Spalding Transport Strategy

Working Paper 2: Evidence Gathering and Analysis

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Executive Summary

Spalding has grown significantly over the past decade with increases in population specifically focused on those of working age and the under 15's which will put pressure on specific transport modes. Forecasts indicate that there will continue to be a steady increase in the population over the next 20 years with all age categories seeing rises above the national average. This will generate additional pressures and demands on the local transport network

With potentially up to 7,100 new homes to be developed between now and 2031, the Transport Strategy will need to set out the extent of new transport infrastructure and services required to meet this additional demand and support these proposals in a sustainable manner. A key part of this strategy will be the proposed Spalding Western Relief Road (SWRR) which is a major project identified in the Lincolnshire Local Transport Plan (4) and the emerging South East Lincolnshire Local Plan.

Car ownership has increased significantly in Spalding, up 26% since 2001, which is higher than the national average. However over the same period the number of households without access to a car has increased by 13% which clearly presents an opportunity to encourage more use of sustainable modes of travel.

The town has experienced a 15% increase in (am peak) traffic between 2006 and 2010. Congestion in the town is focused on the area around Winsover Road, St Thomas's Road and the level crossing and at selected junctions on the A16. The concern amongst residents and stakeholders is the severance created by the rail line and the river and the planned upgrade of the former which could result in more delays for all movements (pedestrians, cyclists and buses in addition to private cars). Freight traffic is limited and is using routes away from the town centre. Data on parking shows that occupancy levels are below average and that there is more than sufficient capacity to cover (current) demand.

The local bus service is relatively good with both the local town service and some inter urban links providing good coverage and accessibility. Patronage (on the local town service) has shown a marginal increase over the last couple of years and it has been reported that punctuality has improved. The bus station does not present a good image of the town and its location, remote from the town core, reduces its attractiveness further. Rail patronage has seen a marginal decrease over the last 5 years which is largely as a result of the limited journeys available.

Provision for cycling and walking is sporadic with recent improvements being introduced through the CTZ initiatives in 2001 and 2008. Feedback from stakeholders during this piece of work and earlier engagement initiatives (town centre masterplan and the CTZ's) indicate that the town still lacks joined up cycle routes and adequate crossing facilities (cyclists and pedestrians). Stakeholders have indicated that improving sustainable links from the new housing areas identified to the west of the town, will need to be a core element of the strategy. However they

also highlighted that further measures should be introduced in the short term to encourage walking provision and legibility/way finding within the centre of town and the key surrounding areas.

Of some particular concern is the concentration of accidents, which over recent years, have increased along the main east-west and north-south corridors through the town centre and specifically the increase in the number of accidents involving pedal cycles. The recent introduction of new traffic signals at a number of key junctions in the town centre should enhance the priority for these vulnerable modes (pedestrians and cyclists) although a number of stakeholders have voiced concern about the impact of these new signals on traffic flow through the town.

1 Introduction

1.1 Spalding Transport Strategy

Lincolnshire County Council's Highways Alliance has been jointly appointed by the County Council and South Holland District Council to develop a new transport strategy for the town of Spalding.

1.2 Working Paper 1: Evidence Gathering and Analysis

This document, Working Paper 2: Evidence Gathering and Analysis, represents the first, interim, output from the Progress Review. The aim of this Working Paper is to identify existing trends, opportunities and issues which affect the Spalding area in terms of transport.

This Working Paper focuses on a number of key themes through which trends within the area have been identified and analysed. The themes which identify the potential for change in the area over the coming years have been assessed.

The key themes include:

- National and local policy
- Economy
- Environment
- Travel
- Developments
- Strategy transport improvement status
- Other transport improvement status
- Engagement and consultation outputs
- Proposed land use developments

The following Areas of Potential Change have been analysed:

- Proposed transport schemes and measures
- Future network performance

1.3 Structure of the Working Paper

This Working Paper, following on from this introduction, contains comments on the findings of a review of the key themes (sections 2 to 9). Section 10 reviews consultation and engagement. Section 11 and 12 summarise the issues and opportunities and provides direction on how the strategy might develop.

2 Policy

2.1 Introduction

This chapter summarises the national and local policy which impact upon transport.

2.2 National Policy

A number of national policies have come into force over recent years with the Coalition Government's commitment to reform the planning agenda. In addition, several initiatives have been put into place to underpin the localism agenda.

This section explores the main policies in place with an emphasis on transport policy.

2.2.1 NPPF

The National Planning Policy Framework (NPPF), published in March 2012, provides guidance on national planning policy and replaces most of the previous Planning Policy Statements (PPS) and Planning Policy Guidance (PPG). The NPPF places emphasis on supporting sustainable development, advising that environmental conditions should be considered alongside economic and social matters. The document states that:

"At the heart of the NPPF is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan making and decision taking."

The main aims of NPPF recognise the three dimensions of sustainable development being Economic, Social and Environmental.

Aims

- Simplification of the planning system
- Making the planning process quicker and easier
- Encourage sustainable development
- Promote sustainable growth
- Protect the environment
- Empower local communities

Dimensions

Economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;

Social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being;

Environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy. (NPPF page 5)

The presumption towards sustainable development for plan-making means that*:*

- local planning authorities should positively seek opportunities to meet the development needs of their area;

- Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or specific policies in this Framework indicate development should be restricted.

For decision-taking this means:

- approving development proposals that accord with the development plan without delay; and

- where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless; any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or specific policies in this Framework indicate development should be restricted.

Chapter 4 of NPPF looks specifically at the promotion of sustainable transport. It sets out the need for transport systems to be balanced in favour of sustainable transport and that smarter use of technologies can reduce the need to travel. Local authorities should work with neighbouring authorities and transport providers to develop strategies to provide infrastructure to support sustainable development (such as rail freight interchanges).

NPPF recognises the importance of travel plans and all developments that generate significant amounts of movement should provide one.

Local authorities should seek to improve the quality of parking in town centres and, where it is necessary to ensure the vitality of town centres, the quantity too. Local planning authorities should set appropriate parking charges that do not undermine the vitality of town centres and parking enforcement should be proportionate, avoiding unfairly penalising drivers.

2.2.2 Transport White Paper: Growth, Cutting Carbon – Making Sustainable Local Transport Happen

The local transport White Paper, published in January 2011, sets out its vision for a local transport network that generates economic growth while reducing carbon emissions.

Vision	*"Our vision is for a transport system that is an engine for economic growth, but one that is also greener and safer and improves quality of life in our communities."*

The White Paper recognises the Government's commitment to ending top-down decision making and the steps taken to hand back responsibility for developing local solutions to the local level. It sets out a new approach to local transport funding which aims to simplify funding streams in four main areas:

- a major schemes (capital) programme of over £1.5 billion for schemes costing more than £5 million;
- more than £3 billion (capital) for local highways maintenance over four years;
- over £1.3 billion (capital) for the integrated transport block; and
- A total of £560 million was originally made available through the Local Sustainable Transport Fund to enable the department to fund a number of high quality bids for local projects with a focus on transport sustainability.

  In total, the Department for Transport awarded funding to 96 packages to 77 authorities to deliver their schemes between 2011 and 2015. Along with local contributions provided by all funded project teams, over £1 billion is now being invested in local sustainable travel.

Through bespoke local sustainable transport projects, the Fund aims to contribute to local economic growth whilst at the same time helping to achieve ambitious carbon reduction targets. The DfT says that the Fund has been universally popular, with all eligible local authorities applying with bids across 2011 and 2012. Due to this volume of interest and the high quality of bids received, the Department injected an additional £40 million into the Fund in 2012.

In line with the shift towards Localism, the White Paper acknowledges that two-thirds of all journeys are five miles or under; these are trips which have the potential to be made by means other than the private car. Research shows that a substantial proportion of drivers are willing to drive less, particularly for short journeys, especially if practical alternatives are available, and therefore the White Paper aims to offer:

"…people choices that will deliver that shift in behaviour, in many more local journeys, particularly drawing on what has been tried and tested."

It is considered that the biggest opportunity for encouraging sustainable travel lies with short local journeys.

It acknowledges that smaller-scale transport schemes can deliver high value for money, encourage growth and reduce local carbon emissions.

The White Paper develops the concept of enabling choice by providing better information and education to promote sustainable travel.

Chapter 9 of the Paper sets out each of the Government's commitments on local transport.

The White Paper discusses the following areas of change:

Areas of change

- Local transport – choices and implications
- Decentralising power – enabling local delivery
- Enabling sustainable transport choices
- Active Travel
- Making public transport more attractive
- Managing traffic to reduce carbon emissions and tackle congestion

Policy Issue	The key aims of transport are to support sustainable economic growth, and reduce carbon emissions

2.2.3 Planning Act 2008

The Planning Act 2008 was granted Royal Assent on 26 November 2008. The Act introduced a new stream-lined system for decisions on applications to build nationally significant infrastructure projects (NSIPs) in England and Wales, alongside further reforms to the town and country planning system and the introduction of a Community Infrastructure Levy (CIL).

2.2.4 Community Infrastructure Levy (CIL)

The Community Infrastructure Levy (CIL) is a locally set charge which can be applied to most new development to help fund infrastructure. It was introduced by the Planning Act 2008 and the CIL Regulations came into force in April 2010.

Any local authority can decide whether or not they want to impose CIL, and if they do it will replace the approach of collecting developer contributions through Section 106 (s106) planning obligations.

CIL will be charged in pounds per square metre, the amount to be decided by each local authority; charging schedules will be subject to public scrutiny and they must be consulted upon.

The key test will be that the rate of CIL must strike an appropriate balance between:

a) the desirability of funding infrastructure from CIL.

b) the potential effects it would have on the economic viability of development in that area.

Once a charging schedule has been adopted, any development for which planning permission is required will be a chargeable development on which CIL must be paid.

CIL is considered to be a fairer way of raising money for infrastructure than s106 as the money will be 'pooled' and used for more general schemes in the area; as such the use of planning obligations is now more limited. Whilst the following tests were previously applied as a matter of policy for a planning obligation they will now be a matter of law:

- necessary to make the development acceptable;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

Policy Issue	South Holland District Council still makes use of Section 106 Agreements

2.3 Localism Act

The Localism Bill was submitted to parliament in December 2010 and became an Act in November 2011. The Act has lead to a shift in power from central government to individuals, communities and local councils. The aim is to strengthen local democracy and individual responsibility, allowing local people to have an input into the issues that matter to them.

Through planning tools such as NPPF and other similar mechanisms available to them, local authorities are being given the powers to set their own policies that are more sensitive to their own local areas. In addition, the 'general power of competence' will give councils more freedom to work together with others in new ways to drive down costs.

2.4 Local Policy

2.4.1 South East Lincolnshire Local Plan

The South East Lincolnshire Joint Strategic Planning Committee was formed in July 2011. The Committee is made up of councillors from Lincolnshire County, Boston Borough and South Holland District Councils and is supported by a small team of officers from South Holland and Boston Borough Councils. The Committee has the responsibility for producing a local plan for the area of Boston Borough and South Holland District which will replace existing Local Plans for each district.

2.4.2 South Holland Local Plan

The South Holland Local Plan was adopted in 2006 and covers the period up to 2011 and is closely associated with the Lincolnshire Local Transport Plan 3 (LTP3) which has been superseded by LTP4, detailed below. The policies and site allocations remain in use until the South East Lincolnshire Local Plan has been finalised, but as it is anticipated that they will be superseded, they have not been considered as part of this review.

The Sustainability Appraisal Scoping Report published in 2012 highlighted that the movement of people and goods is an important consideration in working towards achieving sustainable development. It outlined that without intervention through the mechanism of the Local Plan, the area is likely to experience increased levels of traffic congestion/stress when taking into account additional levels of development. For example, increasing levels of car ownership will contribute to the potential for congestion around the area, particularly in and around the main settlements (including Spalding), which (along with Boston and Holbeach) act as the focus for employment, services and facilities.

It acknowledges that the Local Plan has limited influence over movement within the area, however, in the absence of the Plan it is anticipated that the impacts of development and growth upon traffic congestions/stress would be exacerbated. The

document recommends that the following key transport issues should be taken into account:

- facilitate a shift to more sustainable modes of transport;
- support initiatives to reduce congestion;
- minimise the traffic impact of new development;
- maintain and enhance accessibility to public transport throughout the area; and
- Ensure that increased use of the Freight Line does not lead to significant disruption.

2.4.3 Local Transport Plan 4 – April 2013

The Lincolnshire Local Transport Plan 4 (LTP4) was published in April 2013 and covers the ten year period of 2013/2014 to 2023/2024. LTP4 recognises the changes that have come forward since the previous LTP (LTP3) and that a lot of the uncertainty regarding transport policy has been resolved.

Vision

- There is a well managed and safe road network to maximise the reliability of journeys and reduce the impact of traffic on communities.
- There is good access by a choice of modes to services, jobs and for leisure within Lincolnshire.
- There is good inter- and intraregional access to support a growing economy.
- Our sensitive rural areas are managed in ways that retain, and where possible, enhance the value of the natural environment.
- Our streets in built-up areas are seen primarily as places where people can carry on their activities in a pleasant environment.

A key objective of the plan is to support economic growth in line with the latest Transport White Paper, 'Creating Growth, Cutting Carbon'. The plan recognises the leading industries in the county as being tourism, public administration, education and health.

Objectives

- Assist the sustainable economic growth of Lincolnshire, and the wider region, through improvements to the transport network
- Improve access to employment and key services by widening travel choices, especially for those without access to a car
- Make travel for all modes safer and, in particular, reduce the number and severity of road casualties
- Maintain the transport system to standards which allow safe and efficient movement of people and goods to protect and enhance the built and natural environment of the county by reducing the adverse impacts of traffic, including HGVs
- Improve the quality of public spaces for residents, workers and visitors by creating a safe, attractive and accessible environment to improve the quality of life and health of residents and visitors by encouraging active travel and tackling air quality and noise problems

LTP4 identifies the concerns based around Network Rail proposal to route additional freight trains along an upgraded GN/GE Joint Line through Spalding. It is recognised that the increased barrier down time at level crossings will result in severe road network disruption. In addition, there are proposals to create a Rail Freight Interchange to the south-west of Spalding. Whilst this will have significant benefits in terms of transferring freight from road to rail, it may also increase rail traffic through the town meaning additional infrastructure improvements are necessary hence proposals for a Spalding Western Relief Road being included in the four major schemes identified as priorities in the short to medium term.

One of the main public transport improvements described in LTP4 relates to there now being two 'Into Town' bus routes using new low floor buses; these routes link the outer areas with the town centre.

The Spalding Western Relief Road is itself identified as a major scheme in the Transport Strategy and recognised within LTP4. The document acknowledges that it is intended that the first phase of the relief road, between the Holland Park

development, which includes 2,250 new homes, and up to the B1172 Littleworth Drove and Hills drain, will be provided by the Holland Park development. On opening, it will just serve as an access road to Holland Park and won't serve as a relief road until Phase 2 (extending to Bourne Road) is built. Work is continuing on the identification of a preferred route for the remainder of the relief road. Once the entire route has been identified then work towards a planning permission for the remaining section between the Holland Park development and the B1356 (Spalding Road) can be progressed. The relief road is a priority for Spalding and further detail will be provided on the progress of this scheme in Section 8 of this Working Paper.

Policy Issue	LTP4 highlights the importance of delivering transport infrastructure to enable Spalding to cope with increased rail freight traffic and the associated level crossing down time increases.

2.4.4 *South Holland Draft Economic Development Strategy, 2010-2015*
This document refers to the Council's Corporate Plan's vision which is; *"to develop and promote South Holland as a thriving, living and working rural community, a place that people are proud of".*

2.4.5 *Spalding Town Centre Master Plan,*
Published in 2007 by SHDC (South Holland District Council), the Spalding Town Centre Masterplan (STCM) prepared a strategy for attracting and retaining new and existing shoppers, visitors, businesses and investors to Spalding well into the future.

The Baseline Review and Analysis stage of the Masterplan study highlighted a number of key issues and opportunities affecting Spalding. In terms of 'Transport and Access' this covered:

- Imperative to reduce congestion within Spalding especially east-west routes across town;
- Railway line cutting through the town with limited vehicular and pedestrian crossing points;
- Poor pedestrian/cycle links between rail station, bus station and town centre;
- Poor quality pedestrian spaces within the town centre;
- Lack of linkage between cycle routes and pedestrian routes to the town centre, residential areas and schools;
- Car parking provision within the town centre occupies key spaces and is high in relation to the town centre core retail use;

- Bus station has an out of town feel and has poor pedestrian links to the town centre.

The STCM sets out a vision for Spalding to become the cycle gateway to the Fens and Lincolnshire by the creation of cycle trails linking the town centre with the surrounding countryside. It also focuses on improving the quality of town centre spaces for pedestrians and cyclists.

3 Society and Wellbeing

3.1 Introduction

The demographic characteristics of an area will determine to a large extent the transport needs of its population. This chapter explores various population statistics in the study area in comparison to the wider county and England.

3.2 Population

Table 3-1 provides the key statistics of the town's population derived from the 2011 Census. Population statistics break the age categories every five years, and hence the working age category starts at age 15 rather than 16.

Table 3-1 – Population of Spalding, Divided into Age Groups (mid-2011 estimate)

Age	Total Population 2007		Total Population 2011	
	Number	Share %	Number	Share %
All usual residents	25,608	100.0%	28,823	100.0%
Age 0 to 14	4,164	16.3%	4,752	16.5%
Age 15 to 64	16,143	63.0%	18,346	63.6%
Age 65+	5,301	20.7%	5,725	19.9%

Source: ONS Ward Level Mid Year Population Estimates 2011

Spalding's population increased by 3,215 between 2007 and 2011, an increase of 12.6%. The share of the working age population and the youth (age 0 to 14) population increased slightly while the share of over 65s decreased slightly, although the absolute numbers of over 65s did increase by 424, or 8.0%.

In order to gain an understanding of trends in the size and demographics of Spalding's population, mid-year population estimates have been sourced from the Office for National Statistics. However, as mid-year estimates up to 2012 are not available at a town level, the population of Spalding is only available up until 2011.

Trends in the population of South Holland can be compare equivalent trends for Lincolnshire, East Midlands and England. As Spalding is a market town for South Holland, residents from many parts of the district work in Spalding and use Spalding to access services. However, South Holland extends to within six miles of Peterborough and therefore some residents of South Holland will access Peterborough for services rather than Spalding. Both the Crowland and Deeping St. Nicholas and the Gedney wards can be considered to be more accessible to Peterborough than to Spalding and the majority of those residents would be more likely access service in Peterborough. The combined population of those two wards are 8,567, or 9.7% of South Holland's 2011 population. Table 3-2 shows that the population of Spalding has grown steadily over the last 5 years, and at a higher rate than the national, regional and local trends.

Table 3-2 – Overall Mid-Year Population Estimates

	Spalding	South Holland	Lincolnshire	East Midlands	England
2012		88,500	719,000	4,567,700	53,493,700
2011	28,823	88,270	714,800	4,537,400	53,107,200
2010	27,270	84,561	711,800	4,481,100	52,234,000
2009	26,658	84,103	705,600	4,451,200	51,809,700
2008	26,149	83,884	700,700	4,429,400	51,464,600
2007	25,608	83,142	693,800	4,397,000	51,106,200
Change 2007-12	3,215	5,358	25,200	170,700	2,387,500
Percentage Change	12.6%	6.4%	3.6%	3.9%	4.7%
Mean Age (2011)		43.0	42.5	40.0	39.3
Median Age (2011)		45	44	40	39

Source: ONS Population Estimates for England and Wales, single age of year unformatted – Mid 2006 to Mid 2011 Revised

With the populations broken down into three age groups in the following three tables, it can be seen that South Holland's population of over 65s are growing at a slower rate than Lincolnshire, and the East Midlands although slightly faster than England as a whole whereas the working age population is growing at a much faster rate than Lincolnshire, the East Midlands and England. The youth population is growing much faster than the Lincolnshire average, although slower than the East Midlands and England. The transport needs of the youth, working age and over 65 populations will all need careful consideration.

Table 3-3 – Mid-Year Estimates of 0 to 15 Year Olds

Year	Spalding	South Holland	Lincolnshire	East Midlands	England
2012		14,868	122,400	844,400	10,130,200
2011	4,752	14,916	121,900	838,700	10,030,100
2010	4,600	14,585	122,300	817,800	9,766,300
2009	4,454	14,545	122,000	815,800	9,704,400
2008	4,326	14,577	122,000	815,800	9,666,300
2007	4,164	14.434	121,800	816,200	9,654,000
Change 2007-12	588	434	600	28,200	476,200
Percentage Change	14.1%	3.0%	0.5%	3.4%	4.9%

Source: ONS Population Estimates for England and Wales, single age of year unformatted – Mid 2006 to Mid 2011 Revised

Table 3-4 – Mid-Year Estimates of 16 to 64 Year Olds

Year	Spalding	South Holland	Lincolnshire	East Midlands	England
2012		53,100	441,500	2,912,200	34,307,000
2011	18,346	53,691	443,700	2,919,200	34,347,400
2010	17,048	50.454	443,900	2,908,900	34,118,000
2009	16,741	50,463	441,800	2,893,500	33,892,200
2008	16,407	50,561	440,200	2,882,400	33,713,000
2007	16,143	50,341	436,500	2,862,800	33,440,400
Change 2007-12	2,203	2,759	5,000	4,9400	866,600
Percentage Change	13.6%	5.2%	1.1%	1.7%	2.6%

Source: ONS Population Estimates for England and Wales, single age of year unformatted – Mid 2006 to Mid 2011 Revised

Table 3-5 – Mid-Year Estimates of Over 65 Year Olds

Year	Spalding	South Holland	Lincolnshire	East Midlands	England
2012		20,532	155,100	811,100	9,056,500
2011	5,725	19,663	149,200	779,600	8,729,700
2010	5,622	19.522	145,600	762,900	8,563,600
2009	5,463	19,095	141,800	745,100	8,400,300
2008	5,416	18,746	138,500	727,800	8,250,000
2007	5,301	18,367	135,500	713,600	8,125,200
Change 2007-12	424	2,165	19,600	97,500	93,1300
Percentage Change	7.4%	11.8%	14.5%	13.7%	11.5%

Source: ONS Population Estimates for England and Wales, single age of year unformatted – Mid 2006 to Mid 2011 Revised

Issue South Holland's working age population is growing at a much faster rate than the county, region and nation

Issue Growth in the youth population will increase pressure on specific transport modes

3.3 School Population

There are 3,479 pupils, which is equivalent to 12.1% of the town's population, (although many of these pupils are not Spalding residents) and this represents a large number of people that are travelling to three schools that are relatively close

together. A more detailed breakdown of how many pupils walk from within Spalding and how many pupils travel from outside the town will be required to analyse the impacts that these pupils have on the transport network.

Table 3-6 – Secondary School Population in Spalding (2011-2012)

Name of School	Number of Pupils
Sir John Gleed School	1,570
Spalding High School	990
Spalding Queen Elizabeth Royal Free Grammar School	919
Total	**3,479**

Issue	Almost 3,500 pupils attend the 3 secondary schools in Spalding, equivalent to 12% of the town's population.

3.4 Indices of Multiple Deprivation

The English Indices of Deprivation are released on a three-yearly basis, by the Department of Communities and Local Government. Their purpose is to assess the concentration and degree of deprivation and poverty within all local authorities in England. The index ranks, at a highly localised scale, the degree to which the different locations could be considered to be in relative deprivation across the following factors[1]:

- Income Deprivation – measures the proportion of the population living in families who are deprived due to unemployment or low earnings
- Employment Deprivation – measures the proportion of the population who are not working due to unemployment, illness or disability
- Health Deprivation and Disability – analyses those living in poor physical and mental health
- Education, Skills and Training Deprivation – investigates the level of skills, education and training among young people and adults
- Barriers to Housing and Services – looks at the affordability and availability of housing, and closeness of such housing to key services
- Crime – compares the level of four types of crime within a particular area: burglary, theft, violence and criminal damage
- Living Environment Deprivation – analyses the standards of people's indoor and outdoor living environment. The specific measures which contribute to this index are the quality of housing, the local air quality and number/severity of road traffic collisions in the area

[1] [2] Department for Communities and Local Government (2011), The English Indices of Multiple Deprivation, Neighbourhoods Statistical Release,

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6871/1871208.pdf

There are 326 local authorities within England, so a ranking of 326 indicates the least deprived authority according to that particular criterion. According to these results, South Holland sits near the middle of the table of deprived local authorities in the country with an average rank score of 148 putting it in the middle 20%.. Although its 2007 average rank was 172, there were 354 local authorities then, therefore rather than dropping 24 places in the table, South Holland has merely dropped from the 49th to the 45th percentile in least deprived local areas.

The overall average scores for South Holland are displayed in Table 3-7, along with the individual Income and Employment scores. It also lists the Extent score which looks at the proportion of the district's population living in the most deprived LSOAs in the country.

Table 3-7 – English Indices of Deprivation, Summary Rankings for South Holland

Category	2007	2010
Extent	277	252
Income Scale	257	233
Employment Scale	257	229
Average of LSOA Scores	195	168
Average of LSOA Ranks	172	148

Source: GOV.UK https://www.gov.uk/government/publications/english-indices-of-deprivation-2010

LSOA refers to the Lower layer Super Output Area which are homogenous small areas of relatively even size (approximately 1,500 people) of which there are 32,844 in England.

Figures 3-1 and 3-2 show the overall deprivation scores for Spalding in 2007 and 2010 taking into account the seven factors previously mentioned. The third map displays the overall change of rank among Spalding's LSOAs between 2007 and 2010.

