and the expanding port area at North Killingholme.

Signing Strategy – concerns have been raised about the extent of existing traffic signs in SHG area. An option is to review existing signing and develop a preferred signing strategy for the whole of the South Humber Gateway.

HGV Parking Facilities – the need for additional HGV parking, particularly in the SHG, has been identified as a key problem to be addressed though LTP3. An initial solution could be to extend existing laybys or provide new layby facilities. A longer term solution is the provision of a dedicated lorry park. The availability of sufficient land in an appropriate location is a key factor in determining whether this can be achieved. The provision of a dedicated lorry park is also dependent on an interested operator coming forward to run it. During the lifetime of LTP3, the council will work closely with interested parties to achieve this.

Rail Improvements – as mentioned in Section 3.3.3, the Port of Immingham generates approximately 300 trains per week transporting coal and ore to various locations in the UK. As the busiest port complex in the UK, ensuring sufficient freight capacity on the rail network is crucial.

Network Rail have already invested £13.8 million on improvements along the Immingham to Doncaster Line and the Brigg Line to increase capacity. Further works are also planned to improve capacity along the Immingham – Scunthorpe – Knottingley Corridor, which includes enhanced signaling between Scunthorpe and Immingham.

The council submitted a successful bid through the Local Devolved Funding (part of Local Growth Fund) to the Humber Local Transport Body, for gauge improvements between the South Humber Ports and Doncaster.

The ability to move railway vehicles and their loads on the rail network depends upon the loading gauge of the route. Vehicles must comply with the route loading gauge to ensure that trains safely pass all structures, for example over-bridges and tunnels and also features such as station platforms, canopies and overhead or lineside equipment.

The South Humber Gateway is currently W8 gauge clearance, which allows standard containers to be transported by rail from the ports. By 2014 the South Humber Ports will be the last major ports not to have full gauge clearance and this combined with the fact that they are the busiest ports complex in the UK and the predicted increase in 'hi-cube' containers, needs to be addressed. It is intended that the scheme will result in the route being W10/W12 gauge clearance, which will allow all 'hi-cube', refrigerated and European containers to be transported by rail from the ports to their destination. These improvements are vital to allow the ports to retain their economic competitiveness and for their continued expansion.

International Gateways Area Wide Travel Plan – in addition to the 'hard' measures suggested above, a 'softer' approach is the development of an International Gateways Area Wide Travel Plan for the South Humber Gateway and Humberside Airport.

The primary aim of the travel plan would be to reduce single car occupancy and increase sustainable transport use by developing and implementing measures across the area. In order to be successful, the plan will require support and input from existing companies in the area. Some of the possible measures that could be included are:

- Area wide travel website
- Area wide car share scheme
- Public transport improvements
- Shuttle bus services
- Guaranteed ride home service

7.2.2 Lincolnshire Lakes

The Lincolnshire Lakes is an ambitious project, which will transform the western side of Scunthorpe. It aims to create a series of village settlements, providing 6,000 new homes, in addition to a business park, community, leisure and recreation facilities, which will be situated around several artificially created lakes between the western edge of Scunthorpe and the River Trent.

Extensive consultation was undertaken on 4 initial options early in 2013. The comments received have led to the development of the final option, which will be out for consultation in 2014. The council is also working on the Area Action Plan, which when formally adopted will provide clear planning policy to be used in the decision making process and guide investment and the development of the project.

The council is in the early stages of discussions with landowners and developers about how the project will become a reality.

Decisions about the transport infrastructure required to support the development are still at the feasibility stage, although a number of options have been identified. These include:

- De-trunking the M181 and the creation of new junctions onto the de-trunked road. An additional benefit of this, will be to reduce congestion at Berkeley Circle.
- Provision of high quality pedestrian and cycle links to Scotter Road, retail areas to the north and connections into the existing network and throughout the development
- Encourage walking and cycling for both utility and recreational purposes
- High quality public transport services and facilities, potentially including Park and Ride
- Effective area wide travel planning, both residential and workplace
- Highway improvement schemes on the highway network to accommodate development.

