1.0 Key Transport Related Issues Facing the North Yorkshire Economy

Transport is just one of several factors which are likely to affect the County’s economic success. Full details of these factors and specific measures to manage them are included in the North Yorkshire Framework for Economic Development Action and also the York and North Yorkshire sub regional economic strategy (see www.ynypu.org.uk)

Ensuring that the County continues to be an attractive location for businesses to do business is a main element of this. Transport is likely to be one of the major factors impacting on the ability of the County to compete regionally, nationally and internationally.

Through maintaining and improving connectivity and reducing lost productive time a significant contribution to improving the economic performance of the County can be made.

A major challenge exists to continue to support the higher performing economies to ensure that they remain successful and cater for the high travel to work volumes across the County. It is also important to look at ways in which connectivity can be improved particularly to areas with lower performing economies.

Helping to improve economic activity through transport against a backdrop of reduced funding for transport will be a significant challenge during the delivery of LTP3. The County Council, through its policy of managing, maintaining and improving the transport network will seek to help to support economic growth wherever possible and where funding allows.

It is the intention of the County Council to closely align emerging economic policies alongside LTP3. The recently produced Local Economic Assessment forms the basis of economic development policy within York and North Yorkshire.

The policies and strategies outlined within this section of the LTP3 are designed to complement the aims of the economic assessment.

There are several areas across the County which suffer from economic deprivation and relatively high levels of unemployment in comparison with elsewhere within North Yorkshire, the region and other areas of the country. In some locations urban congestion issues can limit the ability of the local economy to develop and prosper. High levels of congestion and poor journey time reliability can impact the local economy in the following ways

- Can influence whether businesses remain in an area. Poor journey time reliability for employees, customers, deliveries and collections, may reduce the profitability and viability of businesses.
- High levels of congestion may be a major factor in new businesses not locating in an area.
• Areas with high congestion may deter potential visitors / customers from visiting shops and visitor locations.

Urban congestion is sometimes seen as a byproduct of economic success, for example the more jobs in a specific location the more people may want to travel to it for work. However it is important that congestion is managed in an appropriate manner to maximise reliability and predictability in journey times for all transport users.

The key focus of how the County Council will aim to manage and reduce the impact of congestion throughout LTP3 by endeavouring to ensure that journey time reliability is maintained across the network and that any changes to journey times are reductions and not increases.

Whilst urban congestion is often only perceived to be an issue within larger conurbations such as Leeds and York, levels of congestion within several areas of the County, whilst often not to the extent of other areas, can still be an issue to residents, commuters, visitors and businesses.

Traffic congestion does not solely impact on the economy. It can have a significant impact on the environment through increased emissions related to standing motorised traffic. In three locations in the County (Bond End Knaresborough, Skellgate Ripon and Butcher Corner Malton) Air Quality Management Areas have been declared due to road traffic emissions. The County Council is working in partnership with the relevant district and borough councils to ensure that appropriate measures are introduced to improve air quality at these sites.

The focus of the County Council will be to work towards reducing congestion issues within the County and wherever possible ensure that they do not increase.
2.0 Key economic drivers within North Yorkshire

Several local factors exist that influence transport and help to shape and develop the economy of North Yorkshire

- The size and geography of the county means that it has a very diverse economy. Different areas have different economic strengths and drivers. Agriculture, Tourism, Manufacturing, Creative industries and the public sector are all particularly strong in parts of the county. The County’s business base is heavily reliant upon self employment and “small” businesses (employing less than 4 people), which are in diverse sectors and perhaps consequently react quickly to changing circumstances. Forecasting trends in the present economic climate is difficult, but future changes in the composition of the North Yorkshire economy will have implications for transport.

- North Yorkshire's market towns act as the local economic hubs for their immediate area, a valuable role in terms of the geographical size of the County and the dispersed population within it; the County's largest settlements, Harrogate & Knaresborough and Scarborough have populations of 90,000 and 52,000 respectively. There are many smaller settlements with populations under 25,000. The links and connections between these towns are important in supporting and developing businesses, tourism and the wider economy, enabling the local economic hubs to reinforce their impact on a wider scale.

- The influence of major employment centres outside the County such as York, West Yorkshire and Tees Valley. A smaller influence is exerted by other areas including, Lancashire, Cumbria Durham, South Yorkshire and East Riding

Evidence Base

In terms of demography, the overall population of the County has increased by 5.1% between 2001 and 2008, this is at a higher rate than for England and the region. In contrast, growth in Scarborough was nearly half that for England and less than half of that for the region. Perhaps more importantly for transport due to the reduced mobility and increased demand for transport to services such as healthcare, the elderly population for North Yorkshire (above working age) is seeing an increase more than twice the regional and national rate.

In terms of the distribution of deprivation within the County, whilst at a countywide level the picture is a positive one, more detailed local analysis highlights a clear emphasis on deprived communities along the coastal strip (although there are also smaller pockets elsewhere). Map 1.0 shows the levels of deprivation across the County by ward.

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1 York & North Yorkshire Economic Assessment Engagement Paper 7 January 2010
2 Office for National Statistics, 2001 and Mid-Year Population Estimates
Map 1.0 Areas of deprivation across the County.

Map 2.0 below shows the unemployment levels on ward basis.

Map 2.0 Unemployment by ward in North Yorkshire

It is clear that there is a correlation between deprivation and unemployment. Transport through enabling economic growth and as a result developing further employment opportunities will be able to help reduce the amount of
deprivation across the County. Of the County’s districts and borough, only Scarborough has an unemployment rate above regional and national levels. These factors combine to place emphasis on connecting areas of deprivation with employment opportunities.
3.0 Economic Areas of North Yorkshire

The York and North Yorkshire Economic Assessment identified six distinct economic areas across the York and North Yorkshire sub region. These are as follows:

1. The York Sub Area Economy (including the City of York)
2. The Vales and Tees Sub Area Economy
3. Connections to the West Yorkshire Economy (Leeds City Region)
4. Remote Rural West
5. The Coastal Area
6. Remote Rural East

LTP3 aims to link closely to and supplement the York and North Yorkshire Economic Assessment.

Map 3.0 illustrates each of the economic areas across the Sub Region. It should be noted that for the purposes of the Economic Assessment, the sub region encompasses North Yorkshire, City of York and parts of East Riding.

Each area has its own economic and spatial characteristics. An overview of each of these areas is given below.
York Sub Area
The sub-area includes the whole of the City of York Council area; Easingwold and its surrounding villages in Hambleton District; the A64 corridor including Malton, Norton, Rillington and Sherburn in Ryedale District; Selby town and the villages to the north in Selby District; and the Wolds, Weighton and Pocklington area in the East Riding. The City of York and Selby area also sit within the Leeds City Region.

The economies of North Yorkshire and York are closely linked. York remains the major economic centre of the sub region and its influence is strongly felt throughout the districts of Selby, Ryedale and Hambleton. Much of the economic activity of this sub area is focussed on the City of York, with 72% of employment of the sub area being based within York. Over 80% of all jobs within the sub area are taken by people living within the spatial area, which demonstrates that it is a relatively self contained labour market.

The Regional Spatial Strategy (RSS) allocated in the region of 8000 new dwellings in the Selby area and close to 4000 dwellings in the Ryedale area. The bulk of this new housing is planned to be focussed in or close to the Selby and Malton/Norton areas. In addition over 16000 dwellings were proposed for the City of York area. This may have a negative impact on traffic congestion, which if not managed could have a negative impact on the ability of the City to attract new jobs, investment and tourism, which is likely to also impact on southern Hambleton, Selby and Ryedale. Whilst the RSS has been abolished by the coalition Government, it is anticipated that levels of housing growth, up until 2026, will remain similar to RSS levels.

Over the past 10 to 20 years the economy of the York Sub Area has changed and developed from an economy based around manufacturing to one based around a the following sectors;

- Public Sector
- Financial business and insurance service sector.
- Visitor and retail sector
- Science and Knowledge based sector

Internal transport links are relatively good, north to south links exist between Selby-York – Easingwold, however patronage on the York – Selby rail corridor remains lower than expected. Issues do exist on the A64 corridor, reducing the reliability of journey times. This area has relatively good transport links to the rest of the Country with the A1, A64 and M62 corridors all passing close to or within the sub area. Additionally good rail links exist from York, particularly on the east coast route.

Coastal Area
The area covers the coastal part of the sub-region around Scarborough and Filey. The relative peripheral nature and remoteness of this area is a key characteristic. The coastal towns of Scarborough and Filey are however significant local centres, popular visitor destinations and a location for many businesses and local services.
The Gross Value Added output for the area is low and household income is the lowest in the sub-region. In many wards within Scarborough town unemployment rates are very high and there are substantial levels of deprivation. The sub area has an increasingly ageing population. Over 22% of the overall population of this area is aged over 65.

Scarborough town is the major employment area with 88 per cent of travel to work trips remaining within the area. There is a significant two-way travel to work movement between Scarborough Borough and Ryedale District with a net outflow of approximately 1,000 daily trips. There are also smaller movements between the East Riding and Tees Valley. Public transport access to Scarborough is relatively good, but the rest of the area is sparsely populated and less accessible by public transport.

Renaissance work is continuing within the area to assist in supporting and developing the local economy. Due to its location on the periphery of the County, this area suffers due to relatively poor physical communication links with the rest of the County and national transport networks.

Tourism is an important sector of the economy and 18 per cent of jobs in Scarborough are tourism related compared to a national average of 8 per cent. This can lead to congestion and delays outside of the more typical peak of 0700-0900, especially during the summer months.

There is a significant projected level of housing growth concentrated in Scarborough town. The additional housing will require major new transport infrastructure to facilitate the development and cater for local increases in travel demand. There is already localised congestion within Scarborough town which is likely to be exacerbated.

**The Vales and Tees Sub Area**

The area is defined broadly as the part of the sub-region along the A1 and A19 north of Harrogate through to the boundary with the Tees Valley. It covers much of Hambleton District, including the towns of Northallerton, Thirsk, Bedale and Stokesley; the towns of Boroughbridge and Ripon in Harrogate Borough; and the towns of Richmond and Catterick Garrison in Richmondshire District.

The area is well served by North – South strategic transport links, namely the A1 and A19, and the East Coast Main Line. However, there is only limited access to the East Coast Main Line from most parts of the sub-area with there only being stations at Northallerton and Thirsk.

Gross value added output and household income in the area is moderate when compared with the rest of North Yorkshire and York. Unemployment and levels of deprivation are generally relatively low, but there are pockets of moderately high unemployment and deprivation in Northallerton, Catterick Garrison and Richmond.
The hospitality and visitor economy has grown significantly over the past 20 years and now accounts for 29% of employment in the sub area. Industries such as the food and drink manufacturing sector continue to develop, particularly in and around the Leeming Bar and Stokesley areas. There remains a high level of employment within the public sector, particularly in the Northallerton and Catterick Garrison.

Within the area there are approximately 1,800 daily travel to work trips from Richmondshire to Hambleton. There are also significant two-way movements between Hambleton and York, with an outflow of approximately 850 daily trips, and Hambleton to Harrogate Borough, with approximately 1,500 daily trips in each direction. The area has a strong relationship with the Tees Valley City Region. When combining in and out flows there are over 12,000 daily travel to work trips between Hambleton / Richmondshire and the Tees Valley, with a net outflow of approximately 2,500 daily trips.

Housing growth is likely to be concentrated in the towns of Northallerton, Thirsk and the Catterick Garrison area. This growth will potentially have a significant impact upon the local transport networks.

**Connections to the West Yorkshire Economy (Leeds City Region)**

The spatial area is defined as the part of North Yorkshire that has direct connections to the West Yorkshire economy. In particular this includes the connections between Harrogate and Leeds; the Skipton area with Bradford; and the western and southern parts of Selby District with Wakefield and Leeds. There is also a strong economic link between York and Leeds which is described further in the section on the York sub-area.

Gross value added and household income is high particularly in Harrogate Borough. There are low levels of unemployment and deprivation. Public transport links to the major employment areas in Harrogate and West Yorkshire are generally good. In particular the Harrogate to Leeds bus corridor has seen significant growth and the Leeds – Harrogate – York rail corridor is seen as key to sustained economic growth. The A59 corridor provides an important link between the key employment centres of York, Harrogate and Skipton.

Approximately 66 per cent of all jobs are taken up by people living within the area. There is a substantial outflow particularly to West Yorkshire with just over 28 per cent travelling to the districts of Leeds and Bradford. Some of these movements are very local between South Craven and Keighley and Tadcaster and Wetherby, but there is also an important flow to the city centres of Bradford and Leeds. Approximately 20 per cent of jobs are taken by West Yorkshire inflow to the area. There is a balanced two way flow with the York sub area.

The business and service sector has risen by 144% since 1991 to nearly a quarter of all employment within the sub area compared with 20.5% for the Leeds City Region as a whole. Within the urban areas of Harrogate and Knaresborough there is a high proportion of hospitality and retail employment.
The conference and exhibition market is a significant part of the visitor economy and good direct rail services to London and improvements to the York-Harrogate-Leeds rail line are seen as critical to future growth. In contrast to other sub areas manufacturing is strongly represented with 16.1% of all employment.

The scale of housing land release in Harrogate and Knaresborough will necessitate the development of green field urban extensions to the existing built up areas. These will be in the broad locations of west Harrogate and east Knaresborough and within smaller scale land releases in sustainable locations elsewhere around the built up areas of the two towns. There are localised congestion issues in Harrogate / Knaresborough and capacity constraints on both the strategic highway network and on the rail route between Harrogate and Leeds. Work is ongoing to test the impacts of this projected housing growth on the transport network.

Remote Rural West
The spatial area can be defined as the area covering approximately the Yorkshire Dales National Park and Nidderdale Area of Outstanding Natural Beauty. It includes the majority of Craven District, including Grassington, Settle, Bentham and Ingleton; the north western rural element of Harrogate Borough, including Pateley Bridge and Masham; and much of Richmondshire District, including Leyburn, Middleham, Hawes and Reeth.

Employment in this sub area grew by 75% between 1991-2008, this growth has slowed somewhat since 2008. Within the sub area there are high levels of self employment, particularly in the agricultural sector, in which nearly a third of all self employed people work. Almost 28% of all jobs in the area are in businesses with less than 4 employees. When combining this figure with self employed business this clearly demonstrates the reliance of the area on small businesses. Overall around 50% of jobs are in businesses employing less that 5 people.

Hospitality and retail remains an important sector accounting for 28% of the local economy. There is a net 17%, migration of workers on daily basis from the sub area to adjacent areas such as Lancashire and Cumbria.

Remote Rural East
The area broadly covers the North York Moors National Park; the northern part of Ryedale District, including the towns of Pickering, Kirkbymoorside, and Helmsley; and the Whitby area of Scarborough Borough.

There is a heavy reliance on tourism in the area with the hospitality and retail accounting for over 35% of all employment in the sub area. As with the remote rural west of the Country there is a high proportion (37%) of jobs in businesses employing less than 5 people. There is a relatively high proportion of people out of work, with 9% of the available workforce currently on work related benefits. Additionally there are areas of deprivation particularly around Whitby and to a lesser extent Pickering.
Much of the area is categorised as super sparse with a scattered population dependent on key local service centres for both services and employment. Approximately 84 per cent of all jobs within the area are taken up by people living within it. Unlike the Remote Rural West this area does not rely as much on neighbouring areas for jobs. However, there is a net outflow of daily travel to work trips particularly to the Malton area and to the Tees Valley.

Planned housing growth will be predominantly in the towns, but this will be moderate and should not have a major impact on the strategic transport network.

The area is dominated by the North York Moors National Park and it is important to minimise the impact of transport on this designated landscape.

**Service Centres**

Work as part of the now abandoned Regional Spatial Strategy identified that much of the economy of the County is based on small to medium sized (population 2000-25,000) towns which provide the main services for the town and rural hinterlands. These settlements formed the basis of the 28 Service Centre Transportation Strategies that were developed during LTP2. Much of the focus of sustaining and developing the economy of North Yorkshire will remain on supporting and developing these towns. This policy forms a key element of the county’s economic development strategy and the Local Development Frameworks.

These towns act as the local economic hubs for their immediate area, a valuable role in terms of the geographical size of the County and the dispersed population within it. The links between these towns are important in supporting and developing businesses, tourism and the wider economy, enabling the local economic hubs to reinforce their impact on a wider scale. Developing this will help to ensure that the county punches its weight in the region and beyond: its population of nearly 600,000 is comparable with the core of Leeds (761,000) and the Tees Valley City Region (720,000).
4.0 Business Sectors in North Yorkshire

The following section provides an overview of some of the main business sectors within North Yorkshire as identified by the York and North Yorkshire Economic Assessment. Each sector plays an important part in the overall economy and have their own specific impact upon transport networks both within the County and wider regional transport networks.

The following section gives an overview of some of the major industries in North Yorkshire. A more detailed overview of these sectors can be found in the York and North Yorkshire Economic Assessment produced by the York and North Yorkshire Partnership unit. [www.nypu.org.uk](http://www.nypu.org.uk)

**Agriculture**

Agriculture has traditionally been one of the main industries within the county. Accounting for a significant proportion of land use across the County, it continues to be a vital part of the economy both as an activity in itself and also as part of the food supply chain supporting other downstream businesses such as food processing. With the possible loss of agricultural capacity elsewhere within the world there is the possibility for further development of local agricultural production.

Additionally it is likely that there will be increasing competition for use of rural land within the County. As a consequence of climate change, there is likely to be increasing demand for biomass production, flood prevention measures and carbon storage (in trees and peat), biodiversity and recreation.

The main movements on the transport network associated with this sector are as follows;

- Farm vehicle travelling between agricultural sites
- Collections and Deliveries from agricultural sites and processing facilities

**Food and Drink Processing**

The food and drink processing and manufacturing industry, closely linked to the agricultural sector, is increasingly becoming a more prominent part of the County’s economy. Areas such as Leeming Bar (Dalepak foods) and Scarborough (McCain Foods) are home to significant food processing and manufacturing businesses.

The main movements on the transport network associated with this sector are as follows;

- Collections and Deliveries from / to agricultural sites and processing facilities
- Journeys to work and associated business trips.

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3 “Biomass is biological material derived from living, or recently living organisms. In the context of biomass for energy this is often used to mean plant based material, but biomass can equally apply to both animal and vegetable derived material” - [http://www.biomassenergycentre.org.uk/portal/page?_pageid=74,15273&_dad=portal&_schema=PORTAL](http://www.biomassenergycentre.org.uk/portal/page?_pageid=74,15273&_dad=portal&_schema=PORTAL)
Manufacturing
Manufacturing, other than the food sector, also remains an important part of the economy. Whilst the number of traditional heavy engineering and manufacturing facilities within the County is lower than that of the Tees Valley and Leeds City Regions, the County is home to a range of major structural and high tech engineering companies such as Industrial Textiles & Plastics at Easingwold, Claro Engineering at Knaresborough, Severfield-Reeve Structures Ltd at Thirsk, and Atlas Ward at Sherburn.

The main movements on the transport network associated with this sector are as follows;
- Collections and Deliveries from / to sites and processing facilities
- Journeys to work and associated business trips

Energy Production
Energy production, both renewable and non renewable is a major industry in North Yorkshire. Within the Selby District, both Drax and Eggborough power stations are major employers and suppliers of energy to the national grid. An opportunity exists for the expansion of renewable energy generation, through implementation of measures such as carbon capture technology, wind turbines and small scale hydro power generation, for example the Settle Hydro scheme. The development of these lower carbon technologies is likely to assist in the expansion of a green industry sector, which could be an important part of the County’s economy in the future.

The main movements on the transport network associated with this sector are as follows;
- Deliveries of fuels for energy production (coal, biomass etc)
- Journeys to work and associated business trips

Tourism and Visitors
The tourist and visitor economy has developed successfully within North Yorkshire. The County is able to offer a wide range of visitor attractions, ranging from the unique landscapes of the 2 National Parks and 2 Areas of Outstanding Natural Beauty to the busy seaside holiday destinations along the East Coast from Filey to Whitby. Significant investment and developments have broadened the range of activities on offer within the County. Specific focus has been placed on making North Yorkshire a year-round destination through development of outdoor sports and adventure activities and stronger co-ordination and development of the festivals activity in the County.

Visitor numbers are not solely limited to the more traditional holiday and day tripper market. The Conference and exhibition market is a significant part of the visitor economy. The Harrogate International Centre and conference facilities in Scarborough play host to numerous conferences and exhibitions throughout the year, contributing over £150million to the local economy per annum.
As the visitor market is becoming increasingly competitive it is important that North Yorkshire seeks to maintain its diversity and product mix in order to ensure that it remains a popular visitor destination.

Closely linked to the visitor economy is the creative and arts sector. Smaller scale businesses specialising in areas such as crafts, art and design, provide a significant number of jobs and in many cases provide attractions and destinations for visitors.

The main movements on the transport network associated with this sector are as follows;
- Visitor and tourist traffic accessing destinations
- Retail Trips

**Transport and communications**

Whilst not being a significant employer across the County, the transport and communications sector is a vital part of all sectors of the economy to function. This sector acts as an enabler for other economic sectors in the County to be able to function.

**Financial and Business Service Economy**

This sector has grown significantly over the past 10 years and now accounts for just over 16% of all jobs in the County. It is particularly prevalent within the York Sub area and also in the areas connected to the Leeds City Region. At this stage it is unclear what impact that the economic downturn has had on this sector.

The main impact on the transport network of this industry is through the following;
- Journeys to work
- Trips associated with business travelling.
- Retail trips

**Public Sector**

Public Administration, Education & Health, coupled with defence, accounts for approximately 25% of the number of employees across the County. Areas such as Catterick (40.7% of jobs) and Northallerton (52.1% of jobs)⁴ have high numbers employed in this sector. There is a strong reliance on this sector across the County.

The main impact on the transport network of this industry is through the following;
- Journeys to work
- Trips associated with business travelling

**Local Service Economy**

The wholesale and retail sector accounts for over 17% of employment across the County. Whilst these jobs are often relatively lower paid, this sector

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⁴ NYPU Economic Assessment 2010
supports many of the employment opportunities within North Yorkshire. This is particularly prevalent within many of the towns across the County which act as local destinations and suppliers of goods for the both the town itself but also its rural hinterland.

These local centres do not act solely as a retail centre, but are also key locations in the delivery of a wide range of services, including many of the public sector and financial services.

The main impact on the transport network of this industry is through the following:

- Journeys to work
- Trips associated with business travelling.
- Retail trips
- Leisure trips
5.0 Stakeholder Views on Transport & the Economy

Overall Transport Objectives
As part of the ranking of LTP3 priorities the following objectives were ranked by respondents

- Supporting the Local Economy
- Protecting the environment
- Ensuring better safety and health for all
- Improving accessibility
- Improving Quality of life
- Other (respondents choice)

Respondents ranked the goals in priority order from 1 to 6 with 1 being the most important. These were then scored in order of importance (ranked 1 scores 6 and ranked 6 scores 1). These scores were then combined to identify an overall score for each goal. A summary of these combined scores is shown in figure 1.0 below.

Fig 1.0 Transport Related Objectives identified during LTP3 Phase one consultation.

The importance of supporting the local Economy is illustrated by its position as the top priority within the phase one consultation. Although only accounting for 21% of the overall score, supporting the local economy is clearly the most popular first choice, with 31% of respondents selecting this, in comparison to 21% selecting improving accessibility as first choice. This is clearly shown in figure 2.0.
Fig 2.0 Ranking of overall transport objectives identified during LTP3 Phase one consultation.

**Importance of Economy – change in priority from LTP2**
The ranking of Economy as the top priority is in contrast to the ranking of economy within LTP2 where it was only ranked as the fourth highest priority behind Accessibility, Road Safety and Congestion Environment. Whereas previously in LTP2 reducing congestion was primarily linked to improving air quality issues, it now has a wider remit, addressing both economic and environmental issues. This closely reflects links between the transport objectives.

**Importance of economy across the county and by respondent type**
Analysis of responses illustrates that the rating of economy across the County remains broadly consistent. Responses received from either residents and parish councils within each area were considered when analysing by geographic area. Support ranged from 17% (Selby District) to 26% (Harrogate Rural Area). Whilst not always being the most important priority within each specific geographical area, it remained consistently high.

Further analysis of the results of the consultation has shown that the priority score for supporting the economy does not vary significantly across age range, gender or disability.
How can LTP assist in supporting the economy?
In order to establish how stakeholders felt the County Council should be using transport funding towards supporting the local economy respondents were given a range of categories to prioritise.

The options were as follows

- Improve main links form North Yorkshire to UK Cities and ports and airports (National / International Connectivity)
- Improve main routes within North Yorkshire (Local Connectivity)
- Improve Transport Systems in our towns to reduce congestion.
- Improve links between North Yorkshire and neighbouring areas (Regional Connectivity)
- Improving links for Freight
- Other suggestions (respondents choice)

As with the overall objectives the responses were ranked and scored from 1-6 in order to assess what the transport priorities within supporting the local economy should be. The results are shown in figure 1.2.

![Local Economy Objectives](image)

Figure 3.0 supporting the local economy. Priorities identified during LTP3 phase one consultation.
The ranking of each option is shown in figure 4.0

![Local Economy Objectives](image-url)

**Fig 4.0 Ranking of supporting the local economy objectives from phase one consultation.**

It is clear from these responses that improving the main routes within North Yorkshire is the top priority in terms of how best to support the local economy. This option was chosen by just under 50% of respondents as their top priority, clearly ahead of the next priority, improving transport systems in North Yorkshire towns to reduce congestion, which was selected by 20% of respondents as first choice.

Whilst the business centres that main routes serve within North Yorkshire may not be key in a regional or national perspective, they remain of vital importance to the County’s economy and assist in supporting the local economy, particularly improving links to local service centres.

Improving links to neighbouring areas and to other areas of the country and international locations were seen as being of lower importance however combined these options accounted for 36% of the overall score, which again suggests that cross boundary movements and longer distance connectivity is an important element to consider throughout the development and implementation of LTP3.

Improving links for freight was seen as being the fifth most important option accounting for 15% of the overall score. Whilst not seen as one of the highest priorities, it can be said that maintaining and developing good sustainable freight links remains an important part of developing and supporting the economy. Improving main routes within North Yorkshire and improving links to neighbouring areas and international locations would automatically provide improved links for freight.
Alternative options for supporting the local economy

Whilst only 5 main options were given, respondents were given the opportunity to select another priority area for funding. This was an open question. Not all respondents selected an alternative option. Of those who did respond with an alternative option the majority of these were related to the following:

- Promotion of public transport and improvements to connections between modes
- More affordable public transport
- Extended public transport services
- Improvements to and promotion of sustainable modes of transport,
- Improvements to cycling and pedestrian facilities.
- Increasing capacity on strategic routes such as the A64
- Development of alternative routes and bypasses
- Ensuring the current network is adequately maintained.
- Encouraging the use of rail transport.

Supporting the Economy and Protecting the Environment.

Reducing congestion is closely linked to protecting the environment. A reduction in congestion can help to reduce carbon emissions, and improve the quality of the natural and built environment. As such it is sensible to use the results from the protecting the environment section of the LTP3 consultation to help shape the direction of congestion reduction and management within North Yorkshire.

The results (shown in more detail in the LTP3 phase on consultation report) illustrated that stakeholders felt that the major methods of reducing the impact of transport on the natural and built environment are through the promotion of more sustainable modes of transport. Approximately 50% of respondents identified reducing motorised vehicle traffic and encouraging sustainable modes as being the top priority. Improving accessibility to local services was also identified as being an important priority alongside improved planning and reducing the need to travel. This suggests that stakeholders feel that more forward planning of developments should take place to ensure that services can be accessed easier and that opportunities for delivering existing services locally should be explored.
6.0 Connectivity

Background
As highlighted in section 3.0 and 4.0 there are a number of areas where the local economy is under-performing relative to both the North Yorkshire economy as a whole and to the regional and national economies. In some, but not all, cases the remoteness and poor transport links to the strategic national transport network and the economic core of the region is a major contributory factor.

The ease of movement from an area to other population and employment centres and to the main strategic transport infrastructure is often referred to as its ‘connectivity’. For example Scarborough is approximately 50 miles from the A1 and East Coast Main Line railway which are the main national transport corridors in North Yorkshire. Scarborough is also remote from other main centres such as York and Leeds. The quality of transport links serving Scarborough is relatively poor. The main road route, the A64, is a mixture of dual and single carriageway and at times in heavily congested. The York - Scarborough railway, although operating an hourly service, is relatively slow. Scarborough can therefore be described as having poor connectivity.