Figure 3-1 – English Indices of Deprivation, Overall Rank 2007

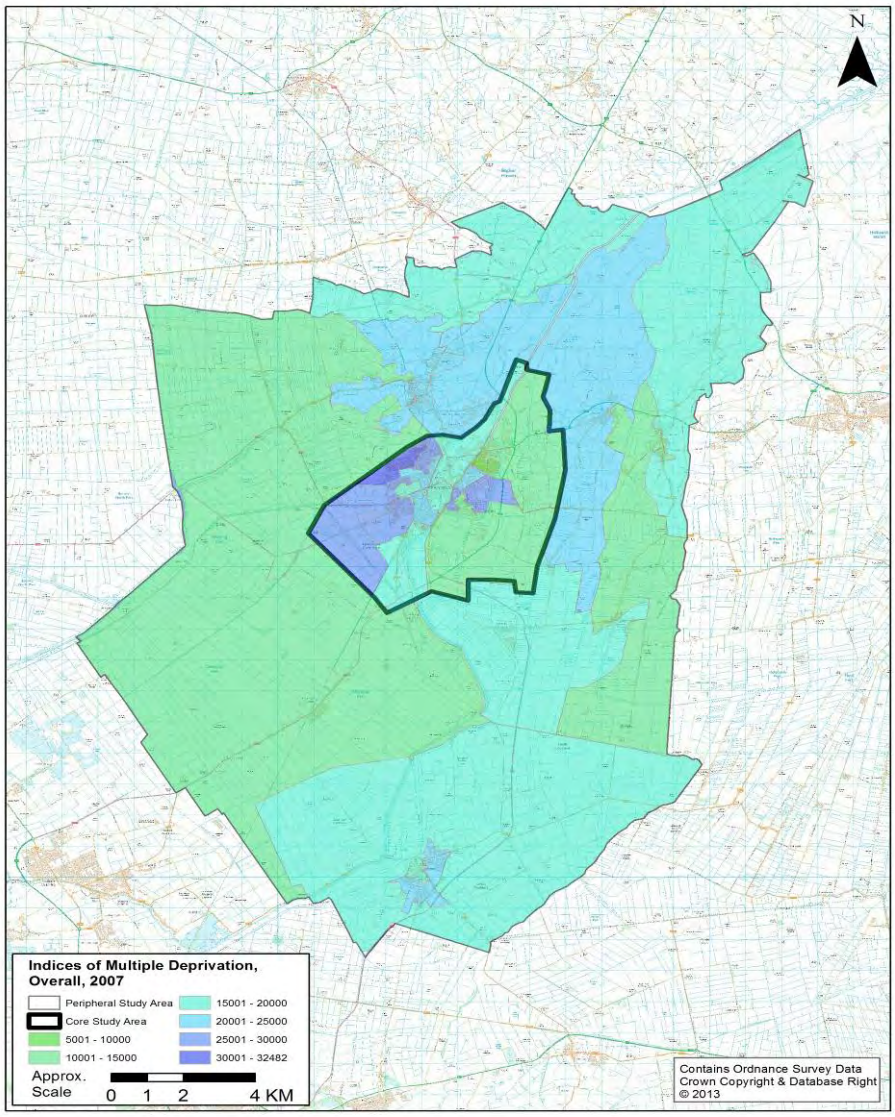
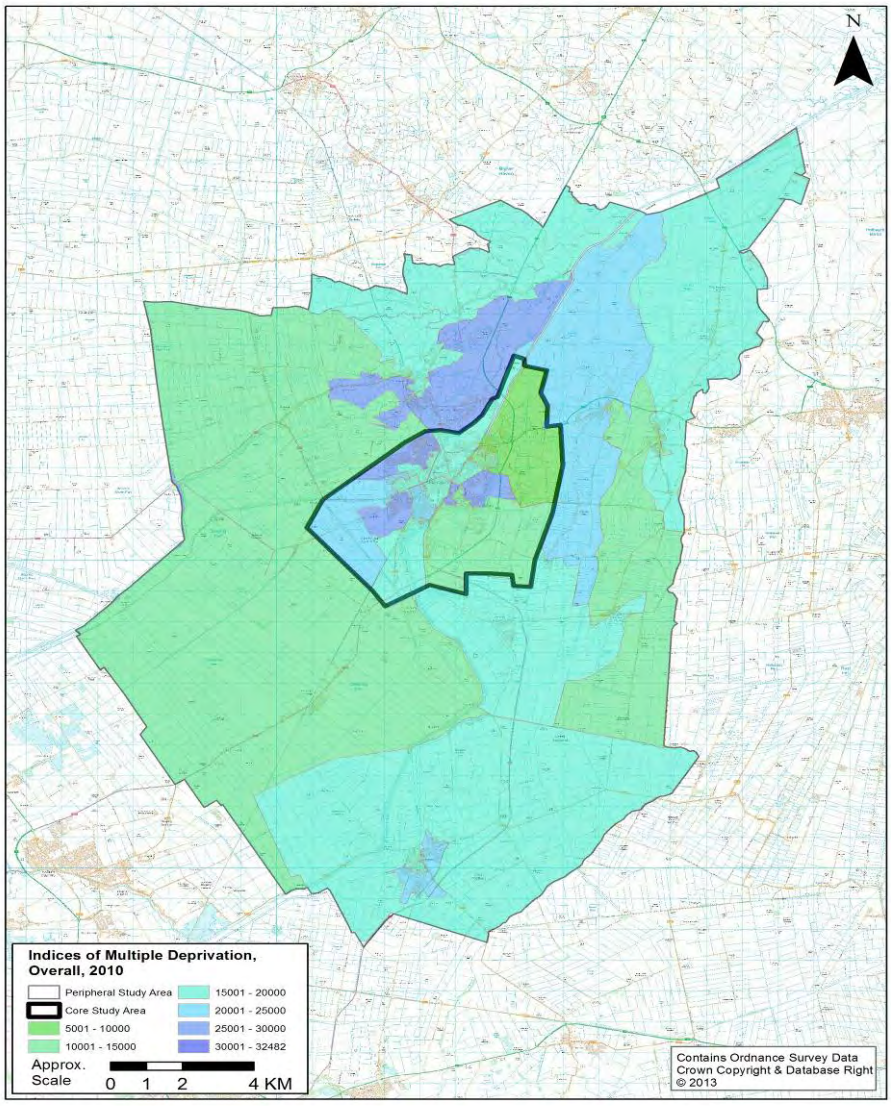
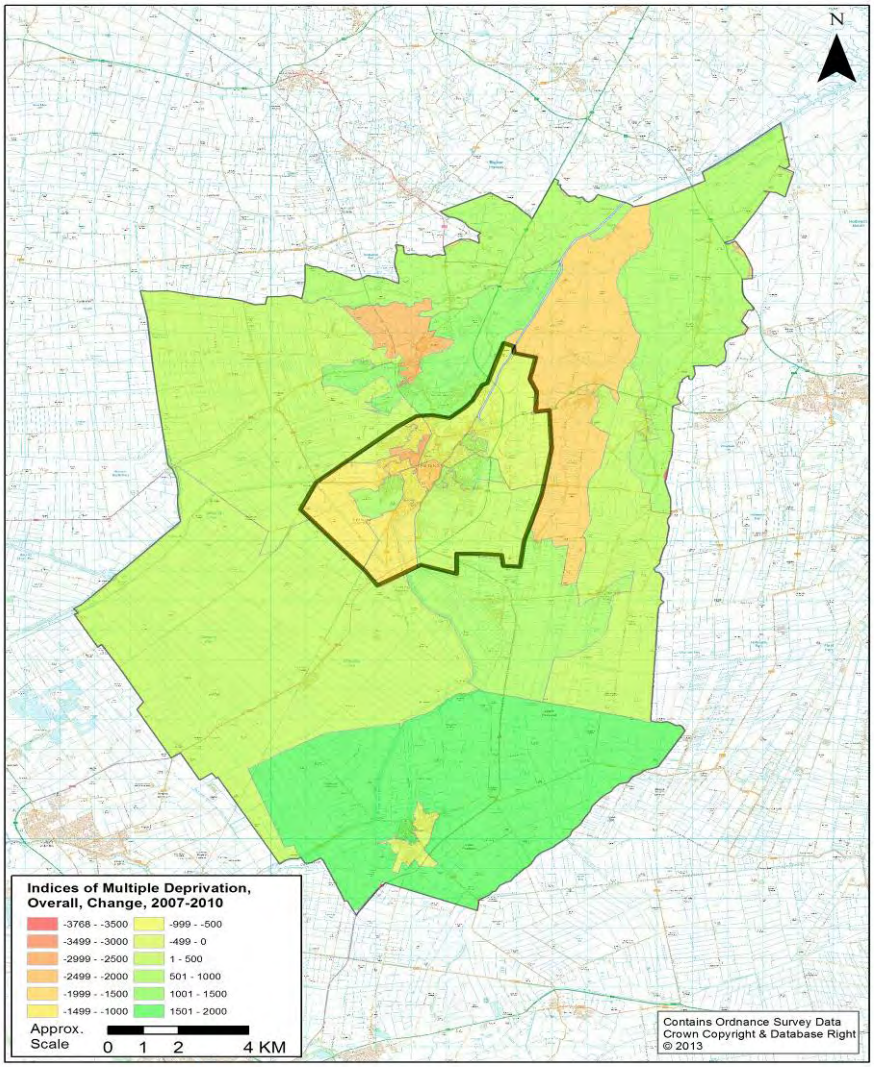


Figure 3-2 – English Indices of Deprivation, Overall Rank 2010



Generally, Spalding is less deprived than most areas of the country, although there are some disparities within the area. generally, the rural areas show higher levels of deprivation than the urban ones. Spalding has some of the least deprived areas in the country, with some neighbourhoods such as Clay Lake, Wygate Park and parts of Pinchbeck being above the 91st percentile in least deprivation. Some of the local areas are below the middle of the deprivation tables, but only one, Fulney, is in the bottom 15%.

Figure 3-3 – English Indices of Deprivation, Overall Change of Rank, 2007-10



Many of the rural areas around Spalding have seen their levels of deprivation fall. Within Spalding some deprived areas like Fulney have improved somewhat, while other less deprived areas like the town centre and parts of Wygate have become more deprived, although they are still less deprived overall.

Issue	Overall Spalding has low levels of deprivation, although some areas are slowly becoming more deprived.

3.5 Summary

Spalding's population has increased by 12.6% over the past five years.The youth and working age population has shown the highest percentage of growth and this may have particular effects on Spalding's transport services and infrastructure, although the needs of the over 65 population will also need careful consideration. In addition to this there are a large number of pupils who attend secondary school in Spalding which bring a different set of challenges for the transport network.

South Holland sits near the middle of the table for the most deprived districts in the country and this has changed little between 2007 and 2010, although there are areas within Spalding that are higher on the deprivation index than others.

4 Economy

4.1 Introduction

National, Regional and Local Policy have all made the link between the need for good quality transport infrastructure and economic growth. This chapter explores various economic statistics in the study area in comparison to the wider county and to England.

4.2 Economy

GVA (Gross Value Added) is a measure used to assess the contribution of an area to the economy. GVA is equivalent to GDP excluding taxes and subsidies on production. Lincolnshire was the smallest region where data could be found; it shows that although Lincolnshire has a lower GVA per head than the regional and national averages, it has increased at a higher rate.

Table 4-1 – Headline GVA per head

	Lincolnshire	East Midlands	England
2007	14,438	17,280	20,681
2008	14,670	17,887	20,992
2009	14,315	17,355	20,531
2010	14,846	17,832	21,054
2011	15,270	18,083	21,349
CHANGE 2007-2011	**5.8%**	**4.6%**	**3.2%**

Source: ONS Regional GVA NUTS3

The number of people in employment is a key indicator of the economic health of an area. Headline figures from the ONS Annual Population Survey have shown, at the local authority level, South Holland has slightly outperformed the county, equalled the region and fell slightly behind England in 2011. South Holland's economically active population is slightly less than the national average, at 69.3%.

Table 4-2 – Percentage of Working Age Population in Employment

	South Holland	Lincolnshire	East Midlands	England & Wales
2008	77.7%	78.6%	78.2%	76.6%
2009	79.5%	77.8%	77.9%	76.6%
2010	84.9%	77.7%	76.5%	76.1%
2011	82.8%	78.2%	77.3%	76.2%
2012	76.6%	76.9%	77.7%	76.9%
CHANGE 2008-2012	**-1.4%**	**-1.7%**	**-0.6%**	**0.4%**

Source: Lincolnshire Research Observatory

Within Spalding, one of its six wards has a higher employment rate than the district average, with two other wards very close and the other three a few more percentage points behind. Despite this, Spalding has relatively high employment rates compared to other parts of the District. However, there are a relatively high levels of unemployment within Spalding, including 4.3% in Spalding Monk's House and 6.8% in Spalding St. Paul's.

Table 4-3 – Percentage of Working Age in Employment by Ward 2011

	Spalding Castle	Spalding Monks House	Spalding St. John's	Spalding St. Mary's	Spalding St. Paul's	Spalding Wygate	Spalding Total or average
Number of Residents Employed	1221	2725	3412	2231	2590	2293	14472
Percentage Economically Active (Ages 16-74)	72.0%	74.7%	77.6%	71.4%	70.1%	74.1%	73.3%
Unemployment Rate	5.7%	4.3%	5.1%	5.4%	6.8%	5.6%	5.5%
Retired Persons	298 (11.9%)	608 (11.6%)	608 (9.8%)	549 (11.9%)	597 (10.9%)	556 (12.0%)	3216

Source: ONS Neighbourhood Statistics Economic Activity 2011 QS601EW

Although South Holland's average annual earnings are lower than the regional and national averages (table 4-4), they have increased at higher rates.

Issue

There is a wide range of employment rates within the Spalding urban area.

Table 4-4 – Average Annual Earnings, Full Time, Residence Based

	South Holland	Lincolnshire	East Midlands	England & Wales
2007	£20,547	£21,257	£22,544	-
2008	£21,708	£21,949	£23,724	-
2009	£23,139	£23,174	£24,549	£26,000
2010	£23,994	£23,676	£24,453	£26,113
2011	£23,384	£23,101	£24,337	£26,307
2012	£24,443	£24,256	£25,000	£26,632
CHANGE 2007-2012	£3,896	£2,999	£2,456	-
% CHANGE (2007-2012)	19.0%	14.1%	10.9%	-

Source: Lincolnshire Research Observatory

Issue	Rising salaries at a relatively high rate may discourage residents from travelling via more sustainable means.

Table 4-5 – Employment by Industry Type 2011

Type of Industry	South Holland 2009	South Holland 2012	Lincolnshire. 2012	East Midland 2012	Eng. 2012
Agriculture and Fishing	9%	10%	6%	3%	2%
Banking Finance and Insurance	16%	17%	14%	17%	21%
Construction	6%	5%	5%	5%	4%
Distribution Hotels and Restaurants	24%	24%	25%	23%	23%
Energy and Water	1%	1%	1%	1%	1%
Manufacturing	18%	20%	12%	13%	9%
Public Administration Education and Health	15%	15%	27%	27%	27%
Transport and Communications	9%	7%	5%	7%	9%
Other Services	2%	2%	4%	4%	4%

Source: Lincolnshire Research Observatory

South Holland has higher than average employment numbers in Agriculture and Fishing, and Manufacturing than the county, region and the country. There have been no major shifts in employment industry between 2009 and 2012, with the only share changes of more than 1% being manufacturing's 2% rise and Transport and Communications 2% drop in share.

Table 4-6 – Number of Local Business Units 2013

Type of Industry	South Holland	Lincolnshire	East Midlands	England
Agriculture Forestry and Fishing	735	3,890	11,075	98,795
Production	210	1,835	13,485	130,935
Construction	455	3,275	18,810	227,875
Motor Trades	140	1,205	6,615	66,160
Wholesale	250	1,470	9,300	108,505
Retail	375	3,345	19,165	239,340
Transport and Storage	290	1,575	7,545	72,090
Accommodation and Food Services	155	1,895	10,480	138,820
Information and Communication	95	895	7,965	159,470
Finance and Insurance	60	490	4,300	57,240
Property	65	815	5,810	82,595
Professional Scientific and Technical	265	2,895	21,455	340,970

Type of Industry	South Holland	Lincolnshire	East Midlands	England
Business Admin and Support Services	210	1,730	10,740	156,455
Public Administration and Defence	35	420	2,300	20,530
Education	95	815	4,915	56,140
Health	170	1,900	10,525	126,695
Arts Entertainment and Recreation	160	1,585	10,540	151,730
TOTAL	**3,765**	**30,035**	**175,025**	**2,234,345**

Source: ONS UK Business: Activity, Size and Location 2013

The types of industries to which local businesses are most common in South Holland are Agriculture Forestry and Fishing, Construction and Retail.

Table 4-7 – Number of Active Enterprises 2007-2011

	South Holland	Lincolnshire
2007	3,050	25,040
2008	3,060	25,145
2009	3,030	25,080
2010	2,865	23,990
2011	2,900	24,365
Change 2007-2011	-150	-675
% Change (2007-2011)	-4.9%	-2.7%

(Source: Lincolnshire Research Observatory)

South Holland has been outperformed by Lincolnshire in that it has seen a decrease in the number of businesses over the past five years, although there's been a slight improvement since 2010. Data for the East Midlands and England was only available for 2011.

Issue	Higher rate of business loss compared to Lincolnshire.

Table 4-8 – Size of Business by Employees 2013

Number of Employees	South Holland	Lincolnshire	East Midlands	England
0-4	2,590	20,250	117,450	1,531,705
5-9	560	4,610	25,825	319,905
10-19	315	2,565	15,045	184,895
20-49	195	1,735	10,435	122,650
50-99	50	495	3,595	42,620

Number of Employees	South Holland	Lincolnshire	East Midlands	England
100-249	35	280	1,930	22,600
250-499	15	75	500	6,490
500-999	5	20	185	2,325
1000+	0	5	60	1,125
TOTAL	**3,765**	**30,035**	**175,025**	**2,234,315**

Source: ONS UK Business: Activity, Size and Location 2013

68.8% of South Holland's businesses have less than 5 employees, slightly higher than the national average of 68.6%. Furthermore, 0.53% of businesses in South Holland have more than 250 employees, slightly above the national average of 0.44%.

4.3 Summary

South Holland's employment rate is slightly lower (0.3%) the national and Lincolnshire averages. However, Spalding has more variation among its six wards. This suggests there is some disparity among Spalding residents which will require a more varied approach to developing the strategy.

Average earnings are increasing at an even higher rate than the national average, although there has been no major shift in industry in the district to explain this. This has happened despite South Holland seeing a larger decrease in the number of active enterprises than Lincolnshire.

5 Environment

5.1 Introduction

This section documents the changes observed in environmental conditions within South Holland and England. However, there is a lack of data available as there are no Air Quality Management Areas in South Holland, nor has noise mapping been undertaken within the district.

5.2 Carbon Emissions

Trends in road transport carbon dioxide emissions, obtained from the Department for Energy and Climate Change, have been analysed for South Holland, and compared with those for Lincolnshire, the East Midlands and England.

Table 5-1 and 5-2 look at trends in per capita carbon emissions for England, the East Midlands, Lincolnshire and South Holland, between 2005 and 2011. They both show declines in road transport and the overall carbon emissions during this period.

Table 5-1 – Road Transport – Per capita CO_2 emissions (tonnes)

	2005	2006	2007	2008	2009	2010	2011	Change
South Holland	2.6	2.6	2.6	2.5	2.4	2.4	2.3	-11.5%
Lincolnshire	2.3	2.3	2.3	2.2	2.1	2.1	2.1	-8.7%
East Midlands	2.6	2.6	2.6	2.5	2.4	2.4	2.3	-11.5%
England	2.3	2.2	2.2	2.1	2.0	2.0	1.9	-17.4%

Source: https://www.gov.uk/government/publications/local-authority-emissions-estimates

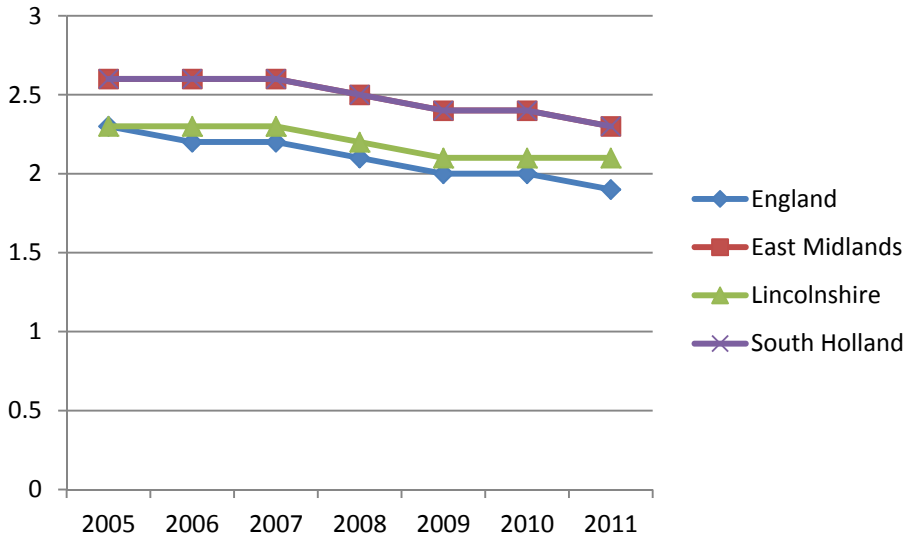
Table 5-2 – Overall – Per capita CO_2 Emissions (tonnes)

	2005	2006	2007	2008	2009	2010	2011	Change
South Holland	8.4	8.3	8.2	8.0	7.3	7.4	6.8	-19.0%
Lincolnshire	8.0	8.0	7.7	7.5	6.9	7.0	6.5	-18.8%
East Midlands	9.3	9.2	8.9	8.6	7.7	8.0	7.4	-20.4%
England	8.5	8.4	8.2	8.0	7.1	7.3	6.7	-21.2%

Source: https://www.gov.uk/government/publications/local-authority-emissions-estimates

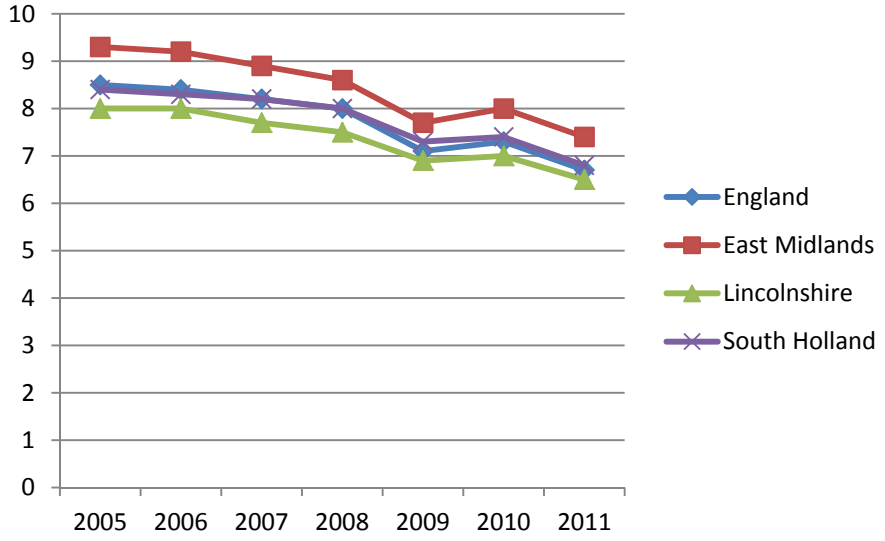
Although road transport emissions have seen a decline during the study period, they have reduced at a slower rate than the overall total in South Holland and England alike. This is illustrated in figures 5-1, 5-2 and 5-3, where it is also clear that road transport represents a substantially higher percentage of overall emissions within South Holland, which is likely to be due to the rural nature of the area. Statistics for Spalding alone are not available, which could show a greatly differing trend, as a growing urban settlement.

Figure 5-1 – CO_2 Emissions Road Transport and Overall (England)



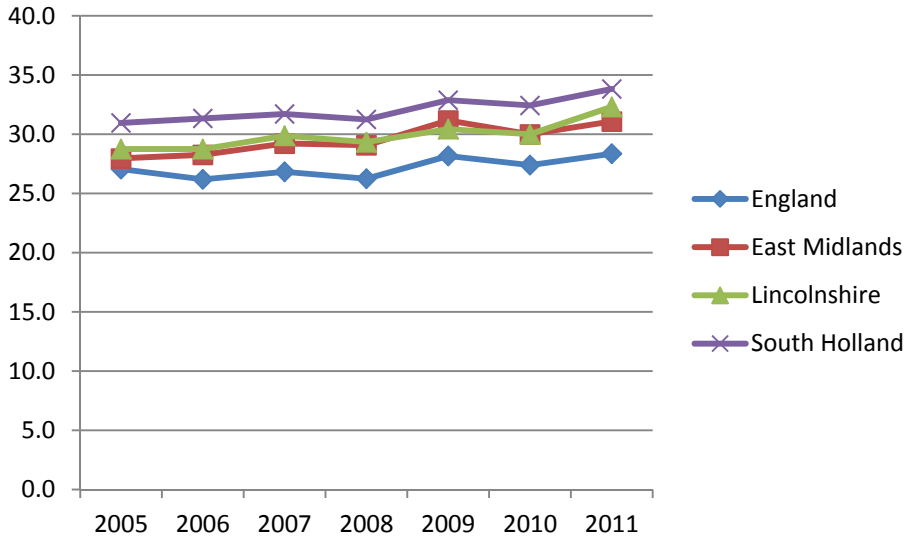
Source: https://www.gov.uk/government/publications/local-authority-emissions-estimates

Figure 5-2 – CO_2 Emissions Road Transport and Overall (South Holland)



Source: https://www.gov.uk/government/publications/local-authority-emissions-estimates

Figure 5-3 – Road Transport as a Proportion of Total CO_2 Emissions



Source: https://www.gov.uk/government/publications/local-authority-emissions-estimates

Issue	Road transport in South Holland produces a higher proportion of CO_2 emissions than the national average

5.3 Air Quality

There are no Air Quality Management Areas in South Holland.