7.2.3 Humberside Airport Access Improvements

Humberside Airport is located on the A18, approximately three miles east of junction 5 of the M180. In addition to the existing demand created by staff and passengers there are a number of businesses located within the site that also currently generate traffic and 20 hectares of land has been allocated within the Local Development Framework for employment. This will inevitably create additional demand on the surrounding highway network. Infrastructure improvements are also required to serve the UK Search and Rescue Helicopter Base on land to the east of the main runway, which will be accessed via Caistor Road.

In order to facilitate the future development proposals a package of infrastructure improvements have been identified between the M180 and the Airport along the A18 corridor:

- **New Airport Access Roundabout** – this would replace the existing priority junction with a new roundabout. It would provide additional junction capacity for future development on sites allocated in the LDF and would also provide an opportunity to introduce a gateway feature that reflects Humberside Airport's status as an international hub.
- **A18 Barnetby Top Junction Improvements** – this is located immediately to the south of junction 5 on the M180, on the route between the airport and the motorway. The scheme would involve upgrading the existing priority arrangement to provide either a roundabout or signalised junction.
- **Caistor Road Widening** – Caistor Road runs along the eastern boundary of Humberside Airport. The scheme will widen the existing carriageway to facilitate access to land on the eastern part of the site. This land provides additional capacity for development at the airport, including the proposed UK Search and Rescue Helicopter Base.

In addition to the highway infrastructure improvements a number of measures were identified to improve access to the airport in the 2011 Surface Access Strategy. These are:

- Improve waiting facilities at Barnetby Rail Station. Waiting room, heating and real time information.
- Introduce a permanent taxi service presence at Barnetby station and marketing of the inextricable link between rail and taxi
- Maintaining the existing level of bus provision to the airport through increased promotion to passengers and staff
- The creation and promotion of an open monthly return ticket
- Dedicated fleet of Humber Flyer buses with unique branding and bus adaption for more luggage space
- Bus marketing inside the terminal building and in staff areas, providing information on frequency, destinations and ticket prices
- Commencement of an earlier Humber Flyer service to tie in with working hours and check-in opening times
- Improvement in cycle storage and changing/shower facilities
- Greater site wide promotion of the taxfree bicycle purchase 'CycleScheme' for staff
- Promotion of the existing cycle route options and discussion of potential future routes
- Dedicated car share website for employees at the airport

North Lincolnshire is keen to develop the International Gateways Area Wide Travel Plan, which will cover the South Humber Gateway and Humberside Airport, see section 7.2.1 for more information.

7.3 Infrastructure Schemes

This section sets out local infrastructure schemes that could be implemented in North Lincolnshire to support the delivery of the Local Transport Goals. The projects have been developed to address the challenges and issues identified in the previous chapters.

7.3.1 A18 Berkeley Circle Junction Improvements

Berkeley Circle is a five-arm roundabout on the A18, the main route into Scunthorpe from the west. To the west of the junction is Gallagher Retail Park. The land to the north of the retail park has planning permission for approximately 1,000 houses. Planning permission has also been granted for another retail park to the south of the Gallagher site. There are also proposals to relocate the football ground to a site further west and build a 12,000 seat stadium.

The junction already experiences significant queuing at peak times during the day and this will drastically increase with the completion of the additional retail park and new housing development. To address this, the planning permission for the residential development includes a Section 106 agreement for £3 million to improve Berkeley Circle. The current proposals for the improvement scheme are to remove the five arm roundabout and replacing it with a signalised crossroads and a new signalised junction on Doncaster Road, where the A18 Kingsway will merge with Doncaster Road. The proposals for the retail park include a £300,000 contribution for improvements to Berkeley Circle, in addition to a number of improvements along the A18 from the A1077 to Berkeley Circle. It is anticipated that these improvements will reduce congestion along this key corridor and also reduce severance for pedestrians and cyclists.