Conversely Northallerton is on the East Coast Main Line railway and close to both the A1 and A19 trunk roads. Northallerton is also well served by transport links to York and Leeds and Teeside. Northallerton can therefore be described as having good connectivity.

Poor connectivity can impact on local economies in two main ways. Firstly business decisions to locate in an area (or to stay in that area) can be influenced by the ease and cost of transport of goods or staff to that area. Poor connectivity can therefore lead to fewer businesses choosing to locate in the area which also limits local job opportunities. Secondly, poor connectivity makes it more difficult for residents of that area to travel to access employment opportunities in other areas.

Whilst this section primarily considers longer distance routes it is recognised that localised urban traffic congestion can also impact on overall connectivity. Measures to identify and address urban congestion are discussed in section 11.

Additionally, especially in rural areas, the economic performance of a town can be dependant on the quality of transport links and services to its supporting rural hinterland. Consideration of these localised connectivity issues is included in accessibility and the scheme identification appendices.

As previously stated the first phase of stakeholder and public engagement into the priorities for LTP3 identified that ‘supporting the local economy’ was seen to be a high priority. The supplementary question asking how respondents would ‘most like to see transport funding spent’ on supporting the local economy identified that ‘improving main routes within North Yorkshire’ was seen as the highest priority with strong support for both improving links to neighbouring counties and improving longer distance links.
Local Connectivity
Local connectivity can be influenced by many things. Distance from national transport networks and other major economic centres is something the County Council cannot change. However journey time reliability which is influenced by, delays on the highway network, whether caused by the characteristics of the network (e.g. a junction) or by temporary road works or accidents is something the County Council can influence.

Delays on the highway network can be influenced either by improving the network (e.g. improving the operation of junctions) or by improving the management of the network. Many delays on the network are caused by temporary events such as road works or road accidents. By improving the management of these events (e.g. avoiding road works at peak times) the Council can significantly reduce delays on the network. Details of measure to improve the management of the network are included in section 12.3 on the Network Management Duty.

Whilst the County Council have no direct control of public transport services (e.g. bus and rail) we can have an influence on the providers of these services. Therefore when considering local connectivity we will consider all modes of transport and where appropriate try to influence other service providers.

It has been identified that the economies of Scarborough, Malton / Norton, Whitby and Skipton have under performing local economies. A contributory factor to this may be due to the fact that they are more isolated and further away from some of the larger economic centres.

Long Distance Connectivity (Road)
Longer distance road travel to / from North Yorkshire is primarily catered for by the trunk road network. In North Yorkshire this consists of the M62, the A1 / A1(M), the A19/A168, the A64 and the A66. These roads are the responsibility of and managed by the Highways Agency (HA) rather than the County Council. The HA and County Council do however work closely together to ensure that trunk roads and county roads are integrated. We will continue to work with the HA to improve connections to the trunk road network and the trunk roads themselves in order to improve long distance road connections especially to London, the South East and the channel ports and tunnel.

As well as serving long distance trips these roads have an important role in catering for more local trips both within the County and to neighbouring areas. This can sometimes cause a conflict of interests where the need to improve local access to the trunk road, for example by providing a new roundabout, can interfere with the free flow of long distance travel. The County Council and HA will continue to work together when these issues are encountered to determine the best course of action on an individual basis.

We also recognise that linkages to the trunk road network from the towns and villages form an important element of long distance connectivity.
Consideration of these linkages will form part of the local connectivity investigations.

Brief details of each of the main trunk road links are given below:

**M62**
The M62 runs from Hull to Manchester and crosses the County in the south of Selby district. The M62 provides links from North Yorkshire to the Humber ports and South Leeds and onwards to Manchester and the North West.

**A1/A1(M)**
The A1/A1(M) is the main north-south link through the county providing the main route to the midlands and south of England (either directly or via the M1) and links to Tyneside and Scotland. Over the last 15-20 years the HA have upgraded sections of the A1 to motorway standard. The penultimate phase of this improvement (Dishforth to Leeming Bar) has started and is due for completion in 2012/13. This has and will significantly improve journey times and journey time reliability on the A1 with good local access being retained through the provision of parallel service roads wherever feasible. The proposed final section from Leeming Bar to Barton was cancelled as part of the Comprehensive Spending Review in October 2010. This cancellation will have an adverse impact both on longer distance and local connectivity, particularly links to the North East and Scotland.

**A19/A168**
This trunk road route connects the A1(M) at Dishforth to Teeside and beyond to Wearside. It is a key route linking North Yorkshire to the employment and business opportunities in Teeside and also provides access to Teesport.

**A64**
This route provides access from West Yorkshire, the A1(M) and York to Ryedale and the east coast. This is discussed in more detail in section 8.0 above.

**A66**
The A66 is a trans Pennine route connecting Teeside and the A1 at Scotch Corner to Cumbria and the M6. It is an important route for holiday traffic to the Lake District and onwards travel to western Scotland and the ferry terminal to Northern Ireland at Stranraer. Sections of this route have been improved during LTP2, however there are other sections which still need to be addressed, to further improve journey time reliability and safety on the route.

**Rail Connectivity**
The County Council, and hence this LTP, has no direct role in supporting or providing rail services serving North Yorkshire. However, rail is an important mode of travel in the County and the County Council can influence services and if appropriate can invest local transport capital funding in rail infrastructure.
This section sets out a summary of the Council’s strategy for influencing passenger rail services and infrastructure in North Yorkshire. Further details can be found in the North Yorkshire Passenger Rail Strategy www.northyorks.gov.uk

Whilst rail services in North Yorkshire can have a limited impact on urban congestion their main use is for longer distance trips and therefore these services can benefit local and national connectivity. Notwithstanding the above, the rail services from Harrogate and Selby to Leeds and York are important commuter routes and make a contribution to reducing congestion in Harrogate, Leeds and York.

Map 4.0 below shows all the current operational rail routes and stations in North Yorkshire. All of the routes form part of the national rail network with the exception of three heritage / tourist railways. Brief details of the key routes serving North Yorkshire are set out below with a summary of the key issues for each of the routes.

Map 4.0 Rail Routes in North Yorkshire (North Yorkshire Network Rail Stations in bold).

**East Coast Main Line (ECML)**
The route runs from Edinburgh to London and is one of the nation’s premier high-speed routes. It serves the major towns and cities of Newcastle, Darlington, York, Doncaster and Peterborough. The two stations in North Yorkshire are Northallerton and Thirsk. The route carries both long distance services to London and trans Pennine services between Newcastle / Middlesbrough and Manchester.
A major issue for this line in the instability of franchises for the services to London, with both GNER and National Express having had franchises terminated early and the service consequently being nationalised during 2009. Additionally, the desire by operators to reduce journey times to London has lead to pressures to reduce the number of services stopping at Northallerton and Thirsk. The County Council will continue to lobby the Government and operators to maintain and improve the number of ECML services stopping at Northallerton and Thirsk.

Harrogate Line
The route runs from York to Leeds via Harrogate. Within North Yorkshire there are stations at Hammerton, Cattal, Knaresborough, Starbeck, Harrogate, Hornbeam Park, Pannal and Weeton. The line carries mainly commuter passengers and provides an important link between Harrogate and the wider Leeds City Region.

A key issue on this line is the passenger capacity. The County Council has already co-operated with Leeds City Region partners to provide longer trains and the necessary infrastructure. However seating capacity on peak hour services into Leeds is still significantly over capacity.

Whilst the Leeds City Region have a longer term aspiration to operate Tram Train units on this line this is unlikely to be funded before 2016. In the shorter term we will continue to work with partners to improve service frequency to 3 trains per hour (Leeds – Harrogate) and 2 trains per hour (Harrogate – York). Additional we would support the increase in frequency of direct services between Harrogate and London, to further improve links for businesses in the area, particularly the exhibition and conference facilities in Harrogate.

We will also continue to work with Harrogate Borough Council as part of their Local Development Framework preparation to improve interchange facilities at Harrogate and to investigate the potential for a new station at Knaresborough East links to a potential urban extension of Harrogate / Knaresborough.

Selby
Two lines link Selby to the wider Leeds City Region, these are Selby – Leeds and Selby – York. As with the Harrogate line these are primarily commuter routes into Leeds and York

Whilst there are no significant capacity issues on these routes the County Council would like to see increased service frequencies to improve local connectivity to Selby, access to jobs and services in Leeds and York and mode shift from private cars to reduce congestion on roads into Leeds and York. The route is currently operating significantly under capacity.

Skipton – Leeds/ Bradford
The route runs from Skipton to Keighley, Bingley and Shipley, where there is a junction, with one route going to Leeds, and the other to Bradford. Within North Yorkshire there are stations at Skipton and Connolly. There are
currently approximately 2 trains per hour running between Skipton and Leeds and 2 trains per hour between Skipton and Bradford providing good connections into the Leeds City Region.

There are some capacity issues on the Skipton to Leeds service though the frequency is very good. The other main issue for this line in North Yorkshire are access to stations. Limited parking and difficult access to the stations at Skipton and Connolly constrain the potential for growth of this service. In late 2009 the County Council commissioned a transport model of the Skipton and South Craven area. This model will be used in the early years of LTP 3 to investigate options for improving access to these stations and the potential for a new station at Crosshills. A new station at Crosshills does however aggravate problems associated with traffic congestion at the Kildwick Level Crossing (see section 16). These congestion issues will need to be resolved before a new station can be provided. The cost of the station and necessary congestion management measures make it highly unlikely that it could be delivered before the end of LTP 3 in 2016.

York – Scarborough
The route runs from Scarborough to York, passing through Seamer and Malton, linking to Leeds and Manchester Airport and provides an approximately hourly service as far as York. The route serves a mixture of commuter and holiday traffic.

The line speed is generally slow and access and interchange difficulties at the stations at Scarborough, Malton and York are a deterrent to modal shift away from private transport for longer distance journeys. Connectivity to Malton, Scarborough and the East Coast is a major issue for the county. This line and the rail services using it are an important element of the A64 Corridor connectivity study which is (at the time of writing LTP3) currently in production. The study will provide a range of measures to improve connectivity along the A64 corridor.

Community Rail Lines
Community Rail routes and services were designated by the government in 2004 with the objectives of:

- reducing operating costs
- increasing patronage
- involving the local communities to support their railway
- enabling local rail to play a part in social and economic regeneration.

There are three Community Rail lines in North Yorkshire. Brief details are given below.

The Esk Valley Line runs between Whitby and Middlesbrough and is one of 7 routes nationally designated by the DfT as a pilot scheme to test the principles of the Community Rail concept. The line is used by NYCC during term time to transport up to 150 schoolchildren from the Esk Valley to three schools in Whitby. It also does extremely well from tourists in the summer months,
particularly in July and August; and weekends from Easter to Autumn. The County Council has a seat on the Board of Directors of the Esk Valley Railway Development Company (EVRDC) and works very closely with the Company to achieve the aims of Community Rail Operation. The service is infrequent, with only four trains in each direction each weekday at an interval of approximately every three hours. A Sunday service of five trains each way operates from May to September.

The Yorkshire Coast line from Scarborough to Beverley. The County Council is a member of the Management Group of the Yorkshire Coast Community Rail Partnership (YCCRP). The YCCRP is particularly active and innovative. Only the northern end of this line from Scarborough to Hunmanby is in North Yorkshire and the service of nine trains each way at intervals of between 90 minutes and 120 minutes between Scarborough and Bridlington is not considered sufficient.

The ‘Leeds – Lancaster – Morecambe Community Rail Partnership’ was created in 2006, with the support of most Local Authorities along the route. NYCC holds a seat on the Board of Directors of the LLM CRP. The service of five trains per day in each direction is considered inadequate, particularly as some of the trains run at times that are not when people are likely to travel. At certain times of the day, there are gaps of up to four hours between trains which does not make the service as attractive as it could be.

The County Council’s approach to Community Rail is to play an active role in promoting and assisting the work of the Development Companies and Community Rail Partnerships to achieve the aims of the Department for Transport’s Community Rail initiative. Key issues we are working towards are working towards increases in service frequency and the introduction of bus/rail integrated ticketing, with a view to increasing public transport opportunities in these sparsely populated areas.

Heritage and Tourist Railways
There are three operators in North Yorkshire that are not part of the National Rail Network. These railways operate over lines closed by British Rail, but where the track and signalling remained intact. Brief details are given below.

The North Yorkshire Moors Railway (NYMR) operates from Grosmont to Pickering with some of the services extending along the Esk Valley line to and from Whitby. They use mainly steam traction and operate almost every day from April to October. Outside this period they operate during school holidays and also on a few ‘winter’ weekends.

The Wensleydale Railway Company (WRC) operates from Leeming Bar to Redmire in Wensleydale. At present they operate at weekends from spring to autumn, and all week during holiday periods. They have aspirations to become a ‘fully fledged’ public transport provider to operate daily including extending services to Northallerton. They also have longer term aspirations to re-construct the line on the former trackbed at the west end of the line to Hawes and Garsdale, and thus connect with the Settle & Carlisle railway.
The Embsay and Bolton Abbey Steam Railway (EBASR) operates from Bolton Abbey to Embsay mainly at weekends and during school holidays. The EBASR has aspirations to restore the junction at Embsay Junction on the Skipton to Swinden quarry freight only line, to facilitate through running from Bolton Abbey to Skipton. Network Rail has undertaken a study, partly funded by North Yorkshire County Council into the various signalling options for restoring the junction and allowing passenger trains to operate over the freight line into Skipton.

Whilst all of the above railways are important tourist attractions in the County and therefore help boost the tourist economy the actual transport function they serve is limited both by the areas they pass through and by the limited services available. The County Council will wherever possible assist the operators of these railways however given their limited transport function and the current financial constraints on transport budgets it is unlikely that there will be any significant investment in these routes through LTP3.

**Railway Re-openings**

Over the past ten years there have been a number of high profile campaigns to re-open railways in North Yorkshire. These include the Skipton to Colne line and the Harrogate – Ripon – Northallerton line.

The County Council supports in principal rail re-openings, particularly the Skipton to Colne and Harrogate – Ripon – Northallerton routes. Additionally we would like to see former railway infrastructure protected for possible future transport use. It is however important that each proposal is assessed on its individual merits and the business case for re-opening.

Notwithstanding the above, the capital cost of rail re-opening is high and any proposals would be classed as ‘major’ (costing over £5m) transport schemes. All Major Schemes are funded directly by government with advice taken from the Yorkshire and Humber Regional Transport Advisory Board (RTAB). (Plans for future coordination of funding for major schemes has yet to be confirmed). The current programme of Major Schemes for Yorkshire and the Humber extends to 2021 and there are many other contenders for programme entry. There is therefore no realistic chance of the County Council being able to fund any rail re-openings during LTP3 and little chance of funding in the foreseeable future.

Based on the above funding constraints the County Council will not actively promote or fund studies into the re-opening of any disused railway unless there is a strong chance of alternative funding being available for the re-opening. This applies to both passenger and freight proposals.

**Sea Ports and Marine Connectivity**

The closest and hence most important major ports to North Yorkshire are Tees Port (in the Tees Valley City Region) and the Humber Ports (in the Hull and Humber Posts City Region). Access to and from these ports from North Yorkshire is mainly via regional and national transport networks (trunk roads
and national railways). The County Council will support appropriate improvements to these networks where these improve access from North Yorkshire.

Notwithstanding the above a key issue for the County is access to the Port of Hull. Access to and from the North Sea Ferries passenger terminal is particularly important as a gateway for continental tourists to the area. For much of North Yorkshire the main route to the Port of Hull is via the A1079 which runs from York, through the East Riding of Yorkshire to Hull. The A1079 is a mainly single carriageway road which runs through numerous villages. Discussions with City of York Council and East Riding of Yorkshire Council have established that improving safety, journey time reliability and journey times is seen as a high local priority. It is not however regarded as a high priority at a regional or national level. The County Council has therefore supported the inclusion of this corridor as a priority in the North Yorkshire and York Sub Regional Transport Strategy and where appropriate will support any initiatives by the relevant local highway authorities to improve the route.

Scarborough has a small port which is situated beneath, and in the lee of, the town's Castle Headland. The Port is a central part of the urban renaissance of the town and some £2.5m of public money is being spent on new deeper berth pontoons and environmental improvements to the harbour and adjacent public realm. The port retains the capability to accommodate larger vessels at times of seeking refuge in poor sea conditions or in the event of an emergency however the ‘industrial’ uses of the port are of significantly less importance than its role as a tourist attraction. Transport links to the harbour are inevitably compromised by the road passing adjacent to the beach and the tourist industry situated around the port. The County Council will work with Scarborough Borough Council, who own the port, to ensure that these conflicts are minimised.

Whitby also has a port which is situated at the mouth of the River Esk. The port is separated into a lower and an upper harbour by a mechanical swing bridge. An estimated £3m of public funding is going to be spent on the Port to principally improve fishing diversification and leisure facilities. The port also has cargo facilities but is unable to handle or store containers. The Esk Valley Railway line is adjacent to the port but due to weight restrictions cannot handle heavy freight traffic. Coupled with this are the relatively poor transportation links to the town. As a result, little cargo has been attracted to the port for several years. As with Scarborough, the County Council will work with Scarborough Borough Council to minimise conflicts between industrial traffic and tourists.

**Inland Waterways**

The current use of waterways in North Yorkshire for utility transport purposes is minimal. However, particularly in the Selby area the potential exists for waterways to provide an alternative to road transport particularly for bulky freight. The County Council will therefore continue to work with local businesses and British Waterways to seek opportunities for mode shift of road freight to water. This will be particularly through the planning and development
control process where the County Council will encourage new or expanding businesses to fully consider the potential of using waterways.

Whilst many of the existing waterways may be unsuitable for freight transport, in many areas of the County (especially Craven District) the waterways network is a valuable tourist asset. In line with our commitment to supporting sustainable tourism initiatives the County Council will support the appropriate use of waterways, and towpaths for tourism purposes. Additionally, the Council will work with British Waterways to identify where the use of canal towpaths can provide good, direct traffic free routes to improve pedestrian and cyclist links between towns and villages.

Airports
In addition to the London Airports there are five main regional airports which serve North Yorkshire. These are:

- Durham Tees Valley Airport – Within the Tees Valley City Region this airport has a small number of schedule and charter passenger flights mainly to short haul destinations. The airport primarily serves the northern areas of the County.
- Robin Hood Airport - Located near Doncaster to the south of the County this newly opened airport caters primarily for short haul holiday flights.
- Leeds Bradford Airport- Within the Leeds City Region and providing a significant number of scheduled and holiday charter flights to short haul destinations and also a limited number of long haul destinations. The airport is particularly used by people in the south and west of the County
- Newcastle Airport - Situated north west of Newcastle this regionally important airport provides a large number of schedule holiday charter flights to both short haul and transatlantic destinations.
- Manchester Airport - Although somewhat remote from North Yorkshire, Manchester Airport is the premier regional airport serving the north of England with holiday charter and scheduled flights to numerous short and long haul destinations.

Good international air travel linkages are seen as being increasingly important in a global economy. Whilst the County Council has little influence on the provision of flights it is important that we seek to ensure good surface access to the key airports from North Yorkshire.

The County Council will remain actively involved in partnerships with adjacent authorities, airport operators and other partners seeking to improve surface access to the two closest airports of Durham Tees Valley and Leeds Bradford. In particular we will continue to seek improved public transport access by both bus and rail to both Durham Tees Valley and by bus to Leeds Bradford. Through the Leeds City Region we will also continue to support investigation of ways to provide rail access to Leeds Bradford airport.
North Yorkshire is well served by rail links to Manchester and Newcastle Airports with direct trains to Manchester Airport from Northallerton, Thirsk, York and the stations on the York - Scarborough Line. Rail links to Newcastle Airport are via Newcastle Central station and regular Metro services to the airport. We will seek to maintain this level of service in any future rail franchises.

**Priority Areas and Key Issues**
The following section details some of the major connectivity issues in North Yorkshire in more detail.

**Scarborough and Malton/Norton**
Connectivity issues for the communities of Scarborough and Malton/ Norton will be considered as part of the same investigation due to their proximity to each other and the fact that both communities in general terms are served by the same transport networks.

Scarborough (population 52000) is the second largest town in North Yorkshire. It is remote from the national transport corridors being approximately 50 miles from the A1 and East Coast Main Line railway at York. The twin towns of Malton / Norton (population. 12000) lie roughly half way between Scarborough and York. See Map 4.0

The main road linking Scarborough and Malton / Norton to York and the national transport networks is the A64 Trunk Road. This is a predominately single carriageway trunk road carrying between 25000 AADT near to York and 13000 AADT at its eastern end. This currently suffers from peak hour congestion and delays, especially during the summer months, resulting in
long journey times and journey time predictability / reliability issues. Other important road links serving Scarborough are the A170 which joins the A19 Trunk Road at Thirsk and the A165 to Hull and the Humber Ports.

There are 2 railway lines which serve the area. The Scarborough – Hull line and the York – Scarborough line which follows the A64 corridor. On the York – Scarborough line there are currently stations at Scarborough, Seamer, Malton and York. Services are generally hourly with a journey time of approximately 50 minutes between York and Scarborough.

A significant factor for the future of this area is the level of housing growth allocated for these towns in the Regional Spatial Strategy. Housing allocations for 2008 to 2026 are for an additional 10640 houses in Scarborough Borough and 3800 in Ryedale District. It is likely that the majority of the allocations will be accommodated in Malton / Norton and the town of Scarborough. These levels of housing growth and the associated population growth represent an increase of over 25% in Scarborough town and 15-20% in the rest of the area.

Member authorities of the North Yorkshire &York Functional Sub Region have agreed that the A64 (road and rail) corridor to Ryedale and Scarborough is a very high priority and it was included in the Regional DaSTS submission to Government. Unfortunately the government rejected the bid for funding a connectivity study for this corridor. Funding for this study has therefore been provided through a partnership of North Yorkshire County Council, City of York Council, Ryedale District Council, Scarborough Borough Council and Yorkshire Forward. Recommendations and actions developed from this connectivity study will be taken forward, where funding allows, through LTP3

**Whitby**

Whitby (population 14,000) lies on the east coast of North Yorkshire and is completely surrounded by the North York Moors National Park. The main routes serving Whitby are the A171 / A169 corridor from the south, the A174 from Teeside and the north and the A171 from the west. Although they are ‘A’ class roads, all of these routes cross upland areas of the National Park and are of a relatively poor standard. See Map 5.0
The standard of the roads, together with holiday season congestion and adverse weather conditions in winter result in long journey times and poor journey time reliability.

Whitby is also linked to Middlesbrough by the Esk Valley community railway. However only 4 services per day use this line. Additionally the privately operated North York Moors Railway heritage line links into Whitby (via the Esk Valley line at Grosmont) from Pickering.

**Skipton**

Skipton (population 15,000) lies at the northern end of Airedale approximately 20km north of Bradford. Although road and rail links into Bradford and West Yorkshire are relatively good using the A629 and Aire Valley railway the main route into the rest of North Yorkshire and to the A1 is the A59 trans Pennine route. This route crosses upland areas of the Pennines and in places is of a poor standard and has suffered at times from extended closures and extensive diversion routes as a result of land slips. Proposals are in hand to seek to address these issues. This together with adverse winter weather can result in long journey times and journey time reliability problems. See Map 6.0
Skipton lies in the area of North Yorkshire which is considered to be part of the Leeds City Region. In order to help meet the objectives of the Leeds City Region Development Plan connectivity improvements between Skipton and the Leeds City Region is identified as a priority C corridor in the Leeds City Region Transport Strategy.

**Addressing Connectivity Issues**
The County Council will work with other partners (e.g. Network Rail, Highways Agency, Bus and Train Operators) to identifying the transport infrastructure required to facilitate new housing and employment developments. It is proposed that this process will produce a Strategic Transport Improvement Master Plan (STIMP) for every Planning Authority within North Yorkshire.

Where applicable the proposed developments will be modelled using available traffic models for local areas. The County Council in conjunction with relevant partners has produced traffic models for the following areas

- Harrogate
- Scarborough
- Selby
- Malton / Norton
- Skipton & South Craven
- Northallerton.

These traffic models will assist in modelling proposed traffic infrastructures schemes such as junction improvements and also will assist in assessing the impact on the highways network of new developments.
Additionally a county wide traffic model has also been developed. Local models will help to assist assessing issues in a greater level of detail. In contrast the countywide strategic model is able to assess the impact of new developments on the overall county network. For example a development of 5,000 new homes is likely to generate a significant number of additional trips on the County’s road network. The model will help to assess the impact of these trips on the network, identifying potential areas of over capacity and bottlenecks.

Alongside the production of the STIMP potential actions to improve connectivity where poor connectivity is having a significant detrimental impact on local economies will be identified as follows;

- Review all available evidence (including TrafficMaster data) to determine the importance of poor connectivity to the economic problems.
- Identify key constraints on the transport infrastructure and services (road, rail and public transport).
- Identify any links to safety, environmental or accessibility issues.
- Identify and prioritise realistic and deliverable short (to 2016) and medium (to 2021) term schemes and initiatives (management, maintenance and improvement) to improve connectivity.
- Identify longer term (post 2021) aspirations for connectivity improvements.
- Identify funding packages (e.g. from LTP money, local planning authorities, other partners and developer contributions) to deliver the short and medium term schemes and initiatives.
- Deliver a range of schemes and initiatives to improve connectivity.

**Identifying and Implementing Measures to improve connectivity**

It must be recognised that with the constraints on public spending in the short to medium term, large scale, high cost infrastructure improvements will not be deliverable. Most of the short to medium term schemes and initiatives are therefore likely to involve either network management solutions or localised, lower cost (up to around £5m) improvements to address ‘pinch points’ on transport networks or improve the availability of transport services. It is however important to identify longer term aspirations for future consideration to ensure that opportunities for future funding are not missed.

The majority of options to improve connectivity will be targeted at managing; maintaining and improving the transport networks and services other ‘softer’ measures will also be considered. These may not necessarily improve connectivity but may reduce the need to travel through better co-location of services or through improved Information Technology. In many cases the County Council will not necessarily lead on delivering these types of measure but will support other bodies in their delivery, for example the local planning authorities delivering new employment and housing allocations through the Local Development Frameworks.
These investigations will not directly address the impact of urban traffic congestion on journey times and journey time reliability. In some cases however the impact of urban congestion on connectivity is of greater importance than constraints on the longer distance routes and services. The connectivity studies will establish the relative importance of these two factors and establish whether improvements to address urban congestion are most appropriate.

In order to ensure that any initiatives identified by connectivity and congestion investigations help to contribute to the economic prosperity of the area, a small number of relevant indicators will be introduced for each investigation area. It is not feasible to directly quantify the contribution of improved connectivity to local economies. Each of the studies will therefore adopt indicators that are relevant to the issues identified.
7.0 Cross Boundary Connectivity and the City Regions

Journey to Work Data
When assessing cross boundary links the major movements are generally journeys to work. However, consideration of other movements such as leisure traffic, education and health related trips and freight movements cannot be neglected.

Based on 2001 census data (the most up to date available data), some key trends are evident when looking at cross boundary movements. These are highlighted below:

- The majority (77%) of journey to work trips start and end within North Yorkshire.
- 18% of residents in North Yorkshire travel to adjacent authority areas for employment
- There is a net flow of just over 18000 workers out of the County. (more people leave the County to work, than arrive from outside of the County.
- In contrast 12% of jobs within North Yorkshire are taken by people living outside of the County.
- The key commuter links flows to and from North Yorkshire are to;
  - West Yorkshire
  - York
  - Tees Valley City Region
- Other important commuting links are to
  - East Riding of Yorkshire
  - South Yorkshire
  - Lancashire
  - Cumbria
  - Other areas of the County

It is recognised that the data available for analysis is relatively old but there are no indications that the data is still representative of the current position; the County Council will however, following the publication of the 2011 census results, conduct a further review of journey to work travel patterns.

Impact of cross boundary travel
It is important to recognise that cross boundary travel has an impact on the transport network in both North Yorkshire and in neighbouring authorities.

It is therefore essential that the County Council works closely with neighbouring authorities to ensure that cross boundary initiatives are properly co-ordinated.