Spalding's average Air Quality Combined Indicator score ranged between 0.92 and 1.23 in 2007. The averages throughout Lincolnshire ranged from 0.82 to 1.36. Data for 2010 only displays an average for South Holland which was 0.77, while the other districts in Lincolnshire ranged from 0.73 to 0.90. As any score on the scale lower than 3 is considered low, Spalding, South Holland and all of Lincolnshire can be considered to have good air quality.

5.4 Noise

Noise remains a very important barrier to most people's quality of life, so it is vital that changes in their levels are monitored closely. As Spalding's population is under 100,000, no noise mapping has been undertaken or is planned by the Department for Environment Food & Rural Affairs.

The proposed Spalding Western Relief Road will come into proximity to local houses and this could be an issue of concern. Another issue will be the planned diversion of more freight trains through Spalding.

5.5 Summary

Although South Holland's overall CO_2 emissions as well as emissions from transport have decreased over the past six years, there is no evidence to determine whether this has had an impact on air quality as there are no Air Quality Management Areas

in South Holland. Furthermore, there has been no noise mapping undertaken in South Holland, so there cannot be any meaningful conclusions drawn regarding these two key environmental indicators.

6 Travel

6.1 Introduction

This section of the Working Paper presents information on trends in travel and transport use within the study area. The section focuses on a range of issues including traffic, parking, freight, public transport, cycling and road safety.

6.2 Traffic

Spalding is remote from the trunk road network; the A47 to the south at Peterborough and the A1 to the west are approximately 15 miles and 22 miles away respectively. Both the A1 and A47 are accessed via the A16 to the south of the town with the more northern part of the A1 being accessed via the A151 or A17. The A47 allows access to destinations to the east such as Norwich and locations on the east coast. The A1 runs from London to Scotland. The most strategic (non-trunk) roads serving Spalding are the A16 and A151 which run north/south and east/west respectively.

The single carriageway A16 bypasses Spalding to the east of the town. To the south it connects to the former A1073 (which has been recently replaced and now forms part of the A16) to Peterborough (and the A47) in the south and linking to Market Deeping and eventually Stamford (the stretch to the south of the connection to the former A1073 is now known as the A1175) in the southwest. To the north it connects Spalding with Boston and North Lincolnshire.

The A151 connects to the A1 in the west and the A17 to the east. The A17 allows access to Kings Lynn and the northern part of East Anglia to the south and connects into the A16 in the north.

The key routes through Spalding to and from the north are the B1356, Spalding/Pinchbeck Road and the B1172, Commercial Road/High Street and Albion Street. The B1356 intersects with the A151 north of the town centre and the B1172 intersects with the A151 further to the east.

Reflective of their B-road status, these roads are not conducive to heavy traffic movements. Close to the town, they are skirted by a mix of residential and shop frontages; these become more predominately residential further out from the town centre. They are relatively narrow with on-street parking outside adjacent residential properties and are accessed via a large number of private accesses.

To the south of the town centre, the B1172 connects to the A16 and former A1073; again this route is characterised by residential frontages and a number of private accesses. Such an environment, with these potential conflicts, can restrict large traffic movements.

The A151 runs through the town to and from the east and west. This road connects to the A17 to the east near Holbeach and, eventually, to the A15 to the west at Bourne. In the town, vehicles travelling along the A151 use Kings Road and

Pinchbeck Road. Furthermore, vehicles using the A151 to pass through Spalding are subject to delays at the level crossings.

Observations of the operation of the town centre road network and traffic modelling (see Section 9.8), as well as anecdotal evidence, suggest that the town centre highway network experiences congestion at peak times and in particular when the level crossing barriers are down. Traffic moves slowly through Winsover Road at its junction with St Thomas's Road and Swan Street which are in close proximity to the main level crossing in the town.

Congestion is also experienced at a number of locations across the town with slow moving traffic in the peak periods at the London Road bridge and on the A16 where it has a junction with the A151 and the B1180.

Issue	East/west route choice through Spalding are constrained due to both the railway and the river

6.2.1 *Car Ownership*

Table 6-1 presents the 2011 Census data for car ownership and a comparison to the same dataset for 2001. It can be seen that since 2001 there has been a significant, 26%, increase in overall car ownership within the study area.

There has been a significant increase in the number of households with two or more cars but a relatively smaller change in the number of no car households; this is likely to reflect increases in car ownership in households already with cars i.e. one car households becoming two car households, etc.

Table 6-1 – Car Ownership in the Spalding Study Area in 2001 and 2011

Year	All categories: Car or van availability	No cars or vans in household	1 car or van in household	2 cars or vans in household	3 cars or vans in household	4 or more cars or vans in household	All cars or vans in the area
2001	10,103	2,145	4,974	2,415	435	134	11,717
2011	12,107	2,425	5,696	3,118	664	204	14,810
% Change	20%	13%	15%	29%	53%	52%	26%

Source: 2001 Census and 2011 Census

The study area shows a higher rate of growth in the total number of cars/vans compared to regional and national figures. A significant increase in households with two or more cars/vans is noted which reflects trends nationally. The increase in the number of households without a car/van is higher than corresponding figures regionally and nationally.

Table 6-2 – Car Ownership in England comparison between 2001 and 2011

Year	No cars or vans in household	1 car or van in household	2 cars or vans in household	3 cars or vans in household	4 or more cars or vans in household	All cars or vans in the area
England	3%	4%	13%	31%	51%	14%
East Midlands	0%	5%	19%	40%	60%	18%
Lincolnshire	2%	6%	24%	45%	68%	22%
South Holland	3%	5%	22%	50%	69%	23%
Spalding study area	13%	15%	29%	53%	52%	26%

Source: 2001 Census and 2011 Census

Issue

Car ownership in Spalding has increased by 26% since 2001, a higher rate than nationally.

Opportunity

The number of households in Spalding without access to a car/van has increased by 13% since 2001.

Table 6-3 shows the number of vehicles licensed nationally, for the East Midlands, Lincolnshire and the study area. The data broadly shows that between 2008 and 2011, the number of vehicles being licensed remained flat across all levels with only a slight increase of 1.6% in the study area. This is despite there being a 6% increase in the population in Lincolnshire. Combined with car ownership data described above, superficially at least, it appears that growth in car ownership has stabilised since 2008. However, the vehicles licensed figures will exclude vehicles registered abroad, therefore, the actual number of vehicles 'resident' in Lincolnshire and the Spalding area may be higher.

Table 6-3 – Vehicles Licensed ('000s)

Area	2008	2009	2010	2011	Change 2008-2011
Study Area	55.7	55.9	56.2	56.6	1.6%
Lincolnshire	454	455	452	455.6	0.4%
East Midlands	2,654	2,655	2,645	2,663	0.3%
England	29,114	29,081	28,939	29,069	-0.2%

Source: Transport Monitoring Report 2011 (March 2012), Lincolnshire County Council, DfT Vehicle Stats

Issue

The number of licensed vehicles has shown a very slight increase of 1.6% in Spalding since 2008 despite a 6% growth in local population.

6.2.2 *Traffic Flows*

Table 6-4 shows the sums of AADT flows on a number of major routes through Lincolnshire between 2008 and 2011. The strategic traffic through the county shows a small increase in car traffic on the network while traffic in total has shown no significant increase between 2008 and 2011.

Table 6-4 – Combined AADT Flows on Major Routes in Lincolnshire

Mode	2008	2009	2010	2011	Change 2008-2011
Cars/Taxis	1,683,548	1,709,317	1,709,911	1,720,796	2.2%
All Traffic	2,233,936	2,237,931	2,228,362	2,242,380	0.4%

Source: Department for Transport

The traffic flow data for Spalding is very limited as annual town centre cordon counts were discontinued in 2006. More recently, in 2009 and 2010, manual turning count surveys were undertaken at a number of sites in the town as part of a modelling project undertaken in connection with the proposed Spalding Western Relief Road. Data has been analysed for the years 2006 and 2010 using the AM peak period and peak hour traffic flows inbound across the cordon to Spalding town centre. It should again be noted that data was not available post-2006 for town centre cordon survey sites therefore data has been taken from the SATURN base model for Spalding for the year 2010.

The AM peak period flows have been analysed for both the 08:00 to 09:00 peak hour and the 07:00 to 10:00 peak period. The following table shows the change in total traffic flows, between 2006 counts and the 2010 model, crossing over the cordon into the town centre during the AM peak hour.

Table 6-5 – AM Peak Hour Traffic (08:00-09:00) Inbound Town Centre Cordon

Cordon Site	2006		2010 (SATURN base model)	
	Peak Hour (08:00-09:00)	Peak Period (07:00-10:00)	Peak Hour (08:00-09:00)	Peak Period (07:00-10:00)
A151 Winsover Road	579	1,369	582	1,404
Pinchbeck Road	464	1,287	484	1,168
Westlode Street	420	1,016	638	1,539
Church Street (Bridge)	607	1,250	700	1,689
London Road	350	957	468	1,129
Spring Gardens	67	131	52	125
Priory Road	93	166	19	46
Total vehicles crossing cordon	**2,580**	**6,176**	**2,943**	**7,100**

Source: Lincolnshire County Council & Mouchel SATURN base model

Table 6-6 – AM Peak Hour and Peak Period Traffic (Inbound) Change

	2006	2010	Change 2006-2010
Peak Hour (08:00 – 09:00) Total vehicles crossing cordon	2,580	2,943	14.1%
Peak Period (07:00 – 10:00) Total vehicles crossing cordon	6,176	7,100	15.0%

Source: Lincolnshire County Council & Mouchel SATURN base model

The data indicates that the total number of vehicles crossing the cordon during the peak hour has increased by 14.1% from 2,580 in 2006 to 2,943 in 2010.

An increase in 15% in total number of vehicles crossing the cordon during the peak period (07:00–10:00am) from 6,176 in 2006 to 7,100 in 2010 has also been indicated.

Issue	Traffic entering the town centre shows an increase of 14.1% in the AM peak hour and 15% in the AM peak period between 2006 and 2010.

6.3 Level Crossings

There are five level crossings in the centre of Spalding. Concerns have been raised regarding the delays caused by these level crossings currently and the proposed increase in freight rail through the town, which will increase the down time of the crossings. Details on projected future queues and delays to journey times can be found in Section 9.8 of this working paper.

Issue	The level crossings in the town centre restrict movement of traffic and cause congestion, particularly during peak periods

Issue	Congestion and journey time delay are likely to increase due to increased use of rail line by freight rail and increased level crossing down time

6.4 Parking

At present, there are 751 publicly available parking spaces in the town centre located in ten car parks which are owned and operated by SHDC. Other, privately owned and operated car parks are also available within the town centre, such as Sainsbury's, Homebase and others however data is not available for these locations.

Table 6-7 – Town Centre Car Parks and Capacities

Operator	Car Park	Capacity
South Holland District Council	Sheep Market	21
	Herring Lane	74
	Vine Street	66
	Victoria Street	180
	Holland Road	48
	Westlode Street	147
	Winfrey Avenue	87
	The Vista	63
	Swimming Pool	50
	Market Place	15
	Total	**751**

Tables 6-8 and 6-9 present a summary of car park surveys undertaken, at eight of the ten town centre car parks. The surveys were undertaken by Spalding & District Civic Society in November 2010 and May 2011. The figures exclude disabled spaces and were observed between 11am and noon on each day from Monday to Saturday. Clearly it could be argued that given the short timescale in which they were undertaken, that these surveys are not representative. They are, however, useful in giving a 'snapshot' of parking occupancy and usage in the town centre.

Table 6-8 – Total Observed Cars Parked November 2010 (Monday-Saturday, 11:00am – 12:00 Noon)

Car Park	15th to 20th November 2010						Max Occupancy observed (Day)
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Sheep Market	3	0	3	6	0	6	28.6% (Sat)
Herring Lane	0	1	10	14	0	19	25.7% (Sat)
Vine Street	14	3	27	17	3	20	40.1% (Wed)
Victoria Street	128	106	132	91	107	143	79.4% (Sat)
Holland Road	27	16	26	22	21	37	77.1% (Sat)
Westlode Street	97	64	85	73	98	89	66.7% (Fri)
Winfrey Avenue	49	51	62	48	54	45	71.3% (Wed)
The Vista	16	8	14	14	8	45	71.4% (Sat)
Total	**334**	**249**	**359**	**285**	**291**	**404**	

Source: Spalding & District Civic Society

Table 6-9 –Total Observed Cars Parked May 2011 (Monday-Saturday, 11:00am – 12:00 Noon)

Car Park	15th to 20th May 2011						Max Occupancy observed (Day)
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	

Car Park	15th to 20th May 2011						Max Occupancy observed (Day)
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
Sheep Market	6	3	1	3	14	0	66.7% (Fri)
Herring Lane	12	0	18	4	8	1	24.3% (Wed)
Vine Street	22	9	29	28	8	8	43.9% (Wed)
Victoria Street	119	78	109	89	99	110	66.1% (Mon)
Holland Road	26	24	27	36	23	29	75.0% (Thur)
Westlode Street	80	38	69	81	86	112	76.2% (Sat)
Winfrey Avenue	58	48	47	56	51	33	66.7% (Mon)
The Vista	26	6	21	20	13	36	57.1% (Sat)
Total	**349**	**206**	**321**	**317**	**302**	**329**	

Source: Spalding & District Civic Society

As can be seen in Tables 6-8 and 6-9, the highest recorded occupancy was observed at Victoria Street car park in November with an occupancy of 79.4%. Over the two study weeks Monday, Wednesday and Saturdays were observed to be the days with the highest demand for spaces. However the maximum occupancy across all car parks combined was recorded at only 58%. In real terms this translates to 404 spaces being occupied of the 686 surveyed during the study period.
The Chartered Institution of Highways & Transportation guidance states that a car park with an 85% occupancy is operating at its theoretical capacity. The data collecting for Spalding indicates that during the period that the surveys were undertaken that all of the publicly owned car parks in the town centre were operating below this threshold.

Whilst detailed data regarding ticket sales at car parks has not been forthcoming the total number of tickets sold over the last two years has been provided by SHDC. In the financial year 2012/13 the total tickets sales in council operated pay and display car parks was 315,988. This represents an increase in ticket sales of some 26% when compared to ticket sales from the previous year, 2011/12.

At the recently held stakeholder workshop session held in Spalding car parking was not identified as an issue however it was acknowledged that it may become an issue in the future taking into account the predicted growth of the town.

Issue	The data available indicates that the car parking provision is more than sufficient for the current demand in the town however further analysis would be required before any reliable trends could be identified.

6.5 Freight

The movement of freight on the strategic road network has seen a significant increase according to DfT AADT data for Lincolnshire. The table below shows a 4.9% increase in HGV movements on the major highway network in the county between 2008 and 2011.

Table 6-10 – Combined AADT Flows on Major Routes in Lincolnshire – HGVs

	2008	2009	2010	2011	Change 2008-2011
HGVs	61,105	55,197	55,239	64,097	4.90%

Source: Department for Transport

As previously described, traffic data for Spalding is very limited after the discontinuation of annual town centre cordon surveys in 2006. Whilst the SATURN base model has been used to obtain an idea of total vehicle numbers crossing the cordon for 2010, this does not provide classified data in terms of vehicle type.

Classified turning data is available, however, for three of the seven cordon sites and this information has been used to give a picture of HGV levels in the town centre. The sites at which classified data has been used for this purpose are Winsover Road, Pinchbeck Road and Westlode Street.

Table 6-11 and table 6-12 show the percentage of HGVs crossing the town centre cordon, inbound, for the sites where this detail is available and whilst it does not paint the whole picture, it can give us an indication of any trends or changes in numbers.

Table 6-11 – AM Peak Hour HGVs (Inbound: Winsover Rd, Pinchbeck Rd & Westlode St)

	2006	2010	Change 2006-2010
Total HGVs crossing three cordon sites (inbound)	28	25	-10.7%
HGV share of total vehicles crossing the three cordon sites	2.08%	1.94%	

Source: Lincolnshire County Council

Table 6-12 – AM Peak Period HGVs (Inbound: Winsover Rd, Pinchbeck Rd & Westlode St)

	2006	2010	Change 2006-2010
Total HGVs crossing three cordon sites (inbound)	88	68	-22.7%
HGV share of total vehicles crossing the three cordon sites	2.64%	2.03%	

Source: Lincolnshire County Council

The data indicates that the number of HGVs crossing the cordon at the three study sites reduced slightly during the period 2006 to 2010. There has been minimal change in the mode share of HGVs over the period and it is assumed that the share of HGV traffic has remained broadly unchanged across the town centre although there may be some increase in numbers of HGVs given the rise in traffic levels indicated by the SATURN modelling work shown in section 6.2.2 of this working paper.

Issue	Data indicates a reduction in HGV mode share in the town centre, however, given the rise in traffic levels indicated it is expected that, in real terms, the number of HGVs has increased.

6.6 Public Transport

6.6.1 Bus

Error! Reference source not found.13 shows that there are a good number of bus services currently serving Spalding and the surrounding study area from a variety of settlements.

The variety of routes, frequency and the number of the peripheral villages and settlements served by buses are reasonably good. An overview of the scheduling suggests that the peak times are reasonably well served. The towns and villages in rural areas surrounding Spalding, however, are not as well served on Sundays, with the majority of services not operating at all.

Table 6-13 – Spalding Area Bus Service Summary Table

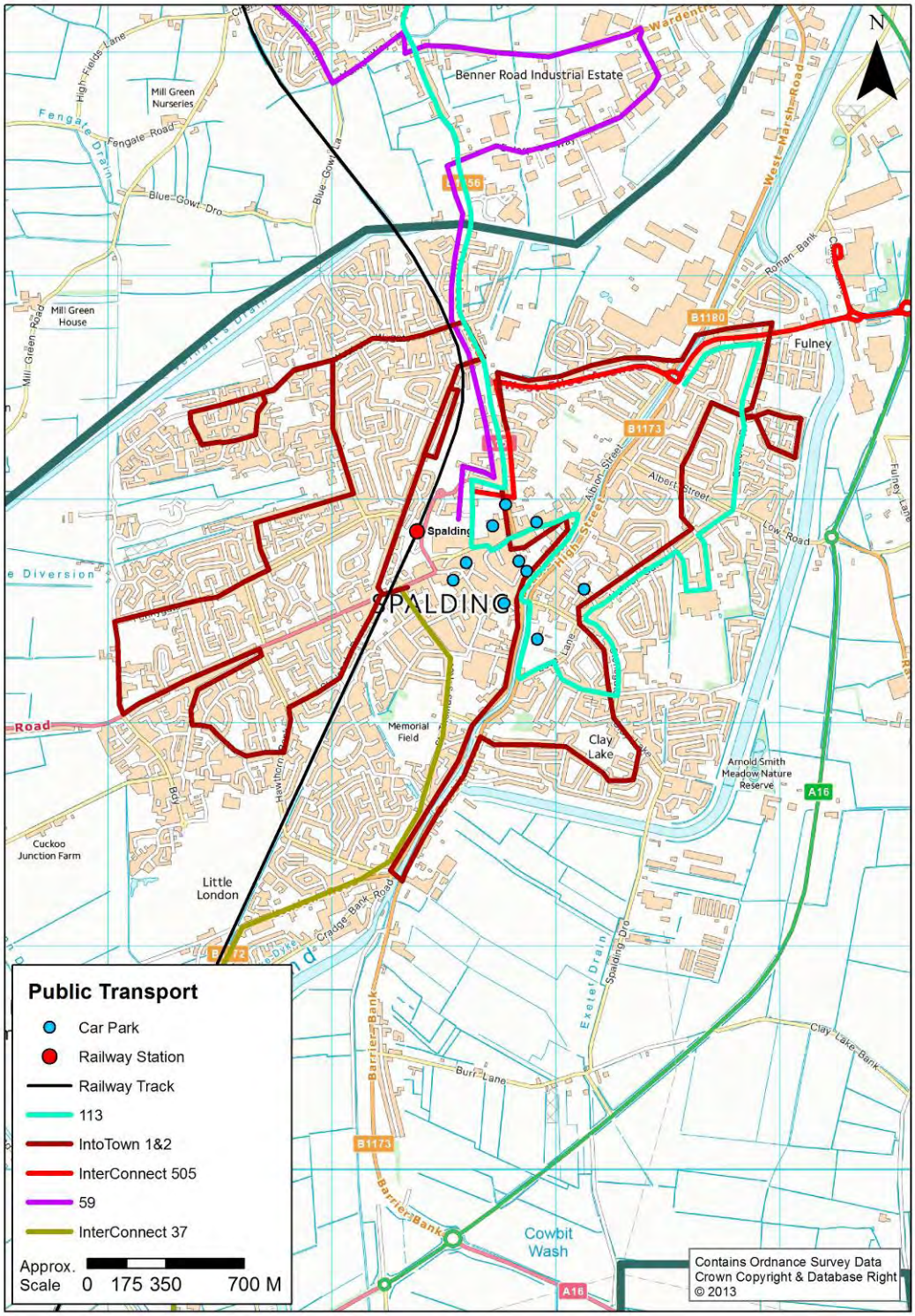
Service	Operator	Route	Days of operation	Daytime frequency	Sunday frequency
High Frequency Services					
1/2 (Into Town)	Brylaine Travel	Into town loop	Mon - Sat	2 Journeys every 30 mins	No services
505 (InterConnect)	Norfolk Green	Spalding – King's Lynn	Mon -Sun	Max every 20 mins	Max every 30 mins
37 (InterConnect)	Stagecoach	Spalding – Peterborough	Mon - Sat	Max every 60 mins	4 Journeys (each way)
113	Brylaine Travel	Spalding – Kirton – Boston	Mon - Sat	30 mins	No services
59	Brylaine Travel	Spalding – Donnington – Boston	Mon - Sat	Max every 60 mins	No services
Monday to Saturday Services					
52	Fowlers Travel	Spalding – Gedney Hill	Mon - sat	Every 2hrs (Mon-Fri) 4 Journeys	No services

Service	Operator	Route	Days of operation	Daytime frequency	Sunday frequency
				(Sat)	
100	Shaws Coaches	Spalding – Market Deeping	Mon - Sat	6 Journeys (Mon-Fri) 3 Journeys (Sat)	No services
Weekday Only Services					
62	Sleafordian Coaches	Spalding – Quadring	Mon – Fri	1 Journey (each way)	No services
Limited Days Services					
302	Delaine Buses	Spalding – Bourne	Tuesdays	2 Journeys (each way)	No services

Source: Lincolnshire County Counci

Figure 6-1 shows the high frequency bus service routes servicing Spalding.

Figure 6-1 – High Frequency Bus Services in Spalding



The Interconnect network and its services are subsidised by Lincolnshire County Council and serve the rural areas surrounding Spalding. Some of the services were scaled back in April 2011 as a result of cuts to local government funding[2].

It should however be noted that in 2011, Lincolnshire County Council reported a 23.5% increase in usage of CallConnect, the demand responsive element of the Interconnect service, compared to 2010.[3] CallConnect is an on demand bus service that operates only in response to pre-booked requests (on a 'dial a bus' basis). There is no fixed timetable as the route the bus takes is defined by passenger demand and can differ each day.

Two Interconnect services operate within the study area. The two routes provide links between Spalding and Peterborough and King's Lynn, visiting rural locations on the journey. The Interconnect service to King's Lynn operates on an approximate 20 minute frequency serving peak times. A service every 30 minutes is provided on Sundays. The Peterborough service operates on an hourly basis during peak times with four journeys operating in each direction on Sundays.

Issue	Residential and retail areas are well served by public transport, but employment areas are not.

Centrally held bus patronage data is limited to approximately 40% of the bus services on offer, however, some data is available nationally and enables a good comparison to be made between Lincolnshire as a whole and the Spalding area.

The following table shows the annual bus passenger numbers (in millions) for Lincolnshire, the East Midlands region, England and Great Britain. Since 2009/10, bus passenger numbers have grown slightly in Lincolnshire and at a higher rate than Great Britain as a whole. This positive trend is also set against a background of significant declines in bus passengers in the East Midlands over the same, relatively short period. The Lincolnshire figures also compare favourably to those for non-metropolitan areas in England and areas outside of London; passenger numbers fell by both measures. It should be noted that figures for Spalding are not available and that patterns for Lincolnshire as a whole may vary from Spalding itself.

[2] Lincolnshire County Council (2011) *Service changes from 4th April 2011*. Available from: http://www.lincsinterconnect.com/timetables/ServiceChangesApril2011.pdf

[3] Louth Target (2012) *Lincolnshire's CallConnect bus usage increases by 23.5 per cent*, 21 January. Available from: http://www.thisislincolnshire.co.uk/Lincolnshire-s-CallConnect-bus-usage-increases-23/story-14986912-detail/story.html

Table 6-14 – Annual Bus Passenger Journeys (Millions)

Area	2009/10	2010/11	2011/12	% Change 09/10 to 11/12
Great Britain	5,214	5,203	5,233	0.4%
England	4,639	4,656	4,678	0.8%
East Midlands	218	215	213	-2.3%
Lincolnshire	16.3	16.9	16.4	0.6%
Non-Metropolitan England	1,315	1,317	1,314	-0.1%
Outside London	2,401	2,387	2,355	-1.9%

Source: Department for Transport

Table 6-15 presents a different perspective of bus passenger numbers, with passenger number per head of population falling in Lincolnshire since 2009/10.

As indicated previously and shown in Table 6-16, the population of Lincolnshire has grown significantly since 2009. It can therefore be suggested that the increase in bus passenger numbers is likely to be a result of increased population in Lincolnshire rather than higher propensity of the established population to travel by bus.