At the moment there is no indication when work will start on the residential development. Although the

proposals for the overall Lincolnshire Lakes projects should reduce congestion at Berkeley Circle, once the additional motorway junction has been completed, they may increase congestion further in the short term. The current planning applications for the Lincolnshire Lakes include delivering an element of the overall improvement scheme. Given the current uncertainty about when work on the improvements will start and the future impact of general traffic growth at Berkeley Circle, the council will seriously consider whether the scheme can be funded through alternative funding sources.

Delivering improvements to Berkeley Circle is a key priority for the council.

7.3.2 A18/A1029 Ashbyville Roundabout Improvements

Ashbyville Roundabout is located to the east of Scunthorpe on the A18 and is the main junction into the town from the east. It provides access to the south to Lakeside Retail Park and the nearby residential development (1,000 dwellings), which is under construction and to the north, the industrial areas along Brigg Road, including the steelworks.

Like Berkeley Circle, this junction also experiences very high traffic flows, which will increase further once the residential development is completed. The junction will need to be improved to accommodate the increased traffic flows and a Section 106 Agreement for £300,000 is in place with the residential development to help fund junction improvements. An preferred improvement scheme has not been identified yet, although it will involve either signalling the existing roundabout or replacing the roundabout with a signalised crossroads. It is anticipated that additional funding may be required to complete the improvement works.

Some of the Section 106 funding has been used to pay for a toucan crossing west of the roundabout on the A18 Queensway, where there are currently no safe crossing facilities. The new residential development includes a pedestrian/cycle link onto the A18 and the new crossing will be aligned with this. This will allow pedestrians and cyclists from the development to access the industrial areas to the north, along Grange Lane North, Brigg Road (including the steelworks) and also to Scunthorpe town centre. It will also provide safe access for pedestrians and cyclists from the residential areas to the north of Queensway to the new primary school in the residential development, Lakeside Retail Park and the local shopping area of Ashby. The new crossing also helps to reduce some of the severance issues currently experienced along Queensway.

7.3.3 Urban Traffic Control

One of the main improvements already being implemented in Scunthorpe is the introduction of an Urban Traffic Control (UTC) system. UTC aims to improve the overall efficiency of the highway network by linking traffic signals together to manage fluctuations in traffic flows and reduce delays at key junctions. The proposals have been divided into three phases, based on the key transport corridors in Scunthorpe, these are:

- Phase 1 – Ashby Road
- Phase 2 – Station Road, Oswald Road, Doncaster Road
- Phase 3 – Brigg Road

Phases 1 and 2 of the UTC system have been completed and are already proving beneficial in reducing journey times along the Ashby Road and Station Road, Oswald Road, Doncaster Road corridors. The continued expansion of UTC and the potential use of Intelligent Transport Systems can enable the introduction of other transport improvements that require this technology. For example, UTC can be developed further to allow the introduction of real time traffic information and variable message signs. However, these measures are beyond the remit of the current proposals for UTC and would need to be implemented as separate schemes.

7.3.4 Public Transport Improvements

The main emphasis in recent years has been on improving bus stop infrastructure. This has included installing new poles and flags, with shelters at key stops and the construction of raised kerbs to allow easy access onto buses for those with mobility issues or parents with buggies. This has improved the overall bus experience for passengers and helped to develop a distinct identity for bus stops.

The majority of bus stop improvements have been completed, but there are still a few outstanding locations that need to be completed. It is recommended that these are identified and the improvements delivered on a priority basis.

In addition to this, the council is also keen to implement bus priority measures, where appropriate, to improve bus journey times and improve service reliability. The introduction of the UTC system in Scunthorpe has already proved to be successful with a reduction in journey times along the Ashby Road corridor. Bus priority measures have also been introduced in Scunthorpe on Oswald Road and also on Fenton Street by the bus station. Other locations where improvements would be beneficial are:

- Bristol Road/Scotter Road (Scunthorpe)
- Berkeley Circle
- Queensway Roundabout

In addition to this, bus service reliability can be affected by inappropriate on street parking on certain routes.