As part of the development of the sub regional transport strategy with City of York Council, links are being further improved between both authorities. Similarly the County Council will continue to develop links with the Leeds City Region, Tees Valley City Region and other authorities.
Through these links and subsequent measures implemented we will consider both strategic and operational transport issues.

Longer term strategies, to help to manage and maintain existing links such as promoting sustainable travel, reduce travel demand and maintain existing links to a suitable standard, will be conducted alongside key partners. A key focus of this will be aimed at promoting methods to encourage the use of public transport, particularly rail travel for longer distance journeys.

Where these measures are deemed not suitable, opportunities to improve the network through the provision of new infrastructure and services will be looked at.

Additionally day to day operations such as Streetworks and roadworks that may impact on traffic flows will also be reviewed. This is to ensure that activities within each area do not negatively impact on adjacent areas. This is in line with the County Council’s network management duty.

Through liaison with adjacent authorities, the County Council will continue to adopt the “manage maintain and improve” hierarchy to address cross boundary travel issues. This ensures that the most use is obtained of the current transport network before any new infrastructure is added to the network.

Leisure based travel journeys
Whilst not specifically related to journeys to work, promoting sustainable travel for tourism related trips, particularly from the West Yorkshire area to the Yorkshire Dales National Park is also important. Travel choices of people in Leeds who are travelling for a day trip to Malham for example, will impact on the road network in North Yorkshire. Likewise people travelling from Selby in to Leeds City Centre for a shopping trip will impact on the transport network in Leeds.

As with all aspects of LTP3, the focus will be on managing and maintaining the existing network to ensure that the most efficient and effective use of the transport network is achieved. Wherever possible, we will encourage leisure demand to be moved towards more sustainable modes of transport. Throughout LTP3 the County Council will focus on ensuring that the existing links operate effectively through maintaining the network to a suitable standard.

Within the financial climate of LTP3 it is not likely that any major schemes to deliver improvements to cross boundary links will be implemented. Any improvements, if prioritised are likely to be small scale, designed to improve traffic flow and journey time reliability

Cross boundary transport links
As outlined within the Connectivity section, several major transport links provide cross boundary links to other areas. The strategic road and rail network provides the major high volume links, however major county links
also provide important access to adjacent areas. Additionally in some instances B&C class routes can provide local level cross boundary access.

The following section details the key cross boundary movements. For each relationship between North Yorkshire and its neighbours the following will be looked at;

- Major movements
- Number of trips being made
- Key Links
- Key issues on the network
- Areas for future improvements

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<th>Table 1.0 Movements between North Yorkshire &amp; Leeds City Region</th>
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<tr>
<td><strong>Major Movements</strong></td>
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<tr>
<td>• Skipton / South Craven to Bradford</td>
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<tr>
<td>• Harrogate to Leeds / Wetherby</td>
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<td>• Selby to Wakefield</td>
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<td>• Selby to Leeds</td>
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<td><strong>% of working age population travelling out of North Yorkshire</strong></td>
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<td>• 18% from Craven</td>
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<td>• 15% from Harrogate Borough</td>
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<tr>
<td>• 24% from Selby</td>
</tr>
<tr>
<td><strong>Jobs taken in North Yorkshire by inbound movements</strong></td>
</tr>
<tr>
<td>• 15% in Craven</td>
</tr>
<tr>
<td>• 7% in Harrogate</td>
</tr>
<tr>
<td>• 14% in Selby</td>
</tr>
<tr>
<td><strong>Key Links Road</strong></td>
</tr>
<tr>
<td>Craven</td>
</tr>
<tr>
<td>• A629 Skipton / S Craven to Keighley and Bradford</td>
</tr>
<tr>
<td>• A65 Skipton to Ilkley / Otley / Leeds</td>
</tr>
<tr>
<td>Harrogate</td>
</tr>
<tr>
<td>• A61 Harrogate to Leeds</td>
</tr>
<tr>
<td>• A658 Harrogate to NW Leeds / Bradford</td>
</tr>
<tr>
<td>• A661 to Wetherby</td>
</tr>
<tr>
<td>Selby</td>
</tr>
<tr>
<td>• A64 Tadcaster to Leeds</td>
</tr>
<tr>
<td>• A63 Selby to Leeds</td>
</tr>
<tr>
<td>• M62 Selby to Leeds / Wakefield</td>
</tr>
<tr>
<td><strong>Key Links Rail</strong></td>
</tr>
<tr>
<td>Craven</td>
</tr>
<tr>
<td>• 2 services per hour between Skipton and Leeds</td>
</tr>
<tr>
<td>• 2 services per hour between Skipton and Bradford</td>
</tr>
<tr>
<td>Harrogate</td>
</tr>
<tr>
<td>• 2 services per hour between Knaresborough / Harrogate and Leeds</td>
</tr>
<tr>
<td>Selby</td>
</tr>
<tr>
<td>• 2 services per hour between Selby and Leeds</td>
</tr>
<tr>
<td>• 1 service per hour between South Milford / Church Fenton and Leeds</td>
</tr>
<tr>
<td><strong>Key Links Bus (hourly or better service)</strong></td>
</tr>
<tr>
<td>Selby</td>
</tr>
<tr>
<td>• A629 Corridor. Skipton / South Craven to Keighley / Bradford</td>
</tr>
<tr>
<td>• A65 Corridor. Skipton / Ilkley, Otley, Leeds</td>
</tr>
<tr>
<td>Harrogate</td>
</tr>
<tr>
<td>• A61 Corridor. Ripon- Harrogate-Leeds</td>
</tr>
<tr>
<td>• A661 Corridor. Harrogate – Wetherby – Leeds</td>
</tr>
</tbody>
</table>
### Key Issues

**Craven**
- Congestion on A629 at Kildwick roundabout, due to impact of level crossing closures.

**Harrogate**
- Congestion on A658 / A59 Harrogate Bypass
- Congestion at Harewood & Pool in Northern Leeds
- Over capacity on Harrogate Leeds Railway

**Selby**
- Localised congestion on A63 corridor

### Areas for future Improvement

- Continue to promote the use of more sustainable transport modes, particularly rail usage.
- Increase capacity of Harrogate to Leeds Railway
- Improve bus links between Selby and Leeds, by increasing the peak hour services frequency to more than hourly.
- Improve communication with transport authorities within West Yorkshire on both day to day operational issues and also on more strategic issues and developments.

### Table 2.0 Movements between North Yorkshire and York

<table>
<thead>
<tr>
<th>Major Movements</th>
<th>Malton &amp; Norton to York</th>
<th>Thirsk &amp; Easingwold to York</th>
<th>Selby to York</th>
<th>Tadcaster to York</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of working age population travelling out of North Yorkshire</td>
<td>6% from Hambleton</td>
<td>10% from Ryedale</td>
<td>12% from Selby</td>
<td>2% from Harrogate</td>
</tr>
<tr>
<td>Jobs taken in North Yorkshire by inbound movements</td>
<td>4% in Hambleton</td>
<td>6% in Ryedale</td>
<td>6% in Selby</td>
<td>2% in Harrogate</td>
</tr>
<tr>
<td>Key Links Road</td>
<td>Hambleton</td>
<td>A19 Thirsk / Easingwold to York</td>
<td>Ryedale</td>
<td>A64 Malton &amp; Norton to York</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A64 Tadcaster to York</td>
<td>Selby</td>
<td>A19 Selby to York</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A59 Harrogate to York</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key Links Rail</td>
<td>Ryedale / Scarborough</td>
<td>1 services per hour between Scarborough / Malton and York</td>
<td>Harrogate</td>
<td>1 services per hour between Knaresborough / Harrogate and York</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 service per hour between Selby and York</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Hambleton
- 2 services per hour between Northallerton / Thirsk and York

### Key Links Bus (hourly or better service)
- Ryedale / Scarborough
  - York to Pickering
  - York to Malton
  - York to Scarborough
- Selby
  - A64 Corridor. Tadcaster-York
  - A19 Corridor. Selby York
- Hambleton
  - A19 Corridor. Thirsk - Easingwold to York

### Key Issues
- Harrogate
  - Limited capacity on the York – Harrogate rail line
- Ryedale / Scarborough
  - Journey time reliability on A64 between York and Malton
- Selby
  - Low patronage on rail services between York and Selby
  - York
  - City centre congestion issues
  - Congestion and poor journey time reliability on the York Outer Ring Road

### Areas for future improvement
- Where possible take forward recommendations from the A64 connectivity study
- Continue to promote the use of more sustainable transport modes, particularly rail usage.
- Improve communication and work alongside City of York Council on both day to day operational issues and also on more strategic issues and developments.

### Table 3.0 Movements between North Yorkshire and Tees Valley

<table>
<thead>
<tr>
<th>Major Movements</th>
<th>Hambleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catterick / Richmond to Darlington</td>
<td></td>
</tr>
<tr>
<td>Northallerton to Darlington</td>
<td></td>
</tr>
<tr>
<td>Northallerton / Thirsk to Middlesbrough</td>
<td></td>
</tr>
<tr>
<td>Stokesley / Great Ayton to Middlesbrough</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of working age population travelling out of North Yorkshire</th>
<th>Hambleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>6% from Hambleton</td>
<td></td>
</tr>
<tr>
<td>10% from Richmondshire</td>
<td></td>
</tr>
<tr>
<td>2% from Scarborough</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jobs taken in North Yorkshire by inbound movements</th>
<th>Hambleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>4% in Hambleton</td>
<td></td>
</tr>
<tr>
<td>6% in Richmondshire</td>
<td></td>
</tr>
<tr>
<td>6% in Scarborough</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Links Road</th>
<th>Hambleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>A19 Thirsk to Middlesbrough</td>
<td></td>
</tr>
<tr>
<td>A172 Stokesley / Great Ayton to Middlesbrough</td>
<td></td>
</tr>
<tr>
<td>A167 Northallerton to Darlington</td>
<td></td>
</tr>
<tr>
<td>A1 Richmondshire to Darlington</td>
<td></td>
</tr>
<tr>
<td>A171 Whitby to Middlesbrough</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Links Rail</th>
<th>Hambleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly service between Northallerton &amp; Thirsk and Thornaby &amp;</td>
<td></td>
</tr>
</tbody>
</table>
### Key Links Bus (hourly or better service)

<table>
<thead>
<tr>
<th>Location</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hambleton</td>
<td>Stokesley to Middlesbrough, Richmond to Darlington, Catterick to Darlington, Whitby to Middlesbrough, Scarborough to Middlesbrough</td>
</tr>
<tr>
<td>Key Issues</td>
<td>A1 from Leeming Bar to Barton, Localised congestion issues on approaches to Teeside, Limited bus services from Northallerton to Darlington</td>
</tr>
<tr>
<td>Areas for future Improvement</td>
<td>Improvement to communication between North Yorkshire County Council and Tees Valley authorities and Highways Agency, Further improve public transport links.</td>
</tr>
</tbody>
</table>

### Table 4.0 Movements between North Yorkshire and East Riding & City of Hull

<table>
<thead>
<tr>
<th>Major Movements</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarborough / Filey to Bridlington, Selby to Goole / Howden, Malton to Wolds</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of working age population travelling out of North Yorkshire</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% from Scarborough, 3% from Selby, 2% from Ryedale</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Jobs taken in North Yorkshire by inbound movements</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>3% in Scarborough, 6% in Selby, 4% in Ryedale</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Links Road</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarborough</td>
<td>A165 Scarborough to Bridlington, A163 Selby to Beverley, A10141/A645 Selby to Goole, A63 Selby to Howden, M62 Selby to Hull, B1248 / B1252 Malton to Driffield</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Links Rail</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarborough</td>
<td>2 hourly service between Scarborough to Bridlington, Driffield and Hull, Regular services between Selby and Hull</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Links Bus (hourly or better service)</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scarborough</td>
<td>Scarborough / Filey to Bridlington, Driffield, Beverley and Hull, Selby, Selby to Goole</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Issues</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>No public transport link between Ryedale and East Riding, Congestion issues on approaches to Scarborough</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Issues</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>No public transport link between Ryedale and East Riding, Congestion issues on approaches to Scarborough</td>
<td></td>
</tr>
</tbody>
</table>
Areas for future Improvement

- Improve public transport provision between the 2 areas, particularly from Ryedale
- Better communication and co-working between areas

### Table 5.0 Movements between North Yorkshire and South Yorkshire

<table>
<thead>
<tr>
<th>Major Movements</th>
<th>Selby to Doncaster</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of working age population travelling out of North Yorkshire</td>
<td>1% from Selby</td>
</tr>
<tr>
<td>Jobs taken in North Yorkshire by inbound movements</td>
<td>6% in Selby</td>
</tr>
</tbody>
</table>

**Key Links Road**
- A19 Selby to Doncaster
- A1(M) Sherburn to Doncaster
- M62 corridor to Doncaster Sheffield

**Key Links Rail**
- Regular direct services between Selby and Doncaster, supplemented by services with one change

**Key Links Bus (hourly or better service)**
- Selby to Doncaster

**Key Issues**
- Limited Connectivity from Selby to Doncaster

Areas for future Improvement
- Improvement to communication between North Yorkshire County Council and South Yorkshire Authorities

---

### Table 6.0 Movements between North Yorkshire and Lancashire

<table>
<thead>
<tr>
<th>Major Movements</th>
<th>Skipton to Clitheroe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skipton to Colne / Burnley</td>
<td></td>
</tr>
<tr>
<td>South Craven to Colne / Burnley</td>
<td></td>
</tr>
<tr>
<td>Ingleton to Lancaster</td>
<td></td>
</tr>
<tr>
<td>% of working age district population travelling out of North Yorkshire</td>
<td>6% from Craven</td>
</tr>
<tr>
<td>Jobs taken in North Yorkshire by inbound movements</td>
<td>15% in Craven</td>
</tr>
</tbody>
</table>

**Key Links Road**
- A6068 South Craven to Colne
- A59 Skipton to Clitheroe
- A59/A56 Skipton Colne
- A682 Long Preston to Nelson
- A687 / A683 Ingleton to Lancaster

**Key Links Rail**
- Craven
  - 5 Services per day between Skipton and Lancaster

**Key Links Bus (hourly or better service)**
- Skipton to Colne
- Skipton to Burnley
- Skipton to Nelson

**Key Issues**
- Craven

---
- No direct rail link between Skipton and East Lancashire
- Relatively high HGV traffic levels along the A6068 in South Craven as this is an important link between West Yorkshire and East Lancashire

| Areas for future Improvement | • Ensure that the current network is maintained to enable cross boundary movements to continue.  
• Continue to promote the use of more sustainable transport modes.  
• Improve communication and work alongside Lancashire County Council on both day to day operational issues and also on more strategic issues and developments. |

### Table 7.0 Movements between North Yorkshire and Cumbria

<table>
<thead>
<tr>
<th>Major Movements</th>
<th>Settle / Ingleton to Kirby Lonsdale</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of working age population travelling out of North Yorkshire</td>
<td>1% from Craven</td>
</tr>
<tr>
<td>Jobs taken in North Yorkshire by inbound movements</td>
<td>1% to Craven</td>
</tr>
</tbody>
</table>
| Key Links Road | Craven  
• A65 Settle & Ingleton to Kirby Lonsdale / M6  
• A66 Scotch Corner to Penrith  
• A684 Hawes to Sedbergh |
| Key Links Rail | Craven  
• 5 services per day from Skipton on the Settle & Carlisle Railway |
| Key Links Bus (hourly or better service) | Limited services |
| Key Issues | Limited public transport options |
| Areas for future Improvement | Improvement to communication between North Yorkshire County Council and Cumbria County Council  
• Increase patronage on Settle Carlisle Line- particularly for tourist flows |

### Table 8.0 Movements between North Yorkshire and County Durham

| Major Movements | Northallerton to South Durham  
• Richmondshire to Barnard Castle |
|-----------------|--------------------------------|
| % of working age population travelling out of North Yorkshire | 1% from Hambleton  
1% from Richmondshire |
| Jobs taken in North Yorkshire by inbound movements | Under 1% in Richmondshire  
Under 1% in Hambleton |
| Key Links Road | Hambleton  
• A19 / A1  
Richmondshire  
• A1  
• A66 |
| Key Links Rail | Hambleton  
• Hourly or better service between Thirsk / Northallerton and Durham |
| Key Links Bus (hourly or better service) | Limited services |
| **Key Issues** | • Limited public transport options, for shorter trips  
• A1 between Leeming Bar and Barton |
| **Areas for future Improvement** | • Improvement to communication between North Yorkshire County Council and Durham County Council |
8.0 Transport Congestion

**Stakeholder Views and Opinions on Congestion**
As discussed in section 6, supporting the local economy was identified as being the highest priority by stakeholders in the phase one LTP3 consultation exercise. When asked to look in more detail at types of measures, reducing congestion in urban areas was identified as being the stakeholders’ second highest priority to help support the local economy. This demonstrates that stakeholders believe that congestion is an issue that needs addressing.

As part of the County Councils ongoing citizens’ panel, a series of stakeholder focus groups in each of the seven district council areas across the County in November 2009. The aim of these groups was to identify how the public perception of the service delivered was aligned to the County’s own perception of its performance and to provide an opportunity to identify what transport issues exist across the county.

Traffic congestion issues were specifically raised as being an issue in Harrogate, Scarborough and Northallerton areas. This is broadly consistent with the key congestion issues in the County. Although as these focus groups only provide a very small snapshot of the views of the County’s population, the results are seen as an indication only. However it suggests that addressing congestion in these areas is closely aligned to the public’s expectations.

Using additional feedback from the place survey it is clear that traffic congestion remains an important issue for residents in North Yorkshire. Although not identified as the top priority for making an area a good place to live, it was identified by 20% of all district council wards across the County as the main area for improvement. The main wards where congestion was identified as an area for improvement were in Harrogate and Scarborough. These are the two major towns within North Yorkshire. The congestion issues here are more acute than in other areas of the County, based upon the higher traffic volumes and increased demand for travel.

**Views of Businesses with North Yorkshire**
Alongside the responses received through the LTP3 consultation, responses from the York and North Yorkshire Chamber of Commerce were also taken into consideration. Utilising results from the Chamber’s annual member survey from November 2008 it is possible obtain an overview of the key findings. These are illustrated below.

The overall survey results are available for the whole of the Yorkshire and Humber region. Results are broken down into sub regional areas. North Yorkshire is contained within the York and North Yorkshire (Y&NY) sub region. Due to the sub regional nature of the responses it is not possible to directly relate to North Yorkshire, however the responses do provide an indication of the views of businesses within the sub region on local transport issues.
Road transport remains key to successful business with Y&NY. 84% of businesses believe that it is essential to their business and its operations. This compares to 11% for rail and 2% respectively for air and sea based transport.

Within Y&NY local congestion is identified by 93% of businesses as being either a significant (63%) or somewhat (30%) of a problem for their business. Whilst it is likely that many of these views may be related to transport issues within York, it is still significantly higher than 47% of business the region wide who identified congestion as being a problem. Only 7% of respondents felt that local congestion was not a problem.

Across the Y&NY sub region 49% of businesses believed that transport problems outside of their control had cost them in excess of £2500 over the past 12 months. 14% of all businesses estimated this cost to be in excess of £50,000 per annum.

On local roads it was suggested by businesses that the major factors causing congestion were the school run, lack of viable alternatives to private car based transport and the volume of traffic. Whilst this data is only opinion based it is important to consider these views when looking at implementing measures to reduce the impact of congestion within North Yorkshire.

Three key points related to increasing public transport use were identified by businesses within the sub region. Improved reliability / punctuality of services, reduced fares / discounts for regular users and passenger transport improvements on key congested routes. These were all given equal levels of importance by businesses.

Developing, introducing and supporting sustainable travel options for employees has not been considered or introduced by 42% of businesses within Y&NY. Of those businesses that have introduced measures over half have introduced flexible working practices. This clearly demonstrates that an opportunity exists for further developing workplace travel initiatives.

The County Council will continue throughout LTP3 to use further results and feedback form the York and North Yorkshire Chamber of commerce to help develop ongoing strategies.

**Air Quality Management Issues**

There are three AQMA’s that have been declared within North Yorkshire. These are as follows;

- Bond End Junction Knaresborough
- Butcher Corner Malton / Norton
- Skellgate Area Ripon

Other locations across the County will continue to be monitored by District Councils to ensure that any other traffic related AQMA’s are identified. Where issues are identified, appropriate action will be taken to improve air quality.
back to an acceptable standard. Further details of the Council’s input into specific air quality issues can be found in the Protecting the Environment appendix.

The County Council will continue to work closely with district and borough councils on developing and implementing relevant action plans to address identified AQMA’s and also ensure emerging air quality issues are investigated.

**Main congestion issues across the County**

Widespread congestion does not exist across North Yorkshire. The congestion issues that do exist tend to occur at specific times of the day and are concentrated in localised areas. The County Council will seek to implement measures to ensure that congestion does not become widespread in the future.

The more severe congestion issues within North Yorkshire are located within urban areas. These are outlined below;

- Harrogate / Knaresborough Town Centres
- Scarborough Town Centre
- Whitby Town Centre
- Butcher Corner- Malton / Norton
- A170 Vivas Lane and A169 Roundabout Pickering
- Skellgate Area of Ripon Town Centre
- Kildwick Level Crossing A6068 Skipton Road, Crosshills
- A167 North End Northallerton Level Crossing
- A19 through Selby (including the A63 junction at Barby)

Other locations of congestion do exist on a temporary basis as a result of planned and unplanned activities; measures to deal with these and manage them accordingly are dealt with as part of the County Council’s Network Management Duty.

The following section details some of the key congestion locations across the County. Whilst not being exhaustive it provides an illustration of the more significant issues that are experienced. Whilst many of the congestion issues experienced within North Yorkshire cause local issues, they are in comparison to larger conurbations such as Leeds and London, relatively minor.

<table>
<thead>
<tr>
<th>Table 9.0 Congestion in Harrogate and Knaresborough</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Congestion Issues / Location</strong></td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>
- A61 / B6162 / A6040 Prince of Wales Roundabout
- A61 / A59 New Park Roundabout
- Starbeck Level Crossing
  - Delays due to closure of level crossing on York / Harrogate line

**Contributory Factors**
- Important business commercial and retail centre generating high volumes of traffic.
- Relatively high local trips in the area particularly from residential areas to main employment centres
- Popular location for events and conferences which increases travel demand
- Travel to and from adjacent areas, particularly Leeds City Region

**Measures that have already been implemented**
- Harrogate and Knaresborough Integrated Transport Strategy (HAKITS) implemented a range of measures such as junction, pedestrian, cycling and passenger transport improvements including extensions to platforms to accept longer trains.
- Urban Traffic Management Control System has been implemented, to coordinate and manage traffic signals throughout the area.

**Potential impact of LDF developments**
- It is anticipated that the majority of LDF allocations for Harrogate Borough will be located in or adjacent to the urban area. This is likely to put additional pressure on the existing transport network

**Air Quality Issues**
- An Air Quality Management Area (AQMA) has been declared at Bond End Knaresborough.

**Possible Future Measures**
- Use Harrogate and Knaresborough Traffic Model to assess any potential measures.
- Work closely with HBC to implement an action plan to help improve air quality at Bond End
- Work alongside Network Rail to try and address issues at Starbeck Level Crossing to help reduce delays.
- £3m has been allocated to Harrogate as part of the RFA underspend. Measures to be considered include;
  - Park & Ride Options
  - Bus Punctuality improvements
  - Bus prioritisation measure
  - Junction Improvements
  - Traffic Signal Optimisation
  - Pedestrian / Cycling Signing Improvements
  - Promotion of sustainable transport options
  - Maintenance of existing facilities for pedestrians and cyclists

**Table 10 Congestion Issues in Scarborough**

<table>
<thead>
<tr>
<th>Key Congestion Issues / Location</th>
<th>Main access routes to the town</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• A165 - Filey Road</td>
</tr>
<tr>
<td></td>
<td>• A64 - Seamer Road</td>
</tr>
<tr>
<td></td>
<td>• A171 - Scalby Road</td>
</tr>
<tr>
<td></td>
<td>• A170 – Stepney Road</td>
</tr>
<tr>
<td></td>
<td>• A165 – Burniston Road</td>
</tr>
<tr>
<td>Key Junctions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A64 / A170 / A171 Falsgrave Road area</td>
</tr>
</tbody>
</table>
### Contributory Factors

- Important business, commercial and retail centre generating high volume of traffic.
- High number of local trips to access employment and other key services.
- Very popular tourist and visitor destination. Traffic levels in August are almost 20% higher than January.

### Measures that have already been implemented

As part of Scarborough Integrated Transport Strategy (SITS)
- Realignment of the A165 Filey Road, South of Scarborough
- Construction of two 600 car capacity park and ride sites. One each on the A64 and A165
- Bus Priority Measures to help improve public transport reliability
- Updated traffic control system to coordinate traffic signals and improve traffic flow.

### Potential impact of LDF developments

- Scarborough likely to be the main focus of Scarborough Borough Council’s LDF allocations. Almost 11,000 new dwellings are planned up until 2026. This represents a population increase of 25%.

### Air Quality Issues

- No significant air quality issues have been identified however monitoring by SBC will continue.

### Possible Future Measures

- Use the Scarborough traffic model to assess the impact of new residential and employment developments on the transport network.
- Improve and encourage usage of the Park & Ride service.
- Improve signage to the Park & Ride sites.
- Promote and encourage the use of sustainable modes of transport.
- Promote and encourage the use of local bus services.
- Improve car parking management.
- Maintain the existing footway and cycle network.
- Ensure the current road network remains in a fit for purpose condition.

### Table 11 Congestion Issues in Malton & Norton

<table>
<thead>
<tr>
<th>Key Congestion Issues / Location</th>
<th>Malton Town Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Butcher Corner Junction (B1248 / B1257 / A169)</td>
</tr>
<tr>
<td></td>
<td>County Bridge B1248</td>
</tr>
<tr>
<td>Close to Malton Train Station</td>
<td>B1248 Castle Gate Malton</td>
</tr>
<tr>
<td></td>
<td>B1248 Church Street / Commercial Street Norton</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contributory Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant levels of through traffic due to limited access at two of the three junctions accessing the A64. Consequently any traffic heading west from the east of the towns has to travel through Malton / Norton to access the A64 and vice versa.</td>
</tr>
<tr>
<td>Closures of the level crossing at Malton station (crossing remains down whilst a train is in the station), prevents traffic from moving through the area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measures that have already been implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signing improvements to promote the most effective through routes.</td>
</tr>
<tr>
<td>Small scale junction improvements</td>
</tr>
<tr>
<td>Range of pedestrian and cycle improvements</td>
</tr>
</tbody>
</table>
# Potential impact of LDF developments

- Malton & Norton has been identified as a key location for the Ryedale LDF. It is anticipated that an additional 3800 homes could be built in Ryedale before 2026.

# Air Quality Issues

- An AQMA has been declared at Butcher Corner due to the high levels of Nitrogen Dioxide (NO₂). The County Council will be working closely with Ryedale District Council to develop and implement a suitable action plan to improve air quality.

# Possible Future Measures (subject to available funding)

- Improvements to the A64 / B1248 Brambling Fields junction to the east of Malton / Norton to facilitate all turning movements at this junction. This would significantly reduce the amount of through traffic in Malton town centre.
- Improvements to passenger transport infrastructure in Malton, better bus / rail interchange facilities.
- Introduction of HCV routeing to avoid town centres.
- Maintain the existing footway and cycle network.
- Ensure the current road network remains in a fit for purpose condition.
- Promote the use of more sustainable modes of transport.
- Work alongside Network Rail to establish if any improvements can be made at the level crossing to reduce road delays.