Table 6-15 – Passenger Numbers by Head of Population

Area	2009/10	2010/11	2011/12	% Change 09/10 to 11/12
England	89.5	89.1	88.8	-0.8%
East Midlands	49.0	47.9	47.0	-4.1%
Lincolnshire	23.4	24.0	22.7	-3.0%

Source: Department for Transport

Table 6-16 – Population Change 2009-2011

Year	Mid-2009	Mid-2010	Mid-2011	% Change 09/10 to 11/12
England	52,196,381	52,234,045	53,107,169	1.7%
East Midlands	4,451,200	4481431	4,537,448	1.9%
Lincolnshire	697,900	703,000	714,800	2.4%
Lincoln	88,491	89,668	93,541	5.7%

Source: Lincoln Research Observatory and Office for National Statistics

Table 6-17 shows average monthly bus patronage figures by month for approximately 40% of the bus services operated in Spalding. The figures shown are for bus services, serving the town centre, which are commercially operated. The data which has been made available is limited and therefore can only be considered to give an approximate idea of bus patronage and is not comprehensive. The data indicates that, for the services operated continuously over the 2011 to 2013 period for which data is available, there has been a small increase in patronage. This is

despite a marked decline in passenger numbers for one of the into town centre services. Operator feedback indicates that increasing congestion problems in the town centre have lead to reduced reliability which has in turn lead to a decline in passenger numbers.

Table 6-17 – Bus Patronage during the month of September on Into Town routes continuously operating: 2010 to 2013

Year	Total
2011	33,467
2012	32,939
2013	34,050
% Change 2010-2013	**1.7%**

Issue	Bus patronage levels in Lincolnshire remained unchanged between 2009/10 and 2011/12, performing better than the East Midlands region as a whole

Issue	Bus journeys per head of population in Lincolnshire decreased between 2009/10 and 2011/12 at a higher rate than nationally but at a lower rate than the East Midlands region

Issue	Overall data indicates a small increase in bus patronage, reflecting the national trend, however some town centre but services have experienced a decline in passenger numbers because of reliability problems due congestion within the town centre.

Data was collected on the timeliness of buses within Spalding for 2009, 2010, 2011 and 2012. The data was taken at Spalding Bus Station. The statistics show that, of the sample collected, average punctuality was found to range between 80% and 89%. Importantly, the average punctuality ratings show a significant improvement following a year on year downward trend between 2009 and 2011.

Table 6-18 – Summary of Bus Punctuality Surveys Spalding Bus Station (Departure point) 2009 to 2012

	2009	2010	2011	2012
Total observations	178	158	166	169
Observations early or late	32	30	33	18
Observations on time	146	128	133	151
Timing point punctuality	82%	81%	80%	89%

Source: Lincolnshire County Council

Issue Bus punctuality has improved since 2009.

It should be noted that the definition of an 'on time' bus, is one that arrives not more than five minutes late or one minute early.

Spalding has recently undergone a complete overhaul of all bus stop infrastructure along the IntoTown service routes which included new poles and timetable cases. Timetabling information is also regularly produced and distributed to places such as Tourist Information Centres, libraries and supermarkets.

6.6.2 *Rail*

The study area is served by Spalding rail station which is situated in the west of the town centre. The station has a 45 space car park for which there are charges in place for users. There are eight cycle stands at the station some located in the car park area and others provided on platform. A summary of the train services available at the station can be seen in the table 6-19.

Table 6-19 – Spalding Station Rail Services Summary Table

Station	Route	Days of operation	Daytime frequency	Sunday frequency
Spalding	Peterborough - Lincoln	Mon - Sat	60 mins (Mon-Fri) 6 Journeys (Sat)	No service
Spalding	Lincoln - Peterborough	Mon - Sat	60 mins (Mon-Fri) 11 Journeys (Sat)	No service
Spalding	Nottingham	Mon-Sat	3 journeys	No service
Spalding	Doncaster	Mon-Sat	1 journey	No service

Annual patronage figures are available for Spalding rail station, as well as wider data to provide national comparison. Spalding's rail station generated 172,692 passengers in 2011/12, representing a 0.56% decrease in passenger numbers since 2007/08.

The decrease in passengers using Spalding station contradicts the significant upward trends for Lincolnshire in total and nationally. It should be noted that national figures include London which has experienced significant increases over the period.

Table 6-20 – Rail Passengers (000's)

Area	2007/08	2008/09	2009/10	2010/11	2011/12	07/08 to 2011/12
Spalding	173.66	186.39	197.07	183.28	172.69	-0.56%
Lincolnshire Total	4,270	-	4.47	4.52	4.79	12%
National Rail Total	2,069,340	-	1,257.87	2,313.51	2468.85	19%

Lincolnshire County Council Transport Monitoring Report 2011 and Department for Transport

Using the Spalding population figures, the passenger journeys per head of population for the study area have decreased slightly from 6.8 in 2007/08 to 6.0 in 2011/12.

Issue

Rail patronage in the Strategy area decreased by 0.56% between 2007/08 and 2011/12. Passenger journey per head of population also decreased to 6.8 from 6.0.

Issue

Rail connections to/from the town are poor with no service on Sundays and only Peterborough can be reached at peak times.

6.6.3 Community Transport

Voluntary Car Scheme

Spalding and the surrounding area is covered by a voluntary car scheme which provides transport to medical or health appointments. The scheme covers a large area in South Holland District.

Wheels to Work

Access Your Future is a social enterprise working in partnership with Lincolnshire County Council and Build-a-Future training centre to offer an affordable transport solution for individuals struggling to get to work, college or training. Mopeds are loaned to individuals enabling easier access to where public transport may not provide a suitable option.

Access Lincs

Access Lincs is a countywide initiative provided by Lincolnshire County Council offering free help, advice and assistance to support employers who wish to access sustainable travel solutions for the benefit of their organisation and their staff. Specifically aimed at Lincolnshire organisations who wish to voluntarily encourage

staff to travel in a more environmentally- friendly way, the Access Lincs programme provides specialised support and advice on all aspects of travel planning to help employers identify and achieve their goals.

In the Spalding area 35 local employers have been contacted via the Job Centre Plus service. Methods are also currently being explored to engage people with English as a second language, due to the high numbers of migrant workers in the South Holland area. Liaisons are also underway with the Grants4Growth Team and Wheels2Work to businesses in the area to increase economic growth and sustainability.

School Travel Plans
All schools within the Spalding area should have a travel plan. In 2013, up until the publication of this working paper, one Spalding school had requested School Travel Plan resources for use in encouraging sustainable travel on the school journey. All schools in Lincolnshire receive invitations and newsletters reminding them of the availability. For the year 2012/13 at least five other schools from Spalding took part in initiatives.

Two Spalding schools took part in the Big Bike Race which began in October 2013. During the year 2012/13 four schools from the area took part in bike races.

Bikeability
Up until the publication of this working paper, during the financial year 2013/14, 17 Bikeability sessions have been delivered to Spalding Schools with 14 more deliveries already planned for the area. This equates to 231 individual places delivered in the year 2013/14 with a further 263 planned.

Parish Shelter Grants
Installing a new bus shelter, or improving an existing one, can greatly enhance the public transport experience for passengers and may also encourage others to consider using the bus services on offer through your village. Parish and Town Councils across Lincolnshire may be eligible to participate in the Bus Shelter Grant Scheme. The scheme provides a contribution towards the cost of a new bus shelter for the community, or for repairs or updates to an existing shelter. Within the study area initial interest has been shown regarding a shelter for Spalding Wygate.

Car sharing
Lincshare is a free travel-matching service for all those who live, work and travel in and around Lincolnshire. There are nine members of the scheme currently registered in Spalding.

Issue	The introduction of Bikeability, whilst in its infancy, has generally been well received.

Issue	The take up of varying initiatives on offer which are aimed at enabling access by sustainable means is quite low given the opportunities available

6.7 Cycling

6.7.1 Cycle network – national and local

Spalding is connected to the national cycle network via Cycle Route 12, an on road spur from Peterborough.

6.7.2 Cycle infrastructure

In addition to Cycle Route 12 running into town on Cradge Bank Road, London Road and finally Double Street, there are several cycle routes in the town.

There is an off road path along the River Welland from the Church Street Bridge to the junction with the A151. There are a number of short off road cycle routes connecting residential side streets in Wygate, as well as in Little London and in the town centre near the Sports Complex. There is also an off road cycle path in Clay Lake running from Cowbit Road on the River Welland to Mulberry Way near Spalding High School, and another off Pinchbeck Road just north of the town centre past Johnson Community Hospital and onto the Wardentree Lane/Enterprise Park Industrial Estate.

There are several on road cycle paths in addition to Cycle Route 12. There is one running along Halmer Gate, and further north along Queens Road which extends along Holbeach Road (A151) across the A16 and continuing east away from the town. There is also one running up West Marsh Road past the works and up to the industrial estate where there are on road cycle paths through most of the estate.

Lincolnshire County Council are currently developing a cycling strategy for the county which will seek to develop action plan for each area to encourage more people to us cycling a s a means of transport.

Opportunity	Several existing on and off road cycle paths in the town lay a foundation on which to build upon.

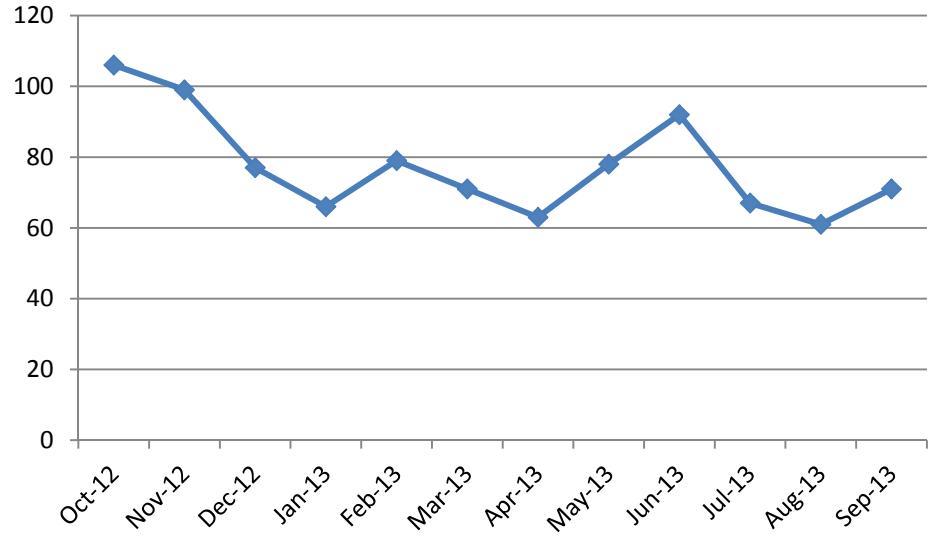
6.7.3 Cycle flows from counts

Cycle counts have been recorded at four locations across the town (see figures 6-2 to 6-9). Pinchbeck Road has the highest overall cycle flows although it saw a continuous drop over the summer of 2012, and the data for Spring 2013 is well below that for Spring 2012; this could be a result of the colder than average seasons for those dates.

Cycle flows on Halmer Gate have seen a steady decline since 2005 although these have levelled off over the past three years. Flows on Balmoral Avenue had been steady until seeing a sharp rise in 2011 that has dropped in 2012, but has still above

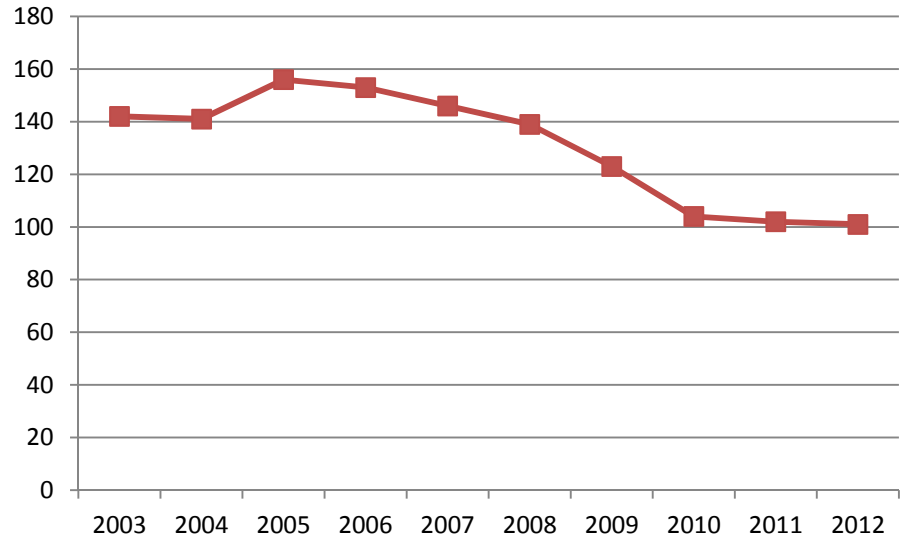
pre-peak levels. Pinchbeck Road had seen modest rises each year until 2012 where numbers dropped below 2003 levels. Riverside has seen steady declines since 2004 before a rise in 2011 that dropped again in 2012.

Figure 6-2 – Average Daily Cycle Counts Oct 2012 - Sep 2013 Halmer Gate



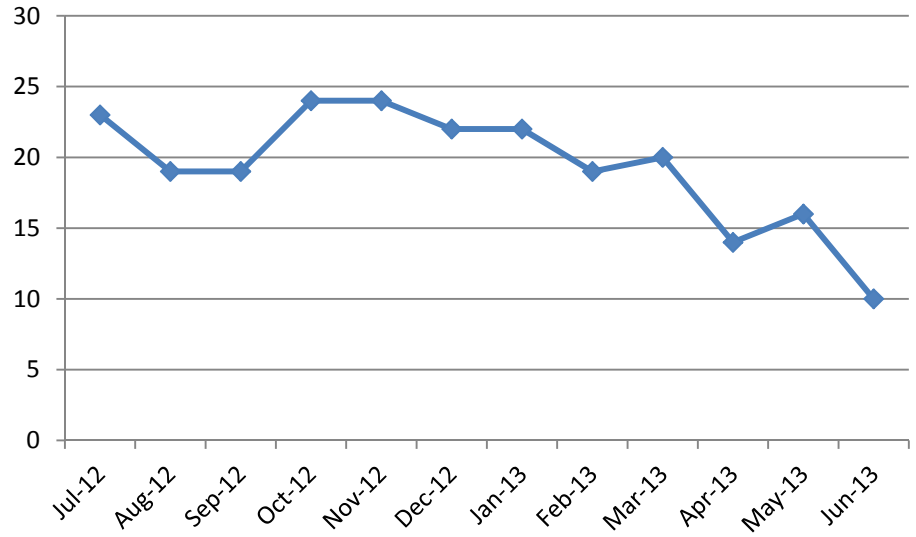
Source: South Holland District Council

Figure 6-3 – Average Daily Cycle Counts 2003 –2012 Halmer Gate



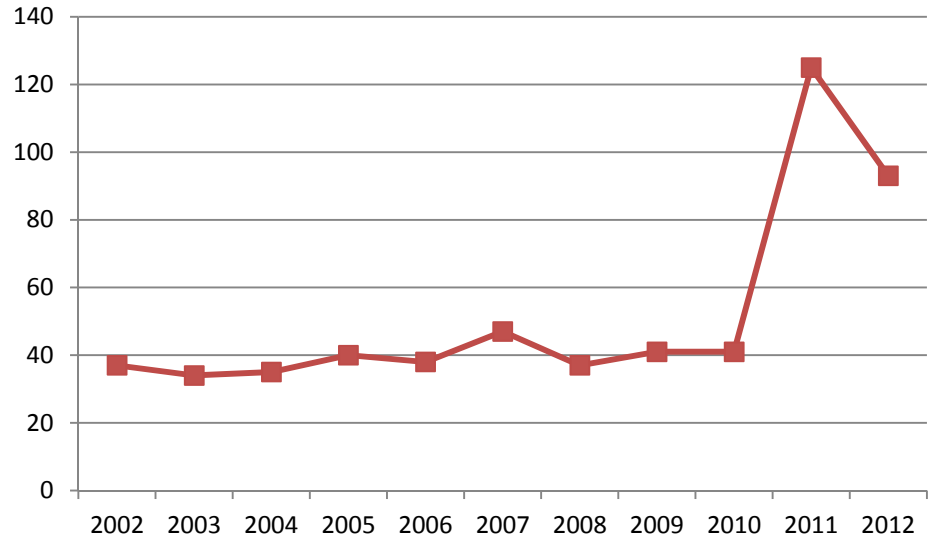
Source: South Holland District Council

Figure 6-4 –Average Daily Cycle Counts Jul 2012 - Jun 2013 Balmoral Avenue



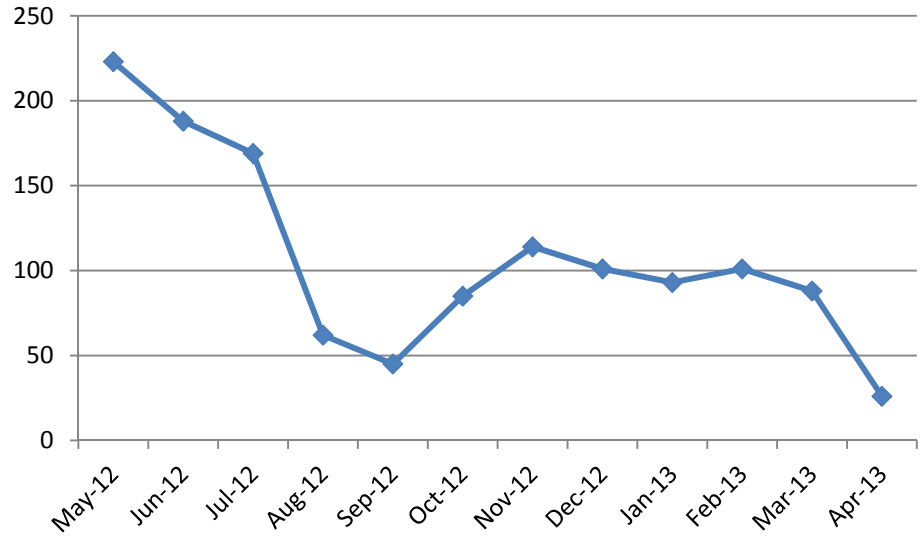
Source: South Holland District Council

Figure 6-5 – Average Daily Cycle Counts 2002 - 2012 Balmoral Ave



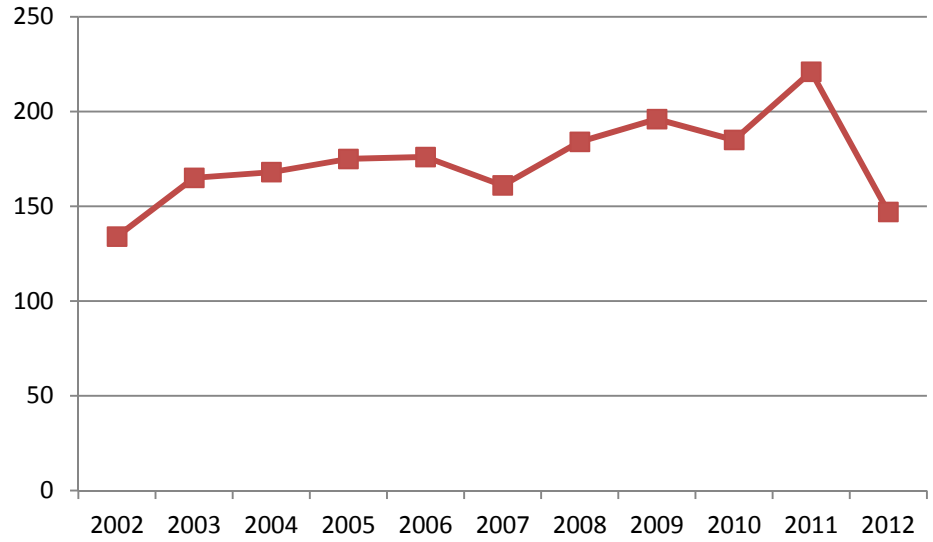
Source: South Holland District Council

Figure 6-6 – Average Daily Cycle Counts May 2012 - Apr 2013 Pinchbeck Road



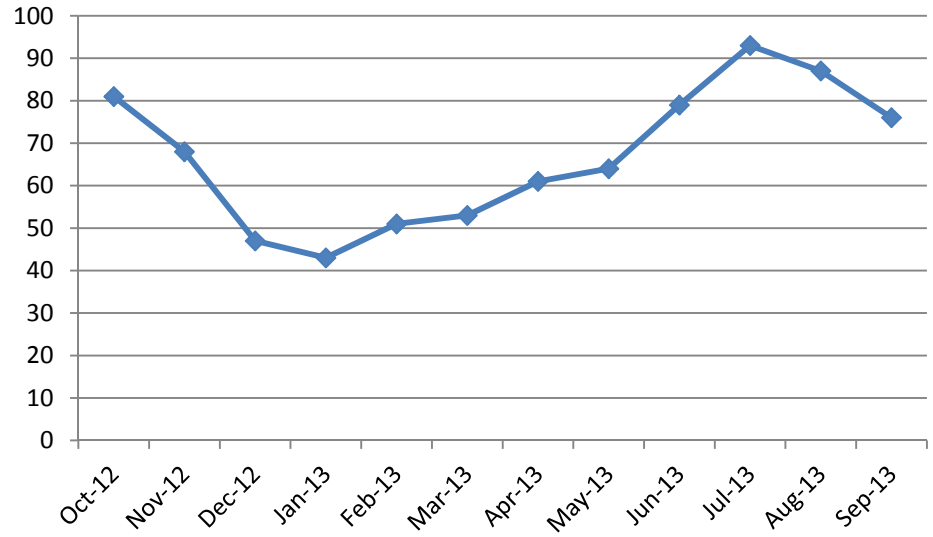
Source: South Holland District Council

Figure 6-7 – Average Daily Cycle Counts 2002 - 2012 Pinchbeck Road



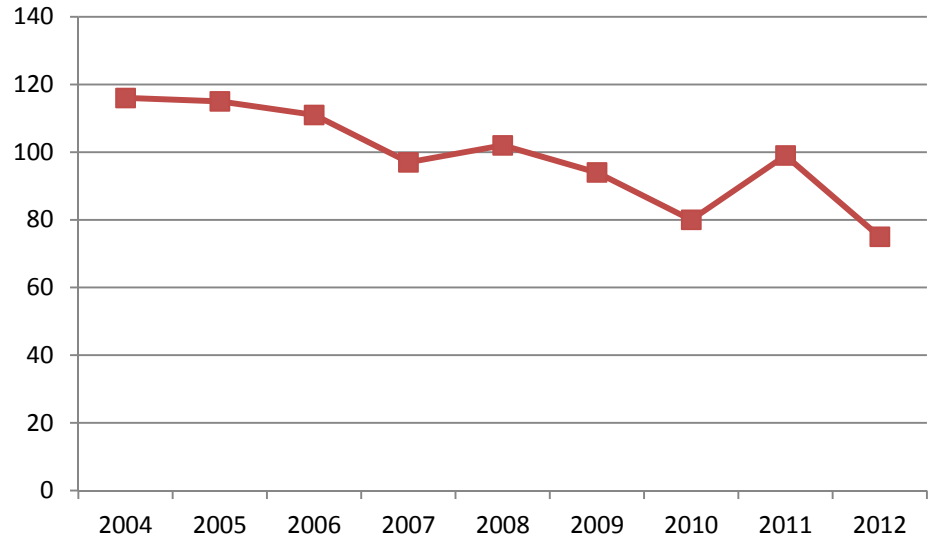
Source: South Holland District Council

Figure 6-8 – Average Daily Cycle Counts Oct 2012 - Sep 2013 Riverside



Source: South Holland District Council

Figure 6-9 – Average Daily Cycle Counts 2004 - 2012 Riverside



Source: South Holland District Council

Issue	Three of the four survey sites have seen a decrease in cyclists over the past ten years.

Table 6-21 – Cycling for Utility Purposes in South Holland

	Minimum once per month	Minimum once per week	Minimum 3x per week	Minimum 5x per week
South Holland	8%	4%	3%	1%
Lincolnshire	12%	6%	2%	1%
East Midlands	11%	6%	2%	1%
England	11%	6%	2%	1%

Source: GOV.UK https://www.gov.uk/government/collections/walking-and-cycling-statistics

South Holland has lower than average number of residents cycling for utility purposes than the county, region and country across all frequencies except for between three and four times per week where they are slightly higher.

6.8 Walking

6.8.1 Walking Infrastructure

There are four main roads leading into and out of the town centre. Heading west from the town centre along Winsover Road, which later becomes Bourne Road there are footways on both sides of the road from the town centre to Abbot's Way, with the footway continuing along the south side of the road only beyond that point. Between the level crossing and the junction at the edge of town with Broadway and Monks House Lane, there is only one designated place (a zebra crossing at Hawthorn Bank) for pedestrians to cross along a distance of approximately three quarters of a mile.

Heading south along London Road which later becomes Cradge Bank Road, from the footbridge just south of Market Place there are footways on both sides of the road until Magellan Way where the footway on the east side of the road ends. The footway continues on one side of the road switching back and forth between the west and east sides of the road. After the second junction with Aintree Drive the footway ends. There is just one designated pedestrian crossing along this stretch, a distance of approximately one and a half miles. There is no safe pedestrian crossing at the junction of London Road and Cradge Bank Road.

Heading east along Church Street, Halmer Gate and later Queen Road there are footways along both sides of the road from the bridge at Church Street right up until the end of Queens Road where the footways continue along Holbeach Road. There are two zebra crossings and one pedestrian island over this stretch, a distance of approximately one and a half miles. However, there is no safe crossing at the roundabout where Halmer Gate and Queens Road meet.

Heading north along Pinchbeck Road from Westlode Street there are footways on both sides of the road until Fern Drive, where the footway continues along the east side of the road until the town limit with Pinchbeck. There are two pedestrian islands and one pelican crossing along this stretch, a distance of approximately one mile.