Solutions that incorporate bus priority measures at the above locations will continue to be investigated. The Public Transport Team will also work with the Civil Enforcement Team to address inappropriate on street parking on affected bus routes.

The council is also keen to implement a real time information system, which will deliver real time information via the mobile network. It is recommended that this is considered in more detail and implemented when funding is available.

7.3.5 Cycle Infrastructure Improvements

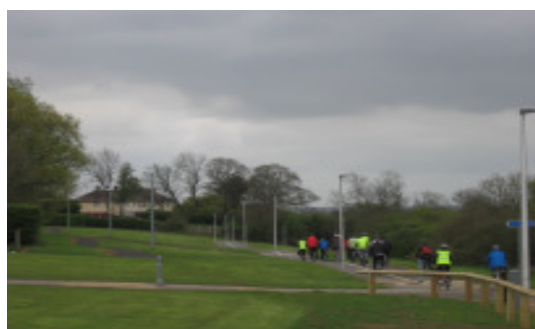
In 2013 the Ridgeway was completed, this provided a six mile off road pedestrian/cycle route from Burringham Road in Scunthorpe, along the western edge of Scunthorpe to Bagmoor Lane at Normanby. The project was started in 2009 and funded by Sustrans, the Big Lottery and the council. It now forms part of the National Cycle Network as route 169. The total cost was £4 million, which delivered:

- 6 miles of new network
- cycling storage for two further education colleges, four secondary and five primary schools
- two new bridges over West Common Lane and Bridges Road to provide a continuous level route and safe crossing points
- direct links to education, health, leisure and facilities, employment and retail areas, Scunthorpe and Ashby local centres and open green space
- new toucan crossings and new raised crossing points

The Ridgeway is proving to be extremely popular and the number of cyclists has increased significantly from 485 to 1600. The challenge now for the council is to maintain this level of cyclists and continue to increase the number of users.



Pedestrians using new crossing point on Brumby Wood Lane



Cyclists on the Ridgeway

During the remainder of LTP 3, the council will continue to provide additional cycle infrastructure improvements, to improve conditions for existing cyclists but also to encourage new cyclists, including:

- New or improved cycle routes
- Secure cycle parking
- Shower and changing facilities
- Lockers and storage areas for cycle equipment

Chapter 6 provides more detail on the three-tier assessment scheme that is used to assess proposed cycle routes and schemes. These will then be delivered in order of priority.

The provision of secure cycle parking, lockers, shower and changing facilities are also important in encouraging behavioural change. These are particularly beneficial in schools and workplaces. The council will work with employers and education providers to encourage the provision of these facilities.

7.3.6 Pedestrian Infrastructure Improvements

As well as providing measures for cyclists, there are also a number of infrastructure improvements that can be undertaken to improve facilities for pedestrians in North Lincolnshire, these are:

- Improvements to existing footways and pedestrian routes
- Creation of new footways and pedestrian routes
- New or improved pedestrian crossing facilities
- Enhancements to the quality of the urban environment

Improvements to existing footways and pedestrian routes can help to improve safety for vulnerable road users, encourage an increase in the number of journeys undertaken on foot and improve people's health.

This is also the case with the creation of new footways and pedestrian routes, which should be targeted in areas where key services are located and where it has been identified that there is a clear need for them to be introduced. All new requests are ranked using the council's approved prioritisation scheme and then delivered according to order of priority and available funding.

Pedestrian crossing facilities play a key part in pedestrian movements and should be located to provide pedestrians with a safe and convenient crossing point and remove any issues of severance.

Enhancing the quality of the urban environment can help to attract more people and businesses to the main retail core and improve its economic prospects of an area. This is particularly important in North Lincolnshire's urban centres of Scunthorpe and Ashby, Barton and Brigg.