# Table 12 Congestion Issues in Northallerton

<table>
<thead>
<tr>
<th>Key Congestion Issues / Location</th>
<th>Level Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A168 Boroughbridge Road (freight services only)</td>
</tr>
<tr>
<td></td>
<td>Romanby Road (freight services only)</td>
</tr>
<tr>
<td></td>
<td>A167 North End Level Crossing (freight and passenger services)</td>
</tr>
<tr>
<td>Roundabouts</td>
<td>A167 / Racecourse Lane / South Parade / Romanby Road</td>
</tr>
<tr>
<td></td>
<td>A167 / South Parade / High Street</td>
</tr>
<tr>
<td></td>
<td>A167 / A684 /North End / High Street</td>
</tr>
</tbody>
</table>

| Contributory Factors | Main congestion issues are caused during the closure of the level crossings. Particularly at North End, where traffic can often queue back to the town centre during peak times. This is compounded when the multiple trains pass through, causing the crossing to be closed for up to 20mins per hour. |
|                      | High level of local trips made by cars |
|                      | Poor alignment and layout of roundabouts |

| Measures that have already been implemented | Signing improvements to encourage the use of East Road to avoid the High Street area. |
|                                             | Implementation of various pedestrian and cycling measures to encourage modal shift |

| Potential impact of LDF developments | Northallerton has been identified by Hambleton District Council as one of the main locations for new housing and employment development. Significant developments have been proposed to the north of the town. |

| Air Quality Issues | Friarage Street in Northallerton has been identified as an area for further monitoring due to air quality issues, although no formal AQMA has at this stage been declared. |
### Possible Future Measures

- Use Northallerton Traffic Model to assess the impact of possible measures
- Work with Network Rail and Rail Safety Standards Board to identify possible measures to reduce congestion at the Level Crossings
- Work with Hambleton DC to develop master plan to provide transport infrastructure / improvements to accommodate LDF allocations
- Improve public transport facilities in the town to encourage modal shift
- Work alongside developers to ensure infrastructure is in place to facilitate new developments
- Promote cycling and walking for shorter distance local trips
- Maintain current network to a fit for purpose level

<table>
<thead>
<tr>
<th>Table 13 Congestion Issues in Selby</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Congestion Issues / Location</td>
</tr>
<tr>
<td>Town Centre Approaches</td>
</tr>
<tr>
<td>• A19 Barlby Road</td>
</tr>
<tr>
<td>• A1238 Gowthorpe / Leeds Road</td>
</tr>
<tr>
<td>• A19 Doncaster Road / Brook Street</td>
</tr>
<tr>
<td>• A1041 Bawtry Road</td>
</tr>
<tr>
<td>Town Centre Area</td>
</tr>
<tr>
<td>• Gowthorpe / Brook Street Junction</td>
</tr>
<tr>
<td>• Crescent / Gowthorpe junction</td>
</tr>
<tr>
<td>• Selby Swing Bridge / Ousegate junction</td>
</tr>
<tr>
<td>A63 / A19 Junction at Barlby Crossroads</td>
</tr>
<tr>
<td>Contributory Factors</td>
</tr>
<tr>
<td>• Important local centre for retail and business</td>
</tr>
<tr>
<td>• Significant levels of through traffic use town centre rather than using the bypass</td>
</tr>
<tr>
<td>• Poor visibility and access at Barlby Crossroads from A63 and Barlby to A19 can cause delays</td>
</tr>
<tr>
<td>Measures that have already been implemented</td>
</tr>
<tr>
<td>• Completion of A63 Selby Bypass, diverts through traffic away from the town centre.</td>
</tr>
<tr>
<td>• Pedestrian improvements in Selby Town Centre to encourage pedestrian usage and regulate parking in the town centre.</td>
</tr>
<tr>
<td>Potential impact of LDF developments</td>
</tr>
<tr>
<td>• Selby District Council has identified Selby as the main focus of its LDF allocations. It is likely that the majority of the 8360 new homes planned by 2026 in Selby District will be in the Selby Town area. This will have an impact on the local transport network.</td>
</tr>
<tr>
<td>Air Quality Issues</td>
</tr>
<tr>
<td>• No significant air quality issues have been identified however Selby District Council will continue to monitor air quality in the area.</td>
</tr>
<tr>
<td>Possible Future Measures (subject to available funding)</td>
</tr>
<tr>
<td>• Improve the A63 / A19 junction, through the introduction of a roundabout at the junction.</td>
</tr>
<tr>
<td>• Encourage the use of Selby Bypass for through trips avoiding the town centre.</td>
</tr>
<tr>
<td>• Encourage the use of more sustainable modes of transport for shorter distance local trips.</td>
</tr>
<tr>
<td>• Encourage the use of rail transport in to and out of Selby</td>
</tr>
<tr>
<td>• Assess possible measures using the Skipton &amp; South Craven</td>
</tr>
</tbody>
</table>
Table 14 Congestion Issues in Ripon

<table>
<thead>
<tr>
<th>Key Congestion Issues / Location</th>
<th>City Centre Locations and through traffic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Skellgate area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Market place</td>
<td></td>
</tr>
</tbody>
</table>

| Contributory Factors | • Network of small roads through the city centre |  |
|                     | • Relatively high volumes of traffic through the city centre |  |

| Measures that have already been implemented | • Introduction of a new link road to the west of the market place, linking Blossomgate to Coltsgate Hill. This link road provides access to a new retail development and also provides an alternative route for through traffic other than using the market place. |  |
|                                             | • Improvements to the market place area to regulate parking |  |
|                                             | • Pedestrian improvements |  |

| Potential impact of LDF developments | • Growth in the number of dwellings is anticipated as part of the development of the Harrogate Borough Council (HBC) LDF. |  |

Air Quality Issues

| • Harrogate Borough Council has identified an air quality issue in the Skellgate area of the city. As a result HBC are in the process of declaring an Air Quality Management area (AQMA) in this location. North Yorkshire County Council will work closely with HBC to introduce an action plan to deal with these issues. |  |

| Possible Future Measures (subject to available funding) | • Review signing within the area to encourage and promote the use of the link road to further reduce traffic levels on High Skellgate |  |
|                                                         | • Encourage bus use, through further promotion of the 36 bus service between Ripon, Harrogate and Leeds |  |
|                                                         | • Maintain the existing footway and cycle network |  |
|                                                         | • Ensure the current road network remains in a fit for purpose condition |  |
|                                                         | • Promote the use of more sustainable modes of transport |  |

Table 15 Congestion Issues in Whitby

<table>
<thead>
<tr>
<th>Key Congestion Issues / Location</th>
<th>Approaches to Whitby</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• A171 Guisborough Road / Mayfield Road</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A171 Helredale Road</td>
<td></td>
</tr>
</tbody>
</table>

| Junctions | • Mayfield Junction (A171/A174) |  |
| Town Centre | • West Cliff / Harbour / Marina areas |  |

| Contributory Factors | • High volume of visitors. Traffic flows in August on A171 Guisborough Road are 30% higher than the annual average traffic flow. |  |
|                     | • Town centre congestion is often caused by cars looking for available car parking spaces. |  |
|                     | • Inappropriate car parking in and around the town centre / harbour area and nearby residential areas. |  |

<p>| Measures that have already been implemented | • Improvements to public transport infrastructure to encourage the use of more sustainable transport measures. |  |</p>
<table>
<thead>
<tr>
<th>Table 16 Congestion Issues in Pickering</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Congestion Issues / Location</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Parking and vehicles searching for parking in the town centre and close to the North York Moors Railway</strong></td>
</tr>
<tr>
<td><strong>Contributory Factors</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Measures that have already been implemented</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Potential impact of LDF developments</strong></td>
</tr>
<tr>
<td><strong>Air Quality Issues</strong></td>
</tr>
<tr>
<td><strong>Possible Future</strong></td>
</tr>
</tbody>
</table>
Measures (subject to available funding)

- Work with major tourist operators in the area to encourage more sustainable travel options for their visitors
- Maintain the existing footway and cycle network
- Ensure the current road network remains in a fit for purpose condition
- Promote the use of more sustainable modes of transport

Table 17 Congestion Issues in South Craven (Kildwick Crossing)

<table>
<thead>
<tr>
<th>Key Congestion Issues / Location</th>
<th>South Craven Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A6068 / B6265 Skipton Road, Crosshills</td>
</tr>
<tr>
<td></td>
<td>B6172 Station Road, Crosshills</td>
</tr>
<tr>
<td></td>
<td>A6068 Keighley Road Crosshills</td>
</tr>
<tr>
<td></td>
<td>A629</td>
</tr>
</tbody>
</table>

| Contributory Factors | The A6068 / B6265 route crosses the railway line at a level crossing (Kildwick level crossing). The crossing is located 350m south of the A6068 / B6265 junction with the A629. Due to the high frequency of train services between Skipton and West Yorkshire, the level crossing is regularly closed to road traffic. At peak times the crossing can be closed for in excess of 40 minutes per hour. This can cause congestion back to and on to the A629 and also back to Crosshills village. |
|                      | The A6068 / A629 is an important cross boundary link between South Craven, North East Lancashire and West Yorkshire. |
|                      | High levels of local trips to major employment centres in Bradford MDC such as Airedale Hospital |

| Measures that have already been implemented | No significant measures have been introduced |

| Potential impact of LDF developments | The South Craven area has been identified by Craven District Council as an area for future development for the introduction of both housing and employment sites |

| Air Quality Issues | No significant air quality issues have been identified however monitoring by Craven District Council will continue to monitor air quality in the area. |

| Possible Future Measures (subject to available funding) | Work with Network Rail and Rail Safety Standards Board to identify possible measures to reduce congestion at the Level Crossing. |
|                                                        | Encourage the use of more sustainable modes of transport for shorter distance local trips. |
|                                                        | Work with major local employers to promote more sustainable travel options |
|                                                        | Assess possible measures using the Skipton & South Craven Traffic model. |
|                                                        | Maintain current network to a fit for purpose level |
Rural Congestion
As well as urban congestion areas, smaller scale congestion issues do exist within the county. These have been identified within congestion studies completed during LTP2. Studies were completed in the Yorkshire Dales and Nidderdale AONB and also the North York Moors and Howardian Hills AONB. Actions have been generated and these are being dealt with at a local level as part of Service Centre Transportation Strategies and part of small scale schemes such as signing improvements. The County Council will continue to monitor existing and identify new, rural congestion issues and address these as appropriate.

Many of the issues identified by these congestion studies were related to Car Parking, particularly inappropriate car parking blocking rural roads and villages. Many of these issues will be reviewed and potential solutions developed as part of any future North Yorkshire Car Parking Strategy.
9.0 Addressing Congestion and Connectivity Issues - The LTP3 Toolkit

In order to try and effectively manage and reduce congestion and improve connectivity across the County, the Council has developed an approach based upon the manage maintain and improve framework.

The key focus of this toolkit will be as follows;

- Reducing and Managing Travel Demand;
- Modal Shift to more sustainable modes of transport
- Providing additional capacity within the transport network

Reducing the need to travel and managing travel demand can be achieved through various methods such as the localised delivery of services and encouraging multi purpose trips. Additionally through effective management of new land use developments the need to travel can be significantly reduced.

The use of private car transport can lead to large volumes of traffic on the roads. By encouraging people to use more sustainable modes such walking and cycling for shorter trips and public transport for longer trips, traffic volumes can be reduced. One of the most significant methods for achieving this modal shift is the provision of public and community transport services. The accessibility appendix and associated public transport strategies covers this in greater detail.

In certain circumstances additional capacity may be required at specific locations to more effectively manage traffic congestion. Additional capacity can be provided by physical improvements, such as new routes and junctions but also through methods such as altering signal timings to optimise capacity at junctions.

The proposed framework is hierarchal. Before adding new capacity to the network, measures aimed at reducing and managing demand and modal shift will be considered. This ensures that the most effective use of the current network is achieved before adding anything new.

The County Council will adopt a toolkit approach to managing and reducing congestion and improving connectivity across the County. This approach has been used throughout LTP2.

Managing and reducing congestion and improving connectivity can not only be achieved through implementing new schemes, interventions and initiatives. The County Council through its statutory duties such as the Network Management Duty, can effectively manage incidents on the network which can lead to congestion.

Many of the possible measures are of a “softer nature”, aimed at changing travel behaviour, such as encouraging more sustainable use of private car through car sharing, encouraging public transport usage, encouraging cycling and walking etc.
With the likelihood of reduced transport funding throughout LTP3, lower cost measures and measures as part of the Council’s statutory duties such as travel awareness and more effective Network Management will become more important tools in order to try to reduce, and effectively manage congestion.

The County Council will consider all possible funding options including the Sustainable Transport Fund to try and obtain funding to implement schemes that help to reduce congestion and improve connectivity.

Any measures identified may be a combination of individual parts of the hierarchy. At each specific congestion location, measures will be tailored to meet the individual characteristics of the site.

Congestion reduction and management related schemes will be identified and assessed against LTP3 objectives. Available funding will be allocated to suitable schemes based on how well they meet these objectives. The Scheme Identification appendix covers this in more detail.

If sufficient funding allows, the County Council will be conduct connectivity studies across the County, which are aimed at dealing with longer distance connectivity issues. The studies will however, provide the opportunity for specific urban congestion to be analysed in more detail. Much of this will work will be further developing issues identified through the SCTS process in LTP2.

The following section gives an overview of the range of measures that are available. This is not an exhaustive list. The County Council will continue to develop new and innovative solutions to deal with transport issues in North Yorkshire.

**Bus Transport Measures**

A range of generic measures exist in order to try and reduce congestion and improve connectivity through encouraging the use of public transport across the County. Efficient and reliable public transport networks provide a viable option for longer distance journeys to be made more sustainably. As discussed within section 6, improving public transport was identified by stakeholders as an important way of helping to reduce congestion and carbon emissions.

The North Yorkshire Public Transport Strategy contains further details on how public transport will be developed throughout LTP3.

Measures listed below were implemented during LTP2. The County Council will where possible and based on available funding continue to implement and develop these measures throughout LTP3.

- Continue to provide bus information to the public through the policies laid out in the revised Bus Information Strategy
- Monitor and react to customer satisfaction levels in terms of overall bus use and information provision.
• Rolling programme of infrastructure improvements
• Work in partnership with operators to improve punctuality.
• Continue raising the standard and quality of our contracted services to include, in most cases low floor buses, and ensure that this standard is maintained though future retendering processes.
• Actively promote bus use and the positive effects it can have on congestion and the environment
• Audit roadside displays to ensure information is present, legible and current.
• Continue to develop key transport corridors and other areas where buses can relieve congestion and where appropriate develop Quality Bus Partnerships.

Possible future measures to be looked at and developed within LTP3 are described below. As levels of funding are not yet formally confirmed it may be the case that not all proposed interventions are considered or indeed implemented. However the County Council remains committed to improving public transport usage throughout LTP3

Punctuality Improvement Partnerships (PIP)
Formalise PIPs in Harrogate and Scarborough to reflect where congestion has the potential to have the greatest impact on the road network. A PIP is a partnership approach between local authorities and bus operators to assist more punctual and reliable bus services through a coordinated package of measures.

Integrated Ticketing Solutions
Work with regional partners to join a Region-wide interoperable, integrated ticketing scheme, which will provide:

• A regional multi-operator smart ticketing solution,
  o based on the existing brands, expanded with innovative products into new geographical areas (e.g. York, Harrogate)
• A regional e-money “Pay as you Go” solution which
  o allows a passenger to travel on any means of public transport where they see the “Pay as you Go” logo, and
  o retains the commercial independence of the operators

Bus Pre-emption solutions
Extend the use of Bus Pre-emption in an attempt to achieve greater bus punctuality. Improving bus punctuality is well documented to increase patronage over time as passengers’ confidence in the bus service and reliability grows. Bus pre-emption can be used in many ways, the method currently used in North Yorkshire and seems to the most effective, is giving priority to late running buses at traffic signals.

Engineering and Physical Improvements
The County Council will look to introduce small scale specific bus priority engineering solutions to improve bus punctuality. Although there is little scope to build complete dedicated bus lanes in North Yorkshire largely due to its
existing road network, there are specific instances where small bus priority schemes could make a difference.

Provide More Extensive Real Time Passenger Info
Continue to develop Real Time Information routes to customers. Real time information gives customers information on when their bus is expected to arrive at a specified bus stop. Currently customers can gain access to this information via the internet, a text message and at bus stops where there is a real time board.

Rail Transport Improvements
Rail Transport is an important element in providing an opportunity for longer distance journeys to be made by modes other than the private car. Rail travel is typically focussed on longer distance connectivity issues, by reducing the number of private car trips in local centres such as Harrogate and Scarborough in can also assist in reducing urban congestion.

Network Management
The network management duty, whilst being a statutory duty as of the Traffic Management Act 2004, provides the County Council with an important tool to manage congestion and ensure traffic can move with least disruption both on our own network and also the network of other highway authorities.

Section 16 of the Traffic Management Sets out the following objectives;
   a. Securing the expeditious movement of traffic on the authority’s road network
   b. Facilitating the expeditious movement of traffic on road networks for which another authority has responsibility.

North Yorkshire borders many authorities and as such the interaction between networks can have a major impact on the North Yorkshire network. Likewise the North Yorkshire network significantly influences the network of other authorities.

In recognition of this close linkage, the County Council is a key member of both the Yorkshire and Humber and the North of England Traffic Managers groups. This enables a consistent approach to Network Management issues across the region.

Communication with other authorities is not solely limited to communication with other highways authorities. North Yorkshire is a two tier authority area, where responsibilities are shared between the County Council and District Councils. The County Council will work closely with district councils to coordinate wherever possible “streetscene” activities such as litter picking, refuse collection, street cleaning etc. By doing this any disruption on the network can be kept to a minimum.

The position of overall Traffic Manager for the County has been allocated to the Assistant Director for Highways and Transportation. Due to the area based structure of the highways function within the county, each Area
Manager has been assigned the post of assistant traffic manager, with specific control for network management functions within their area. Central and countywide coordination of network management functions are coordinated centrally by the Streetworks Manager.

This structure enables localised delivery of network management across the County. One of the main advantages of this approach is that it overlaps the existing structure of other highways functions. As a result the County Council is able to effectively deal with any activities on the network and reduce disruption and congestion.

Three groups of activities on the Network can cause congestion. These are as follows;

- Operational activities
- Planned activities
- Unplanned activities

Operational Activities
A wide range of activities on the network have been categorised as being standard operational activities on the network. Whilst not being long term causes of congestion across the network, they can cause significant levels of short term localised congestion. Effective management of these types of activity will assist in ensuring that congestion is kept to a minimum. These are not exhaustive and include the following;

- street works (statutory undertakers)
- road works (council/developers)
- NRSWA licensed activities (installation of private apparatus)
- Highways Act 1980 licensed activities (skips/scaffolding, etc)
- Traffic Regulation Orders (Road Traffic Regulation Act 1984)
- road closures
- abnormal load movements
- refuse collection
- parking enforcement
- Planning and Development Control (Town and Country Planning Act 1990)

North Yorkshire County Council will exert a direct influence, albeit to varying degrees, over the above activities. The Traffic Manager will be responsible for managing and reviewing policies and processes that will allow effective co-ordination of works on the network in order to prevent, so far as is reasonably practicable, unnecessary or avoidable disruption and congestion. This role will include ensuring that, whilst proactive discussion with all parties involved in works on the network should result in the successful co-ordination of works activities, robust enforcement policies are in place to deal with instances where due process has not been followed.

Parity is an important principle in ensuring that network management is successful. North Yorkshire County Council will lead by example by applying
the same standards and approaches to their own works and activities as to those of others.

Traffic volume and the anticipated growth in traffic over the coming years (currently forecast to be around 30% over the next 10 years) will inevitably mean congestion on the network will increase. The Road Traffic Reduction Act 1997 requires local transport authorities to prepare a report, at such times as the DfT require, on the level of local road traffic, a forecast of growth in the level of that traffic and a target for reduction. However it is the Council’s aim to minimise the growth in that congestion through the proactive application of the network management duty in line with this plan and our wider LTP policies.

Planned Activities
A portion of congestion on the network is caused by the effects of planned events. Typically these can include, but are not necessarily exclusive to:

- Sporting events
- Carnivals
- Parades
- Demonstrations

The Traffic Manager will develop and maintain a register of Planned Events and disseminate the information to nominated stakeholders such that network management decisions will be informed, in particular with respect to potential temporary changes in Network Management hierarchy.

Unplanned Activities
The impact of an unplanned incident/event on the network cannot be underestimated. Such incidences can include, but are not limited to:

- road traffic accidents
- broken down vehicles
- motorway/trunk road diversion routes
- debris or diesel spillage on the road
- failure of the carriageway
- failures of utilities apparatus
- emergency repairs to utilities apparatus
- weather events (including snow, ice, flooding, high winds)
- major incidents where roads need to be closed for safety or operational reasons
- security alerts

The unexpected nature of such incidents often means that the immediate effects on the network are difficult to deal with. However, North Yorkshire County Council has contingency plans and winter service plans to deal with such occurrences. The Traffic Manager is included in the Council’s strategic contingency planning team, thus ensuring that emergency decisions take account of the Network Management Duty. For example, the diversion of traffic onto another part of the network may have a negative impact on works already planned. The Traffic Manager would be in a position to inform the decision process with the potential effects it may have and also review the
planned works programme, recommending temporary changes to accommodate the particular emergency.

Local coordination meetings will continue to be held on a monthly basis at an area office level across the County to discuss specific network management issues. These will be chaired by the Streetworks Manager and all activities on the network, planned unplanned and operational will be considered.

Coordination is not limited to internal liaison at an area level. Regular discussions will take place with traffic managers in adjacent areas and also in external adjacent Highway Authority areas bordering North Yorkshire.

The County Council will work closely with the Highways Agency to ensure that any disruptions on the Trunk Road and Motorway Network and on the County Council’s Network are kept to a minimum. Routes such as the A19 (T), A168 (T), A64(T), A66(T) and the A1 / A1(M) have significant traffic flows. If disruption to these flows occurs on these routes, a significant impact will be felt on the County Network. Appropriate diversion routes have been established to minimise impact on the County Council’s network.

The County Council recognises the importance of other stakeholders in terms of managing the network. Any company, authority or organisation whose activities could potentially impact in significant fluctuations on motorised and/or pedestrian traffic, will be contacted to ensure that their activities and the activities of the County Council are coordinated. This will ensure that any level of disruption is kept to a minimum.

Disruption to routes on the bus network will be communicated to relevant bus operators so that appropriate diversionary routes and service amendments can be made, minimising disruption to public transport services.

The County Council will work alongside the freight transport industry and subject to available funding, will look at developing route maps across the County. This will build on from the work undertaken by the Timber Freight Quality Partnership in identifying preferred routes for Timber Transport in North Yorkshire.

Providing information on network disruptions to transport users is an essential element in effectively reducing disruption. The County Council recognises that by providing accurate information, transport users will be able to amend their journeys and routes accordingly to avoid areas of disruption. This together with accurate diversionary routes and appropriate traffic management measures will result in disruption being kept to a minimum.

The County Council will continue to utilise GIS based software to locate all planned disruptions on the network. Alongside this a public web based interface will be used so that members of the public can obtain data and information easily and effectively. Other publicity will be used such as local newspapers and local radio. The County Council’s newspaper the NY Times will also be used.
Parking Strategy and Management
Effective management and control of car parking can assist in ensuring that traffic can move freely on roads throughout the county. Inappropriate car parking can restrict traffic flows, causing localised congestion and posing a potential safety risk for transport users.

Responsibility for the management and coordination of car parking across the County is shared by the County Council and other authorities. The County Council is responsible for on street parking across the County. Enforcement of these regulations is conducted by North Yorkshire Police (except for in Harrogate and Scarborough). Off street parking in designated public car parks is the responsibility of borough /district councils and the national park authorities.

Civil Parking Enforcement (CPE), (where local authorities take responsibility for enforcing parking regulations instead of the Police) is currently in place in the Harrogate and Scarborough boroughs. This enforcement helps to ensure that on street parking is managed in a way to reduce the amount of inappropriate parking and promote traffic management, allowing better movement of traffic.

During LTP3 we will look at the feasibility of introducing CPE across the County to try and improve management of off street parking. As part of this investigation, we will develop a parking strategy. The County Council recognises that borough and district councils currently have strategies related to car parking. Any countywide policy will seek to incorporate these, to ensure that a consistent approach to parking is maintained.

The County Council will ensure that through the development control process appropriate consideration is given to car parking and that alongside this; more sustainable travel options are considered, maximum parking standards are adhered to and suitable disabled parking provision is made available. Workplace parking levies in North Yorkshire will not be considered during LTP3 as a tool to manage traffic demand.

Travel awareness initiatives
A range of travel awareness measures exist to try and address influence and manage travel demand across the County. Possible measures are summarised below.

School Travel Plans
All Schools within North Yorkshire have developed and implemented School Travel plans during LTP2. Many of the key measures proposed within these plans have now been implemented. Throughout LTP3 the County Council, through its team of road safety and travel awareness officers, will continue to develop and review these travel plans and continue to encourage the use of more sustainable modes of transport to be used by pupils and parents on the traditional school run and also as part of normal travel patterns.
As part of the development of the Sustainable mode of travel strategy the County Council will continue to promote sustainable travel options for pupils across the County.

Workplace Travel Plans
An important element in shaping transport and land use policy is the development of workplace travel plans aimed at encouraging and promoting the use of more sustainable modes of transport. Whilst these are compulsory for all new major developments, encouraging existing businesses and their employees to adopt more sustainable modes of transport is an important tool in helping to reduce congestion.

The County Council will continue to encourage the development of deliverable workplace travel plans throughout the County. It is essential that these plans are achievable and that the possible benefits to the individual business are clearly demonstrated.

Measures that will be considered and possibly promoted include the following:
- Car Share Schemes
- Secure Cycle Parking
- Flexible working hours
- Encouraging home working
- Improving connectivity to existing transport networks and services (e.g. links to existing footways and bus services)Personal Travel Planning

Developing more personalised travel plans can also help in reducing traffic congestion. Whilst this can be relatively labour intensive, using tools such as the County Council public transport website, personalised travel options can be given easily to many people.

Marketing and Promotion
Alongside the more personalised element of travel planning it is also important that people in North Yorkshire are aware of their available travel options. Often the private car is seen as the only viable option to complete journeys. This is particularly prevalent for shorter journeys (DfT figures estimate that 23% of all car trips are less than 2 miles). The County Council will where funding allows, further develop its marketing and promotion of sustainable travel choices to encourage modal shift.

As with the marketing and promotion of workplace travel plans, any marketing will be aimed at promoting the actual benefit to the individual, such as the money they could save by not using as much petrol and also through the potential health benefits of walking or cycling for shorter journeys as opposed to using the private car.

The County Council will aim to work alongside key partners such as the Borough and District Councils across the County, Local Strategic Partnerships, and public transport operators other local groups, to try and increase awareness of more sustainable travel options. Events such as “Car
free” days in Skipton and Harrogate have helped to raise awareness of how to make journeys without using the private car.

Ticketing Measures
Improvements to ticketing and ticketing information can help to encourage transport users across the County to use public transport in preference to other less sustainable modes of transport. The County Council will seek to work, where funding allows, with operators, businesses and visitor attractions to promote incentives to encourage public transport use (such as money off at attractions if a valid bus ticket is provided etc)

Providing information about weekly / monthly tickets will be considered. This would help to inform users and potential users about the potential costs savings available through purchasing a longer term ticket.

The County Council will work where possible in partnership with operators, other authorities and other relevant stakeholders such as user groups etc to try and address these issues.

Existing Infrastructure
The County Council recognises that by managing and maintaining the existing transport network across the County it will be able to contribute to reducing congestion. For example by maintaining existing pedestrian and cyclist facilities to make it easier for walking and cycling to take place, the County Council will be able to assist in promoting more sustainable modes of transport.

Through its targeted maintenance programme as outlined in the Transport Asset Management Plan appendix the County Council will aim to ensure that key routes will continue to be maintained to a suitable standard to enable the safe and efficient movement of both motorised and non motorised traffic.

Where applicable the County Council will look at alternative routeing options for traffic, to divert traffic on to more appropriate routes. Using the network hierarchy developed as part of Transport Asset Management Plan and knowledge of the existing network, it may be possible to improve signing to direct traffic on to more appropriate routes.

New Infrastructure
The County Council will investigate opportunities for new infrastructure to offer the opportunity for modal shift. These will only be considered if appropriate management and maintenance options do not provide a suitable solution. Potential options include new footway links, cycle facilities, improved bus infrastructure and new pedestrian crossing facilities. This list is not exhaustive and additional measures will be considered on a location specific basis if required.

Fit for purpose measures for pedestrians and cyclists will be investigated. This includes provision of appropriate crossing facilities to reduce severance
issues; appropriate signing including walking times on signs to encourage people to walk instead of using private cars.

The County Council will look to target the implementation of new cycling and pedestrian infrastructure in areas where they will achieve the most benefit and usage. Whilst the County Council recognises the benefits of longer distance rural cycling routes, any money invested in cycling will be concentrated on urban routes where cycling can be used as a legitimate alternative to private car usage.