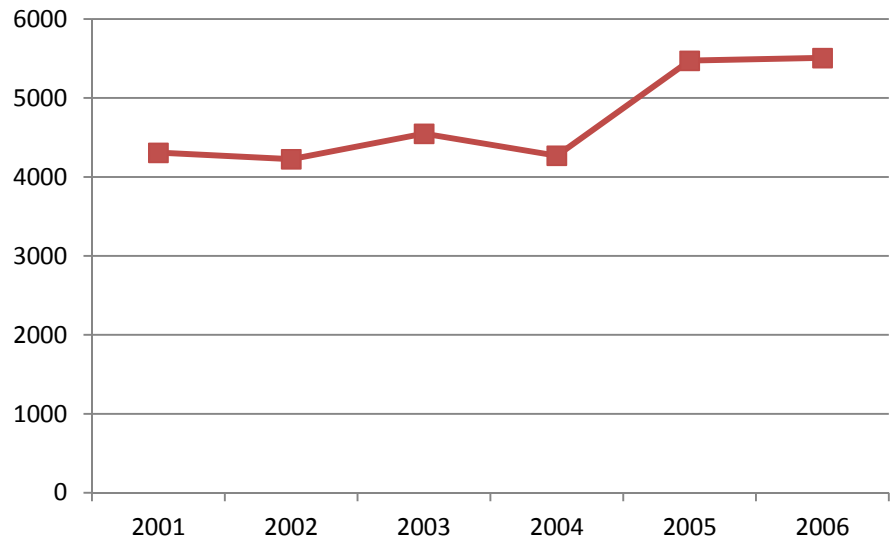
In the town centre the most notable pedestrian space is Market street which is pedestrianised (allowing vehicular access out of hours for servicing traffic). However the pedestrian linkages between here and other key parts of the town centre are far from ideal e.g. routes to from the bus station and the rail station.

Issue	Lower than average walking rates along with lack of safe pedestrian crossings leave room for improvement.
Opportunity	Footways along both sides of most main roads along with some pedestrian only streets in the town centre.

6.8.2 *Additional Data*

Pedestrian counts for Spalding are available only for the period between 2001 and 2006. Although they may not be up to date, it may be worth looking at them to determine if there are trends visible within that timeline. Pedestrians at each site were recorded for two three hour periods, the first being from 0700 to 1000 and the second being from 1500 to 1800. The following figure displays the total number for each of the ten sites (within the town centre) over the five year period 2001 to 2006.

Figure 6-10 – Total Number of Pedestrians Counted 2001 - 2006



Source: South Holland District Council

Overall, observed numbers of pedestrians increased from 2001 to 2006, an increase of 27.9%, above the rate of population growth during that period.

Table 6-22 – Walking for Utility Purposes in South Holland

	Minimum once per month	Minimum once per week	Minimum 3x per week	Minimum 5x per week
South Holland	26%	19%	5%	3%
Lincolnshire	32%	22%	9%	5%
East Midlands	33%	22%	10%	6%
England	35%	24%	11%	7%

Source: GOV.UK https://www.gov.uk/government/collections/walking-and-cycling-statistics

South Holland has lower percentages of people walking for utility purposes than the county, region and country across all frequencies.

6.9 Mode Share

Mode share data is available for the strategy area from the Census and traffic surveys. The following tables show the change in travel to work mode choice between the 2001 Census and 2011 Census.

Table 6-23 shows that the number of residents within the study area travelling to work by car increased by 39% between 2001 and 2011. This is significantly higher than the increases experienced in Lincolnshire, the East Midlands and nationally. However, the mode share for car driver only increased by only 0.5%, indicating that the change in car use is likely to be linked to an increase in travel to work over the period rather than purely a shift to car travel.

Table 6-23 – Census 2001 and 2011 Travel to Work Comparison – Car/Van Driver

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	12,324,166	1,157,931	174,806	6,551	65.3%
2011	13,515,693	1,329,068	207,591	9,101	65.8%
2001-2011	10%	15%	19%	39%	

Source: Office of National Statistics

The number of people travelling to work as car passengers increased over the period by 55%, but was reflected by an increase of only 1% in the mode share. The increase in number of car passengers is significantly larger than that experienced in Lincolnshire and contradicts the downward trend experienced regionally and nationally.

Table 6-24 – Census 2001 and 2011 Travel to Work Comparison – Car/Van Pass.

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	1,370,685	133,260	19,762	791	7.9%
2011	1,228,307	125,925	20,303	1,228	8.9%
2001-2011	-10%	-6%	3%	55%	

Source: Office of National Statistics

The number of people walking to work increased by 64% between 2001 and 2011, this is reflected by a small increase in mode share from 11.6% to 13.8%. The increase in walking was significantly higher than regionally and nationally.

Table 6-25 – Census 2001 and 2011 Travel to Work Comparison – On Foot

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	2,241,901	201,247	31,860	1,159	11.6%
2011	2,456,447	214,860	35,663	1,903	13.8%
2001-2011	10%	7%	12%	64%	

Source: Office of National Statistics

Cycling as a mode of travel to work decreased by 6% between 2001 and 2011, this led to the mode share decreasing over the period. The trend was comparable with a decrease in the East Midlands region particularly but contradicts the increase of 13% for England as a whole.

Table 6-26 – Census 2001 and 2011 Travel to Work Comparison – Bicycle

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	634,588	62,644	15,789	1,129	11.3%
2011	719,110	57,383	13,008	1,057	7.6%
2001-2011	13%	-8%	-18%	-6%	

Source: Office of National Statistics

Motorcycle use decreased by 65% and mode share decreased to 0.3%.

Table 6-27 – Census 2001 and 2011 Travel to Work Comparison – Motorbike

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	249,456	20,018	3,541	126	1.3%
2011	199,896	15,138	2,529	44	0.3%
2001-2011	-20%	-24%	-29%	-65%	

Source: Office of National Statistics

Bus travel to work increased overall by 96%, which resulted in only a 0.4% increase in modal share for the study area. This trend was substantially better than figures regionally and nationally.

Table 6-28 – Census 2001 and 2011 Travel to Work Comparison – Bus/Coach

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	1,685,361	133,858	9,579	93	0.9%
2011	1,836,494	129,093	8,135	182	1.3%
2001-2011	9%	-4%	-15%	96%	

Source: Office of National Statistics

Travel to work by train increased considerably across England, the East Midlands, Lincolnshire and the Spalding study area showing an increase of 34%. The mode share, however, remained the same over the period.

Table 6-29 – Census 2001 and 2011 Travel to Work Comparison – Train

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	950,023	18,849	2,214	99	1.0%
2011	1,292,953	27,094	3,065	133	1.0%
2001-2011	36%	44%	38%	34%	

Source: Office of National Statistics

Taxi use for travel to work now has shown an increase of 47% during the period within the study area but mode share has remained the same.

Table 6-30 – Census 2001 and 2011 Travel to Work Comparison – Taxi

Year	England	East Midlands	Lincolnshire	Spalding Study Area	Spalding Mode Share
2001	116,503	7,926	1,168	30	0.3%
2011	120,655	8,058	1,048	44	0.3%
2001-2011	4%	2%	-10%	47%	

Source: Office of National Statistics

Overall, the travel to work data shows that car travel remains dominant in the Spalding area, with bicycle travel declining, however, levels of walking and bus travel has increased in real terms and mode share.

Issue	Travel to work data shows that car travel remains dominant in the Spalding area, with bicycle travel declining.
Opportunity	Levels of walking and bus travel have increased in real terms and mode share.

6.10 School Travel

Mode share data for travel to school is available for all but two schools within the Spalding study area. The data has been obtained from School Travel Plan Health Checks undertaken by Lincolnshire County Council and the figures in them are based on the 2009/10 school censuses. The following table shows the travel to school mode choice for this period which was issued in 2011.

Table 6-31 – Census 2011 Travel to School modal split

	Walk	Cycle	Car/Van	Car share	Public Bus	Dedicated Bus	Taxi	Train	Other
Number of pupils travelling to school by mode	2,333	283	1,920	172	467	1,281	253	0	71
Total Mode share (%)	34.4%	4.2%	28.3%	2.5%	6.9%	18.9%	3.7%	0.0%	1.1%
National	38%	2%	26%		29%		4%		

Source: Office of National Statistics.

Overall the school travel mode data shows that 34% of pupils walk to school making travel by foot to school the highest mode share. This is marginally higher than the number of pupils travelling to school by car which at 28% represents a large portion of school journeys. It is anticipated that a proportion of these journeys are being made by pupils residing in outlying rural areas for which car travel may well be the only viable option. Mode share for walking is marginally lower than the national average whilst that for cycling is marginally higher.

Bus travel represents around 26% of school travel in overall terms, 19% of which are dedicated bus services. This is broadly in line with the national average.

The number of cyclists is quite low at only 4% which is only slightly higher than those travelling by taxi. The Bike It initiative aimed at encouraging cycling amongst school pupils is in its early stages and is covered in section 6.5 of this working paper.

Opportunity	To increase the number of trips to school by bike.

6.11 Road Safety

The summary of accidents that have occurred within Spalding from 2008 to 2012, are listed according to their severity, within Table 6-32. Fatal accidents have been level, although they occur infrequently enough as to make it difficult to identify trends. Serious accidents have increased by 125% while slight accidents have increased by 26%.

Table 6-32 – Annual Accidents within Spalding by Severity 2008-2012

	2008	2009	2010	2011	2012	Total	Average	CHANGE (2007-2012)
Fatal	1	2	0	1	1	5	1.0	0%
Serious	4	7	13	5	9	38	7.6	+125%
Slight	54	58	74	67	68	321	64.2	+26%
Total	**59**	**67**	**87**	**73**	**78**	**364**	**72.8**	**+32%**

Source: Lincolnshire Road Safety Partnership

The number of fatalities has stayed level, although their infrequency makes it difficult to identify trends. The number of casualties in serious accidents has increased by 29% while the number of casualties in slight accidents has increased by 30%.

Issue	There are an increasing number of slight and serious accidents and consequently more casualties.

Table 6-33 – Number of Casualties in Road Accidents within Spalding 2008-2012

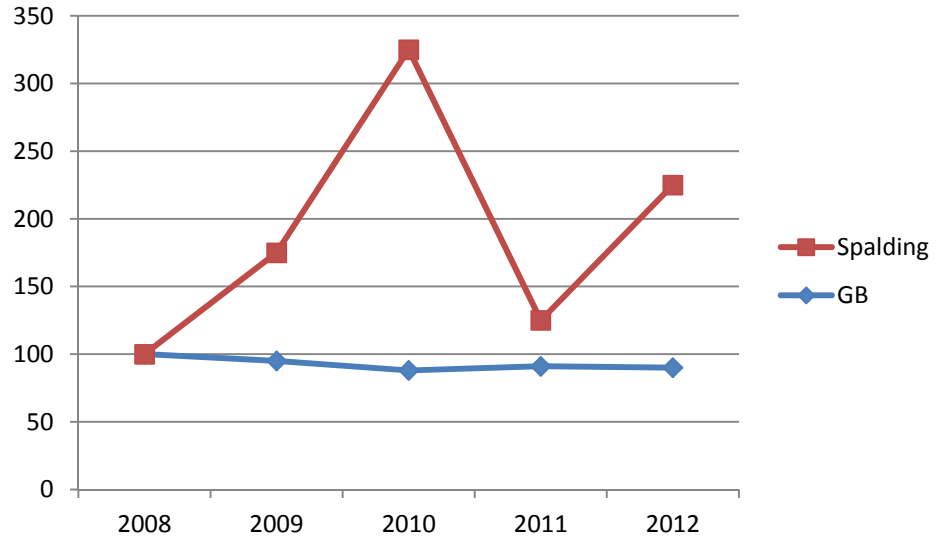
	2008	2009	2010	2011	2012	Total	Average	CHANGE (2007-2012)
Fatal	1	8	0	1	1	11	2.2	0%
Serious	7	7	14	7	9	44	8.8	+29%
Slight	69	68	97	81	90	405	81	+30%
Total	**77**	**83**	**111**	**89**	**100**	**460**	**92**	**+30%**

Source: Lincolnshire Road Safety Partnership

A comparison of serious accidents in Figure 6-11 between Spalding and Great Britain shows there is a greater volatility in Spalding's accident numbers, due to the relatively small size of the Spalding dataset. As a result, it is not possible to say with any confidence whether Spalding is seeing a drop in serious and fatal accidents, even though the number of accidents in 2012 is higher than the number of such accidents in 2008.

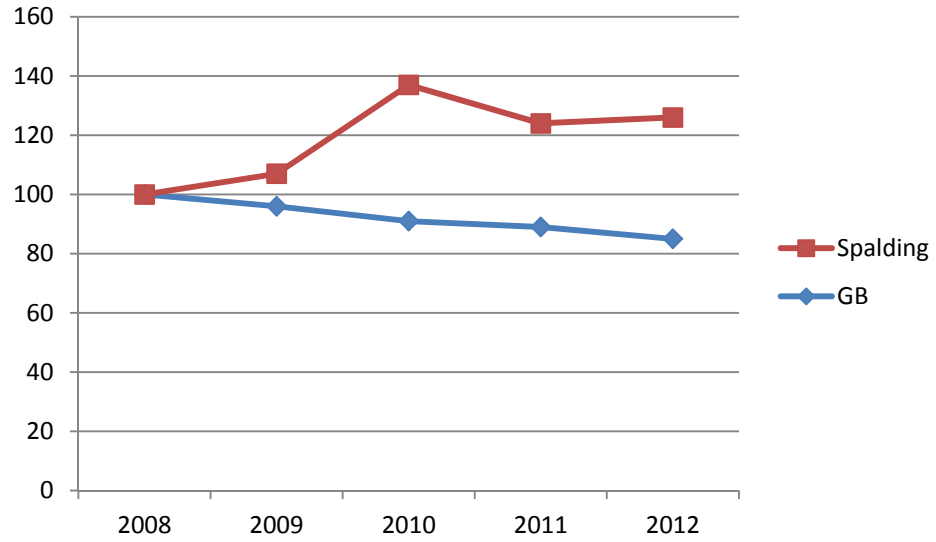
Figure 6-12 provides the same comparison for slight accidents. The number of such incidents has increased, albeit down from a peak in 2010. However, across Great Britain, slight accidents have reduced between 2008 and 2012. This suggests that road accidents are increasing at a faster rate compared to most places in the country.

Figure 6-11 – Indexed Rates of Serious Accidents Great Britain and Spalding 2008-2012



Source: Lincolnshire Road Safety Partnership

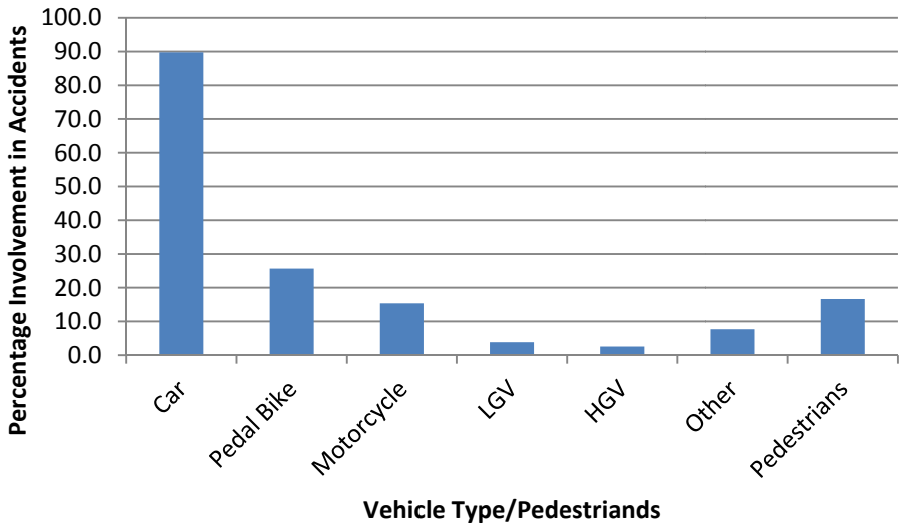
Figure 6-12 – Indexed Rates of Slight Accidents Great Britain and Spalding 2008-2012



Source: Lincolnshire Road Safety Partnership

As to be expected, Figure 6-13 shows that the vast majority of accidents involved at least one car, but a significant number of cyclist, motorcyclists and pedestrians have also been involved in recorded collisions.

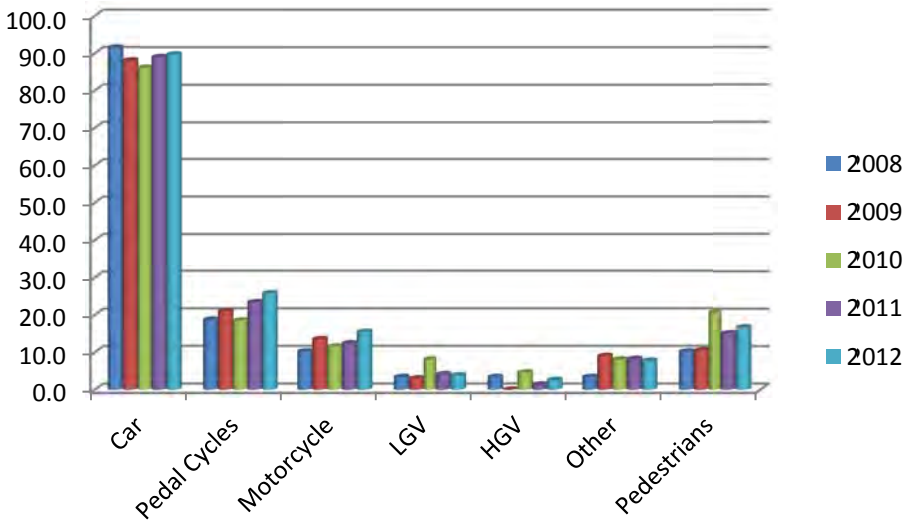
Figure 6-13 – Percentage Involvement in Accidents by Vehicle Type/Pedestrians



Source: Lincolnshire Road Safety Partnership

Figure 6-14 gives the year-on-year variation for all road travel modes, and shows a spike in car accidents in 2010. Other modes show a reasonable amount of consistency during the period although accidents involving pedal cycles are seen to be on the rise while accidents involving pedestrians, after seeing a peak in 2010, are starting to trend downwards.

Figure 6-14 – Percentage of Accidents Involving Vehicle Type/Pedestrians 2008-2012



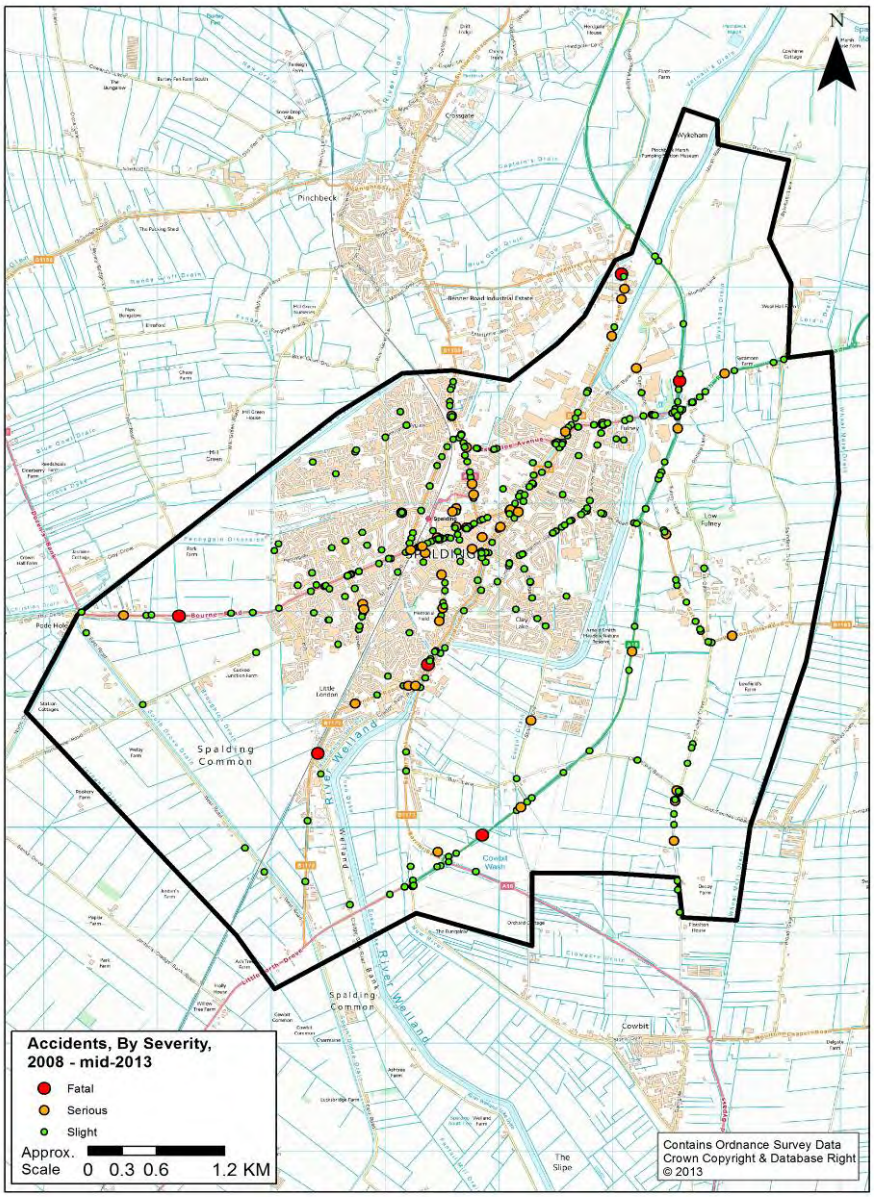
Source: Lincolnshire Road Safety Partnership

Issue	There has been an increase in the number of accidents involving pedal cycles.

Accident Analysis by Location

The locations of all the road accidents in Spalding from 1st January 2008 until 31st August 2013 have been displayed in the following maps according to their severity.

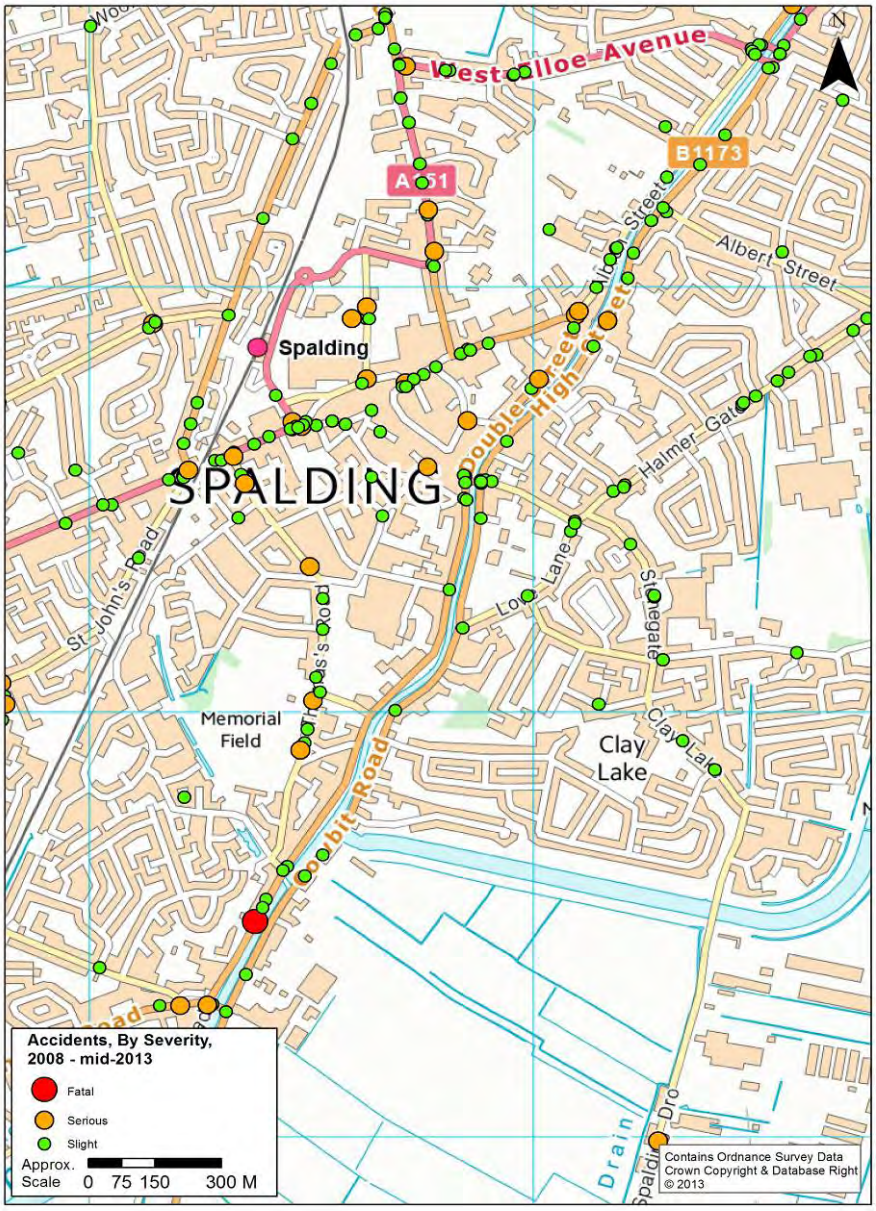
Figure 6-15 – Road Accidents by Severity in Spalding 2008-mid 2013



As can be seen in Figure 6-15, almost no area of Spalding has been accident free with all of the major roads in the town seeing several accidents over the past five years. Although most of the accidents have been slight, there were still a large number of serious accidents, many of which were in the town centre. The number of accidents in the town centre have been consistently high, although the serious accidents peaked in 2010.

Issue	Many serious accidents in areas with relatively low speeds limits.

Figure 6-16 – Road Accidents in Spalding Town Centre



There are notable clusters on Winsover Road, St Thomas's Road, Broad Street and Albion Street (the main east-west route through the town). Many of these streets are narrow and allow on street parking on one or both sides of the road.