7.3.7 Rights of Way Improvements

The Rights of Way Improvement Plan identified a number of measures that could be implemented to enhance North Lincolnshire's rights of way network. Some of these recommendations were based on specific infrastructure measures:

- New or improved signage
- Creation of new paths, bridleways and cycle tracks
- Provision of car parks at selected sites
- Eradication of superfluous structures
- Improvements to paths that can provide and encourage use of alternative routes to shops, work and school in a safe environment away from motorised traffic

7.3.8 Scunthorpe Controlled Parking Zones (CPZ)

There are currently on street parking issues on some residential streets in the central areas of Scunthorpe, particularly near the town centre and hospital. The cause is a mixture of residents and visitors to the area parking on street. The council has acquired powers to undertake Civil Parking Enforcement, which aims to:

- integrate traffic management policies with effective on-street enforcement
- provide dedicated on-street and off-street parking enforcement
- allow the council to be responsive to changing priorities, local factors and demand for parking
- provide definitions of parking exemptions or dispensations where appropriate
- allow free moving traffic
- create a safer North Lincolnshire

The introduction of Civil Parking Enforcement in March 2010 has addressed some of the problems mentioned above, however they could be supported by the introduction of parking measures as part of

a Parking Strategy for Scunthorpe. This would aim to manage the parking supply in Scunthorpe more effectively and improve network performance.

A measure that could be included in the Parking Strategy is the introduction of Controlled Parking Zones. These are areas where parking is allowed within marked and signed bays. Residents and their guests are entitled to unrestricted parking with a valid permit but commuter parking is restricted. The main benefits of this are:

- improved safety from better visibility at junctions
- reduced traffic levels and pollution
- makes it easier for residents to park near their homes
- easier access for emergency services and delivery vehicles
- reduced visual impact of cars on the street environment.

There are currently two resident parking schemes in North Lincolnshire. The council will continue to monitor the situation to determine whether it is appropriate to introduce schemes elsewhere in Scunthorpe, for example around the hospital. However in this instance it may be more appropriate to work in partnership with the hospital to address on-street parking issues around the hospital. In other cases, the introduction and enforcement of traffic regulation orders may be more appropriate.

7.3.9 Freight Infrastructure Improvements

The Freight Strategy identified a number of improvements that could be implemented, which were:

- Driver rest areas/lorry parking facilities
- Support infrastructure improvements to access port facilities to meet growing demand
- Freight signage strategy
- Safety review of accident cluster sites
- Roundabout on the A18 at the entrance to the steel works.

The Freight Strategy identified that there is insufficient lorry parking in North Lincolnshire, particularly given the number of large freight generators and attractors in the South Humber Gateway, the steelworks and industrial estates around Scunthorpe. Currently unauthorised lorry parking is an issue in Scunthorpe with lorries parking in laybys on the A18 and also on the roads in the retail parks around Tesco. Proposed future developments in this area, will restrict this parking and potentially create issues elsewhere. The council is keen to see the provision of additional lorry parking facilities particularly in Scunthorpe and near the South Humber Gateway and will work closely with interested parties to achieve this.

Section 7.2.1 identifies the highway infrastructure improvements required to improve access to the ports and support the development of the South Humber Gateway.

The strategy also recommended that a signing audit should be undertaken to assess the continuity of signing from the strategic road network to all industrial estates and other major freight generators/attractors in North Lincolnshire. It is suggested that this is undertaken to allow a wider signage strategy to be developed for the area.

The Freight Strategy identified some accident cluster sites. It is recommended that these are reviewed to determine whether there is still an issue and to design and implement safety schemes, where appropriate.