At locations of specific congestion such as junctions and roundabouts, solutions that may improve traffic flows will be investigated. Measures such as adapting and optimising the signal timings at traffic signals, improving signing and lining at junctions and roundabout efficiency will be looked at before new infrastructure is implemented.

Due to reduced levels of available funding during LTP3 it is likely that significant larger scale infrastructure improvements will not be taken forward. As the current regional transport funding allocation is fully committed throughout LTP3, new major schemes to relieve congestion are unlikely to progressed during LTP3 however the County Council will utilise any future opportunities for major scheme funding to apply for possible congestion reduction schemes.

The proposed Bedale Aiskew Leeming Bar Bypass did have funding provisionally allocated. However as part of a review of funding by the coalition government, this scheme has been placed on hold. The scheme will provide significant local congestion benefits to the communities of Bedale, Aiskew and Leeming Bar, whilst also providing a link to the newly upgraded A1 (M).

Notwithstanding the above, infrastructure improvements and new infrastructure that encourage modal shift and reduces congestion will be investigated and assessed and implemented if available funding exists.

Localised travel awareness measures will be implemented to promote new infrastructure facilities and services as and when they are implemented. This will assist in trying to maximise the usage of the new scheme / services.

As Local Development Frameworks are developed throughout the County by relevant planning authorities, the County Council will look to support these developments wherever possible. It should be noted however that as funding is limited for new transport infrastructure the County Council will not be in a position to fund substantial transport infrastructure improvements to facilitate new developments.

Developers will continue to be encouraged to negate the impact of new developments by implementing new infrastructure to promote and facilitate sustainable travel. The impact of new developments is not just felt in the immediate vicinity of the development. Trips generated from new housing
and employment land will impact upon the wider transport network and as such improvements over a wider area will be considered as part of the production of Strategic Transport Improvement Master Plans (STIMPS.) This process is outlined in more detail in section 9.

Other Facilities
An important tool in reducing the amount of travel and consequently reducing congestion is through improving opportunities to complete tasks on a more localised level.

The County Council will continue to support localised service delivery and encourage residents to access services without travelling. An important element of this is developing the use of broadband services across the County. This will enable many employees across the County to be able to work remotely from home or from a closer office. The County Council is encouraging flexible working practices for its own employees. Through travel awareness promotion and some level of guidance from the County Council it is hoped that other employers across the county will also take up similar measures. Further details on this are included in the Access to Services Appendix.
10.0 Transport and Sustainable Tourism

Tourism is one of the main sectors of the North Yorkshire economy employing approximately 25% of the workforce. However tourism requires transport and as such can both contribute towards transport problems in the County (such as air quality, congestion) and be hindered by poor transport connections.

The County Council aims to actively encourage visitors and residents to use public transport and other sustainable modes of transport when visiting destinations from within and outside the County. Whilst it is not the role of the LTP to directly promote tourism we will work as and when appropriate with partners and the tourist industry to seek to remove some of the transport barriers to tourists whilst also seeking to minimise the volume and impact of tourist related traffic.

Due to decreased levels of funding available it is likely that the level of impact that the County Council will actually have will be relatively low. Wherever possible measures will be taken forward to try and ensure that tourists and visitors use the most sustainable mode of transport to access destinations across the County.

The County Council will particularly seek to work alongside partner organisations such as Borough and District Councils, National Parks, Visit Yorkshire etc to support and encourage
11.0 Freight Transport in North Yorkshire

Introduction
The efficient and effective movement and distribution of goods is an essential part of a successful economy.

North Yorkshire is home to a diverse range of business and industries, each with their own specific distribution needs. These range from quarries producing thousands of tonnes of aggregate through to small internet based trading companies distributing stock across the world by post.

Virtually all aspects of daily life in North Yorkshire have a requirement on freight transport, ranging from delivery of fuel, food and a range of supplies to businesses and organisations. The day to day operations of almost all business are dependent upon goods being able to be collected and delivered within the County. Likewise most of the goods purchased and consumed by households, food, clothing etc has in general arrived via lorry.

Adjacent to the County are the major port and industrial facilities in the Tees Valley, the Leeds City Region and Humber Ports. All of these areas act as major freight trip generators and destinations.

Routes
Significant amounts of freight traffic pass through the County every day accessing adjacent areas and also travelling further afield. The major north / south routes of the A1/A1 (M), A19/A168 and the east coast railway line all pass through the County. Two major east west links, the M62 corridor (road and Rail) and A66 both have short sections in North Yorkshire.

In addition to the major national routes identified above, several regional and local routes are important for freight transport. These include:

- A64 Scarborough and Malton to A1(M)
- A59 cross Pennine route linking Lancashire/ Skipton / Harrogate / York
- A6068 / A629 linking West Yorkshire and North East Lancashire
- A65 Kendal to Skipton
- A174 Teeside to East Coast
- A170 Scarborough to A19
- Settle and Carlisle Railway
- Northallerton (ECML) to Teesport Railway

Freight transport is not limited to the routes identified. Lower levels of freight operations take place along the majority of routes across the County. Freight vehicles (lorries and vans) often have to travel along smaller country roads to access their collection and delivery points.

Major Freight Generators
There are several key areas in the County which are major freight generators. These are listed below;

<table>
<thead>
<tr>
<th>Area</th>
<th>Freight Transport Generators</th>
</tr>
</thead>
</table>

- 71 -
Table 19 Freight Transport Generators in North Yorkshire

<table>
<thead>
<tr>
<th>Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 (M) Corridor</td>
<td>Distribution facilities at Boroughbridge, Melmerby and Leeming Bar</td>
</tr>
<tr>
<td>Sherburn in Elmet</td>
<td>Major distribution and industrial park</td>
</tr>
<tr>
<td>Selby Energy Belt</td>
<td>Drax, Eggbrough and Ferrybridge Power Stations (Ferrybridge is just on border of North Yorkshire and Wakefield MBC area)</td>
</tr>
<tr>
<td>Ribbesdale and Mid Craven</td>
<td>Major quarrying area</td>
</tr>
<tr>
<td>North Yorkshire Moors</td>
<td>Roundwood timber production and harvesting</td>
</tr>
<tr>
<td>Scarborough / Eastfield</td>
<td>Several large industrial units close to Eastfield and retail developments in town.</td>
</tr>
</tbody>
</table>

In addition to these identified areas, virtually all towns have industrial and business parks. These vary in both size and the amount of freight traffic they generate. Almost all retail and leisure operations require deliveries, almost all made by road transport ranging from van deliveries to 44 tonne lorries.

**Sustainable and Responsible Freight Transport**

The County Council supports and promotes sustainable and responsible freight transport. This can help to contribute significantly towards all of the LTP3 objectives. Whilst we have limited input on the daily operations of independent businesses we can ensure that through regulation, provision of facilities, enforcement and education, that responsible and sustainable freight transport continues to be the norm throughout the County.

**Sustainable and responsible Freight Transport - Impact on LTP objectives.**

Freight transport in North Yorkshire can have a significant impact on achieving the 5 LTP objectives. The following section outlines the impact on each objective in more detail.

**Supporting Economic Growth**

Ensuring goods can be transported reliably and effectively across the County assists in supporting economic growth allowing businesses to operate successfully.

Using the manage, maintain and improvement hierarchy the County Council will look at ways to reduce delays on internal connections between towns and villages within North Yorkshire. This will assist in improving connections for all road users and more specifically allow freight to be moved more effectively and efficiently by improving journey time reliability for businesses.

Several areas of the County suffer localised congestion issues; these can often cause major issues to freight transport, delaying deliveries and collections, ultimately adding to business costs. Through effective management of these congestion areas and promotion of alternative modes
of freight transport, we will seek to reduce delays, and as a result improve freight transport performance and reliability.

Protecting the Environment
Wherever possible and suitable the County Council will look to encourage and support initiatives to move freight from road to other more environmentally sustainable mode such as rail and even water. Opportunities exist in areas of the County to shift freight from road to rail. Whilst it is recognised that the financial and operational implications of modal shift may be prohibitive the County Council will work with operators and assist in any application for funding opportunities such as the Freight Facilities Grant etc. It is however likely that funds from the County Council will be extremely limited and that any support will be non-financial.

Many of the ways in which operators can reduce their carbon emissions are linked to internal business decisions. These are made by the individual businesses on routes taken, load consolidation and driver training. These are generally outside of the control of the County Council. We will however support businesses wherever possible in trying to reduce their carbon emissions through promotion of DfT led initiatives such as Safe And Efficient Driver (SAFED) training and also work with our own suppliers and operations to ensure that they are as carbon efficient as possible during transport.

Freight transport is required in some of the most rural parts of the County, (accessing blocks of timber etc). Many of these locations are within areas of designated importance such as National Parks. It is important that this freight transport is managed and operated in a way that does not impact negatively on the natural environment. The County Council will work alongside operators and other relevant stakeholders to ensure that any issues are identified and managed appropriately. An example of this approach is the proactive management of timber extraction in the North Yorkshire Moors National Park. Through discussion and co-operation, measures are taken to ensure that routes taken avoid or consider the potential effect on verges that may have special designations, or which may contain sensitive plants and species, and consequently reduce any potential impact on the natural environment.

Likewise many of the towns and villages across the county have specific characteristics that contribute to their own unique character. It is essential that these are maintained, whilst the needs of the businesses that the freight transport is serving are also taken in to consideration, so that they are able to function properly.

Ensuring Better Safety and Health
As part of the overall objective of the County Council and other stakeholders to reduce the number of accidents on roads across the County, we will look to promote where possible DfT campaigns such as SAFED which aim to promote training for HGV drivers, helping them to become safer and more fuel efficient drivers.
If any specific freight issues are identified the County Council will consider setting up education campaigns targeting freight operators and HGV drivers to increase their awareness of specific road safety issues.

Improving Accessibility
To support the County Council’s commitment to encourage local delivery and supply of services, more freight and goods deliveries may be required in local areas in order to bring supplies to people rather than people to supplies, where services are more centralised. It is important that any increase or variations in deliveries are managed effectively to ensure that their impact on communities and the local environment is reduced.

Improving Quality of Life
Whilst working towards achieving the objectives laid out above, significant improvements can be made to improving the quality of life for residents across the County.

Freight transport can often be seen by residents and communities as having a detrimental impact on their quality of life. Residents can often be disturbed by noise and vibrations of good vehicles passing their homes and places of work. As demands on the freight industry are increased, the need to operate during the night and early in the morning may become greater, and consequently may have a detrimental effect on people living in the vicinity of well used freight routes.

Pedestrians and other non motorised transport users can often feel intimidated by the size of vehicles as they pass by. This is particularly prevalent where HGVs pass through towns and villages in close proximity to pedestrians.

The County Council supports responsible freight transport, where drivers take into consideration the impact that they can have on local communities. We will continue to encourage operators try to reduce their impact through measures such as keeping vehicle noise as low as possible, ensuring strict adherence to speed restrictions, and avoiding multiple vehicles ‘in convoy’ through small communities wherever possible.

The County Council will try wherever possible to work alongside operators and businesses to ensure that any disturbance to local communities is managed and reduced where applicable and to promote responsible freight transport.

Resolving Freight Issues- Partnership Approach
Where specific freight issues are identified, the County Council will look at ways of addressing these through a cooperative partnership approach with all relevant stakeholders. This approach brings together all interested parties and helps to develop an all round understanding of everyone’s issues and views. Outcomes are generally constructive solutions that reconcile the local social, economic and environmental concerns with the needs of access for goods and services.
Already across the County three formal Freight Quality Partnerships (FQPs) have been established. These are;

- Sutton Bank FQP
- Settle Area FQP
- North Yorkshire Timber FQP

The Sutton Bank and Settle area partnerships deal with location specific issues whereas the timber partnership looks at issues across the County associated with the transport of timber from forest blocks to the A/B road network.

In addition to these established partnerships, the County Council will look at ways of further developing smaller scale partnerships that have been established across the County to address specific freight issues. The amount of support that can be given to these partnerships will be determined based upon available funding.

**Dealing with specific HGV Issues**

The County Council recognises that the not all issues can be resolved through a partnership approach, especially in particularly environmentally sensitive areas. Often in these instances some level of restriction is required to control the level of freight traffic, in these instances legitimate access for freight transport will be maintained. A restriction will only be considered subject to the following criteria;

1. A significant problem caused by freight traffic travelling through an area is identified.
2. The number of HGVs can be reduced.
3. A suitable alternative HGV route is available
4. An environmental benefit can be achieved from re-routeing HGVs
5. The problem is not simply moved from one location to another
6. The proposed redirection is largely self enforcing
7. Appropriate enforcement of the restriction can be made

There are over 2000 bridges across the County. Many of these are of historic or environmental importance, and are not strong enough, are too low or are too narrow to allow safe passage for modern HGVs. As a result there are numerous width, weight and height restrictions across the County in place to preserve bridges, structures and the carriageway structure.

Where formal restrictions are in place, these will be enforced primarily by North Yorkshire County Council Trading Standards. Across the County several Lorry Watch schemes have already been established. Where applicable these will be rolled out in other areas of the County.

These schemes involve members of the local community being given appropriate training to identify and record vehicles that are in breach of weight, width and height restrictions. Details are recorded and supplied to the
trading standards team who then conduct further investigation, and if applicable, legal action is taken against offending operators.

GPS and satellite navigation related issues
With the ever increasing use of satellite navigation (sat nav.) and associated GPS technology in HGVs, there has been an increase in the number of HGVs using inappropriate routes as a result of directions given by their sat nav. The County Council is compiling an overview of all sat nav issues across the County (including non HGV related issues). These will be forwarded to sat nav manufacturers and suppliers so that their systems can be updated.

The County Council supports the development of HGV specific sat nav systems that take into account width, height and weight restrictions and avoid the use of inappropriate routes. Wherever possible we will assist in the supply of appropriate information to sat nav providers.

Delivery times
Almost all businesses require deliveries and collections to be made. In general these do not cause significant disturbance or congestion, however in specific instances deliveries and collections can cause disruption, by blocking town centre routes, parking in pedestrian areas etc. The County Council will work to manage these deliveries in a way that they do not negatively impact on the local road network.

New Developments
New developments above a pre determined size (based on development type as set out in the GLG / DfT guidance on transport assessments March 2007) require a green travel plan. This is to demonstrate how they can reduce travel demand and also increase the proportion of sustainable travel. Whilst this is generally aimed at the movement of people, the County Council will look to encourage new business, retail and industrial developments to take in to consideration the movement of freight to and from these sites by producing a sustainable freight plan. Whilst no specific budget exists for this, the County Council will assist through the provision of travel awareness and planning support.

Through working alongside local planning authorities, the County Council will encourage future land use developments for retail, business and industry to be located in close proximity to the existing transport network, and ensure that good links for freight are considered. Wherever feasible this will encourage the provision of rail access to encourage modal shift.

Rail freight
Currently within North Yorkshire there is a limited number of locations on the rail network that are capable of handling rail freight. Due to relatively high operating costs, rail freight is often only viable over longer distances for the movement of high volumes of product. As the number of passenger services on the rail network increases, opportunities for freight movements are becoming more limited.
The bulk of the rail freight within North Yorkshire has an origin and destination outside of the County. Significant rail freight movements pass along the following routes:

- East Coast Main Line (ECML)
- Northallerton to Teeside, providing a link from Teesport to the ECML
- Settle and Carlisle line linking Cumbria and Scotland to the West Yorkshire Conurbations
- Hull to Leeds (Selby) providing a key Trans Pennine route accessing the Humber / Mersey Ports and conurbations along the M62 Corridor.

The main Power Stations within the Selby Area, Drax and Eggborough and Ferrybridge (just outside of the County boundary) are major destinations for inward rail freight movements. The County Council will continue to support these movements and encourage any future developments to be supported by rail based inward transportation wherever possible.

Located on the B6265 between Skipton and Grassington, Swinden Quarry is served by regular trains collecting aggregate for delivery to locations within West Yorkshire and elsewhere across the County.

Opportunities exist in specific locations across the County to begin to move freight from road to rail. At the time of preparing this document several measures in Ribblesdale are being looked at to support the movement of timber by rail. These movements are from major forests within the local area to processing facilities outside of the region. The County Council will, where possible, support initiatives such as this.

The locations identified have demonstrated that rail freight can be a viable option in specific circumstances. The County Council will support where possible any developments that promotes the use of rail freight providing they meet respective planning guidelines etc. These developments are likely to be privately funded, however the County Council will support where applicable any applications to the Central Government funded Freight Facilities Grant scheme.
NORTH YORKSHIRE COUNTY COUNCIL

Local Transport Plan 3

Appendix 2

Environment and Climate Change
Environment and Climate Change Appendix

The appendix details how transport policy within North Yorkshire will have regard to the Environment and Climate Change.

The Transport Act\(^1\) requires local transport authorities to have regard to Government guidance and policies on the environment when formulating policies for the Local Transport Plan. The Act makes particular reference to climate change mitigation and adaptation, but authorities should consider how their strategies and implementation plans relate to all relevant environmental issues, including air quality, noise, landscape and biodiversity.

The Local Transport Plan 3 consultation

The Local Transport Plan 3 first phase consultation ranked six priorities in the following order, where 1 is the highest priority:

1. Supporting the Local Economy  
2. Improving Accessibility  
3. Ensuring Better Health & Safety  
4. Improving Quality of Life  
5. Protecting the Environment  
6. Other

The protecting the environment priority was ranked as 5. However, support was fairly evenly spread across objectives 1-5 with only a three per cent variation between the highest and lowest scoring objective.

In identifying how best to protect the environment there was an overwhelming majority of support for measures to ‘reduce unnecessary trips by motorised vehicles and encourage use of more sustainable transport modes such as park and ride, cycling, scooters, public transport and walking, or more sustainable options for freight.’

The measures to reduce the need to travel both through providing services locally and through the planning system were also ranked highly. The graph below summarises all of the responses.

\(^1\) Transport Act 2000, Office of Public Sector Information
This appendix recognises the relative importance placed on each objective, but it will be important to address all five objectives through LTP3.

In the second phase of consultation there were some comments made on the need to give full consideration of environmental issues (including carbon) especially through better promotion and provision for alternatives (walking and cycling).

Environment and climate change is one of the four key objectives of LTP3 and this appendix sets out the County Councils approach to achieving this objective. It must however be recognised that in the shorter term severe funding constraints will mean that the majority of transport funding will need to be utilised to maintain the existing highway network and that new provision for pedestrians and cyclists is unlikely to be affordable. We will however continue to promote alternative modes of travel and should greater funding become available seek to improve provision for sustainable transport modes.

**Layout**
Given the broad nature of ‘environment’ in terms of the scope of LTP3, this appendix has been split into three sub-sections:
- Climate change
- The effect of transport on health
- The effect of transport on the historic and natural environment

Each sub-section is set out as follows:
- Introduction-link to LTP3 objectives
- Evidence/literature review/policy review
- Key issues/problems for North Yorkshire
There is then a combined table for all three sub-sections detailing:

- Interventions
- Performance management

The Strategic Environmental Assessment (SEA)\(^2\) has been undertaken in parallel with the development of LTP3. The SEA is required under an EU Directive to assess the effects of certain plans and programmes, including Local Transport Plans, on the environment.

\(^2\) SEA is a generic tool which can be used in a variety of situations. A particular form of SEA is being introduced by the European Union Directive 2001/42/EC. This requires national, regional and local authorities in Member States to carry out strategic environmental assessment on certain plans and programmes that they promote.
Climate change

Introduction-link to LTP3 objectives

The UK Government identifies the need to make the transport system greener and more sustainable3.

The previous Government published a national carbon reduction strategy for transport ‘Low Carbon Transport: A Greener Future’4 which identified that greenhouse gas emissions from transport represent 21 per cent of total UK domestic emissions. Minimising emissions from transport must therefore be part of the solution. The strategy sought to cut carbon dioxide emissions from new cars across Europe by 40% on 2007 levels, support new electric cars and source 10% of transport energy from sustainable sources by 2020.

The strategy identified local authorities as particularly important partners in responding to climate change by leading change, influencing the patterns of journeys and encouraging more sustainable choices. It also stressed the importance of local authorities putting in place measures to improve the resilience of the local transport infrastructure to the impacts of climate change. The DfT has published ‘Delivering Sustainable Low Carbon Travel: An Essential Guide for Local Authorities’5 to support delivery of the strategy and this appendix takes account of that guidance.

The LTP has little control over demand for travel, which is subject to wider economic and social influences such as Government taxation. However, it can help to increase awareness of travel options and through promotion of supporting facilities and infrastructure help to encourage and sustain changed travel behaviour.

Supporting delivery on climate change will contribute to a number of the other LTP3 objectives. It will help to deliver on improving ‘quality of life’, whilst encouraging people to use more sustainable modes of travel can have health benefits and will therefore contribute to ‘safety and healthier travel’.

Evidence/literature review /policy review

Committee on Climate Change
In October 2009 the Committee on Climate Change (CCC)6 provided its annual report to Parliament on the progress that Government is making in meeting carbon budgets and in reducing emissions of greenhouse gases.

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3 The Coalition: our programme for government, May 2010
4 Low Carbon Transport: A Green Future, Department for Transport, July 2009
5 Delivering Sustainable Low Carbon Travel: An Essential Guide for Local Authorities, Department for Transport, November 2009
6 CCC is an independent body established under the Climate Change Act to advise the Government
In terms of transport the Committee make recommendations which combine technology with 'smarter choices' and identify measures to reduce the carbon intensity of vehicles and change consumer behaviour.

**CO2 Emissions data**
The map below shows 2006 net road transport emissions (tonnes CO2) for Yorkshire and Humber. The highest level of net emissions within the County can be seen in Harrogate, Hambleton and Selby which is likely to be because key strategic routes including the A1 (Hambleton and Harrogate), A19 (Hambleton) and M62 (Selby) run through one or more of these Districts. A significant number of trips on these strategic routes represent through movements and are not generated within North Yorkshire.

The map below shows 2006 road transport emissions per capita (kilo tonnes CO2) for Yorkshire and Humber. It can be seen that per capita emissions are highest in areas of lowest population density and that the Districts of North Yorkshire have some of the highest per capita emissions. It is accepted that per capita emissions are likely to be higher in rural areas as people generally have to travel further to access employment and key services.

It should be noted however that road transport emissions per capita have been calculated by dividing the net emissions for each local authority area by the total population. The output is therefore not truly reflective of the
emissions generated by residents of North Yorkshire as it does not separate those emissions generated by through movements from those generated locally.

In North Yorkshire Hambleton has the highest per capita emissions, which is likely to be because the A1 and A19 pass through the District.

The map below shows 1x1 km road transport emissions of CO2 in 2006 (tonnes) for Yorkshire and Humber. It can be seen that emissions are concentrated in urban areas and along key strategic routes. In North Yorkshire the highest concentration of emissions can be seen in Harrogate and along the A1, A19 and to a lesser extent the A64.
The graph below shows CO2 emissions from transport by road type. North Yorkshire has the fifth highest volume of CO2 emissions from transport of sixteen authorities used to make comparison with the County. All of these authorities are predominantly rural in nature and so provide a useful comparison to North Yorkshire.

Source: Yorkshire and Humber databook
Peak Oil

Peak oil refers to the point of maximum oil production, after which output permanently declines. Many countries have already passed peak oil and the International Energy Agency (IEA) forecasts that global supply will match demand through to 2030. Research by the UK Energy Research Council suggests a peak in production by 2031, at the very latest, with a peak before 2020 a significant risk. Whilst the actual year of peak oil is still much debated, the concept is largely accepted.

To compound matters, peak oil and the subsequent decline could occur against a backdrop of increasing demand. It is therefore very likely that oil prices will become significantly higher and very volatile. With oil-based fuels used in 99% of UK surface transport the impact on transport demand could be significant. Peak oil provides further incentive to reduce reliance on oil-based fuels.

Technology

In a report for HM Treasury on low-carbon cars\(^7\) the conclusion was drawn that technology is available now that could bring a 30% reduction in emissions of CO\(_2\) over the next ten years, and that developing technologies would deliver a 50% reduction by 2030, and zero emissions by 2050. The technologies underlying this finding were improvements in efficiency in the short term, and then a move to a sequence of alternative fuels over the medium to long term.

\(^7\) The King Review of Low-Carbon Cars, HM Treasury, 2007
Change in existing technologies – the report proposed that fuel efficiency could be improved by as much as 30% within ten years. It was suggested that many of the potential improvements were being considered for the next ‘car model cycle’. It would however in most instances entail ‘turnover’ of current vehicles for more efficient models.

Wider use of existing fuel alternatives – there is potential to increase the use of existing alternative hydrocarbon fuels. Liquid Petroleum Gas (LPG) and Compressed Natural Gas (CNG) are both already available and in use in the UK. However, the limited availability of these fuels, particularly in rural areas, means they are not viable at the present time.

Alternative (fuel) technologies – the primary technological change in transport over the next 20 years as identified in the report is a move to alternative fuels, and three of these were identified as being likely to replace petrol and diesel:
- Sustainable Biofuels
- Electricity
- Hydrogen

The first two ‘new’ fuels (sustainable biofuels and electricity) are likely to be in widespread use over the next 20 years or so, but the third (hydrogen) is unlikely to make a big impact on personal transport until the middle of the century – and only then if some key technological breakthroughs are made.

For all of these alternatives, however, it is worth noting that certain fuels lend themselves more to particular environments and uses. For example, electric cars may be better suited to short city and town journeys due to their limited range and long recharging times. Vehicles using gaseous fuels such as biogas and hydrogen need to be able to accommodate larger and heavier tanks, requiring larger vehicles – but offering greater range as a result. These types of vehicles may be better suited to the longer distances commonly travelled in rural areas.

The timescales involved with many of these technologies extend well beyond LTP3. In the short to medium term there is the potential for Local Authorities to support the infrastructure required by vehicles fuelled by alternative sources. The larger towns and popular tourist destinations may be suited to the introduction of charging points for electric vehicles for example. This is an evolving agenda and consideration would need to be given to the potential usage and costs before any intervention is progressed. There are also more practical issues that would need to be overcome, which are set out in a Government report looking at how to facilitate charging points through the planning system and identifying other regulatory concerns in bringing this technology forward.

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8 Review of permitted development for charging points for electric cars, DCLG, November 2009
**Smarter choices/behaviour change**

Smarter choices are techniques for influencing people’s travel behaviour towards more sustainable options, for instance travel planning, travel awareness campaigns and setting up websites for car share schemes. In 2004, the Department for Transport (DfT) published research into the effectiveness of Smarter Choices entitled ‘Smarter Choices, changing the way we travel’. The report identified that a sustained and high intensity programme of Smarter Choices could reduce ‘non-urban’ peak traffic by 14% and off-peak traffic by 7%. The main conclusion was that smarter choices merit serious consideration for an expanded role in local and national transport strategy.

Futerra have undertaken research on behalf of the Government into the communications tactics for climate change entitled ‘new rules: new game’. The research identifies five principles to remember when planning specific communications work and it will be important to build this research into interventions in North Yorkshire.

**Measuring impact**

It is difficult to accurately measure the impact of specific interventions in terms of minimising greenhouse gas emissions. It will therefore be important to evaluate the impact of interventions at a more localised level. Developing strong business cases, which demonstrate the likely benefits of proposed interventions, will also help to secure buy-in from stakeholders. The Department for Transport has indicated that they will be developing a carbon calculator for use by Local authorities in assessing local transport schemes and initiatives.

**Key issues/problems for North Yorkshire**

**Private car dominates rural mobility**

After a steady increase from 2004 – 2007 area wide traffic growth across North Yorkshire is now starting to decrease. This will have benefits in terms of reduced greenhouse gas emissions. However, it is recognised that this trend is likely to be strongly influenced by the current economic situation and not a shift away from the car.

The RAC Foundation has undertaken an enquiry into transport over the next 50 years. The report concluded that the car would continue to be the ‘main means of transport’ over this period. This might therefore point to the greatest emphasis needing to be on more responsible car use, for example through encouraging multi-purpose journeys, car-sharing and eco-driving.

Analysis using the National Travel Survey shows that as settlement size decreases, the average distance travelled by individuals’ increases. In an urban area (50K-100K) the average distance travelled per annum is

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9 Smarter Choices, changing the way we travel, Department for Transport, 2005
10 New Rules: New Game, Futerra Sustainability Communications
11 Motoring towards 2050, RAC Foundation, 2002
12 National Travel Survey, Department for Transport, combined data 2002-06
approximately 7,000 miles, where as in rural areas the figure is almost 10,000 miles per annum.