Issue	The town centre, particularly Winsover Road and Swan Street experience a large number of accidents

Opportunity	Introduction of new traffic signals (with full pedestrian facilities) at all major junctions in the town centre should improve accident rates.

Outside of the town centre there was one fatal as well as four serious accidents on West Marsh Road, one of two main roads between Spalding and the Wardentree Lane/Enterprise Park Industrial Estate, the principal employment area of the town.

Figure 6-17 – Road Accidents in Spalding Northeast

Although not as concentrated as the town centre, there were still many serious and fatal accidents in the southwest region of the town as shown in figure 6-18.

Figure 6-18 – Road Accidents in Spalding Southwest

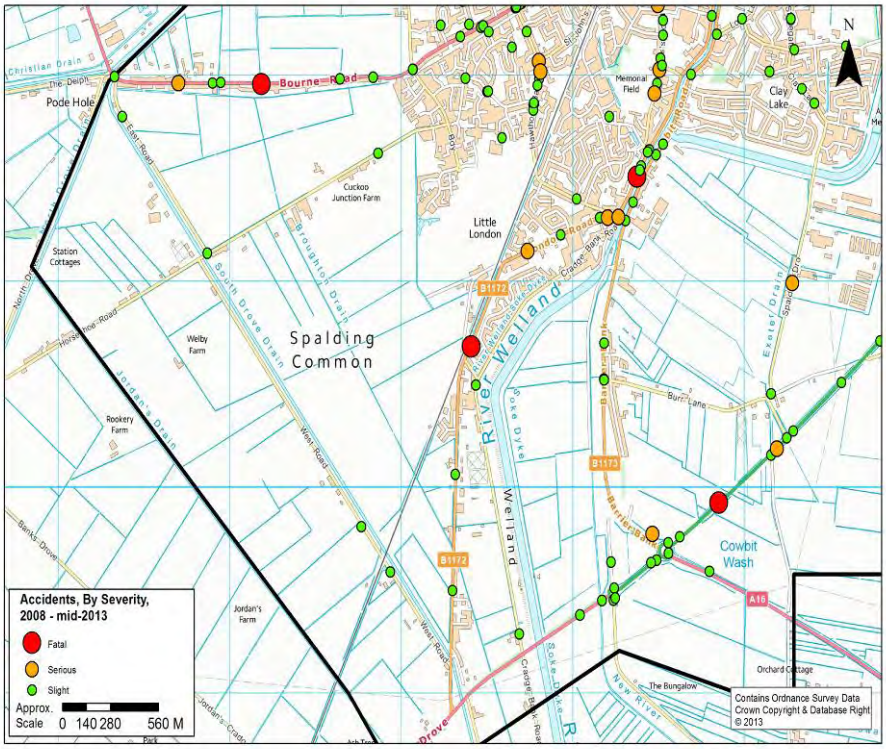
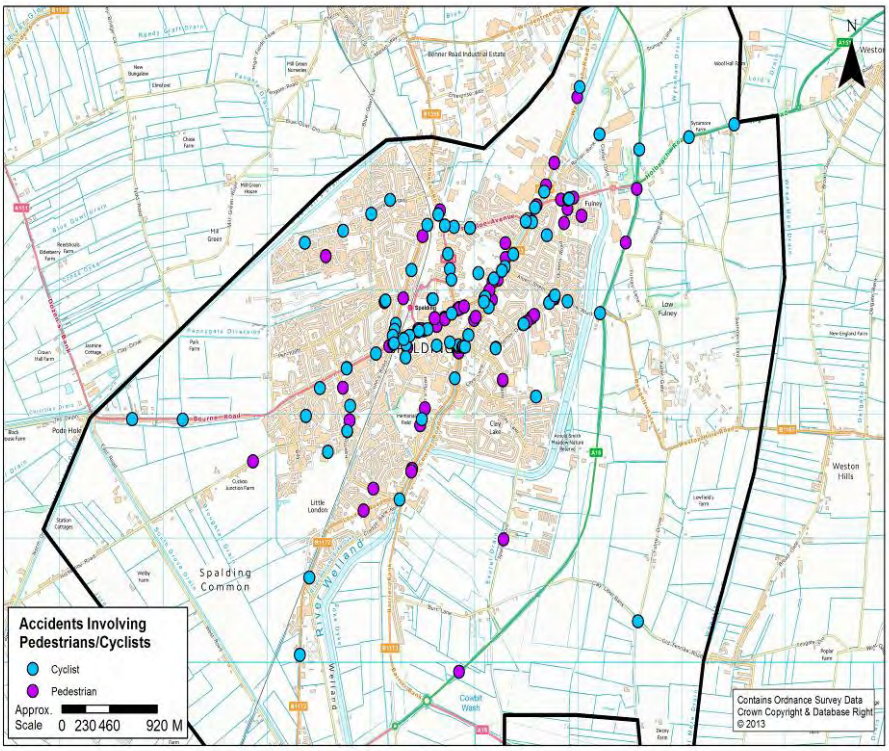


Figure 6-19 shows that there have been an increasing number of pedal cycles involved in road accidents with the town centre being the most affected from the level crossing through Swan Street, Westlode Street, Albion Street and continuing up West Marsh Road. This is in spite of there being an off road cycle path along the river behind Albion Street and an on road cycle path along West Marsh Road. There have also been a number of cycle accidents at the roundabout with Halmer Gate, Queens Road and Low Road in Fulney.

Pedestrians involved in road accidents have also been on the rise, although they have fallen slighlty since peaking in 2010. Pedestrian accidents have been highest in the town centre although there is also a concentration around the junction of Holbeach Road and Queens Road as well as along Halmer Gate near Sir John Gleed School.

Figure 6-19 – Road Accidents in Spalding involving Pedestrians and Cyclists



6.12 Summary

Spalding is slightly isolated from the trunk road network with the A47 (south) and the A1 (west) approximately 15 miles and 22 miles away respectively. The most strategic (non-trunk) roads serving Spalding are the A16 and A151 which run north/south and east/west respectively. The town centre road network is chiefly constrained by the rail line (and associated level crossings) and the river with the majority of the trip generators (schools, shops, emergency services) being located to the east of both. Car ownership has increased significantly over the last 10 years and traffic levels, based on the data available, indicate an increase of 15% over the last 5 years. From the surveys undertaken by the Civic Society we can see that there is currently spare capacity in the current parking stock in the town centre. This

could result in an opportunity to rationalise the overall levels, although given the planned growth identified in the Local Plan this ‘spare’ capacity may be required in the future.

There are significant freight movements across Lincoln and this has continued to rise over the last 3 years (4.9% between 2008 and 2011). In the same period there has been a reduction in the share of HGV traffic in Spalding town centre which may be partly explained by the major industrial area, Enterprise Park, being located immediately adjacent to the A16 thus negating the need for HGV’s to navigate through the town.

Overall, public transport provision in Spalding is mixed. For a rural market town there is a reasonably good local (town) bus network with some variable inter-urban links. Rail services on the other hand are not as good with limited destinations and limited peak time trips available and no services on Sundays.

Provision for cyclists is relatively good with most routes into the town having cycle lanes or paths, although some of these are fragmented. Recent surveys indicate that cycle usage has decreased over the last 10 years. Provision for pedestrians has recently been improved following the introduction of several new traffic signal installations across the town centre although linkages to from the towns bus and rail station could be improved.

Over the past few years travel to work by car has continued to increase in the area with rates, higher than national or regional averages, although this appears to be attributable to people travelling more rather than a shift to car travel. Bus and rail travel (to work) both saw an increase over the same period although the mode share increase was only minor.

Analysis of accidents shows that the number of accidents involving cyclists are on the increase whilst accidents involving pedestrians, after a peak in 2010, are starting to see a trend downward. There are a number of accident clusters in the town centre most notably on the main east–west routes through the town on Winsover Road, Swan Street and Broad Street.

7 Land Use

7.1 Introduction

This section will initially seek to place Spalding within the wider region. Following that, it will identify the principal locations of residential and employment land, along with the sites of key functions such as shops, amenities and public services.

Spalding is a rapidly growing town, currently with a population of approximately 28,000. It is located within South Holland District Council, and has close proximity to many of the major towns and cities within the East Midlands, as shown by Table 7-1.

Table 7-1 – Distances to Key Towns and Cities

Town/City	Distance from Spalding (miles)
Boston	15
Stamford	20
Peterborough	21
Kings Lynn	28
Grantham	30
Lincoln	44
Newark-on-Trent	45
Leicester	53
Nottingham	56
Sheffield	96
London	105

7.2 Current Land Use

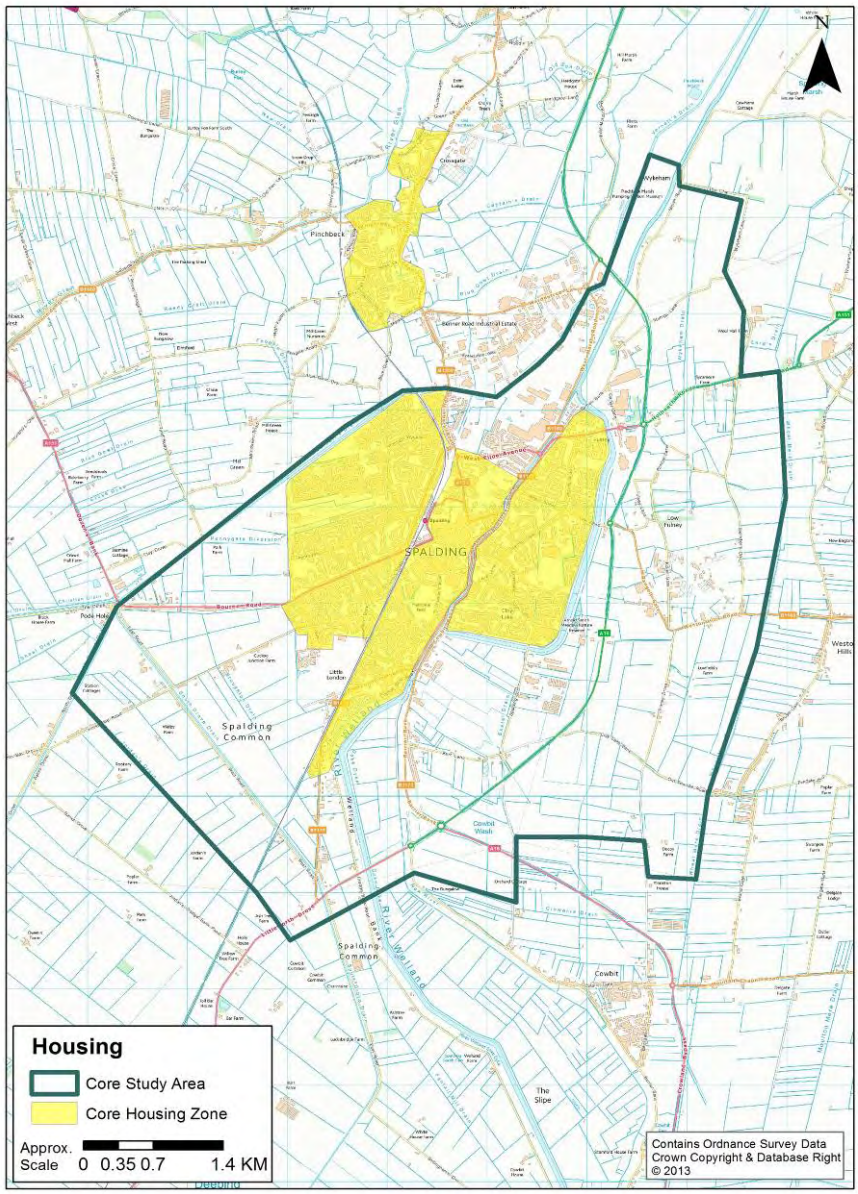
In order to plan Spalding's future transport infrastructure, it is important to appreciate the geographical context of existing housing, employment, infrastructure and services. This sub-section will look at the distribution of Spalding's key land uses and functions.

7.2.1 Residential

The main residential areas within Spalding can be divided into four different sections, as shown in figure 7-1:

- West: west of the railway line
- Central: between the railway line and the River Welland
- East: between the River Welland and the Coronation Channel
- Pinchbeck: the village of Pinchbeck to the north of Spalding

Figure 7-1 – Existing Residential Areas



Each residential area is served by at least one arterial road. The names/numbers of the appropriate routes are shown in table 7-2.

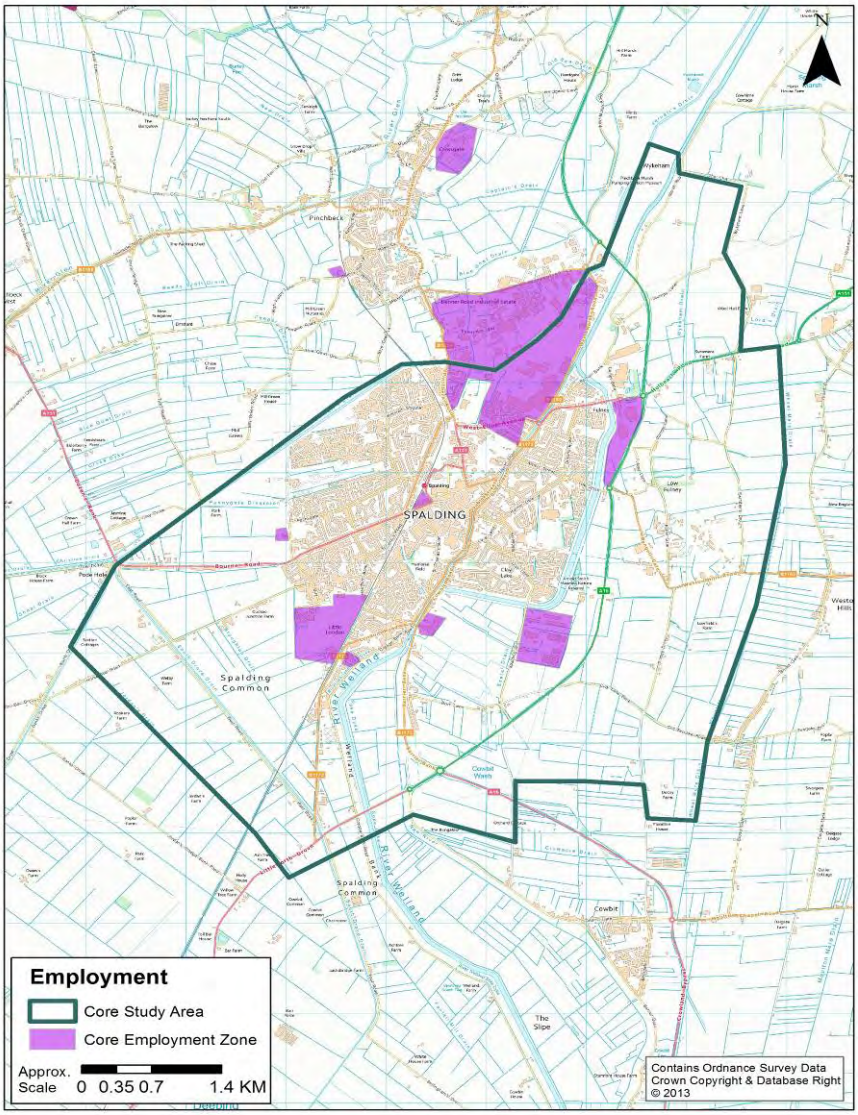
Table 7-2 – Road Serving Key Residential Zones

Residential Area	Major Road(s)
West	A151 (Bourne Road/Winsover Road)
Central	B1172 (London Road) B1356 (Pinchbeck Road) A151 (Holbeach Road) B1180 (West Marsh Rd)
East	A151 (Holbeach Road) B1173 (Cowbit Road)
Pinchbeck	B1356 (Spalding Road)

7.2.2 *Employment*

Spalding's economy is mainly agricultural with both flower and vegetable growth along with fruit and vegetable processing and packing. Spalding's employment areas are concentrated on a relatively limited number of medium to large sites which are detailed in figure 7-2.

Figure 7-2 – Existing Employment Areas



The main employment area is the Wardentree Lane/Enterprise Park Industrial Estate in the north central part of the town. There are also smaller pockets of employment activity located in Cradge Bank in the southwest corner of the town as well as on the Clay Lake Industrial Estate on the southeast bank of the Coronation Channel and Kerry Foods, further up between the A16 and the east bank of the Coronation Channel.

The B1180, West Marsh Road, is the main road into the Wardentree Lane/Enterprise Park Industrial Estate from the town centre, but there is also access along

Wardentree Lane off of Pinchbeck Road as well as direct access from the A16. There is also an off road cycle path from Pinchbeck Road running directly onto the estate. There are also cycle paths along almost every street within the industrial estate.

The Cradge Bank Industrial Estate located in the southwest corner of town can be accessed by London Road, and potentially in the future, from Broadway to the north. However, the access is via narrow local roads through residential areas.

The Clay Lake Industrial Estate located in the southeast corner of the town can be accessed from Spalding Grove off of Clay Lake, although it is a narrow road and there is only a footway along one side of the road after crossing the Coronation Channel and this footway disappears after approximately 700ft.

The employment site (Kerry Foods) near the A16/A151 junction can be easily accessed via Fulney Lane North off of the A151. It is a fairly narrow road, although there is a footway along one side.

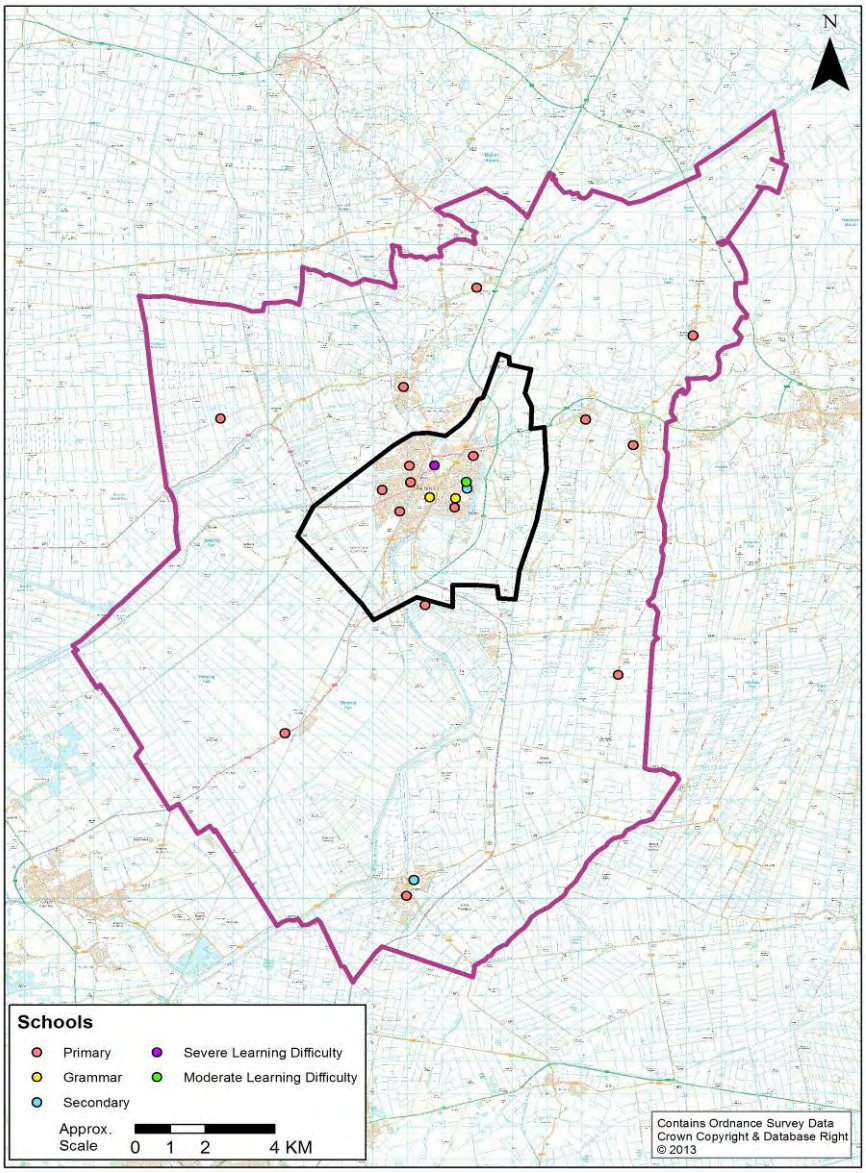
7.2.3 Retail

Spalding's main shopping streets are in the town centre, where there is also a Sainsbury's supermarket. On the northeast edge of town located on Camel Gate, just off Holbeach Road near the junction with the A16 is the Springfields Shopping Outlet and Festival Gardens where there are over 50 retail and restaurant units. There is also a Morrison's supermarket on the Wardentree Lane/Enterprise Park Industrial Estate.

7.2.4 Education

There are three secondary/grammar schools located in Spalding. Figure 7-3 shows that all within half a mile of each other, fed by up to fifteen primary schools within the surrounding area, seven of which are located in Spalding. The only other secondary school nearby is in Crowland, over eight miles away by road from the centre of Spalding. The traffic generated by the three secondary/grammar schools can cause much congestion on school days.

Figure 7-3 – Location of Schools in Spalding



Issue	Concentration of secondary schools on the eastern side of the rail line and the river

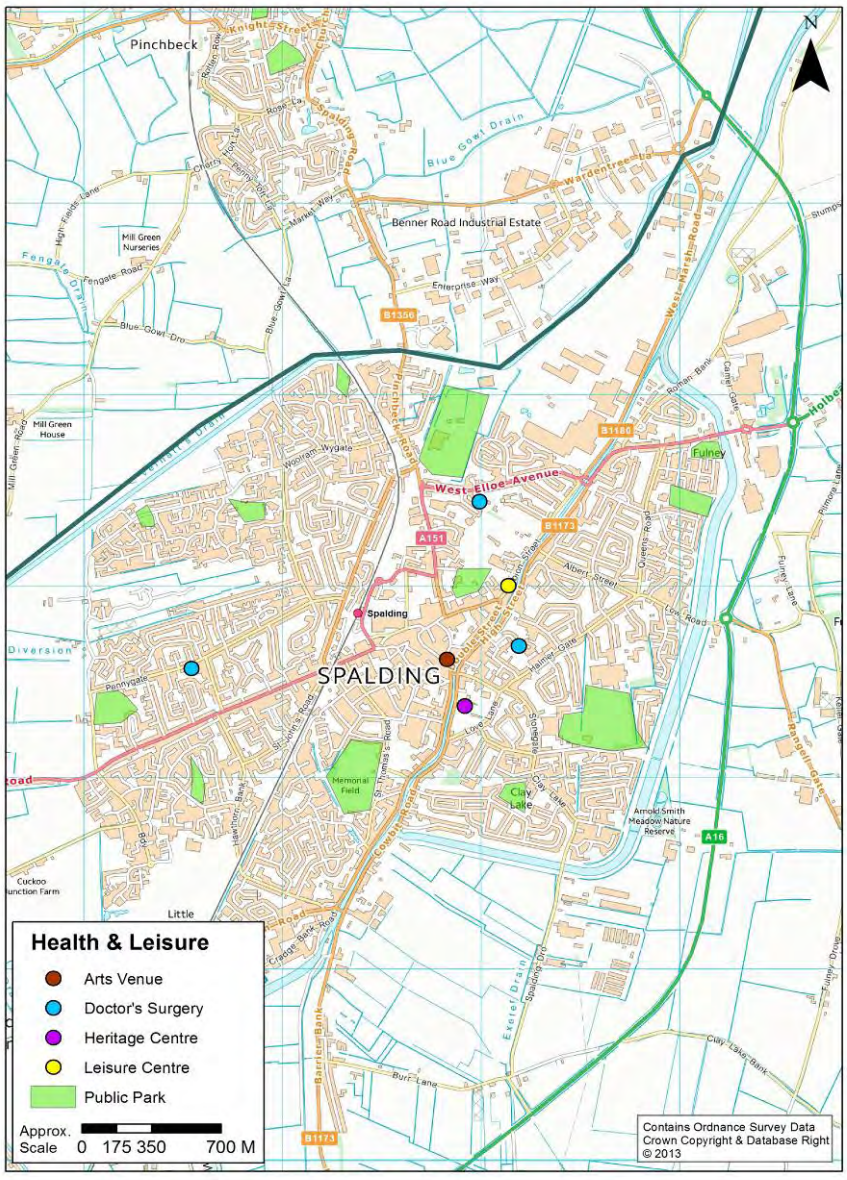
7.2.5 *Civic*

The public sector is a key employer within Spalding, with the town acting as an administrative base for the South Holland District Council. The council offices occupy a site on Priory Road within the town centre.

7.2.6 *Health and Leisure*

There are three doctor's surgeries in Spalding, one in each of the three main residential zones of the town, allowing residents to access one without having to cross the railway or the river. There is also an arts venue as well as a leisure centre in the town centre and a heritage centre within walking distance of the town centre that are all at the resident's disposal.

Figure 7-4 – Health and Leisure Facilities in Spalding



7.3 Committed Development

There are a number of large developments in Spalding which currently have planning permission and need to be considered as committed for the purposes of this strategy.

7.3.1 Holland Park

Holland Park, present a large area for residential development to the south of the town. On completion the development will deliver 2,250 new homes, a district centre, two local centres and a new primary school. Outline planning permission was granted in 2010 and reserved matters applications will be sought in a phased approach by Broadgate Homes.

7.3.2 Wygate Park

Another large residential development with outline permission and being constructed in phases is Wygate Park, which will provide over 800 new homes to the north west of the town centre.

7.3.3 Elsoms Way

In September 2011 outline permission was granted for a 2.5 hectare industrial estate development to the north of the existing employment area to the north of Spalding on Elsoms Way.