7.3.10 A18 Mortal Ash Hill Roundabout

The A18 Mortal Ash Hill is the main route into Scunthorpe from the east and is on the approach to Ashbyville Roundabout. One of the main entrances to the steelworks for HGVs is on Mortal Ash Hill with a left in, left out junction arrangement. This results in any vehicles travelling westbound along the A18, having to travel round Ashbyville Roundabout to enter the steelworks. The construction of a roundabout was a recommendation in the freight strategy and this will reduce the number of HGVs performing u-turns at Ashbyville Roundabout.

The land directly opposite to the south of the A18 has been allocated for development. To improve access to the steelworks and improve access to the development land, a four arm roundabout will be constructed in this location. This will also reduce traffic flows at Ashbyville Roundabout.

7.3.11 A1077 Barton upon Humber Improvements

The Barton upon Humber Transportation Study (2008) identified a number of improvements that could be undertaken along the existing A1077 through Barton, which included:

- Improvements to Hungate mini roundabout – increase capacity at this junction and reduce accidents
- Pedestrian refuges along the A1077 – to facilitate pedestrian crossing movements along the A1077
- Parking bay buildouts
- Removal of right turn into Vestry Lane and extension of parking bays
- Market Place pedestrian improvements – reduce conflict between vulnerable road users and vehicles
- Falkland Way junction improvements – these are required to facilitate development along Falkland Way and would also form a “gateway” feature from the eastern approach. It is anticipated that traffic signals will be installed at the junction and will be funded through S106 contributions from developers.

7.3.12 A1077 South Ferriby Improvements

Part of the A1077 is in close proximity to the south bank of the Humber Estuary near Reads Island. The Environment Agency’s Humber Flood Risk Management Strategy (2008), identified that this section of the A1077 is in serious danger from erosion into the River Humber over the next five to ten years. If the Environment Agency decides not to maintain the existing flood bank or it is not practical do so, then it may be necessary to realign this section of the A1077 and a suitable scheme will need to be developed and funding will need to be secured to implement any improvements.

7.3.13 A15 Improvements

The A15 is split into two parts that adjoin the M180 in North Lincolnshire. The northern dual carriageway section links the M180 to Hull, and the north via the Humber Bridge and the southern single carriageway section provides a link with the south via Lincoln and the A1 at Newark.

The council has previously had discussions with Lincolnshire County Council about dualling the single carriageway section of the A15 between the M180 and Lincoln, the majority of which is in Lincolnshire. This would provide an alternative link between the South Humber Gateway and southern England.

The proposals are still in their infancy, although the council will continue to work with Lincolnshire County Council to pursue the proposals, where appropriate.

7.3.14 Sandtoft Access Improvements

The former Sandtoft Airfield has been included in the Local Development Framework as a site for future development. The existing access to the site is poor and needs improving (see Chapter 6 for more details), if the area is to be developed. It is anticipated that the improvements will be funded through Section 106 agreements with developers.

7.4 Transport Initiatives

In addition to infrastructure schemes, a crucial part of LTP3 is to consider the transport initiatives that can be implemented to assist in addressing the wider issues for North Lincolnshire. This section outlines the initiatives that could be undertaken during LTP3.

7.4.1 Education

Education and training is a key initiative, particularly in transport safety. By providing people with the skills and awareness of the risks associated with roads, this can help to reduce death or injury and, in the case of training increase their travel options. The main educational initiatives that are being implemented are:

- Diversionary road safety courses
- Pedestrian and cycle skills training

A range of diversionary courses for offending drivers and riders are offered through Humberside Police and Safer Roads Humber. These education courses target the poor attitudes and behaviour of drivers who have committed certain offences. They have been shown to reduce the level of re-offending compared to drivers receiving fines and points on their licence.

Speed Awareness courses are used to educate drivers about the risks associated with driving at excessive speed.

Driver alertness is offered to drivers who have been driving without due care and attention or without reasonable consideration to other road users.

RIDE is a course for motorcyclists who have committed certain offences such as failure to comply with traffic directions e.g. traffic lights, stop signs, and solid white lines.

Driving 4 Change is for drivers who have committed similar offences to those for the RIDE course.