Research by the Commission for Rural Communities\textsuperscript{13} showed that household access to the car in rural areas is high. Partly as a result of this, and because of the diffuse nature of the rural population, it is often not economically viable to provide extensive public transport provision. This makes traditional public transport a less viable alternative for those without access to a car.

The map below shows the predicted percentage growth in car ownership by 2026 across Yorkshire and the Humber. In much of North Yorkshire there is predicted to be a minimum 20% growth and in some Districts this is even higher. This will make achieving a reduction in CO2 emissions through modal shift extremely challenging.

\textbf{Forecast growth in car ownership 2006 to 2026 by NTEM zone in Yorkshire and the Humber}

\begin{center}
\includegraphics[width=\textwidth]{map.png}
\end{center}

\textit{Source: DaSTS City and Regional network data book, 2009}

A Yorkshire and Humber report\textsuperscript{14} into rural car sharing found relatively low levels of membership and uptake of formal car sharing in the region, but high levels of informal car sharing in a range of rural areas. Given the reliance on the private car and likely growth in car ownership there is felt to be potential to increase the level of car sharing in North Yorkshire.

\textsuperscript{13} Thinking about rural transport, Commission for Rural Communities, 2009
\textsuperscript{14} Y&H Regional Rural Car Share Feasibility Study, May 2010
Modal shift
Achieving modal shift away from single occupancy car trips to more sustainable alternatives will reduce greenhouse gas emissions from transport and have a positive influence on local air quality. In urban areas, primarily Harrogate and Scarborough, and to a lesser extent in smaller towns, it is more realistic to reduce car use. Achieving modal shift is very difficult in remote, sparsely populated rural areas.

Encouraging the use of public transport and maintaining the services offered is an important element of achieving modal shift. Travel awareness interventions will also have a role to play in encouraging sustainable travel choices. The role of travel awareness is justified by psychological and marketing theories that better awareness of the alternatives is a precursor to an individual changing their behaviour. If people don't have information about their travel options then they will be unable to make an informed decision. By ensuring that the public has a good understanding of the alternative methods of travel, they will be encouraged to use them.

Adaptation and extreme weather events
In recent years, many areas of North Yorkshire have suffered extreme weather events, including flash flooding, extreme hot and cold temperatures and high winds.

In June 2005, there were flash floods when an estimated 70mm of rain fell in three hours across North Yorkshire and nine people were reported missing. In 2006 a heat wave led to many fields being burnt in the North York Moors. In addition, thirteen gritting machines had to be deployed across the County to prevent the roads from melting. In the winter of 2009/10 there was an extended period of extreme weather that had major impacts on County Council services.

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15 Yorkshire and Humber Climate Change Adaptation Study, Royal Haskoning, 2009
The Yorkshire and Humber Regional Adaptation Study concluded that these extreme weather events are likely to become more frequent and there is therefore a requirement to plan and design for their occurrence. The study identifies a number of climate related impacts on transport infrastructure. The table below details these impacts and the suggested adaptation measures along with some more localised impacts.

<table>
<thead>
<tr>
<th>Impact</th>
<th>Suggested adaptation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface melt of rural road surfaces and associated knock-on effects, such as disruption to travel</td>
<td>Use of alternative road surfacing materials in carriageway maintenance programmes to ensure higher melt resistance</td>
</tr>
<tr>
<td>Increased number of traffic accidents and delays on the principal transport routes through North Yorkshire caused by increased winter rainfall and winter average wind speeds</td>
<td>Weather and travel warnings issued to users of key road networks during storm events and anticipate increased resource requirements for emergency responses</td>
</tr>
<tr>
<td>Increased tourism and recreational activity, as other European resorts become too hot, putting increased pressure on local road networks</td>
<td>Plan for increased visitor numbers and consider appropriate interventions to manage additional traffic</td>
</tr>
<tr>
<td>Increased blockage of drains, culverts and gullies due to flooding and rewetting after dry periods</td>
<td>Consider approach to inspection and clearance of drain, culvert and gulley blockages</td>
</tr>
<tr>
<td>Increased frequency of flooding from drainage and sewer systems in urban</td>
<td>Consider improved sewer and drainage design capacity in scheme</td>
</tr>
<tr>
<td>Areas, especially in winter</td>
<td>Design</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Increased risk of coastal erosion leading to loss of rail line at Filey and potential damage to the A174 Sandsend Road and A165 Filey to Scarborough</td>
<td>Plan now for longer-term realignment of sections of rail and road near the coastal margin. Specifically undertake a strategic review of the A174 as a number of critical assets are nearing or have reached the end of their asset life. The recent rapid reduction in beach levels has significantly increased the rate of decline and the risks faced by the structures and the adjacent highway.</td>
</tr>
</tbody>
</table>

| Deterioration of surface materials due to water logging of potholes | Ensure effective maintenance of highway network |
| Loss of highway network is possible due to flooding, coastal erosion and landslip. This has already happened on rights of way at Filey and Cleveland Way National Trail | Understand the risks to the highway network and implement remedial measures where appropriate |
| Increased likelihood of damage to bridge structures as a result of localised heavy rainfall events | Implement bridge adaptations, for example making structures higher and wider, to reduce level of risk |

**Flood management**

Multiple flooding events have been recorded in each of the last five years. Flooding events primarily cause damage to buildings, increase disruption on the roads and lead to reductions in the availability of Council services. The Pitt Review into the 2007 floods identified the need to understand and mitigate the risks to critical infrastructure, including the transport network, from flooding. The Flood and Water Management Act 2010 requires flood risk to be properly assessed, communicated and managed to improve resilience.
Sustainable Highway Maintenance
Highway Maintenance has adopted a materials hierarchy as the basis for forming decisions on materials. The principle of whole life cost, from acquiring a material through to disposing of it, is integral to this decision making process.

Minimise the need to use materials

Use/re-use materials already on site

Re-use materials from elsewhere
(giving consideration to transportation distance)

Use recycled materials
(giving consideration to transportation distance)

Use new materials

Materials hierarchy used by Highway Maintenance
The effect of transport on health

Introduction-link to LTP3 objectives

Transport can have a significant detrimental effect on people’s health and quality of life in areas where there are high levels of transport related pollutants and noise.

In 1995 the Government introduced the Environment Act\textsuperscript{16}, which placed a requirement on local authorities to review and assess air quality in their area against national standards and objectives. Where these standards are exceeded, local authorities are required to designate an Air Quality Management Area (AQMAs) and prepare and implement a remedial action plan. It should also be noted that gases like nitrous oxide, which contribute to poor air quality, have 310 times the global warming potential of carbon dioxide.

The 2006 Environmental Noise Regulations\textsuperscript{17} relate to the assessment and management of environmental noise. Environmental noise is defined in the Regulations as unwanted or harmful outdoor sound created by human activities, including noise emitted by both road and rail traffic. In those areas where the level of noise generated by traffic is unacceptable it is important to seek appropriate solutions.

There is also a potential issue with light pollution particularly in urban areas as more routes and paths are lit.

Evidence/literature review/policy review

Environment Act 1995

Local authorities have statutory duties relating to local air quality management under the Environment Act. In North Yorkshire this duty is the responsibility of the District and Borough Councils.

A review and assessment of air quality is the first step in the local air quality management process. Local authorities have to consider the current and likely future air quality in their areas and assess whether the objectives as set out in the Air Quality Regulations\textsuperscript{18} are, or are likely to be, exceeded. Where the objectives are likely to be exceeded, the local authority must take remedial action to work towards achieving the objectives.

All local authorities are expected to undertake a review and assessment every three years. Where an authority identifies a risk that an air quality objective

\textsuperscript{16} Environment Act, Office of Public Sector Information, 1995
\textsuperscript{17} The Environmental Noise Regulations, Office of Public Sector Information, 2006
\textsuperscript{18} Air Quality Regulations, Office of Public Sector Information, 2000
will be exceeded at a specific location they are required to undertake a detailed assessment.

Should the detailed assessment confirm that one or more of the air quality objectives for each of the seven pollutants are not being achieved then an AQMA must be declared. The detailed assessment should clearly identify areas that exceed the objective and possible boundaries for the AQMA. The Department for Transport identify that 95% of AQMA designations are due to transport emissions.\(^{19}\)

A local authority must then prepare and implement a remedial action plan to improve air quality in that area within twelve to eighteen months. Once an AQMA has been identified the Environment Act 1995 requires local authorities to carry out a further assessment of existing and likely future air quality within twelve months.

District and Borough Councils within North Yorkshire publish the results of air quality assessments on their web sites.

**Key issues/problems for North Yorkshire**

**Air Quality**

Exhaust from motorised vehicles is a source of benzene, carbon monoxide, nitrogen dioxide, and particulates. In some circumstances poor air quality can contribute to chronic health conditions such as asthma and cardiovascular problems. These conditions are associated with a 7/8 month reduction in life expectancy and cost the NHS £20.2 billion per year.\(^{20}\) Air pollutants from transport such as nitrogen oxides, carbon monoxide and organic compounds can also form ozone, an irritant to the eyes, nose and lungs.\(^{21}\) In North Yorkshire, air quality problems are limited, but there are discrete hotspots where pollutants exceed the permitted limit values.

**Air Quality Management Areas (AQMAs)**

District Councils in North Yorkshire are required to monitor air quality. In general terms air quality problems from transport are likely to arise in locations with a high volume of traffic and where there are buildings close to the road that create a ‘canyon’ effect and trap pollutants. Air quality is only regarded as a problem where it affects human health, in other words the road needs to be in close proximity to residential dwellings (generally within 10 metres). This explains why there are no designated AQMAs on the trunk road and motorway network within the County. Currently there are only three AQMAs in the whole County. These are:

- Butcher Corner in Malton (Ryedale District)
- Bond End in Knaresborough (Harrogate Borough)
- Skellgate in Ripon (Harrogate Borough)

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\(^{21}\) The Health Effects of Air Pollutants, Committee on the Medical Effects of Air Pollutants, 2000
Ryedale District Council undertook a review and assessment in 2009 and subsequently declared an AQMA at the cross roads known as Butcher Corner in Malton.

Harrogate Borough Council has declared two AQMAs and plans of both are shown below.
AQMA at Skellgate in Ripon

All of these AQMAs are required because the level of the pollutant Nitrogen Dioxide (NO₂) from transport exceeds the air quality objective. This is caused predominantly by congestion and also the general layout of the junctions in these areas. All are locations where there are many buildings close to the highway producing a ‘canyon’ effect, with the buildings either side of the road restricting dispersion and dilution of the emissions.

Harrogate Borough Council assessment

Nitrogen Dioxide (NO₂) monitoring data collected in 2008 identified Low Skellgate, Ripon and Bond End, Knaresborough as locations where the annual mean objective had been exceeded.

In addition the Nitrogen Dioxide (NO₂) annual mean objective at York Place, Knaresborough was exceeded. This location will be considered as part of the further assessment of air quality required to be undertaken in 2010 following the declaration of the AQMA at Bond End in Knaresborough.

The nitrogen dioxide (NO₂) annual mean objective was also exceeded at the Woodlands public house located on the junction of Wetherby Road and Hookstone Chase/Drive, Harrogate. This location has been identified as a problem in previous years. Data is currently being collected and monitoring results will be reported in the next air quality progress report.

Monitoring has also identified borderline levels of Nitrogen Dioxide (NO₂) at two residential locations on Skipton Road, Harrogate. The 2009 assessment report recommends deferring progress to detailed assessment due to the borderline nature of the situation.
Ryedale District Council assessment
An assessment completed in March 2009 concluded that the Nitrogen Dioxide (NO\textsubscript{2}) annual mean objective was likely to be exceeded in several areas within Malton town centre.

On the basis of these findings and in accordance with the statutory guidance, Ryedale District Council determined that an Order should be made to establish an AQMA that covers these locations. The need for an AQMA designation arises primarily because of localised transport pollution.

In May 2009 the assessment report confirmed the need for an AQMA in Malton, but did not identify any other areas in the District with a significant risk of exceeding air quality objectives. The Air Quality Management Area Order for Butcher Corner in Malton came into being in December 2009.

Hambleton District Council assessment
The Council has been monitoring air quality on Friarage Street, Northallerton since 2005 following concerns that the air quality objectives may be at risk of being exceeded. Monitoring has continued to the present day and each year the Council reports the findings to Defra as part of the Air Quality Review and Assessment reports.

The results show that there have been marginal exceedences of the annual mean objective at a number of locations all of which are commercial properties. Given that there are no residential dwellings there is not considered to be relevant public exposure. These exceedences have been reported to Defra and the advice received is to continue monitoring the sites and respond accordingly should the building use change from commercial to residential.

AQMA Action Planning
Defra has published Local Air Quality Management Policy Guidance\textsuperscript{22} which states that where a local authority designates an air quality management area due to emissions from local transport, they should consider integrating the action plan with the Local Transport Plan. The guidance stresses that the integration of action plans with Local Transport Plans will continue to provide a systematic way of joining up air quality management and transport planning.

The County Council will work with the District Councils in their action planning process. It will be important that these action plans seek not just to combat traffic growth, but seek ways of reducing existing traffic, either by volume or type to reduce the polluting effects of vehicles. There is also a need to ensure that these action plans are integrated into the emerging Local Development Frameworks (LDFs) as the Defra guidance advises that the existing and likely future air quality in an area should be considered in the preparation of development plan documents.

\textsuperscript{22} Local Air Quality Management Policy Guidance, Defra, 2009
Noise
Over 40 per cent of the UK population are affected by traffic noise\textsuperscript{23}. Noise pollution can lead to health impacts including: disturbed sleep; cardio-vascular problems; psycho-physiological issues; reduced performance, provoked annoyance; and changes in behaviour. Under the Environmental Noise (England) Regulations 2006 Noise Action Plans for 23 large urban areas, major roads and major railways were formally adopted in March 2010. North Yorkshire is not covered by such a plan as noise levels are relatively low in comparison to major cities. No urban areas in North Yorkshire have met the requirements for strategic noise maps\textsuperscript{24}, which seek to record average day and night time noise for large communities and busy roads. The County Council will however seek to minimise noise levels from new highway schemes.

In terms of Highway Maintenance, offices, depots and any construction is located so as to minimise noise pollution. Noise pollution from traffic during construction is also minimised.

Light pollution
Street lighting assists in preventing accidents, reducing crime and providing a sense of safety. On the downside light pollution can disrupt the body clock of both humans and wildlife resulting in some forms of cancer, stress and hyperactivity in humans and the dropping of tree leaves at the wrong times or disturbance of nocturnal animals. However, these potential negative impacts need to be balanced against the obvious benefits.

The Council adopts a reduced length of lighting on the approach to rural roundabouts from that set out in the Design Manual for Roads and Bridges. The result is reduced energy consumption and reduced light pollution. The safety records are monitored closely to ensure this is not being compromised.

\textsuperscript{23} Environmental Protection UK
\textsuperscript{24} European Noise Directive (2002/49/EC)
The effect of transport on the historic and natural environment

Introduction-link to LTP3 objectives

Landscapes
North Yorkshire is one of the country’s most beautiful and varied counties with its stunning countryside and coast and rich historic and cultural heritage. It covers over 800,000 hectares and boasts a number of important designated landscapes which include two National Parks, three Areas of Outstanding Natural Beauty (AONBs), a heritage coastline and a range of other specially designated areas. The natural scenic beauty and wealth of biodiversity are principle features of the landscape and factors that have contributed to their designation as areas of high environmental quality. The diverse and distinctive landscapes of the County have evolved through a combination of natural change and processes, human intervention and management. The map below identifies the AONBs and National Parks within North Yorkshire.

Source: North Yorkshire County Council

The landscape of North Yorkshire is one of its most important assets and provides a valuable resource in which people live and work. It is also one of the main reasons why many people travel into the County for leisure and
tourism and choose to return to North Yorkshire repeatedly. The annual visitor survey by Visit Yorkshire noted that when questioned, visitors said that the: “…Main reason for visit was ‘been before’ with over half (54%) of visitors, followed by ‘countryside/landscape/scenery’ (46%), ‘peacefulness/tranquillity’ (38%) and ‘easy to get to/ convenience’ (35%).” It is therefore crucial that the importance of character is recognised when transport and highway decisions are taken which could impact upon the landscape.

Landscape is defined by the European Landscape Convention, which came into force in the UK on 1 March 2007, as, ‘….an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors’. The Convention highlights the need to recognise landscape in law and to develop landscape policies dedicated to the protection, management and creation of European landscapes.

Landscape Character Assessment is a technique that has been developed to help identify the special qualities or characteristics of the landscape, and provides a framework to analyse, describe and classify a landscape in a systematic way. This in turn allows judgements to be made about the landscape so that policy makers can achieve high quality development within a well maintained and sustainable environment. The Character of England map owned by Natural England identifies a number of broad landscape areas across the County with descriptions of what makes them distinct. A comprehensive North Yorkshire Landscape Character Assessment has also been undertaken.

**Water**

Water quality is affected by pollution from transport such as oils and de-icers, which can wash alongside sediments from roads into watercourses, rivers and lakes, eventually entering the marine environment. The provision of transport infrastructure can also alter the physical characteristics of rivers, changing their flow. The Water Framework Directive seeks to improve the ecological status of the water environment. Local authorities are identified as a partner in helping to achieve the aims of the Directive through River Basin Management Plans. North Yorkshire is covered by plans for the Humber, North West and Northumbria. Highway maintenance works, including the storage of products, will be undertaken in such a way as to minimise pollution of water courses.

The Environment Agency advises developers of road schemes to produce drainage plans which consider the impact of the scheme on flood risk, water quality, aquatic biodiversity and measures such as the incorporation and maintenance of traps to remove pollutants. Works will seek to reduce flood risk to both the transport infrastructure and surrounding property and sustainable drainage systems will be installed where feasible.

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25 Visit Yorkshire interim results 2009, Passive enjoyment of the area was the most popular activity with over half (56%).

26 National Character Areas, Natural England
Biodiversity
North Yorkshire contains a rich range of habitats and species which collectively are referred to as biodiversity. These range from upland peatland areas and hay meadows to lowland river floodplains and woodland, each with unique associated species which have adapted to those living conditions. Many habitats and species are protected due to their rarity, importance or the threats which they face. These can include impacts arising from new transport infrastructure and transport use.

Historic environment
The County contains an amazing wealth of archaeological assets and heritage, all of which are contributors to its highly regarded character. Many towns in North Yorkshire have listed buildings, conservation areas and Scheduled Ancient Monuments as well as protected parks and gardens. The map below shows the extent of the designated historic environment and cultural assets within North Yorkshire.

Source: North Yorkshire County Council

Land use planning
New development, such as the expansion of existing communities, often requires new transport infrastructure. This is managed through the LTP and land use planning system. The framework for future development of the built environment is set within the context of national planning policies and guidance, which in turn guides the development of Local Development Frameworks, prepared by the District Councils and National Park Authorities.
Fundamentally this alignment of transport and land-use planning provides for a more sustainable pattern of development that seeks to minimise the need for journeys; support the development of public and sustainable transport options; respect the wider needs of the environment; and support the tourism economy and visitor needs.

National and local policy therefore has regard to the future development of the built environment with a major emphasis on sustainable development, climate change and assessing the environmental impact of land use planning. These policies must be underpinned by an assessment of associated transport infrastructure requirements and the incorporation of environmental benefits into future schemes. Potential benefits include smarter transport choices such as walking and cycling provision and the incorporation of sustainable urban drainage schemes which reduce the impact of flooding and intercept pollution arising from transport. The policies also look at the wider environmental impact of new development and associated transport and the use of re-cycled materials.

**Environmental benefits that transport schemes can provide**

The historic environment includes the highway network such as bridges, hard standing, tunnels and walls. The road network has evolved with the landscape with roads dating back to Roman times and old bridges and stone walls which are culturally and historically significant. These highway assets provide roosting sites for species of bat, especially in bridge arches and substrate for ferns and plants to grow, providing further habitat for insects and birds. Highway corridors with associated verge/hedging and stone walls provide a navigational aid and cover to species, such as bats. Careful maintenance of bridges and other structures helps to retain valuable habitat and protect species. Underpasses also provide wildlife corridors, reducing severance caused by roads. Bridges and riverside structures contribute to the current physical characteristic of rivers including their bed and banks, flow regime, water temperature and turbidity. Specialised habitats and associated species have evolved as a result of human alteration of rivers with structures such as culverts and bridges. The highway network and its future development provide opportunities to enhance landscape, biodiversity, cultural assets and the historic value.

**Tensions**

At times there can be tension between the benefits that transport users enjoy and the costs that transport can impose on the natural and historic environment. The challenge remains to deliver an effective transport system, particularly within the context of sparsely distributed communities with a high dependence upon the private car, whilst minimising the impacts on the natural and historic environment.
Evidence/literature review/policy review

In delivering an effective and efficient transport system, Government guidance seeks to minimise the impacts of transport on the natural environment, heritage and landscape and identify solutions that deliver long term environmental benefits. This approach is supported at the national and local levels through the emerging policies of the Local Development Frameworks of District and Borough Councils and respective National Park Authorities.

Listed below is a selection of the key duties local authorities have with regard to the built and natural environment:

- Section 62 of the Environment Act (1995) which applies to National Parks
- Section 85 of the Countryside & Rights of Way Act (2000) which applies to AONBs
- Section 11(2) of the National Park and Access to the Countryside Act 1949
- World Heritage Sites protection
- Section 40 of the Natural Environment and Rural Communities Act 2006
- The Conservation (Natural Habitats) Regulations 1994, normally referred to as the ‘Habitats Regulations’
- Various planning policy statements/guidance that are contained in Local Development Frameworks
- The vision of the North Yorkshire Sustainable Community Strategy recognises the need to maintain and enhance the special environment and to take care of the attractive landscapes that make the County so special.

Key issues/problems for North Yorkshire

Background

Ever-rising car ownership has led to increasing concerns locally, nationally and globally about the harmful effects of transport on the natural environment and will continue to cause concern as car ownership projections show an increase of at least 15% up to 2026 in North Yorkshire.

North Yorkshire is a sparsely populated County with 56% of the population living in areas defined as ‘super sparse’ or ‘sparse’. According to Defra categorisations, five of the seven North Yorkshire Districts are classed as rural and two are classed as significant rural. In the more remote rural areas of North Yorkshire, dispersed development patterns exacerbate the problem

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27 Guidance to regions on delivering a sustainable transport system (DfT July 2009)
28 Section 5(1) National Park and Access to the Countryside Act 1949
29 Sustainable Community Strategy for North Yorkshire 2008-18 (North Yorkshire Strategic Partnership)
30 DaSTS: city and regional networks data book, 2009
31 Rural Evidence base 2008, Yorkshire and Humber Rural Observatory
of car dependency for those with cars and inaccessibility for those without them.

In some urban areas the combination of road and junction design, traffic speeds, congestion and inappropriately parked vehicles can cause severance of communities, severely limit pedestrian activity and be visually intrusive. In some rural areas, where it is not feasible to provide infrastructure for walking and cycling, personal safety issues can arise.

**Visual Impacts**
The individual elements that make up the landscape are generally quantifiable and can easily be described (hills, valleys, woods, buildings, roads etc). Combinations of these elements contribute to the character of a particular area and include features such as stone walls or distinct hedges. The landscape also encompasses experiential elements such as tranquillity and wilderness. The character of an area is defined by these distinct and recognisable patterns of elements and most importantly how those elements are collectively perceived by people.

The visual amenity of an area is the value of a particular view in terms of what is seen. A transport scheme will directly impact on this view as will the movement of vehicles and any sources of lighting. Within individual landscapes the provision of everyday highway infrastructure such as signage, road markings and street lighting can have a significant detrimental visual impact and erode the distinctive character of the countryside. Even within the built environment, highway detailing can undermine the character and appearance of sensitive streetscapes such as conservation areas, if not managed in a sympathetic way.

Increasing demands from a variety of sources are resulting in changes to the landscape. The design and maintenance of roads to cater for increased traffic can impact, both visually and physically, upon the fabric of the lanes themselves as hedges and verges become more prone to damage. It is therefore essential that high standards of network maintenance and improvements that respect the countryside character and biodiversity are undertaken.

Whilst recognising the value brought to local economies, there are particular pressures arising from an increase in the amount of tourist traffic especially around the coastal towns, but also, on a smaller scale, in the inland areas and the 'honey pot' towns and villages across the County. The need for additional highway infrastructure, such as more car parking, hard standings, amenity facilities and signage to accommodate visitor activity can cumulatively be visually damaging to the landscape if not managed in an effective and co-ordinated way. There is also the need to encourage visitors to use more sustainable modes of transport.

**Other impacts**
Not all of the potential impacts on landscapes are necessarily visual. Improving accessibility and a subsequent increase in vehicular activity along
the County's more minor roads can also compromise non-tangible characteristics such as the tranquillity and wildness, both of which have been identified as landscape qualities that people value and enjoy particularly in the more remote areas of the County such as moorlands. The integrity of these characteristics stands to be jeopardised by too much vehicle activity.

**Biodiversity Issues**

As well as National Parks and Areas of Outstanding Natural Beauty, there are also a range of other special designations that are important for their nature conservation value. These include:

- Sites of Special Scientific Interest (SSSIs) which are of national importance and are legally protected
- Special Areas of Conservation (SACs) which are strictly protected sites designated under the EC Habitats Directive
- Special Protection Areas (SPAs) which are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive and are classified for rare and vulnerable birds and for regularly occurring migratory species
- Sites of Importance for Nature Conservation (SINCs) which are sites that have been identified as being of at least county-level importance for their wildlife
- Verges of Special Biodiversity Interest

In this context, increasing traffic can also create potential threats and have a significant effect on biodiversity. Inappropriate or poorly managed highway maintenance and management techniques can result in damage and disruption to important wildlife habitats; damage roadside verges and lead to animal deaths. For example, within the North York Moors National Park, the death of livestock, and in particular sheep, due to traffic is a particular problem and leads to pressure for the fencing of roads which would, if implemented, destroy the sense of uninterrupted openness on the moorland plateau.

**Design Guide**

A Design Guide is being developed that will detail the approach to be adopted in designated landscapes and other areas requiring special protection. The Guide will set out the required standards for all highways schemes within these landscapes. It will ensure a consistent approach to protecting these landscapes is adopted throughout North Yorkshire.
Interventions/performance management

Approach to interventions
When considering interventions for this theme it is commonly accepted that a ‘one size fits all’ approach does not work. The interventions detailed within this appendix are consistent with the ‘manage, maintain and improve’ commitment and will be targeted to ensure maximum impact. This targeted approach could apply across a number of strands:

- geographical – for instance recognising the rural/urban distinction and the different approach required in the National Parks
- social – recognising that engaging different types of community and individual requires a varied approach
- scheme location – tagging on communication/promotional work to existing infrastructure e.g. promotion of cycle route network

The interventions have been divided into those the County Council can control and those that it can only influence.