7.4 Potential Development

7.4.1 Rail Freight Interchange

There is a proposal to create a Rail Freight Interchange (RFI) to the south-west of Spalding and a preferred site has been identified. Whilst this will have significant benefits in terms of transferring freight from road to rail, it may also increase rail traffic through the town meaning additional infrastructure improvements are necessary. The timescales for the RFI are currently unknown as it is anticipated the delivery would be led by third parties.

7.4.2 Residential Development

It is anticipated that a large area of land will be developed to the north of Vernatt's Drain providing around 3,750 dwellings. It is anticipated that the development would be accessed from roundabouts on Bourne Road, Splading Road and at two points on the SWRR.

7.4.3 Northern Expansion Area

The South Holland Local Plan and the SELLP identifies the northern expansion area as a site for potential development. This land, extending alongside the railway line from north of Chatterton Tower to Pinchbeck Road, was allocated in previous local plans for retail development, however, it is now identified as a potential mixed use development site to include retail and residential use.

7.4.4 The Fenways Water Link

Spalding has been identified as a location for a major navigation hub that would provide extensive moorings for up to 200 boats, with ancillary developments including boat repair yards and accommodation.

8 Existing Scheme Proposals

8.1 Introduction

This section looks at any proposed highways schemes which are proposed in Spalding.

8.1.1 Spalding Western Relief Road

The Spalding Western Relief Road (SWRR) is identified as a major scheme recognised within LTP4. It is intended that the first phase of the relief road, between the Holland Park development, which includes 2,250 new homes, and up to the B1172 Littleworth Drove and Hills drain, will be provided by the Holland Park development. On opening, it will just serve as an access road to Holland Park and won't serve as a relief road until Phase 2 (extending to Bourne Road) is built.

Figure 8-1 – The proposed SWRR Phase 1 Route and corridor of interest for Phase 2&3

Following a public consultation exercise in 2011 and further work, a preferred route decision was made in March 2012 which identified an Option 2A as promoted through the consultation as the preferred route. Since March 2012, work took place to produce the necessary documentation to support a planning application.

However, during the development of the planning application for Phase 2, which involved further discussions between Lincolnshire County Council, South Holland District Council and local developers, a preferred way forward emerged. Phases 2 and 3 are now being linked together, which will enable it to become more aligned with the developing South East Lincolnshire Local Plan. This is also in line with many of the views expressed during the initial public consultation for Phase 2.

More work is now taking place looking at possible routes for Phase 3, with further consultation likely to take place in 2014. The entire route for both phases can then be protected within the South East Lincolnshire Local Plan, the development of which involves Lincolnshire County Council, South Holland District Council and Boston Borough Council. The South East Lincolnshire Local Plan will look at future development of the area over the next 20 years. A planning application for the road can then be progressed.

8.1.2 Pinchbeck Road – Continuation of Cycleway

A proposed continuation of the off road cycleway on Pinchbeck Road towards the hospital is in the early design stage. Consultation on the associated traffic regulation orders is anticipated in January 2014 with a view to work commencing on site in summer 2014. The estimated cost for construction of this scheme is around £35,000.

8.1.3 Deeping St Nicholas – Speed Limit Review

Lincolnshire Highways undertook a review of the speed limit on the A1175, following the upgrade of the A16/A1073. As a result of this review the speed limit through the village of Deeping St Nicholas is being reduced from 50mph to 40mph.

9 Future Conditions

9.1 Introduction

There is much population and housing growth anticipated for South Holland over the next twenty years, although it is unclear if there will be more employment opportunities and infrastructure growth to match.

9.2 Housing

According to the South East Lincolnshire Local Plan, there are four different options for housing growth for South Holland from 2011 to 2031. The first two options were considered reasonable with proposed development rates of 470 and 540 dwellings per annum respectively. Option A (470) is considered deliverable compared to the historic rate of 414 dwellings per annum. This equates to 9,400 new dwellings from 2011 to 2031 with a maximum of 1,200 in the ROY (Red Orange Yellow) flood risk zones. Work is currently being undertaken to update the Peterborough Sub-Regional Strategic Housing Market Area Assessment (SHMA). Early indications are that the 'objectively assessed need' for housing in South Holland District will increase. Once this figure is finalised it will inform the emerging South East Lincolnshire Local Plan."

9.3 Employment

There is planning permission for a 10 hectare extension to the Wardentree Lane/Enterprise Park Industrial Estate.

There is also planning permission for development of a 10 hectare business park on land partly occupied by the Clay Lake Industrial Estate.

According to the South East Lincolnshire Employment Premises & Land Review (Oct 2012) there are 42.6 hectares and 10.0 hectares of undeveloped employment land available at the Wardentree Lane/Enterprise Park and Clay Lake industrial estates respectively.

9.4 Retail

The South East Lincolnshire Retail Study (December 2013) shows that in Spalding there is an oversupply of comparison floorspace until 2016 when there is a requirement for an additional 1,594 sqm net, which grows to 10,810 sqm by the end of the plan period. There is a current requirement for 895 sqm net of floorspace for convenience goods retailing, which increases steadily to 2,286 sqm by the end of the plan period. According to the 2013 Goad reports 8.47% of units in Spalding were vacant, equating to 4.54% (3,038 sqm) of total floorspace."

9.5 Tourism

Tourism revenue generated in South Holland has increased over the last three years going from £73,530,000 in 2010 up to £78,640,000 in 2012, a 6.9% increase in less than three years. There is no data available on predictions for future numbers of tourists.

9.6 Education

A new primary school is being constructed in the Wygate Park area. It is scheduled to open in September 2014.

9.7 Population Change

The Office for National Statistics predicts a steady population growth of 31% from 2013 to 2035 for South Holland.

Figure 9-1 – Projected Population Growth for South Holland 2013 to 2035

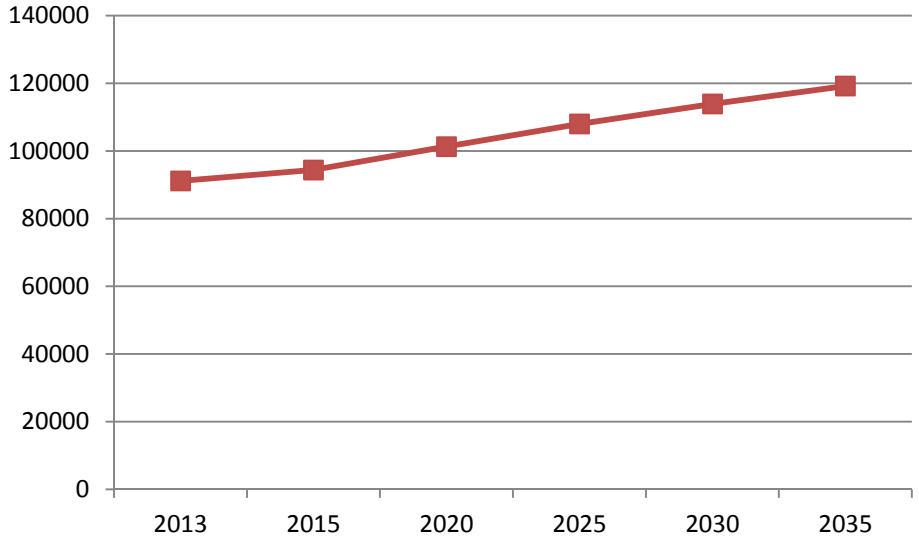


Table 9-1 – Projected Population for Children Ages 0-15

Year	South Holland	Lincolnshire	East Midlands	England
2015	15,900	129,800	866,500	10,315,400
2020	17,600	141,700	934,700	11,006,700
2025	18,800	148,500	970,700	11,292,000
2030	19,100	148,600	970,800	11,191,000
2035	19,100	147,600	964,300	11,060,400
Change	**+20%**	**+14%**	**+11%**	**+7%**

Source: Lincolnshire Research Observatory

Table 9-2 – Projected Population for Working Age Adults

Year	South Holland	Lincolnshire	East Midlands	England
2015	54,400	443,800	2,900,900	33,730,800
2020	60,100	477,200	3,079,300	35,519,200
2025	63,500	494,300	3,172,700	36,982,600
2030	66,200	507,600	3,248,800	36,982,600
2035	69,300	525,000	3,352,800	37,969,400
Change	**+27%**	**+18%**	**+16%**	**+13%**

Source: Lincolnshire Research Observatory

Table 9-3 – Projected Population for State Pension Age and Above

Year	South Holland	Lincolnshire	East Midlands	England
2015	24,000	184,000	950,400	10,422,000
2020	23,600	181,700	931,700	10,080,700
2025	25,600	199,400	1,022,100	10,975,900
2030	28,600	223,100	1,146,600	12,235,900
2035	30,800	238,700	1,229,300	13,048,600
Change	**+28%**	**+30%**	**+29%**	**+25%**

Source: Lincolnshire Research Observatory

Although there is a high growth predicted for the population of pensioners, there will also be significant growth of the youth and working age populations, much more so than the national average. Therefore, the transport needs of the entire population will require much focus, not just those for the pensioners.

Issue	All three age categories see projected population growth above the national average.
Issue	Projected growth in South Holland is above the national average up to 2035 with the majority of this growth focussed on Spalding
Issue	There will be a need to accommodate increased traffic flows in connection with planned growth in Spalding

9.8 Highway Network Operation

Future highway conditions in Spalding have been modelled as part of the work connected with the Spalding Western Relief Road. A strategic model, using SATURN software, was used to assess five different scenarios to determine

changes in delay and journey times. The modelling was undertaken using the AM Peak (08:00-09:00) and the PM Peak (17:00-18:00) models for each scenario. The five scenarios used are outlined below. Each, with the exception of the base model, takes into account the increase in rail freight anticipated through Spalding.

Base scenario: This scenario is the validated base year of 2010; it includes:

- The existing level crossing barrier downtimes based on 1 train per direction per hour;
- No additional developments; and
- No network changes.

Do Minimum (DM) scenario: This scenario assesses the likely Do Minimum situation in the opening year (2018) and design year (2033); it includes:

- Increased level crossing barrier downtimes based on 3 trains per direction per hour;
- The Wyegate Park/Hayfields housing development with 465 dwellings in 2018 and 808 dwellings in 2033; and
- Additional network link between Monks House Lane and Wyegate Park.

Do Something (DS1) scenario: The DS1 scenario combines the DM scenario with Phase 1 of the SWRR. It includes:

- Phase 1 of the SWRR, which includes the bridge over the railway line and consists of a single carriageway with a design speed of 50mph;
- A roundabout at the junction with Spalding Common and at the northern end of Phase 1;
- The Holland Park housing development with 299 dwellings in 2018 and 2,250 dwellings in 2033; and
- No other network changes.

Do Something (DS2) scenario: The DS2 scenario combines the DS1 scenario with the full SWRR scheme. It includes:

- The full SWRR, with a bridge over Vernatt's Drain and the railway line, designed to the same standards as Phase 1;
- Roundabouts at Bourne Road, Spalding Road and at two points along the link north of Vernatt's Drain to provide access to potential future housing development;

- A left in/left out junction arrangement at Horseshoe Road;
- No other developments; and
- No other network changes.

Do Something (DS3) scenario: The DS3 scenario combines DS2 with the future housing growth identified within the SELLP, it includes:

- The development of a new housing development north of Vernatt's Drain with no dwellings in 2018 and 3,750 dwellings in 2033. Accessed from the roundabouts provided along the link north of Vernatt's Drain; and
- No other network changes.

The outputs from the model are summarised below.

9.8.1 Delays and queues at level crossings

The changes in delays (in seconds) and the average queue lengths (in pcus) has been assessed and compared for each of the five scenarios at the five level crossing barrier locations in the centre of Spalding.

The outputs from this assessment are shown Tables 9-4 to 9-7, which make clear that the increased level crossing barrier downtimes will have a significant impact on delays and average queues. Particularly long queues are forecast along Woolram Wygate and Winsover Road, in both the AM and PM peaks. By comparing scenario 'DS1' with 'DS2' and 'DS3', it can be observed that the delivery of the full SWRR scheme does help reduce the impact at most crossings, but not significantly.

Table 9-4 –Delays at level crossings (seconds) – AM Peak

Crossing		Scenario				
		2010	2033			
		Base	DM	DS1	DS2	DS3
WoolramWygate	EB	17	198	214	182	195
	WB	14	139	139	138	139
B1356 Park Road	EB	15	135	138	130	126
	WB	14	129	135	126	126
Winsover Road	EB	21	195	213	189	197
	WB	17	151	154	149	149
Hawthorn Bank	EB	16	148	142	148	142
	WB	15	141	142	132	133
London Road	EB	13	120	120	120	120
	WB	13	119	119	119	119

Table 9-5 – Average Queues at Level Crossings (pcus) – AM Peak

Crossing		Scenario				
		2010	2033			
		Base	DM	DS1	DS2	DS3
Woolram Wygate	EB	3	44	53	36	43
	WB	1	12	12	12	12

B1356 Park Road	**EB**	2	11	12	8	5
	WB	1	7	10	6	6
Winsover Road	**EB**	4	43	52	40	44
	WB	3	19	20	8	18
Hawthorn Bank	**EB**	2	17	14	14	14
	WB	2	13	13	9	9
London Road	**EB**	0	2	2	2	2
	WB	0	1	1	1	1

Table 9-6 – Delays at Level Crossings (seconds) – PM Peak

Crossing		**Scenario**				
		2010	**2033**			
		Base	**DM**	**DS1**	**DS2**	**DS3**
Woolram Wygate	**EB**	15	150	151	143	145
	WB	16	158	152	157	148
B1356 Park Road	**EB**	14	125	131	123	121
	WB	15	143	157	143	150
Winsover Road	**EB**	17	148	154	145	144
	WB	21	179	199	185	191
Hawthorn Bank	**EB**	15	147	145	133	137
	WB	16	158	159	148	158
London Road	**EB**	13	119	119	119	119
	WB	13	120	120	120	120

Table 9-7 – Average Queues at Level Crossings (pcus) – PM Peak

Crossing		**Scenario**				
		2010	**2033**			
		Base	**DM**	**DS1**	**DS2**	**DS3**
Woolram Wygate	**EB**	2	18	19	14	15
	WB	3	23	19	22	17
B1356 Park Road	**EB**	1	5	8	4	3
	WB	2	15	22	14	18
Winsover Road	**EB**	3	17	21	15	15
	WB	4	34	45	37	41
Hawthorn Bank	**EB**	2	16	15	9	11
	WB	2	23	23	17	23
London Road	**EB**	0	1	1	1	1
	WB	0	2	2	2	2

9.8.2 Junction Delays

Figures 9-2 and 9-3 show the scale of junction delays, represented using bandwidths, across the Spalding highway network for each of the modelled scenarios.

The figures demonstrate that there are no major changes to junction delays between the scenarios during both the AM Peak and PM Peak. Given the significant housing growth between the DM and DS scenarios, the various proposed phases of the SWRR scheme appear to mitigate for the additional development traffic.

Figure 9-2 – Junction Delays – 2033 – AM Peak

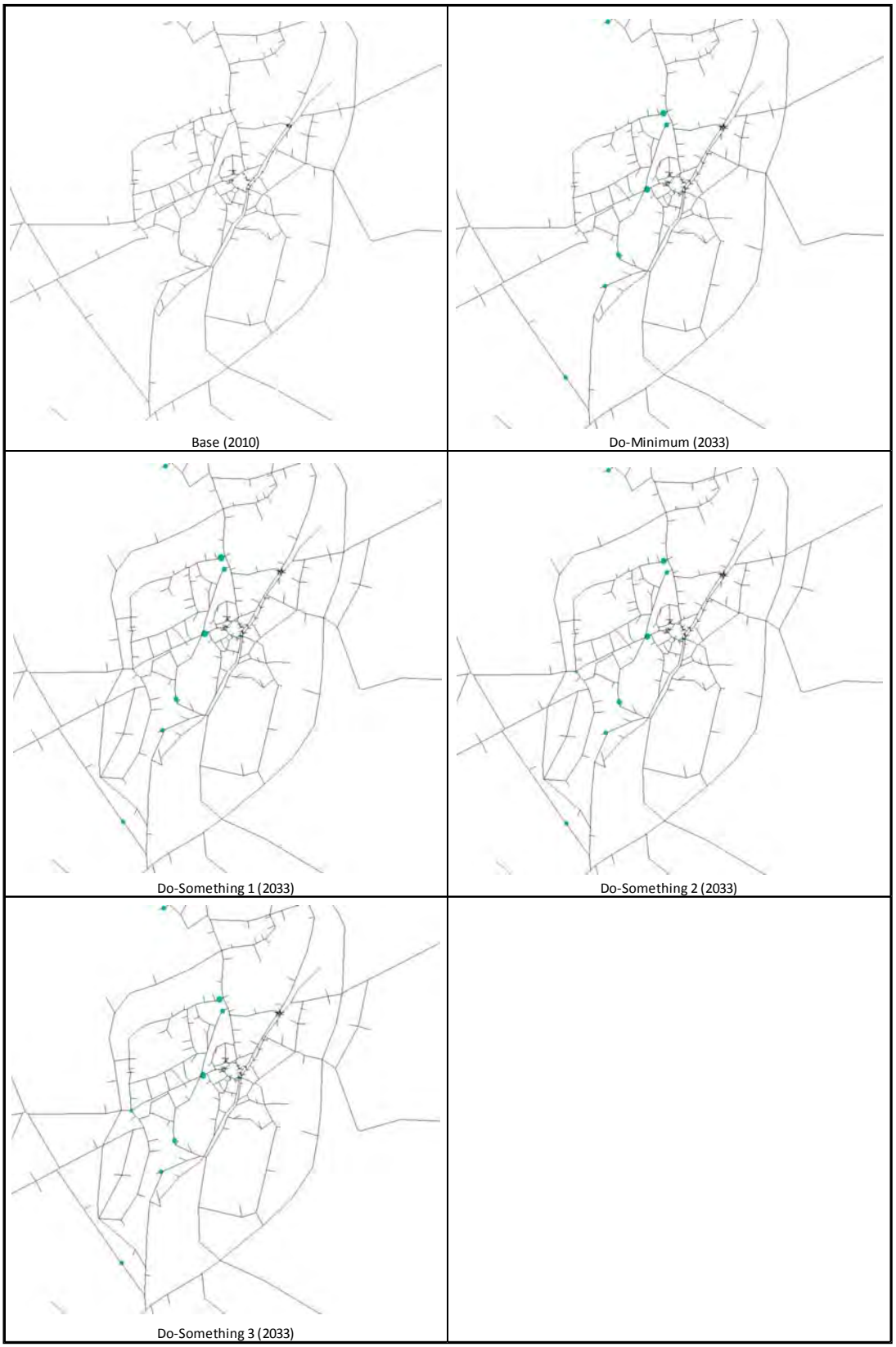


Figure 9-3 – Junction Delays 2033 – PM Peak

9.8.3 Journey Times

Journey times were also assessed for the routes shown in Figure 9-4. The outputs are shown in Tables 9-8 and 9-9. They show that, for the majority of routes, the construction of the SWRR is expected to lead to a maintaining of journey times for north/south journey times. This can be considered to be a satisfactory result, given that the Do Something scenarios also incorporate the Holland Park and Vernatt's Drain housing developments, which together add 6,000 dwellings to Spalding's total.

There are, however, significant forecast increases in journey times across town, travelling east/west. East bound journeys are expected to be subject to the most significant increases in journey times, showing an increase in journey time during the PM Peak from 15mins 15secs in the base model to 26mins 42secs in scenario DS3, an increase of 75%. Westbound journeys, whilst also showing increases in journey times, were not forecast to be affected to the same extent with a maximum journey time increase of 36%.

Figure 9-4 – Journey Time Routes

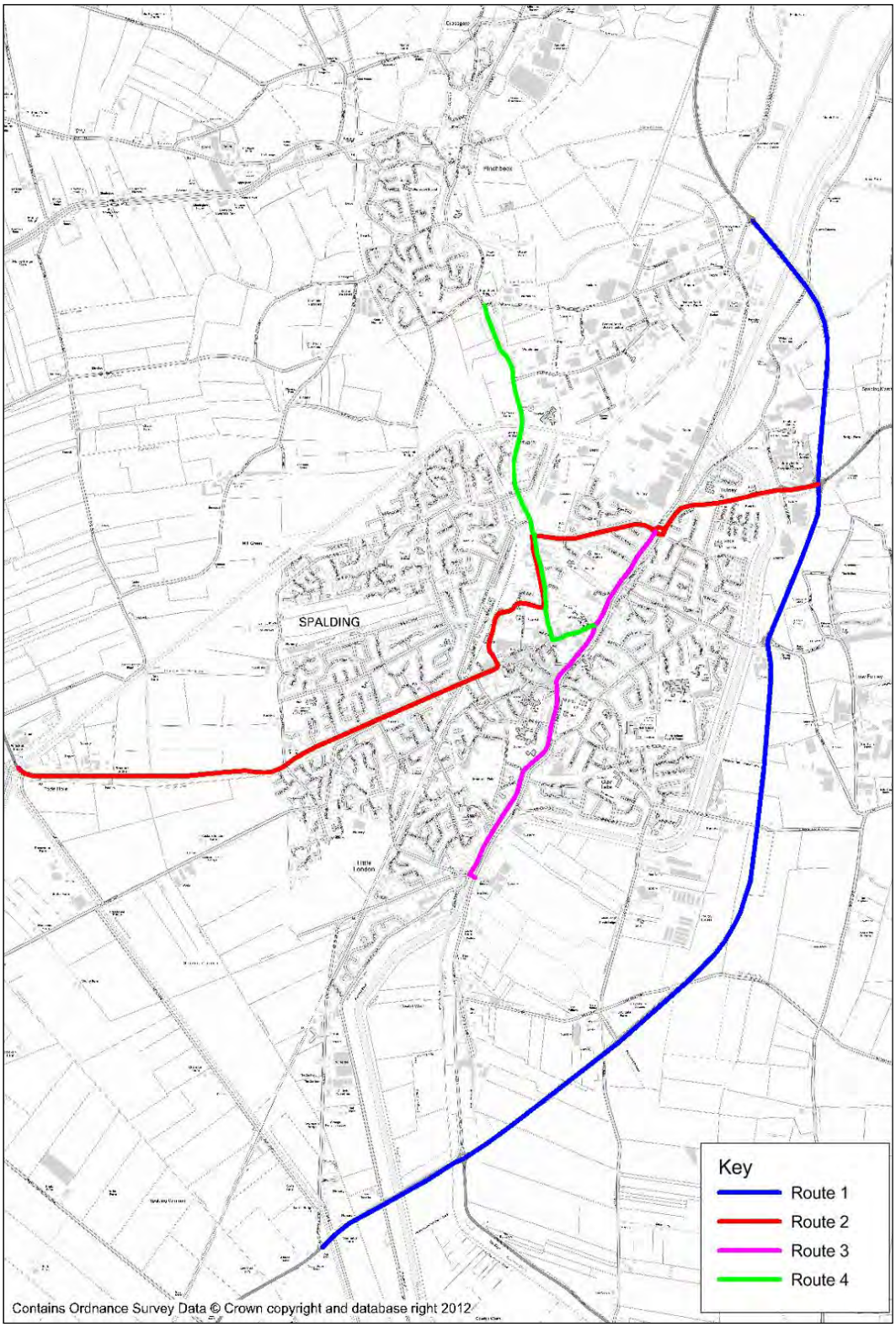


Table 9-8 – Journey Times along Key Routes (mm:ss) – AM Peak

Route		Scenario				
		2010	2033			
		Base	DM	DS1	DS2	DS3
1	NB	6:55	6:58	7:10	6:58	7:00
	SB	6:55	6:56	6:58	6:57	6:58
2	EB	10:28	-	14:27	13:57	15:20
	WB	10:48	-	13:26	13:23	13:48
3	NB	4:14	4:23	5:01	4:31	4:51
	SB	3:25	3:26	3:27	3:26	3:26
4	NB	4:07	4:12	4:25	4:22	4:23
	SB	4:03	4:11	4:26	4:26	6:22

Table 9-9 – Journey Times along Key Routes (mm:ss) – PM Peak

Route		Scenario				
		2010	2033			
		Base	DM	DS1	DS2	DS3
1	NB	6:56	7:00	7:08	6:59	7:01
	SB	6:55	6:57	7:27	6:56	6:57
2	EB	15:15	-	19:58	22:30	26:42
	WB	11:17	-	15:22	14:42	15:19
3	NB	4:08	4:13	4:11	4:13	4:26
	SB	3:29	3:29	3:30	3:29	3:30
4	NB	4:03	4:13	4:46	4:27	5:05
	SB	4:09	4:13	4:30	4:25	4:27

Issue

Congestion and journey time delay are likely to increase due to increased use of rail line by freight rail and increased level crossing down time

Issue

Significant journey time delays east/west across town are likely to increase in the future

Issue

The introduction of the SWRR and level crossing closures will have an impact on journey times

9.9 Summary

To accord with growth aspirations set out within the emerging South East Lincolnshire Local Plan, significant additional housing is planned for Spalding. This growth, as captured in the DS3 scenario, is equal to an additional 6,000 dwellings by 2033 compared to the DM scenario. The magnitude of house building will inevitably lead to a significant increase in the number of journeys made in and around the town, with an increase in trips from 13,400 in the DM to 16,800 in DS3 during 2033 AM Peak (a 25% increase), and an increase from 13,500 to 17,200 trips during 2033 PM Peak (a 27% increase). It is clear that even though the SWRR is predicted to have a positive effect on traffic flows within Spalding it does not solve all of the town's congestion problems. This is because a significant number of the new trips generated by the additional housing growth will continue to use the town centre network, particularly for eastbound and westbound journeys.

As the town's infrastructure comes under unprecedented pressure from its house building plans, consideration will need to be given to complementary measures. It is therefore essential that this Transport Strategy for Spalding addresses these future transport challenges.