1st Gear is targeted at young drivers and riders in the 17 to 24 age group who have committed a variety of driving offences.

Seatbelt course is offered to those detected not wearing a seat belt.

Given the success of the above education courses in reducing offending rates, it is clear that speed seminars can continue to play an important role in addressing road safety issues during LTP3.

Cycle and Pedestrian Skills Training – the provision of cycle and pedestrian skills training can help to improve safety awareness amongst children and young people, when cycling or travelling on foot. It can also help to encourage walking and cycling and can therefore enhance opportunities to access services and improve health and wellbeing.

Pedestrian skills training – aims to give children in Years 3 and 4 basic skills as a pedestrian. It is not the case they will be safe to be out alone once they have completed this course. Classroom theory work is followed by practical training sessions in small groups out on the highway. Each child is given numerous opportunities, under close supervision, to put into practice the crossing strategies learned in the classroom. In 2012/13 1476 children took part in pedestrian skills in North Lincolnshire.

Cycling training – gives children in Years 5 or 6 basic cycling skills. Classroom theory work covers cycling as well as road safety issues for pedestrians and vehicle passengers. Those that reach the required standard are given the opportunity to take part in the practical training, which takes place on public roads near to the school. Basic right and left turns, overtaking and hazard awareness are covered. Cycling training is available through either the North Lincolnshire Council cycling training course or Bikeability. In 2012/13 835 children took part in cycling training in North Lincolnshire.

7.4.2 Marketing

The effective marketing of transport initiatives can be important in delivering a number of benefits. There are a variety of marketing options that could be used including:

- Fixed message signs
- Variable message signs
- Web-based marketing
- Poster campaigns
- Promotional events

Fixed Message Signs – the use of fixed message signs can be an effective marketing tool in improving road safety and can assist in delivering the Safety and Security Local Transport Goal. A prime example of this is through use of the www.shinysideup.co.uk signs to warn motorcyclists of potential risks and which can be installed in locations, where motorcycle accidents and speeds are particularly high.

Variable Message Signs (VMS) – these can be useful in promoting road safety initiatives. The main benefit of VMS signs is that they can display a number of different safety messages at different times and can also be used to display other useful messages, such as real-time travel information.

Vehicle activated signs – these are used to alert drivers to their speed at locations where excessive speed is a problem. They are used extensively within North Lincolnshire’s Speed Management Strategy along with fixed signs and police enforcement. Even on their own they are effective in reducing vehicle speeds.

Web-based and Social Media Marketing – the internet can be used to market a variety of transport initiatives. For example, web-pages can be used to promote sustainable travel initiatives or road safety initiatives and can also be used to promote particular modes through good travel information. Within North Lincolnshire this web-based advertising can be undertaken on sites such as North Lincolnshire Council’s Website, local newspaper websites, or on workplace and school web-pages. Social media can also be used to promote road safety and sustainable travel messages to specific road user groups.

Radio and other media – radio advertising and a variety of other media can be used to target specific social and road user groups identified in having a road casualty problem.

Poster Campaigns – the use of posters is a cost effective way of promoting a variety of transport initiatives in prominent locations. For example, posters can be installed at bus and rail stations, be displayed on buses and trains or alternatively can be located in the workplace and at schools.

Promotional events – the use of promotional events to market sustainable travel use can help to encourage modal shift from private vehicles. National campaigns and local events can be used to promote greater travel by sustainable modes and this can be a useful way of delivering the local goals in relation to environment and sustainability and health and wellbeing.

Targeting – Careful analysis of the target audience for road safety and sustainable travel messages using social marketing tools means appropriate marketing strategies and focused use of appropriate media can be used to maximise impact.

7.4.3 Travel Information

The provision of good travel information can help to improve the ease of travelling by a particular mode of transport and can enhance people’s opportunities for accessing services. It can also be used to promote the use of sustainable modes and therefore improve people’s health and wellbeing. Furthermore, travel information can lead to an improvement in the performance of the existing network and the economy.