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<tr>
<th>Sub-section</th>
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<th>Key performance questions</th>
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<tbody>
<tr>
<td>Climate change</td>
<td>Investigate low carbon vehicle technology (County Council fleet)</td>
<td>How much have we reduced transport related carbon emissions in the County?</td>
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<td></td>
<td>Consider Eco Driver Training for staff whose job involves driving over 5000 miles per year</td>
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<td>Implement travel plans for County Council sites</td>
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<td>Reduce the need to travel through technology e.g. internet services, video conferencing, home working, telecoms</td>
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<td>Consider supporting tailored car share scheme</td>
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<td>Include requirements for green vehicles in contracted bus services contract negotiations</td>
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<td>Use recycled materials in construction where practical and cost-effective and seek to reduce the distance construction materials travel to site</td>
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<td>Encourage schools to undertake active travel planning and implement sustainable travel initiatives</td>
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<td></td>
<td>Work with Planning Authorities to develop policies which seek to reduce greenhouse gas</td>
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<tr>
<td>The effect of transport on the built and natural environment</td>
<td>Ensure landscape/historic environment is protected through the Design Guide</td>
<td>What are we doing to improve or reduce our impact on the environment?</td>
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<td></td>
<td>Work with partners to reduce the impact of diffuse pollution arising from transport</td>
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<td></td>
<td>Protect biodiversity through the provision of wildlife corridors for appropriate highway improvement schemes and adjusting the cutting regime of roadside verges.</td>
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### County Council Influence

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<tr>
<th>Climate change</th>
<th>How much have we reduced transport related carbon emissions in the County?</th>
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<tr>
<td>Promotion / education around more responsible car use e.g. eco driving, car sharing</td>
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<tr>
<td>Encourage use of low emission vehicles by commercial transport organisations e.g. freight, public transport</td>
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<tr>
<td>Investigation into potential benefits and operation of alternative vehicle technologies e.g. electric vehicles, sustainable biofuels</td>
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<tr>
<td>Encourage larger employers to develop travel plans and support staff to travel more sustainably</td>
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<tr>
<td>Support localised initiatives around sustainable travel choices</td>
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<tr>
<td>Support promotion of sustainable modes of transport e.g. bus services, cycling opportunities, car share etc</td>
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<tr>
<td>Support the production of information and marketing materials to encourage use of new and existing facilities e.g. cycle maps, public transport network</td>
<td>How much have we improved Air Quality in key locations?</td>
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<tr>
<td>The effect of transport on health</td>
<td>Work with the District Councils in the Air Quality Management Area (AQMA) action planning process</td>
</tr>
<tr>
<td>Seek to minimise noise levels from new highway schemes</td>
<td>What are we doing to improve or reduce our impact on the environment?</td>
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NORTH YORKSHIRE COUNTY COUNCIL

Local Transport Plan 3

Appendix 3

Safety and Healthier Travel
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1.0 Introduction

The provision of crash and casualty data analysis, road safety highways engineering, road safety education, training and publicity are all statutory duties placed on North Yorkshire County Council as the Local Highways Authority. Since 2004 the County Council has worked as part of the ’95 Alive’ road safety partnership, with a number of other councils, authorities and agencies whose work is complimentary to the reduction of casualties and collisions on our roads e.g. North Yorkshire Police, North Yorkshire Fire & Rescue Service, Highways Agency, National Parks Authorities and City of York Council as the Local Highways Authority for York.

From its inception in November 2004, ’95 Alive’ has been a true road safety partnership, with its creation signalling a watershed in the way police, fire service and local councils worked together to reduce the numbers of people being hurt and killed on the roads of York and North Yorkshire. Collaborative working towards this common aim has achieved greater progress towards road casualty reduction objectives than could have been achieved by continuing to work in isolation. Changing to this integrated partnership was accelerated through the Road Safety Grant allocated via the Department for Transport (DfT) to fund road safety and casualty prevention education, enforcement and engineering. With a strong track record in performance and delivery, and nationally recognised as an exemplar of good practice, scope nevertheless exists to improve how the partnership works across a range of areas during Local Transport Plan 3 (LTP3)

Key issues identified include the need to more effectively integrate Road Safety Engineering into 95 Alive action planning which has tended to be focussed more on education and enforcement activity. Additionally, there is scope to coordinate partner activities more closely in order to avoid any duplication of effort and to further improve the overall level of service to local communities across North Yorkshire.

This document seeks to identify those areas for improvement, and at the same time build on the partnership’s strengths, as well as the opportunities and savings presented by enhanced partnership working. A new partnership vision and strategy is set out below, based on the sound principles laid down when 95 Alive was first established. At the same time, it recognises the emergence and importance of more recent challenges, most notably the reduced future levels of funding and the issues highlighted by the Eddington and Stern Report (2006) which emphasized the need to coordinate policies and planning for transport, land use, the environment, and the economy. Therefore, this document also describes the impact on and relevance to, the economic and environmental objectives as well as with other wider priorities, including maintaining independent living into old age, promoting good health and tackling obesity.

In order to improve road safety in North Yorkshire, it is necessary to go beyond the road safety agenda and improve coordination work with health, education, and other agencies and authorities. The need for economies by
organisations and by individuals means that the road safety programme planning must be closely connected to the effects of the current economic situation and public funding cuts. We anticipate there will be changes in travel patterns and road use and will adapt our work to address emerging hazards and trends early on. The continuation of our successful partnership is seen as the key means to continuing this coordinated approach.

The focus during LTP3 is on strengthening the links between the lead partners, whilst ensuring that those other partner organisations who may need to be less frequently involved are still included where their contributions are required.

Most important of all, is the need to connect more effectively with the communities we serve, in order to understand better the different range of problems and issues from their perspective, and to introduce measures that meet their needs and expectations. Working with local communities is a theme that runs throughout the Strategy.

The use of accurate crash and casualty data and analysis is essential to ensure that scarce resources are directed to where they will provide the greatest benefit and value for money and then to check that work has been effective. This is to be balanced by listening to local people and their representatives about where they feel at risk and doing what can be done to make people and places feel safer too.

2.0 **Links to other policy areas**

This section considers key documents and literature, which form the background and set the overall policy context for the 95 Alive Road Safety Strategy at the national, regional and local levels.

**National Policy**

**Sustainability:** the road safety strategy has an important contribution to make towards the Council’s main priorities. A safe and efficient transport system is essential to every aspect of modern life. We will highlight these links, and the added value derived from the strategy’s implementation, to the communities that we serve. We seek to reduce the disproportionate levels of risk that some groups of road users are subject to.

In order to make our transport system serve our community better, we will pay particular attention to the following areas;

**Supporting Economic Growth:** Road traffic collisions, particularly those involving death or serious injury, reduce network efficiency by delaying other road users and so represent a cost to business and others through lost productivity. The ability to access work and services requires good transport links for businesses, employees and customers.
Tackling Climate Change: We will promote and publicise the importance of proven driving techniques, which improve fuel efficiency as well as reducing collisions. We will support car sharing schemes that help people to find fellow travellers to share costs and reduce the number of vehicles making the same journey with only one occupant per car. We will promote increased uptake of walking and cycling where this is practicable, e.g. short journeys in towns.

Safety, Security and Health: Clearly this is the priority of most relevance to the road safety strategy. Although the primary focus will be on reducing the risk of death and injury on the County’s roads, we will also promote ‘active travel’ e.g. cycling or walking shorter journeys that contribute towards better health outcomes for our citizens;

Promote Equality of Opportunity: The relationship between increased accident risk and deprivation is well documented. We will continue to focus our attention on areas of disadvantage, and on those with fewest opportunities, most notably among them, children and young people and those in rural areas. Equity will be a key consideration in the implementation of our road safety strategy;

Quality of Life: Our strategy will seek to reduce the amount of pain, grief and suffering experienced as a result of death and serious injury arising from collisions on the County’s roads. However, perceptions are also important; and we will do more to reduce the danger that people often associate with what they consider to be speeding or fast moving traffic especially within towns and villages. (see Section 6 for further details of our emerging Speed Management Protocol).

We will encourage cycling and walking where this can offer a reasonable alternative to short car journeys, and the use of better public and shared transport options, in order to reduce the number of vehicles and need for car parking.

Road Safety ‘Compliance’ Consultation: Under the previous government, the DfT consulted on a package of measures to address speeding, drink driving, seatbelt wearing and drug driving and careless driving. This was followed by the North Report on Drink Driving. The new governments’ views and further guidance on these subjects is awaited.

‘Every Child matters’: This is the overarching policy guide from the Department for Children, Schools and Families, now renamed as the Department for Education. This policy guidance remains extant pending the findings of the CSR and the formulation of a new Children and Young Peoples Plan – to be published by 01 Apr 2011. Every Child Matters requires that schools and other agencies work towards five outcomes, namely:

- Being Healthy
- Staying Safe
- Enjoying and Achieving
Making a Positive Contribution  
Achieving Economic Wellbeing

The Road Safety and Travel Awareness services within LTP3 will contribute to all five outcomes, specifically as follows:

**Being Healthy:** By offering pedestrian and cyclist training programmes to primary schools, together with additional appropriate inputs at secondary level, subject to funding availability.

**Staying Safe:** This includes staying safe from accidental injury and death. The planned inputs into each Key Stage will contribute directly to these outcomes in a real and practical way.

**Enjoying and Achieving:** Physical activity and recreation are supported with training and the promotion of walking and cycling.

**Making a Positive Contribution:** Developing self confidence: training and support in becoming an independent road user contributes to these aims.

**Achieving Economic Wellbeing:** Access to further education, training, work experience and employment are at the heart of the 14-19 years Connexions Agenda as well as Every Child Matters. The ability to travel independently, affordably and safely is the essence of accessibility to these opportunities in our large, rural county.

**Healthy Schools:** The Healthy Schools Agenda requires participating schools to work on four themes, which are.

**Personal, Social, Health Education:** This includes identification of risks and making safer choices.

**Physical Activity:** This includes the journey to and from school as well as activities and sports within schools.

**Healthy Eating and Emotional Health and Wellbeing:** Both will benefit from the increased physical activity and proven emotional and mental health benefits that walking and cycling have been shown to provide.

**Regional Transport Policy:**

We will continue to work with our neighbouring authorities to identify and address shared transport issues and routes so that our work in those areas is complimentary and coordinated.

The York and North Yorkshire sub regional strategy has a key role as an enabler for:

* Future economic growth through safer transport links and consequent reduction in lost time
• Sustainable housing growth
• Enhanced social inclusion in deprived and remote areas

The strategy will help also to:

• Reduce the risk of death or injury due to transport accidents
• Reduce the risk of adverse weather impacting on the network
• Manage the impacts of transport, including transport related emissions, on the natural and historic environment

The Leeds City Region Transport Strategy (November 2009): identifies the need to “...Reduce the risk of death or injury due to transport accidents” as a Priority Transport Challenge.

The rationale for this is as follows: “Although the overall long term Killed and Seriously Injured (KSI) trend continues downward, the rate of progress has slowed and levelled out over the last two years. It is also noticeable that the more rural districts have a significantly higher number of KSIs per 1,000 people (approximately double) than the urban districts. There are therefore a number of outstanding safety issues to be addressed including child KSIs”.

We and our neighbouring authorities are agreed that road safety is a priority transport challenge for economic and health reasons. North Yorkshire County Council led on its adoption as a shared strategic issue. We will work together with partner authorities on issues and routes that we share.

We have also agreed with our neighbours to combine our efforts towards a ‘Reduction in Carbon and greenhouse Gas Emissions’. We will work together to achieve a reduction in the need to travel, improved use of public transport and walking and cycling where we are able to do so.

Local Transport Policy

Road Safety overview: During the past ten years and, in particular, the last five years, we have been working in local partnership towards the previous governments 10 year strategy, 2000-2010 “Britain’s Roads – Safer for Everyone”. The numbers of collisions and casualties have been very significantly reduced in North Yorkshire and throughout the partnership area of North Yorkshire and York. Indeed the targets set by government have been stretched and are already achieved. Progress is on track further to exceed these outcomes by the end of 2010.

The challenge now is to assess the likely trends and developments for the next five to ten years and to plan and prepare in order to meet these needs in a difficult and changing economic climate. We are analysing the crash and casualty data in conjunction with a number of other sources of information. These other sources include population and demographic information about the age of our residents and visitors, likely economic changes, the needs of business, the flows of traffic, types of vehicles and other road users, engineering and technical developments, and our partner agencies.
Another significant travel is now to assess and interpret relevant data sources to understand how external factors may have an impact on road safety in North Yorkshire. A range of data including economic, demographic, casualty data and traffic flow information will be analysed. This analysis will help us to predict future trends, enabling better planning and delivery of road safety activities during LTP3 and beyond.

We will continue to develop a more comprehensive data collection network to enable us to monitor, predict and respond to these changes more readily and at local as well as county wide levels. We are developing a level of expertise to enable us to provide more detailed information and advice to our local population and to our partners to inform their work. This will ensure that we are providing the information, advice and training that is needed, when and where it is needed helping to pre-empt and prevent casualties. For example we have confirmed that, in North Yorkshire, drivers over 70 years old more frequently suffer fatal injuries in road crashes than would be expected by the number of over 70 year olds driving. This, combined with an increasing population of older people, led us to develop a programme of Seminars around the county where older drivers can obtain up to date information about traffic law, medication, eye sight requirements and the other effects of aging on a driver, together with an assessment drive with a specially trained driving instructor. These very popular events are aimed at providing information and advice that will keep older drivers on the road independently and safely, for as long as they are able.

Public Health Laboratory: Many different agencies report on accidental injuries. As a result, there are often a range of criteria adopted for assessing road risk on different categories of road and local authority type. For example, the Public Health Laboratory Observatory Health Profiles report in 2009 assessed Ryedale as being the most dangerous District in the country for road injuries and deaths based on a simple assessment of casualties per 100,000 resident. This however did not take in to consideration the number and length of journeys that residents routinely undertake nor to the high number of visitors to the National Park area who also drive on the roads in and through Ryedale. Nevertheless we always consider any relevant research carefully in order to identify any action that may be required.

3.0 95 Alive SWOT Analysis

The transition from LTP 2 to LTP 3, has provided an important opportunity to consider any improvements to 95 alive, and whether it remains fit for purpose within the context of what is proposed for the next five to ten years. This was undertaken prior to the change of government but since the analysis is data led, outcomes are unchanged in principle. A potential change of government was also taken in to consideration. What has changed is the future strategy and action plan, in order to adjust to the changes in policy. At the time of production of LTP3 final budget allocations have not been confirmed. Following conformation of this, the 95 Alive action plan will be finalised.
To answer the question of whether or not the partnership is fit for purpose, the Council with its 95 Alive partners carried out a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats). This Section contains a summary of the key findings. Full details of this analysis are available on the partnership website: www.roadwise.co.uk

**Strengths:**

**Partner commitment:** The ongoing commitment of partners and in particular those with a key delivery role, remains clear and strong. This was underpinned by the outputs from recent separate internal studies into partnership working by North Yorkshire County Council, North Yorkshire Police, and North Yorkshire Fire and Rescue Service. These all identified ‘95 Alive’ as their flagship partnership, and key to delivery of the respective organisations aims and objectives;

**Project Group working:** The development of a project group approach has developed a level of expertise and focus for the most vulnerable and high risk groups of road users. These groups, each chaired by a County Council Road Safety Officer, were given specific responsibility to develop greater depth of knowledge and expertise and to lead on local campaign planning. North Yorkshire Police have now adopted a similar approach, and representatives from relevant partners sit on these groups as appropriate to coordinate their work.

Output has increased markedly, with service delivery now more effective and responsive to local needs and changing circumstances. For example the Motorcyclist Project Group has carried out additional research into motorcyclists’ journeys, attitudes and experiences when they ride our roads. As a result, it has developed a programme of campaigns, road side information boards and engineering measures, training courses (including first aid) that address the most prevalent problems faced by motorcyclists. Opinion surveys have been undertaken to help develop campaigns to better influence behaviour and attitudes, as well as fostering understanding between bikers and the local communities on the most commonly used routes.

The project group is also responsible for linking with the Transport Research Laboratory so that North Yorkshire has been included in an important European Union (EU) wide research study into motor cycling. The study is sponsored by the Department for Transport and the EU. It aims to identify and address attitudes, behaviours and technical and engineering issues in order to reduce the rate and severity of collisions and injuries involving motorcyclists.

**Weaknesses:**

**Lack of coordination:** 95 Alive is a large partnership with over twenty member organisations dispersed over a large geographical area. Consistent and effective coordination of work and communications will always represent a challenge. However, opportunities for improvement exist. During LTP3 we
will work to identify ways in which partnership could more effectively meet the needs of the communities that all 95 Alive partners serve and avoid duplication of effort.

**Constitutional framework:** Whilst some reporting mechanisms are in place, one of the strengths of 95 Alive has been the flexibility brought about by the lack of a formal institutional framework. However, with the benefit now of four years experience inconsistent attendance by some partners, along with duplication of effort and a lack of coordination at the local level, the need for more a more formal governance arrangement to improve efficiency is apparent. Accordingly, the County Council is leading on the establishment of a formal governance framework through the creation of a Memorandum of Understanding for the York and North Yorkshire road safety partnership. The intention is for this revised structure to better reflect the levels of commitment, expertise and resources that they are able to provide (see www.roadwise.co.uk etc for further details).

**Opportunities:**

Alongside more effective communication techniques and better use of data to inform strategy and actions, the relationship with local Community Safety Partnerships and the emerging governance frameworks were both identified as key opportunities for improving the Partnerships future work. Significant scope exists to reduce or eliminate duplication of effort and to clarify roles and responsibilities at the local levels in particular.

**Threats:**

The two biggest threats to the Partnership, or at least to its future performance, are the current uncertainty over funding arrangements during LTP3, and the likely reduced settlement, following what have been significant increases in road safety funding during LTP2. We are not yet in a position to calculate the effect of the anticipated reductions in available funding for investment in road safety and casualty prevention work.

The second threat is the unquantifiable effect that other factors have had on performance against road safety targets; most notably in 2008 and 2009. The concern is that the ‘credit crunch’ and the current economic climate and exceptional weather conditions may have contributed to fewer motor-vehicle journeys being made, and of those that are being made, people making them at slower speeds. In one sense, this is clearly good news, given the correlation between speed and road traffic collisions. However, on rural roads, fewer vehicles can also lead to other drivers travelling at higher speeds and result in more serious injuries when crashes occur. There is also a likelihood that once the economy begins to pick up, the numbers of journeys will increase and those who reduced their speeds to save fuel will go faster again with a corresponding increase in casualties. We will monitor this as best we can and aim to anticipate and prevent these anomalies so far as resources allow.
4.0 Analysis of available data

As we continue to make further progress in reducing road casualty numbers, the remaining problem sites and routes are becoming more dispersed and increasingly difficult to address. Therefore, making best use of the data we do have, and filling in the gaps with proxy or modelled data is important. To do this, we consider it essential to employ best practice statistical analysis in order to provide us with an accurate evidence base. This in turn will ensure that increasingly scarce resources will be targeted to best effect. Accordingly, we will develop further our use of statistic systems and software to improve our ability to identify trends and anticipate changes.

Through analysis of existing data, this section describes the road casualty situation relative to North Yorkshire. Key issues are identified based on a combination of historical data including past casualty and collision data, and on changing factors that we are able to predict and plan for e.g. population changes, age groups and major developments such as the expansion of Catterick Garrison. This enables us to balance historical analysis with a reliable prediction of need.

Collision Overview: Since 1994, North Yorkshire has seen a large reduction in the numbers of people killed or injured on our roads:
- a 38% reduction in fatalities since the 1994 to 1998 baseline average
- a 44% reduction in killed or seriously injured casualties over the same period (see Figure 4.0.7 below)
- a 26% reduction in slightly injured casualties
- a 59% decrease in killed or seriously injured child casualties.

As a partnership, we set ourselves a shared target of preventing the deaths of an additional 95 lives over and above the 415 deaths and serious injuries that government challenged us to prevent. Up until July 2010, we had prevented 91 deaths.

![Figure 4.0.7](source: NYCC)
Traffic/speed overview: This performance against national road safety targets should be seen against the backdrop of a gradual increase in traffic flow in North Yorkshire of 18.9%, since the baseline period. This is a greater percentage rise than was seen either nationally (15.6%) or regionally (16.9%).

Nevertheless, 2008 saw a marked reduction in traffic volume (↓3.6%) in North Yorkshire when compared with national (↓0.8%) or regional (↓1.4%) volumes and a further, more gradual fall in 2009. Figure 4.0.9 below highlights the scale of this fall in traffic volume. There is research evidence that economic factors such as insecurity about employment and the cost of fuel combine to affect travel patterns and behaviours and thus reduce fatal and serious collisions particularly in rural areas where higher speed collisions are more frequent. How much this factor has affected casualty reduction in North Yorkshire is not yet known and may never be able to be calculated fully. It may be that a lower number of vehicles may reduce collisions but also increase speeds and therefore increase, the severity of those collisions that do occur.
The trend in traffic flow in North Yorkshire 1994 to 2009

Figure 4.0.9 Source: Department for Transport: Estimated traffic flows for all motor vehicles by local authority: 1993 - 2009

Figure 4.0.10 below highlights the collision causation factors. Human error in the form of 'Driver/ rider failed to look properly' is the most commonly recorded factor that contributes to collisions in North Yorkshire. This is consistent with the national picture. Data is based on five years 01/01/2005 to 31/12/2009 for North Yorkshire.

The highest ranking causation factors in North Yorkshire 2005 to 2009

Figure 4.0.10 Source: NYCC

Data analysis (see Annex F) has identified the following groups and issues as warranting particular attention:
Wearing of seatbelts and restraints: Correct use in every vehicle on every journey would not prevent crashes. However it would reduce the number of casualties and the severity of their injuries more effectively than any other single measure.

Driving for Work: The working adult population is the largest (numerical) group who are involved in road collisions. Many people use the roads not just to get to and from work but also in the course of their work. These work related journeys, whether in a company vehicle or in their own car or van, have been shown to be at greater risk of collision than domestic journeys.

Motorcyclists: the challenging scenic roads to and through the Yorkshire Dales and the North York Moors continue to prove irresistibly attractive to many motorcyclists. The vast majority of motorcyclists undertake individual and group journeys without incident. However, the frequency of serious and fatal crashes is still too high. These collisions typically involve a single motorcyclist making a mistake on a bend or whilst overtaking. These misjudgements may be due to fatigue, lack of skill and experience or a simple momentary lapse of concentration.

Older drivers: The population of older people (over 50 years) in the county is set to rise by around 30% during the next ten years. Those aged over 70 years will rise by over 40%. Their travel needs require careful thought to enable them to continue to lead fulfilling, independent lives, to access services and to do so as safely as possible over a longer period and in ever greater numbers.

Young drivers: Through a combination of relative inexperience and lack of skills combined with youthful exuberance and group behaviours, young drivers feature too highly in the numbers of crashes in which people are Killed or Seriously Injured (KSI). Exposure to longer and more frequent journeys on rural roads increases their exposure to high risk. Young, novice drivers will always be a potentially high risk group for these reasons. We will continue to work with them, with schools and colleges and with their parents to reduce their risk to prevent these tragic losses and injuries to our next generation.

Health for all ages: Travel is a major factor in everyone’s daily lives. The ability to make choices of what journeys to make and which means of transport to use are essential to healthy, active living. Subject to funding being available, we will coordinate our education, publicity and engineering work more closely with route based assessments of how routes are used, by whom and what their needs and priorities are.

Demographic Trends: The population of North Yorkshire is forecast to rise by around 13% over the period 2006-2020. The number of 16 to 24 year olds in the population is forecast to peak in 2011 and then gradually reduce up to 2021. The number of people aged over 65 is already above the national average and is forecast to grow by over 40% between 2006 and 2018. These are major changes in our communities and will affect every aspect of life, from schools to health services, shopping habits, employment and leisure and,
therefore, the type, time of day, frequency and means of journeys that people will need and want to make. Some areas and industries will be more affected than others e.g. agriculture in the uplands, where the majority of hill farmers are over 50 years of age. By 2018, 24% or almost one in four of the population of North Yorkshire will be over 65 years old. This compares to a national average of 16%. Some Districts are more affected by this than others e.g. Scarborough and Ryedale have larger proportions of older residents, so our approach will be tailored accordingly.

Safety on North Yorkshire’s rural roads: Recent research by the Transport Research Laboratory (TRL) has highlighted the importance of safety on rural roads. As England’s largest rural county, with most people living in small towns and villages, almost all of our highways are country roads with most journeys using rural A class roads for part of their journey. These are roads with mainly 50 or 60 mph speed limits outside of towns and villages. They run through large areas of outstanding natural beauty and national parks. This scenery attracts many thousands of visitors of all ages; tourism and day visits are a main source of income for the county. However, the very features that attract people here can also represent a hazard to the unwary. These country roads are undulating and follow the natural geography. They are often bounded by traditional dry stone walls forming part of the scenery. If driven too fast or without adequate concentration, these features can be unforgiving. In North Yorkshire,: 

- Rural roads form most of the network in North Yorkshire
- Rural roads accounted for 90% of fatalities between 2005 and 2009 in North Yorkshire and 72% of KSI casualties, compared to 66% and 48% nationally.
- 94% of car occupant fatalities and 97% of motorcycle fatalities occur on rural roads;
- For all casualty severities, the largest proportion occurs on single-carriageway Class A roads, ranging from 62% of fatalities to 50% of all injury casualties;
- In 37% of crashes on country roads, no other vehicle was involved. Such crashes are most likely to occur on A class roads, during daylight and involve adult (as opposed to younger) drivers.
Accessibility to education, training, work and other services: All age groups need to access services in varying ways according to their age, income, and physical ability e.g. access to further training for teenagers or those seeking employment or re-training, health services, social and leisure activities. Whether their travel will be by bus, bicycle, car or motorbike, the various modes of travel and different user groups share the one road network and meeting the priorities and needs of one group must take account of the effect on other groups;

5.0 Road Safety Vision

In November 2004, 95 Alive partners signed up to the following vision:

“A new Road Safety Partnership will make the roads in York and North Yorkshire safer by the end of 2010. One in three lives will be saved and 95 people will be alive that otherwise may have been killed on our roads.”

Analysis shows that the Partnership is ahead of target, indicating that this vision will be achieved. However, this vision for York and North Yorkshire is by definition time limited to December 2010. It is therefore necessary to consider a new aim for LTP3.

Partners have taken the view that although a numerical ‘target based’ vision was designed to raise awareness, and be a concept that the media and citizens of North Yorkshire could understand; it has served its purpose. Moving forward, the onus quite rightly remains on us to make people safer when travelling on the County’s road network. Increasingly however, the County Council and its partners are also attaching greater importance to whether people feel safe in their local area and whilst travelling.

Partners have therefore adopted the following vision post 2010:
“The 95 Alive Road Safety Partnership will seek to make travelling in York and North Yorkshire safer, and act in a way that inspires the trust and confidence necessary to make people feel safer too.”

Alongside the need to reduce actual risk and injury on the County’s roads, this Vision captures the notion that perception is reality for many people; if people feel unsafe about walking, cycling, or indeed are concerned about the speed of traffic in the area around their home, then these feelings affect the way they make decisions about when and how they and their families travel. These concerns must be taken into account and addressed wherever we can do so and so far as funding permits. The Speed Management Protocol has been designed to address these issues directly within local communities.

Since 88% of causation factors used to describe the nature of a collision involve human error as either the primary or a contributory factor, the Vision does not imply that improvements to the road network by themselves will bring about the greatest casualty reduction benefit. Rather, it shares responsibility for safety between individual road users and those bodies with statutory duties for engineering, enforcement and other activity. Nevertheless, there remains much for the Council and its 95 Alive partners to do in relation to engineering improvements. For example, as Highway Authority, the County Council has adopted a passively safe protocol in order to ensure the injury risk associated with road-side furniture is actively considered and minimised at the scheme design stage.

The Vision also reflects the importance placed on the Police, and indeed all those involved in community safety, to improve and maintain public confidence.