10 Engagement and Consultation

10.1 Introduction

This section of the Working Paper summarises the outputs from recent engagement exercises undertaken in the Spalding area that provide some insight into stakeholder and public opinions. Included in this section are reviews of the outputs from previous engagement processes on the South Holland Local Plan, Spalding Town Centre Masterplan and the Community Travel Zone Projects undertaken in 2001/2002 and 2006/2008.

An engagement process was also undertaken as part of the development of this Working Paper; the outputs of the process are also outlined in this section.

10.2 Previous Consultations

10.2.1 Spalding Town Centre Masterplan

This study was undertaken in 2006/2007 and highlighted a number of key issues and opportunities affecting Spalding. In terms of 'Transport and Access' the following were identified as the key issues by stakeholders:

- Need to reduce congestion within Spalding especially east-west routes across town;
- Railway line cutting through the town with limited vehicular and pedestrian crossing points;
- Poor pedestrian/cycle links between rail station, bus station and town centre;
- Poor quality pedestrian spaces within the town centre;
- Lack of linkage between cycle routes and pedestrian routes to the town centre, residential areas and schools;
- Car parking provision within the town centre occupies key spaces and is high in relation to the town centre core retail use;

10.2.2 Community Travel Zone Projects

Workshops were held with key local stakeholders in 2001 and 2006 to identify schemes/ideas to improve the operation of the highway network/travel in Spalding. In 2001 thirty schemes were identified (see Appendix D for full list) of which ten were implemented. The majority of the schemes identified were improvements to pedestrian crossing facilities and other cycling and pedestrian enhancements across the town.

In 2006 the exercise was repeated and the stakeholders, in collaboration with Lincolnshire County Council and South Holland District Council, put forward 12 schemes/ideas of which 10 have now been implemented (listed in Appendix D). Once again the schemes identified focused on improving facilities for pedestrians and cyclists.

10.2.3 *Local Plan Combined Preferred Options and Sustainability Appraisal Report consultation (May 2013)*

South Holland District Council consulted on this document in May 2013. Transport issues raised during this consultation included the following:

- parking fees
- highway safety
- pot holes
- the need for upgrading existing key routes
- representations supporting the re-opening of Littleworth Railway Station at Deeping St Nicholas.

There were also a broad range of comments regarding the proposed western relief road including support and some questions about why it is needed.

10.3 Stakeholder Engagement

As part of the evidence gathering for this study it was agreed that public engagement would take place in two phases:

- Wide spread engagement using posters, press, websites, social media, local radio, divisional newsletter, district newsletter. This would simply inform the public that a strategy was being developed and ask all interested parties to share their thoughts and views on transport problems. This initial engagement concludes on 31 December 2013.

- Detailed consultation and engagement on specific proposals and ideas will take place in conjunction with consultation on the Spalding Western Relief Road. It is anticipated this will take place in Spring 2014.

10.3.1 *Stakeholder workshop*

To support the first phase of the public engagement key stakeholders were invited to a workshop on the 14 November 2013, to hear about and discuss the proposed transport strategy for Spalding. The meeting was attended by a range of interested organisations (see Appendix A for full list of organisations invited). The workshop was both a briefing session and a chance for people to share their initial thoughts on transport issues affecting the town.

Background to the study was provided by officers from Lincolnshire and South Holland Councils who indicated how the strategy will complement both the South East Lincolnshire Local Plan and the proposed Spalding Western Relief Road. Attendees were also briefed on the planned study area and the programme/timescales for the work to be completed, including an indication of when there will be further opportunities to comment on, and influence, the strategy.

Following the initial briefing/update the attendees were then split into groups and there was a general discussion around the following key questions:

1. The validity of the objectives for the strategy (listed at the end of this document)

2. The current transport issues/problems faced by the town?

3. Consideration of what key transport issues the town will face in the future and what are the priorities in the short (next 2-3 years), medium (next 10 years) and long (next 20 years) term?

Outlined below is a summary of the responses from the organisations in attendance.

Summary of points made	
1	All groups supported the draft objectives and felt that they were relevant and covered the range of issues faced by the town. There was a consensus amongst several of the groups that they placed greatest importance on "Improving the attractiveness and liveability of Spalding for residents, workers and visitors"…
2	- Congestion was felt to be worst at the following locations: Junction of Winsover/St Thomas St/level crossing Park Road and all other level crossing locations Little London Bridge Roadabout Junctions on the A16 (A151 and B1180). - Road safety concerns: Little London Bridge Double bridge/roundabout at West Elloe Ave and Commercial Rd Albion Street/Double Street High Bridge - Perception that newly introduced traffic signals through the town centre have slowed journey times into and through the town (e.g. Swan Street/Station Approach worked better when off) - Parking capacity in the town centre is (currently) sufficient but could be improved by better signing and information. - Town bus service provides good coverage and level of service. However the bus station is very poor (appearance, location relative to town centre and inaccessible) - On street parking can impede traffic flow in certain locations (e.g. Winsover Road and St Thomas's Road) - Poor level of rail services (throughout the week and no services on Sundays) - Some cycle links need to be imporved: East/west generally Town centre to A16 (Cowbit) Barrier Bank Coronation Channel Cycleway (leisure and links to schools) - Layout of the town. Primary destinations in the town (shops, schools, emergency services etc.) are on the eastern side of the river and/or the rail line. - Potential for increased severance with planned changes/upgrade of the rail line for freight traffic, coupled with the planned residential growth to the west of the town. - Impact of work to upgarde rail line for freight unknown. - Impact of the Rail Freight Interchange, Concerns that it is the wrong side of town and that efforts should be focussed on delivering the SWRR early.

	- Connectivity to the Johnson hospital could be improved. - Water taxis – Perceived as part of the tourist offering rather than a serious transport alternative for residents and commuters.
3	- Concern that transport infrastructure is not in place to support what could be a doubling of the local population if all planned new homes are constructed as envisaged in the draft Local Plan. - Strategy needs to focus on improving west/east links (sustainably) to complement north/south nature of the proposed Western Relief Road. - If these links are not improved then people won't see Spalding as an attractive place to live, work and visit. - Ensure new developments/estates are constructed with sustainble modes of travel in mind e.g. bus gates connecting communities rather than cul-de-sac's. - Improve signing and information (car parks, walking and cycling routes). - Improve co-ordination of bus/rail times - Review traffic signals layouts and designs with the aim of improving traffic flow, including more left-turn filter lanes. - Additional pedestrian/cycle bridge over rail line (adjacent to Winsover Road or Kings Road) - Consider car parks (for the town centre) west of the rail line - Improvements to passenger rail services (will the upgrade – for freight – increase capacity which could be used by passenger services?) - Relocate bus station to Swan Street (opportunity to provide a more attractive, accessible facility which is closer to the town centre. - Allow more traffic into the pedestrianised area (buses and taxis?) - More work required on 'softer' issues around sustainable transport modes (promotion, marketing and education of walking, cycling and public transport options)

10.4 Summary

The majority of the public consulted are in favour of implementing changes to transportation and access which will make Spalding a more attractive place to work, live and visit. The impact of the growth outlined in the Local Plan is a cause for concern if the transport improvements do not keep pace with the change, to meet demand.

The chief concern is the need to improve east–west linkages, which is made difficult by the rail line and the river which effectively sever the town. The planned upgrade of the rail line for (rail) freight movements causes even more concern as there is a lot of uncertainty about the impact (in time) this will have on peoples ability to travel across the town.

There is an acknowledgement that part of that growth in demand will need to be met by enhancing access to sustainable modes (walking, cycling and public transport) thus reducing reliance on the private car. As part of the CTZ's initiated in 2001 and 2008 a number of enhancements were made to walking and cycling routes in the town but there is an acknowledgment that more will need to be done, particularly if all of the developments outlined in the local plan come to fruition.

There is also a feeling that there are a number of improvements which could be introduced in the short term e.g. improving signing and information and that these should be progressed at the earliest opportunity, where feasible to do so.

11 Issues and Opportunities Summary

11.1 Introduction

The previous sections of this Working Paper have reviewed a significant range of information and datasets, identifying a considerable number of issues and opportunities (a summary list of these is provided in Appendix B). This section summarises the overall findings of the evidence gathering and analysis stage and sets the context for the development of the Transport Strategy.

11.2 Policy, Society and Economy

Both national and local government land use and transport policy are focussing on supporting growth and sustainable development, including providing the infrastructure required to support these goals. Similar to many areas in Lincolnshire and further afield, Spalding will be the focus for significant growth over the coming two decades and this will generate additional pressures and demands on the local transport network. With potentially 7,100 new homes to be developed between now and 2031, the Transport Strategy will need to set out the extent of new transport infrastructure and services required to support these proposals.

The proposed development in and surrounding Spalding will be primarily concentrated on the western side of the town with two urban extensions at Holland Park and Vernatts Drain/Pinchbeck. It will be vital for these two large sites to be brought forward using sustainable development principles which limit the impact they have on the transport network and encourage the use of alternatives to the private car, particularly for shorter movements to/from the town centre.

In addition to the proposed land use developments, the proposed Spalding Western Relief Road will have a significant impact on transport in the town. However of more concern is the planned changes to upgrade the rail line (through the town) for rail freight and the impact that frequent and prolonged closures of the level crossings in the town centre will have on journeys times for some routes.

Spalding has grown significantly over the past decade with increases in population specifically focused on those of working age and the under 15's which will put pressure on specific transport modes. With over 3,500 pupils attending the three main secondary schools in the town this equates to 12% of the towns population. Furthermore the fact that a number of these schools are grouped very close together and all on the eastern side of the river and the rail line can and put a certain strain on the local network. The Office for National Statistics predicts a steady increase (31%) in the South Holland population over the next 20 years, with all age categories seeing rises above the national average.

South Holland sits near the middle of the table for the most deprived districts in the country and Spalding has a higher rate of business loss compared to Lincolnshire.

11.3 Travel

Car ownership has increased significantly in Spalding, 26% since 2001, which is higher than the national average. However over the same period the number of households without access to a car has increased by 13% which clearly presents an opportunity to encourage more use of sustainable modes of travel.

The town has experienced a 15% increase in (am peak) traffic between 2006 and 2010. Congestion in the town is focused on the area around Winsover Road, St Thomas's Road and the level crossing and at selected junctions on the A16. The concern amongst residents and stakeholders is the severance created by the rail line and the river and the planned upgrade of the former which could result in more delays for all movements (pedestrians, cyclists and buses in addition to private cars). The introduction of the A16 has diverted some freight traffic away from the town centre although the A151 still forms a route which encourages some HGV movement.

Data on parking shows that occupancy levels are below average and that there is more than sufficient capacity to cover (current) demand.

The public transport network serving the town presents a mixed picture. Coverage by bus is relatively good with both the local town service and some inter urban links providing good coverage and accessibility. Patronage (on the local town service) has shown a marginal increase over the last couple of years and it has been reported that punctuality has improved. However the local bus operator has reported that increasing traffic congestion in the town centre, often caused by the level crossings; do have a direct impact on reliability and patronage. The bus station does not present a good image of the town and its location, remote from the town core, reduces its attractiveness further. Rail patronage has seen a marginal decrease over the last 5 years. This could be explained by the limited range of journeys available to/from Spalding with only peak time services to Peterborough and no services (anywhere) on Sundays.

Provision for cycling and walking is sporadic with recent improvements being introduced through the CTZ initiatives in 2001 and 2008. However it is clear from the feedback via the town centre masterplan and the more recent engagement exercises that the town still lacks joined up cycle routes and adequate crossing facilities (cyclists and pedestrians). Improving sustainable links from the new housing areas identified to the west of the town, will need to be a core element of the strategy. This needs to be supported by stronger promotion of sustainable travel, particularly for those shorter journeys, and while there appears to be a wider stakeholder acceptance that sustainable travel will need to play a large role in the strategy, uptake of such measures as (school) travel plans and cycle schemes has been limited to date. There is a feeling from the engagement with stakeholders that measures could be introduced in the short term to encourage walking provision and legibility/wayfinding within the centre of town and the key surrounding areas.

Of some particular concern is the concentration of accidents, over recent years, along the main east-west and north-south corridors through the town centre and

specifically the increase in the number of accidents involving pedal cycles. The recent introduction of new traffic signals at a number of key junctions in the town centre should enhance the priority for these vulnerable modes (pedestrians and cyclists).

12 Outcomes

12.1 Introduction

This section of this Working Paper focuses on the identification of a set of outcomes which the Transport Strategy will aim to deliver. Following the development of objectives, updated following stakeholder engagement (see Appendix D), and the identification of issues and opportunities within the Strategy area, the final stage to set the context of the Strategy, and to provide a focus for delivery, is the identification of outcomes. The outcomes will enable the impact of the Strategy to be measured in terms of the impact it has had. Rather than purely measuring impact based on outputs from the Strategy (e.g. schemes delivered), it is more important to assess whether the Strategy has had a measurable impact on achieving objectives, resolving issues and delivering opportunities. Outcomes are not targets, with specific numerical changes to be achieved, but should be used to identify the 'direction of travel' in terms of objectives, issues and opportunities, i.e. is the Strategy helping to steer changes in a positive direction?

The objectives, identified in Working Paper 1 set out the overall aims and purpose of the Transport Strategy, within the context of wider land use and transport policy. While all of these objectives will be supported by the Strategy, many will also be supported and delivered by other policies and strategies. For example, the Transport Strategy will support the sustainable development, regeneration and growth of Spalding, but it cannot deliver this objective on its own. Outcomes therefore need to be identified that the Strategy has the ability to deliver in its own right, without relying to a significant extent on other policies and plans; the outcomes are consequently transport focussed.

In identifying outcomes, the following broad process has been used:

- Review objectives
- Review issues and opportunities
- Identify outcomes that support the objectives, resolve the issues and deliver opportunities and can be measured.

The project team held an internal workshop to discuss the objectives, issues and opportunities, to identify a number of appropriate outcomes.

12.2 Objectives

A review of the objectives from Working Paper 1 highlighted that a number of these were broadly similar and therefore it was decided that a couple could be combined and/or removed from the list of objectives circulated in working paper 1. A summary of the changes to the objectives can be found in Appendix C. The refined list of objectives is as follows:

Ref:	Objectives
SP1	To support the sustainable economic growth of South East Lincolnshire through transport improvements. Supporting the South East Lincolnshire Local Plan and the Lincolnshire Local Transport Plan
SP2	To ensure transport infrastructure meets the needs of existing and proposed developments
SP3	To address town centre congestion by creating an efficient transport network
SP4	To encourage the use of alternative travel modes by improving the quality of journey experience
SP5	To improve connectivity and maximise accessibility by improving travel options, especially for those without access to a private car
SP6	To improve the quality of life for residents by improving air quality and reducing noise levels by removing unnecessary traffic
SP7	To reduce the number and severity of road accidents by reducing the potential for conflict
SP8	To improve the attractiveness and liveability of Spalding for residents, workers and visitors by creating a safe, attractive and accessible environment and encouraging healthy travel and lifestyles

12.3 Outcomes

The following draft outcomes have been identified for the Transport Strategy:

- A reduction in the amount of traffic entering the town centre core.
- An increase in the share of cycling and walking trips taken into the town centre
- A reduction in the use of the private car for accessing jobs, schools and the town centre, as a proportion of these journeys
- An increase in public transport services to Lincoln, Sleaford, and Peterborough.
- An increase in the proportion of the population living within 400 metres of a bus stop providing a minimum frequency of one bus service per hour.
- A reduction in both the number and severity of road accident casualties.
- A reduction in the number of accidents involving cyclists.
- A reduction in carbon emissions from transport

As part of the final Transport Strategy, an approach to monitoring these outcomes will be produced and agreed.

We have used our reasonable endeavours to provide information that is correct and accurate and have discussed above the reasonable conclusions that can be reached on the basis of the information available. Having issued the range of conclusions it is for the client to decide how to proceed with this project.

13 Appendix A – Stakeholder Organisations

The following is a list of stakeholder organisations to which invitations to the Stakeholder Workshop were sent:

- AP Sales
- Ashley King Developments
- Broadgate Homes Ltd
- Brown & Co
- Calthrops Solicitors
- CRM Longstaff
- D Brown Builders
- Roythorne & Co
- Sedge Homes
- William H Brown
- Hix & Son
- Maples Solicitors LLP
- Morriss & Mennie
- Munton & Russell
- Mr J Hayes MP
- Cllr N Pepper
- Cllr N Worth
- Cllr R Fairman
- Cllr A Jesson
- Cllr S Wray
- Cllr W Webb
- Cllr C Brewis
- Cllr A Casson
- Cllr R Davies
- Cllr R Grocock
- Cllr A Woolf
- Cllr J Avery
- Cllr S-A Slade
- Cllr E Sneath
- Cllr G Taylor
- Cllr G Aley
- Cllr A Newton
- Cllr G Dark
- Cllr R Perkins
- Cllr H Johnson
- Cllr G Porter
- Cllr D Ashby
- Cllr A Miller
- Cllr R Gambba-Jones
- Cllr B Creese

- Spalding Town Forum
- SHDC Strategic Housing Team Leader
- Cowbit Parish Council
- Deeping St Nicholas Parish Council
- Moulton Parish Council
- Pinchbeck Parish Council
- Surfleet Parish Council
- Weston Parish Council
- Pedals
- South Holland Tenants
- South Lincs Environmental Group
- Spalding & District Civic Society
- Spalding and Peterborough Transport Forum
- Spalding Chamber of Commerce
- Chamber of Commerce Logistics Forum
- Welland & Deepings Internal Drainage Board
- Welland Seniors' Forum
- Sustrans
- Network Rail
- Freight Transport Association
- Roadwatch AA
- Road Haulage Association Ltd
- Lincolnshire Ambulance Headquarters
- Lincolnshire Fire and Rescue
- Lincolnshire Road Safety Partnership
- Spalding and District Access Group
- South Holland Blind Society
- Norfolk Green
- Brylaine Travel
- Cropley Brothers
- W.H.Fowler & Sons
- Kimes Coaches
- Stagecoach
- Kier Developments

14 Appendix B – Issues and Opportunities Summary

14.1 Policy

- The key aims of the Government's transport policy are to support sustainable economic growth and reduce carbon emissions
- South Holland District Council still makes use of Section 106 Agreements
- LTP4 highlights the importance of delivering transport infrastructure to enable Spalding to cope with increased rail freight traffic and the associated level crossing down times

14.2 Socio-Economics

- South Holland's working age population is growing at a much faster rate than the county, region and nationally putting increased pressure on the transport infrastructure to access employment
- There are a high number of pupils and retired residents who are more likely to change their transport habits
- Almost 3,500 pupils attend the three local secondary schools in Spalding, generating significant movements of pupils through the town
- There is a wide range of employment rates within the Spalding urban area
- Rising salaries at a relatively high rate may discourage residents from travelling by more sustainable means
- Spalding has higher rates of business loss compared to county figures

14.3 Growth and Development

- Projected population growth in South Holland will be above the national average up to 2031 with the majority of this growth focused on Spalding
- All three age categories see projected population growth above the national average
- There will be a need to accommodate increased traffic flows in connection with planned growth of Spalding

14.4 Environment

- Road transport in South Holland produces a higher proportion of overall CO_2 emissions than the national average
- No Air Quality Management Areas and noise mapping in South Holland leaves a lack of proper data

14.5 Highway Network

- Traffic entering the town centre shows an increase of 14.1% in the AM peak hour and 15% in the AM peak period between 2006 and 2010
- The level crossings in Spalding restrict the movement of traffic and cause congestion, particularly during peak periods
- Congestion due to increased down time of level crossings is likely to increase with the increase of rail freight using the railway line
- Car ownership in Spalding has increased by 26% since 2001, a higher rate than nationally
- The number of households in Spalding without access to a car or van has increased by 13% since 2001
- The number of licensed vehicles has shown a slight increase of 1.6% in Spalding since 2008 despite a growth in population of 6%
- Significant journey time delays east/west across town are likely to increase in the future

14.6 Freight

- Data indicates a reduction in HGV mode share in the town centre, however, given the rise in traffic levels it is expected that, in real terms, the number of HGVs has increased

14.7 Parking

- The available data indicates that the car parking provision is more than sufficient for the current demand in the town, however, further analysis would be required before any reliable trends could be identified
- On street parking levels within the town centre are quite high

14.8 Rail

- Rail connections to/from the town are limited with no services on Sundays and only Peterborough can be reached at peak times
- The railway station is rundown rather detached from the town centre
- Rail patronage in the Strategy area decreased by 0.56% between 2007/08 and 2011/12. Passenger journey per head of population also increased slightly.
- Planned works to upgrade the local rail line for freight will have significant impact on traffic flow within the town centre

14.9 Buses

- Bus patronage levels in Lincolnshire remained unchanged between 2009/10 and 2011/12, performing better than the East Midlands region as a whole

- Bus journeys per head of population in Lincolnshire decreased between 2009/10 and 2011/12 at a higher rate than nationally but at a lower rate than the East Midlands region

- Overall, data indicates a small increase in bus patronage, reflecting the national trend. Feedback from operators, however, show that some town centre services have experienced a reduction in patronage due to reliability problems due to congestion within the town centre

- Bus punctuality has improved since 2009

- Increased level crossing down times will adversely affect bus punctuality and reliability

14.10 Cycling and Walking

- Several existing on and off road cycle paths in the town lay a foundation on which to build upon

- Three of the four cycle survey sites have seen a decrease in cyclists over the last ten years

- Lower than average walking rates along with lack of safe pedestrian crossing points leave room for improvement

- Good footway provision along main roads and pedestrian only streets in the town centre provide a good basis for improving pedestrian provision

14.11 Sustainable Travel

- Residential and retail areas are well served by public transport but employment areas are not

- The take up of various initiatives on offer to employers, schools and the like are quite low given the opportunities available

14.12 Mode Share

- Travel to work data shows that car travel remains dominant in Spalding, with cycling declining, however, levels of walking and bus travel to work have increased

- Walking and car travel are the most dominant mode of travel to school very low numbers cycling to school

14.13 Safety

- There has been an increase in the number of slight and serious road traffic accidents
- There has been an increase in the number of accidents involving cyclists
- A large number of accidents have occurred on roads with lower speed limits
- Spalding town centre appears to have accident issues specifically Winsover Road and Swan Street
- The recent introduction of traffic signals at junctions within the town centre should improve accident safety, particularly vulnerable road users

14.14 Schools

- The concentration of secondary schools is on the eastern side of the railway and river
- The introduction of Bikeability, whilst still in its infancy, has generally been well received

15 Appendix C – Updated Objectives

This Appendix shows the changes made to the original objectives covered in Section 12 of this working paper.

Objective 1 – Combined with Objective 2: SP1 – *To support the sustainable economic growth of South East Lincolnshire through transport improvements. Supporting the South East Lincolnshire Local Plan and the Lincolnshire Local Transport Plan*

Objective 2 – See Objective 1 above

Objective 3 – No change (now Objective SP2)

Objective 4 – No change (now Objective SP3)

Objective 5 – No change (now Objective SP4)

Objective 6 – No change (now Objective SP5)

Objective 7 – No change (now Objective SP6)

Objective 8 – No change (now Objective SP7)

Objective 9 – Removed as this objective is covered by Objective SP6

Objective 10 – No change (now Objective SP8)

16 Appendix D – Community Travel Zones (CTZ's)

16.1 CTZ - 2001

Ref.	Scheme	Completed (Y/N)
1	Halmergate – Cycleway	**Yes**
2	West Elloe Avenue – Cycleway/Pedestrian footway	**Yes**
3	High Street/Commercial Road – Contra flow cycle lane	**No**
4	Hall Place/Sheep market – Pedestrianisation	**Yes**
5	Hall Place/Sheep market – One way system	**No**
6	Revise layout of Sheepmarket car park – Option 1	**Yes**
7	Revise layout of Sheepmarket car park – Option 2	**No**
8	Swan Street – Pedestrian crossing improvements - hump	**No**
9	Swan Street – Pedestrian crossing improvements - plateau	**No**
10	Winsover Road/Bourne Road – Cycle lanes	**No**
11	High Bridge – Footway widening	**Yes**
12	Bridge Street – Cycle provision	**No**
13	The Crescent – Contra flow cycle lane	**No**
14	High Bridge/Church Street/Bridge Street – Advance stop lines	**No**
15	West Marsh Road – Width restriction	**Yes**
16	West Marsh Road – Footway extension	**Yes**
17	Enterprise Way – Shared cycleway	**Yes**
18	Benner Road – Shared cycle/footway	**Yes**
19	Wardentree Lane/Market Way – Crossing improvements	**No**
20	Wardentree Lane/Market Way – Toucan Crossing	**No**
21	Park Road – Junction improvement	**No**
22	Park Road – Junction improvement with central island	**No**
23	West Elloe Avenue/Pinchbeck Road – Pedestrian provision	**Yes**
24	Kings Road/Pinchbeck Road – Advance stop line and island	**No**
25	Kings Road/Pinchbeck Road – Pedestrian provision	**Yes**
26	Kings Road/Pinchbeck Road – Pelican crossing	**No**

Ref.	Scheme	Completed (Y/N)
27	Horse Shoe Road – Cycle bypass at Point Closure	**Yes**
28	Woolram Wygate – Shared cycle/footway	**No**
29	A16 – HGV Signing	**Yes**
30	Spalding Leisure Wheel	**Yes**

16.2 CTZ - 2006/2008

Ref.	Scheme	Completed (Y/N)
1	Magellan Way – Central Refuge	**Yes**
2	Enterprise Way – Cycleway/footway phase 1	**Yes**
3	Enterprise Way – Cycleway/footway phase 2	**Yes**
4	West Marsh road – Cycleway/footway	**Yes**
5	High Bridge – Signals and footway widening	**Yes**
6	Pinchbeck Road/New Road – Signal changes	**Yes**
7	West March Road – Width restriction	**Yes**
8	Pennygate – SSZ	**Yes**
9	New Road T/C	**Yes**
10	Westlode Street – pedestrian refuges	**Yes**
11	Sheepmarket – Pedestrian crossing	**No**
12	Stonegate – Pedestrian crossing	**No**