Some of the initiatives that can be used to enhance travel information are as follows:

- Fixed signs
- Variable message signs
- Web based travel information
- Real time travel information

Fixed Signs – The use of fixed signs to provide travel information for users is an important aspect across all modes as it helps to improve the efficiency of the network. In North Lincolnshire, road users generally benefit from a good level of signage across the highway network and there is also an adequate level of provision for pedestrians and cyclists.

Maintaining and improving the coverage of these signs should be ongoing throughout LTP3, as necessary. It is recognised that there is a need to implement signage on tactical diversion routes through Scunthorpe during periods when the M180 is closed. The Freight Strategy recommended that a signing audit should be undertaken to assess the continuity of signing from the road network to all industrial estates and major freight attractors/generators, for example the steelworks and the SHG. This should then be supported by the development of a signing strategy.

Variable Message Signs – be used to display a variety of standard messages at different times of the day. Whilst they are a more expensive option than fixed signs, their flexibility means that they can be particularly beneficial in displaying real time information on key routes.

Web-based Travel Information – the internet can be used to display extensive information on travel options and therefore can benefit a number of the local transport goals. A variety of information already exists both nationally and locally to facilitate travel through and within North Lincolnshire and North Lincolnshire Council’s website (<http://www.northlincs.gov.uk>) is one such source.

An important part of web-based travel information is to ensure that users can access up to date information easily, therefore during LTP3, the council will aim to maximise the potential for web based travel information by providing up to date and easily accessible information on its website and where possible will facilitate access to information on other web-pages.

Real Time Travel Information – this is not currently available in North Lincolnshire, however the council would like to implement a system which can deliver real time information via the mobile network.

7.4.4 Travel Planning

One of the goals of LTP 3 is to reduce transport related carbon dioxide emissions and protect and enhance the natural environment. To achieve this, there is a need for behavioural change amongst users, so that there is a reduction in the level of private vehicle usage and an increase in the proportion of people who travel by sustainable modes. This is particularly relevant in North Lincolnshire where the number of people travelling to work by private car (71%) is higher than the regional average (63%).

In terms of influencing behavioural change, there are a number of initiatives that can be undertaken to encourage modal shift:

- Car share schemes
- School travel plans
- Worked based travel plans
- Area wide travel plans

Car Share Schemes – Car sharing involves two or more people sharing a particular journey by car. The aim of a car sharing scheme is to reduce the number of single occupancy journeys made by car via use of an online database to match individual journeys. North Lincolnshire have set up a car share website (www.travellincs.com) in partnership with North East Lincolnshire Council.

This is an area wide car share scheme across both North and North East Lincolnshire. In addition to this, there is the scope for location specific car share initiatives at key employment sites or areas, which will be identified through workplace travel plans. One of the aims of the Transport Strategy is to promote car sharing opportunities during LTP3.

School Travel Plans aim to encourage pupils and staff to travel to school by sustainable modes. During LTP2 North Lincolnshire Council undertook extensive work with schools to develop approved travel plans and all but two schools have achieved this. The main focus of LTP 3 will be to work with schools to maintain and update their existing travel plans.

Work Based Travel Plans – these can encourage travel to work by sustainable modes and also improve accessibility to employment sites. Given the travel to work statistics for North Lincolnshire, it is clear that modal shift from private vehicles to more sustainable modes will be a key part of the Transport Strategy.

The council will work with developers to secure robust travel plans through the planning process. They will also work with existing companies and encourage and support them in the development of their own travel plans.

7.5 Summary

This chapter has outlined a number of transport options that are being considered to meet the Local Transport Goals for North Lincolnshire and address common challenges facing the local area. These transport options have been grouped into those located in North Lincolnshire's major development areas, infrastructure schemes and transport initiatives.

In the next chapter, the Transport Strategy will select the preferred transport options and set out the prioritisation process that will take the LTP forward towards implementation.