6.0 Road Safety Strategy

The Action Plan is based on the proven format of the plan devised for LTP 2, which has worked well. The new Action Plan can be found at Annex A. It has been modified to reflect current road casualty trends and priorities and the anticipated reduced level of funding. One of the key changes is the inclusion of ‘Engineering’. The work of the Education, Engineering and Enforcement elements have been much more closely drawn together through internal NYCC working practice and through the Partnership approach via 95 Alive. Each action represents a broad priority area, against which a more detailed annual action plan will be created. It is against these priorities and the annual action plan that progress and effectiveness will be monitored by the Officer Working Group and Steering Group (see ‘Performance Management’ and ‘Constitutional Framework’ sections on the website at www.roadwise.co.uk).

i. Better integrate ‘Engineering’ with ‘Engineering training and publicity (ETP) and 95 Alive activity’:
The importance of different types of journey and different modes of transport are becoming increasingly important. We need better to understand these patterns and to include planning for more sustainable options for the future to be built into schemes where this is practicable and where funding allows. We are working to achieve better integration For example, as highway authority, we will adopt a more combined approach to:

**High Risk Site Analysis and Route Action Studies:** Where appropriate, this will include consultation with the local community at the ‘problem identification’ stage. This work will complement the Speed Management Protocol already being developed. This holistic approach will add to the core crash and casualty data analysis by looking also at the uses to which a route is put, who travels along it, when, how and why. This enables consideration for all road users and should avoid some unintended consequences that can otherwise occur. It will also enable alternatives to be considered and incorporated where they are feasible and beneficial e.g. consideration of bus routes and services and car sharing where a significant level of commuter traffic is identified. This must be done within an overall framework to keep coordination and consultation effective but within manageable bounds and subject to funding availability;

**Delivery of Local Safety Schemes:** We will ensure that pedestrians and cyclist training incorporates the use of new and existing infrastructure; In addition, we will:

**Further develop the Speed Management Protocol:** Its primary function is to establish a more coordinated approach to managing speed in North Yorkshire by defining clearly the roles and responsibilities of those organisations that play an active role in managing speed. It creates an objective and transparent method for prioritising routes or sites of concern and, importantly, to introduce a graduated approach to the selection and application of the ‘tools’ available for addressing speed related collisions. The Protocol is designed to be both reactive in terms of addressing speed related complaints, which may be generated by local parishes, individual residents, or community groups, and proactive, in helping find solutions to problem sites or routes, which have been identified through ‘high risk’ site or route study analysis. Therefore, the intention is to integrate existing speed related policies and protocols as set out below:

- Permanent VAS (Vehicle Activated Signs)Protocol;
- Temporary VAS Protocol;
- 20 mph Policy;
- Mobile Speed Matrix Protocol;

**Camera enforcement** –Following a feasibility study, the 95 Alive Partnership proposed to carry out a 12 month trial operational study and assessment to confirm that the expected casualty reduction benefits would be obtained and to ensure that costs are appropriate for the benefits gained. However, with the current financial uncertainty, this proposal is on hold until Spring 2011
Passive Safety: Taking a ‘risk’ based approach; we have developed a method of determining whether new roadside furniture and infrastructure needs to be passively safe. We will also develop a programme for carrying out a phased audit on existing street furniture and infrastructure;

Road Safety Audits: Having established a Road Safety Audit Protocol; we will continue to carry out audits on new schemes, as appropriate;

Review of Fatal Collision Procedure: We will further improve our existing Procedure, by seeking to ensure we receive the Coroner’s Inquisition following each inquest, in order to ensure that all relevant data is considered prior to ‘closing’ our inspection file.

Pre/post scheme implementation monitoring: Although we already monitor new schemes, through the comparison of three year ‘before’ and ‘after’ collision data; there is a need to improve how we do this, in order to make the evidence base for calculating scheme effectiveness more robust. We will do this by analysing the significance of changes in collision numbers at treated sites

- Economic Justification: We will continue to use resources for road safety schemes as effectively as possible to produce the maximum benefit in terms of casualty reduction. The economic justification for installing a safety scheme is usually based on its economic return. This is generally calculated as an estimated First Year Rate of Return (FYRR) which is an estimate of the monetary benefits to be gained in accident savings in the first year set against the cost of the scheme. While many schemes will only save a small number of accidents a year, this can still produce a good rate of return on investment.

- Speed Limit Review: We will build on the work already carried out as part of DfT Circular 1/06 to review speed limits within North Yorkshire, subject to funding availability, for a consistent approach. To gain support and improve levels of enforcement, we will continue to work closely with North Yorkshire Police during the process.

- Innovation: We will continue to consider new road safety products, methods and techniques as they become available and will utilize them if we are confident that they will provide a cost effective reduction in the number of casualties.

- Street Lighting The night environment can be a particularly vulnerable time for all road users. A high percentage of personal injury collisions at night result in fatal or serious injuries and the continuing improvements of street lighting can be an effective remedial treatment.

Identification methods of road safety problems are data and evidence led. Effective road safety engineering depends on reliable validated data about
where, when, how and why collisions occur. Engineering remedial measures should be focused on sites, routes and areas with poor collision records in order to concentrate efforts where there is a known, rather than a perceived, risk.

We collate all personal injury collision data that is supplied by North Yorkshire Police and use this data to prioritise high risk sites and route action studies across the County. High risk sites are locations which have an accident record of four or more collisions in the previous three year period and route action studies look at collisions over a length of road.

Road safety engineers also carry out detailed analysis of all collisions in which someone is killed and establish what actions can be taken to prevent recurrence.

By understanding collision causation factors in North Yorkshire and implementing appropriate safety schemes, we will improve road safety for all road users. We must identify the most appropriate solution to the problem, prioritise for potential programming, deliver priority schemes and monitor effectiveness.

In addition we are also responsible for the planning, design, operation and maintenance of all traffic signal control equipment on the public highway in North Yorkshire including Traffic Signal Controlled Junctions, Traffic Signal Controlled crossing facilities, Variable Message Signs (VMS), Vehicle Activated Signs (VAS), Warning Signs, and Close Circuit Television (CCTV) traffic management cameras. All of these offer real safety benefits if they are used in the right places and to achieve specific results. Traffic signal controlled junctions, pedestrian and cycle crossings are the key points of interaction between vehicles and the most vulnerable road users in our society, it is therefore crucial that they are appropriately maintained.

Traffic engineering combines a number of different tools including modern design software, engineering principles, an understanding of the psychology and habits of motorised and non-motorised road users together with local knowledge. Effective use of these tools helps to improve the transportation infrastructure and facilitate the safe, efficient and convenient movement of people and goods.

We also ensure the local highway network is optimised to safely balance the needs of all road users including freight operators, agriculture, motorists, bus passengers, cyclists, pedestrians and horse riders, whether they are travelling for business or for leisure. Going forward, NYCC is committed to utilising emerging technologies to minimise traffic congestion for the benefit of the travelling public and the local economy to enhance quality of life for all employees, visitors and residents in North Yorkshire.

ii Target specific road user groups:
This will be carried out according to their relative risk and needs through dynamic data analysis. Currently these are:

- All car occupants – wearing of seatbelts;
- People driving for work;
- Motorcyclists – riding larger sports bikes on rural roads;
- Older drivers – to keep them driving safely for as long as possible;
- Young, novice drivers

This approach will focus our and our partners’ resources to where they are most needed in order to have best effect. This will be a dynamic process given the planning horizon for LTP 3, and the scope for changes in travel patterns, and influence of demographic changes.

Having established this methodology as a way to allocate and prioritise resources (funds and staff time) within 95 Alive, with demonstrable effectiveness, we will continue to apply this principle in allocating our budgets and resources to where they are most needed and where they can achieve the best results.

iii. Embed road user education and training into each Key Stage of the curriculum:

Our aim will be to achieve this in all North Yorkshire schools. Detailed focus and delivery will be adjustable to take account of local conditions and relative levels of risk. We and our education colleagues are agreed that this will be a beneficial and sensible way to ensure that every child receives an appropriate, relevant level of education about using the roads and travelling safely at each Key Stage of their education. Pupils and students will use roads and transport for the rest of their lives, so this is an essential investment in their future. Inputs will be coordinated and agreed to ensure their relevance to current risks, their educational quality and value and that they achieve the requirements of both education outcomes and our own casualty reduction aims;

iv. Marketing and Publicity:

Provide and lead the publicity and campaigns service to the partnership, subject to funding. Supported by the DfT guidance and strategy that emphasises the increasing importance of this area of work in changing people’s behaviour, in particular those high risk groups identified above. The work and programmes developed during the last five years have demonstrated a proven ability to increase the value and effectiveness of campaigns and operations with appropriate, targeted publicity and the provision of appropriate resources and materials to support partners in delivery of action in our communities. We will continue to use these media so far as funds allow.

v. Selective use of Think!


The Think! Brand and campaigns (including Association of Chief Police Officers (ACPO) and Road Safety Great Britain (RSGB) campaigns) are very effective and obtain national coverage. They offer a very effective set of materials where they coincide with local priorities and issues. The calendar does not always coincide and there have been some difficulties in coordination between national and local campaigns, mainly due to the short notice provided of content and focus from Think! and the reduction in scope of the programmes (fewer campaigns on fewer subjects). We are confident that these issues are now being resolved so look forward to greater use of Think! Programmes. We also coordinate our programmes with ACPO, RSGB and other initiatives wherever appropriate e.g. BRAKE (a road safety charity) National Road Safety Week, the Child Accident Prevention Trust (CAPT) Child Safety Week;

vi Driving for Work:

We will continue to work with employers and businesses to develop and promote safe driving for work policy and practice. Our analysis shows that North Yorkshire reflects national trends and data in the level of collisions incurred by drivers who are travelling as part of their work. We have developed our own Driving at Work Policy as an exemplar and are supporting large, medium and smaller businesses to help them to adopt safe policy and practice. We have also developed multilingual resources to provide information on traffic law, road signs and other matters to foreign based drivers. The hurt to individuals and families and the impact on businesses and organisations business from these crashes can be greatly reduced with a sustained effort. We are working to provide information and material support to the police who invest considerable effort into addressing various specific enforcement issues e.g. checking commercial vehicles and coaches and working with VOSA and other agencies such as the Highways Agency on the trunk routes through our County;

vii Cross Boundary Collaboration:

Data analysis has identified that significant numbers of road users, in particular high risk categories, are highly mobile and are from outside of North Yorkshire. Close cooperation with neighbouring authorities on shared issues is essential. North Yorkshire is a large county with major trunk routes transiting through it. Large numbers of people travelling into and out of the county for work and leisure. York is a major centre of employment and a transport hub, with Leeds and Teesside also generating many journeys. We analyse the travel patterns of people involved in crashes and use this information to inform our preventive work eg motorcyclist publicity and education campaigns are also undertaken within the West Yorkshire and Tees Valley areas because over 40% of our casualties come from there. We have already started to work more closely with our neighbouring authorities to address issues related to specific road user groups.

- Younger Drivers
• Older road users;
• Motorcyclists;
• Young drivers.

We will also continue to coordinate major seasonal campaigns and operations e.g. working with the Highways Agency to provide staff and publicity on identified higher risk dates such as the beginning of the May bank holiday and summer school holidays throughout Yorkshire and as far afield as Northumberland to cover the length of the main routes.

viii Partnership and coordination between agencies:

We will provide the lead within the partnership to coordinate road safety educational inputs into schools and colleges by the various agencies. Our analysis of demographic, casualty and other data is identifying areas and social and age groups who are at highest risk of death or injury on our roads. Within the partnership it is recognised that there needs to be agreement of how and where to prioritise our combined efforts. Part of the revised partnership structure will be an agreement on which agencies and authorities take the lead or indeed provide the main service delivery for which programmes. Thus those problems that are shared county wide and that are best addressed from a strategic level will be led by the most appropriate county wide agency and others will be run at a District level with additional support where needed.

ix. Data analysis coordination:

We intend to further develop our statutory data analysis service in conjunction with District councils and other agencies. Between us we have a significant amount of data and analysis capability. There is a lack of coordination and consequent duplication of effort that has been identified and acknowledged. Partner agencies are now working together to reach agreement on which partners are best placed to undertake what analysis. This agreement will maintain the security of databases and Data Protection requirements whilst preventing duplication. This will use our resources in an intelligent way to achieve the maximum output, benefit and cost-effectiveness for all concerned;

x. Road Safety Education.

We will continue to provide the core expertise for road safety education, training, publicity and engineering services to the county and to the partnership. This is in accordance with statutory duties and requirements. We will develop and maintain a level of knowledge and expertise within these areas of service that will be available to inform and guide the complimentary work of our partners. We will maintain and distribute up to date information and research, including undertaking or sharing in new research where that is appropriate. We will also provide a source of expertise in the design, monitoring and evaluation of bids, initiatives and programmes to our partners. This is a complex and increasingly important requirement for the selection and assessment of current and future work.
Community Engagement:

This will range from capturing the concerns of local residents on specific speed related matters, through the Speed Management Protocol, to continuing to monitor and influence attitudes and opinions on road safety, of the communities we serve. Also, this will include seeking people’s perceptions of how safe they feel, in order to help inform progress against the Vision. This will include the use of the Citizens Panel, Focus Groups, On-street surveys to gauge feelings of safety, and ‘Place’ survey.

Annual Action Plan

We will produce a detailed annual action plan based on the 11 point Strategy set out above. An annual review of previous year’s casualty and collision data will ensure that any necessary adjustments are made to accommodate for emerging trends and to track progress during the five years of the plan.

Measuring progress

Whilst research suggests that nationally, the number of road deaths will fall by less than 20% by 2010 from the 1994 – 1998 baseline, fatalities in North Yorkshire are predicted to have fallen by 24% over the same period.

The 2009 TRL Research reports suggest that the following outcomes are achievable, based on the 2004 to 2008 baseline and continued levels of funding (pre-2009 general election):

- To reduce road deaths by 33% by 2020
- To reduce the annual total of serious injuries by 33% by 2020
- To reduce the number of children and young people aged 0 to 17 killed or seriously injured in road collision by 50% by 2020
- To reduce the combined rate of deaths or serious injuries for pedestrians and cyclists.

After local assessment was undertaken on these potential outcomes, the following indicators have been agreed in principle for North Yorkshire:

- To reduce road deaths
- To reduce serious injuries
- To reduce deaths and serious injuries to children and young people
- To reduce deaths and serious injuries to older car occupants

This takes account of the growing population of older drivers whose safety and independence we seek to assure. We will set measurable targets once actual funding levels are known.
Proposed target to reduce road deaths

Proposed target to reduce the annual total of serious injuries
To reduce the number of children & young people (aged 0-17) killed or seriously injured in road collisions

To reduce the number of older car occupants (aged 50+) killed or seriously injured in road collisions

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a. These data sets help us to tailor our services to those groups, areas and communities with the greatest need and who can benefit the most from this focus. We will use the NYCC and Roadwise websites to publish information as well as through local partnerships and District and Parish Councils.

b. As a Local Highway Authority, we are a member of Road Safety GB, the national organisation that supports and coordinates road safety education, training and publicity programmes and resources. An integral part of the DfT Road Safety Delivery Board, Road Safety GB is currently developing a national exchange to ensure that successful work, methodology and initiatives are available to all authorities. This will enable us to make good use of others work. We see this as an efficient way for future working and have been members of the organisation and its “Timebank” knowledge
exchange from the start. We will also work closely with our neighbouring authorities, including group purchasing for economies of scale and will further develop this networking to mutual benefit.

7.0 An Integrated Approach to Safety, Security and Health Strategy Delivery

The 95 Alive Road Safety Partnership comprises a range of separate organisations, each with their own distinct powers, duties, and responsibilities. In coming together in order to achieve a common goal, they must understand their own role relative to their partner organisations and how it is put to best effect. Understanding the notion of integration is key to this.

Organisational: Working together more effectively is an essential requirement in the delivery of the road safety strategy post 2010. Sections 8.0 ‘Performance Management’ and 9.0 ‘Constitutional Framework’ below describe the process, and the importance of ensuring a more coordinated approach to service delivery;

Policy: A review of partner policy documents has been carried out. Although many of the organisations within 95 Alive have policies that mention road safety, there is a strong alignment between those of six partner organisations in particular:

- North Yorkshire County Council
- City of York Council
- Highways Agency (for Trunk routes)
- North Yorkshire Police
- North Yorkshire Fire & Rescue Service
- National Health Service: both Public Health and Emergency Care services

A more detailed account of the relevant policies of these organisations can be found at www.roadwise.co.uk

8.0 Performance Management

In the current climate of financial restraint it is essential that we use our people and effort where they can make the most difference in preventing casualties and supporting local communities. We will check our performance regularly to ensure we are achieving those aims as effectively and efficiently as possible.

North Yorkshire Strategic Partnership ‘Safer Forum’: The York and North Yorkshire Safer Communities Forum brings together a range of organisations committed to tackling Crime and Disorder and its causes. It is primarily concerned with the delivery of countywide outcomes through the ‘safer’ element of the Local Area Agreement (LAA). There is a duty on the Forum to produce an annual Community Safety Agreement for North Yorkshire.
The agreement is an opportunity for the Forum to consider the data, intelligence and analysis from the district level Crime and Disorder Reduction Partnerships’ (CDRPs) annual Joint Strategic Intelligence Assessments (JSIAs). The agreement also outlines ways in which partners can work more effectively, both individually and collectively, to address the priorities and issues identified. One of the forum’s priorities is road safety. The forum is a group of senior representatives from key stakeholder agencies in the sub-region who have an interest or role in delivering safer communities. The Forum itself meets twice a year to set priorities, allocate funding and develop the Community Safety Agreement.

**Joint Officer Working Group:** The Forum is supported by the Joint Officer Working Group and five Joint Co-coordinating Groups, one of which is the Road Safety JCG - 95 Alive. Performance is reported to the Safer Forum by exception through a ‘Highlight Report’.

**‘95 Alive’ Steering Group:** The purpose of this Group is to determine the strategic direction of the Partnership, approve the annual action and to monitor its delivery and overall performance against targets and indicators. It meets three times a year, and comprises senior ranking officers from ‘lead’ partner organisations. It is chaired by North Yorkshire County Council, North Yorkshire Police and North Yorkshire Fire and Rescue Service on a rotating biennial basis. The same principle applies to the position of Vice-Chair;

**Officer Working Group:** The purpose of this Group is to set the annual action plan, and to monitor its delivery. The Working Group meets monthly, and the chair reports progress to Steering Group three times a year. It is chaired by North Yorkshire County Council on a permanent basis;

**Project Working:** The established project groups work on solutions to the specific problems faced by the high risk road users identified through data analysis (see section ‘Data Analysis’ and Annex I for further details) e.g. motorcyclists, older drivers.

The project group or individual lead officers are charged with planning, organising and delivering those elements of the annual road safety action plan that relate to their area of responsibility. Where actions overlap, groups work together. It is the responsibility of each project group chair to report progress back up to the Officer Working Group on a monthly basis.

Project group members have developed stronger expertise in these particular areas and then share this and disseminate current thinking and innovation across the partnership. We will build on this success and develop project group working further, using tele- and video-conferencing where available to minimise travel times and costs.

**Annual Conference:** The Council will look to host an annual road safety conference, to which all lead and supporting partners will be invited. Its purpose will be to provide an opportunity for delegates to consider
performance against targets and progress towards road safety objectives and local needs;

Member involvement: This is an essential element within any road safety strategy. Whilst the '95 Alive' partnership itself will remain officer based, the Council has sought to incorporate member scrutiny wherever possible. For example:

- Annual area committee reports: Annual report to each Area Committee on delivery of the action plan and performance against aims and outcomes. It provides an opportunity for members and the public to hold officers to account on performance and achievements.

Transport Economy and Environment Overview and Scrutiny Committee: This takes two forms:

- Annual report to the Transport, Economy and Environment Overview and Scrutiny Committee on delivery of the action plan and performance against targets and indicators; and

- A detailed scrutiny review on a different element each year of road safety strategy; taking the role of 'critical friend'. For example, members are currently reviewing the emerging Speed Management Protocol, with particular interest in 'speed outside schools'.

Evaluation. Educational programmes, publicity campaigns and training courses are medium to long term activities that are difficult to evaluate for their effectiveness. Our Area Road Safety & Travel Awareness Officers are all trained to devise, deliver, support and evaluate this type of work. Each officer is a member of their District Community Safety Team and makes this knowledge and expertise available as a community and partnership resource. They are best used at the very outset to help identify or design interventions, to set realistic and achievable goals and then to help to ensure that the programmes work. They can also help to advise on reporting results.

9.0 Constitutional Framework:

95 Alive has always adopted an inclusive approach towards new members. As a result membership has grown steadily from the 20 or so founding organisations, to almost 30 different bodies today. Its success has relied on the commitment of these members, who each participate in the belief that working together to achieve shared objectives is more effective than working separately. The whole is greater than the sum of the parts. However, this inclusive approach has assumed that all partners had an equal stake in the 'road safety' objective. This was not always the case. So it failed to recognise the differing priorities of the organisations of which it was formed, and the extent to which 'road safety' was or was not actually core to their existence, and from this, the extent of the contribution that some partners were able to make.
Over recent years, 95 Alive has been working on the best way of addressing this issue. More recently, the County Council embarked on a partnership working pilot. It commenced in 2008, and 95 Alive was a participant. In requiring partnerships to consider key areas including effectiveness, roles and responsibilities and operational arrangements, the pilot was designed to help them develop a more robust governance framework appropriate to their particular circumstances. This pilot has provided a further useful impetus to 95 Alive, to help it resolve some of the key weaknesses set out in Annex B below.

The solution is set out in:

- Annex C, which describes the relationship and status of all of the organisations that form part of 95 Alive, as well as highlighting the importance of the proposed annual road safety conference; and

- The creation of a constitution in the form of a Memorandum of Understanding. This is designed to set out the roles and responsibilities of each organisation that is a member of 95 Alive.

**Roles and responsibilities:**

**Lead Partners:** These are the organisations that have a key role in the delivery of the road safety service across York and North Yorkshire and whose participation is essential if the achievement of road safety outcomes is to be achieved. Lead partners include:

**North Yorkshire County Council:** NYCC has prime responsibility for delivery of road safety education, training and publicity (ETP), and as highway authority, delivers a range of highway and road safety engineering functions. The Council also has a statutory duty to produce the Local Transport Plan, and it chairs the NYSP, of which the Safer Communities Forum is a key element. It also has ‘accountable body’ status for budgetary allocation and management for the Area Based Grant (ABG);

**North Yorkshire Police:** North Yorkshire Police have prime responsibility for enforcement activity across York and North Yorkshire. They are heavily involved with the introduction of Speed Awareness measures alongside with their involvement in other projects and initiatives, they are taking an increasingly active role in Education, Training and Publicity;

**North Yorkshire Fire and Rescue Service:** Under the Fire and Rescue Services Act, 2004, the Fire and Rescue service assumed a statutory duty to provide a rescue function for people involved in road collisions. This has been further developed into the service taking a pro-active role in helping to deliver some road safety publicity and promotion services. Through the CDRP road safety sub-groups, the fire and rescue service work with the police and NYCC road safety officers in their respective enforcement and education duties,
Highways Agency: The Highways Agency is highway authority for the trunk roads and motorways, and has a similar role to that of NYCC for these elements of the road network;

City of York Council: CYC performs the same functions as NYCC within the City of York administrative boundary;

Supporting partners: These are organisations that possess an interest in road safety, but for whom road safety is not one of their core functions. Nevertheless, as members of 95 Alive, their role is two-fold:

- Involvement at the local level with project groups on a specific geographic or themed group basis, as appropriate; and
- Participation in the proposed annual 95 Alive road safety conference, at which lead partners will report on progress against strategy and targets, and set out the following year’s action plan.

The organisations in this category include the CDRPs, the Yorkshire Dales National Park Authority, North York Moors National Park Authority and HM Forces.

The intention is that this will set out clearly the roles and responsibilities of each organisation, and ensure that all partners, who sign up to the Memorandum, whether ‘lead’ or ‘supporting’, do so on the understanding that they are committing themselves to delivering the road safety service through the 95 Alive road safety partnership and its associated strategies and action plans.

Reference Groups: These are other organisations that possess a specific interest or pursue a single issue agenda in road safety. They include campaigning or representative bodies, or may also be individual members of the public, who have expressed an interest in being informed of, or used as a sounding board for, new initiatives emanating from relevant project groups. For example, the Council has a contact database of motorcyclists across York and North Yorkshire, who are used for this purpose. Giving these organisations and individuals direct access into 95 Alive through the project groups will provide them with the opportunity to participate in road safety campaigns and initiatives and to influence strategy.

10.0 Risks to the Strategy

Reputation – the 95 Alive Partnership has established a wide level of recognition throughout the county and has a good reputation for delivering road safety programmes, events and for providing funding to local councils and community groups to enable them to deliver road safety related projects e.g. a funding grant to the Richmondshire Branch of the Institute of Advanced Motorists to provide free training courses for young novice drivers in Richmondshire. Whilst funding will be reduced, the partnership reputation for effective road safety work has been hard won and needs to be maintained..
The reputation of the partnership is important for maintaining partner agency commitment and public respect and attention.

Financial - the government has announced that there will be no further Specific Road Safety Grant for Road Safety. With uncertainty about all future funding there is an obvious risk to our casualty prevention work until future NYCC funding allocations are decided at the end of 2010 and throughout LTP3. Budget plans and future programmes are being planned with this risk in mind and will be prioritised according to need, risk and available resources.

Expectation – there is a need to be sensitive to levels of expectation between the partner agencies and authorities and from the community at large as to what they expect to see the partnership undertake. Different communities and partners may have differing priorities so the areas of work, resource allocation and rationale behind them must be clear, objective and well communicated. Equally, where we have to reduce or withdraw from areas of work, these decisions and the reasons for them must also be well founded and clearly communicated.

Externalities – whatever work we undertake to reduce and prevent future casualties, other factors always have some effect as well as what we do. Where our work is medium to long term and where larger schemes take two or three years from selection to completion, these other factors grow in influence. The full effect is difficult to calculate in any meaningful way but we are very aware of these issues and try to take them into account wherever practical. For example the level of traffic flow and vehicle speeds reduced significantly during the last three months of 2009 as a result of “credit crunch” and fuel prices, followed by the very severe winter in early 2010. Crash and road casualty numbers also reduced during these periods so we acknowledge these influences when analysing the data.

Demographic – changes in the population ages and employment must be incorporated into our planning and our ongoing work.

11.0 Security

A strong message that comes to us from local communities, be they villages or larger towns is that, whatever the statistics may show, often people’s lives and travelling is strongly affected by whether or not they feel safe. Therefore, we will also take into account people’s perceptions when we consider what improvements we may be able to make. For example: the County Council provides new or improved street lighting in areas of high crime and vandalism at the request of North Yorkshire Police, Crime and Disorder Reduction Partnership Groups, Parish or District Councils, Neighbourhood Watch and Pub Watch co-ordinators.

Recent studies have provided evidence that good street lighting infrastructure can facilitate a reduction in crime and the fear of crime by increasing visibility and the risk of identification to criminals. The improved lighting can also have a positive impact on commercial, leisure and tourism activities and can aid
pedestrian movement and encourage accessibility to the night time environment.

High quality illumination in the vicinity of CCTV cameras allows for enhanced surveillance in known trouble areas providing improved facial recognition and greater opportunity for successful prosecution of offenders.

In recent years improvements have been made to street lighting networks in Richmond, Selby, Pickering, Malton, Northallerton and Ripon to assist with CCTV operations. Prior to its recent redevelopment Skipton Bus Station was also re-lit to discourage racially motivated assaults on Asian taxi drivers.

Recently, at the request of Richmondshire District Council’s Community Safety Partnership we reviewed the lighting in Colburn following a rising number of crime related incidents.

In terms of street lighting faults, areas of high crime or fear of crime, particularly in areas with an aged population, are prioritised with faults often being repaired within 24 hours of notification.

The ongoing column replacement programme has the added benefit of reducing the requirement for routine cyclical maintenance and has also reduced the number of defects by 42%. Part of this saving has financed the installation of street lighting columns following requests from members of the public. Requests are assessed on a number of criteria which include crime and the fear of crime along with location and proximity to local services.

12.0 Health and Sustainable Travel

As the largest county in England, North Yorkshire is sparsely populated, with some 595,000 people spread across 5200 km². With over 20% of the population living in just two major urban centres – Harrogate and Scarborough, most of the rest of the county is designated as ‘super-sparse’

With the population geographically dispersed among small towns and villages, people have to travel higher mileage than in most other areas simply in order to go about their daily business, access services, schools and to get to work. The County is a popular holiday and weekend destination with two National Parks and a popular coastline. A large number of visitors come here all year round, who are not familiar with the roads and conditions and whose purpose is to see the abundant sights and scenery.

The demographics of residents and visitors (age groups, economic status, needs etc) are analysed regularly and the findings, trends and anticipated changes are used to direct service provision and planning. This work has identified the increasing average age of our resident and visitor populations and also the educational and travel needs of children and young people and those looking for and at work. This analysis also considers people's health needs and we are now developing programmes and levels of service that will contribute to providing these age groups with sensible options for travel that
will contribute to their continuing health, ability to get to education, training, work and other services alongside being able to make sustainable, affordable choices wherever these are feasible.

The main focus of North Yorkshire County Council’s approach to promoting sustainable travel through the Local Transport Plan will be to offer sustainable options where they are practical and, as a large employer, to lead by example where feasible. In particular we will;

- Communicate with all our employees to encourage and enable them to adopt a sustainable, lower cost and carbon conscious approach in their working practices.
- Review our policies and procedures to ensure that we are not just catering for, but actively facilitating sustainable travel options.
- Implement the measures recommended by Department for Transport Travel Plan good practice guidance in updating our County Hall and other office locations’ travel plans.
- Promote sustainable travel to staff for travel to and during work where this is practical.
- Liaise with District Councils and all key partners to share information and experience and ensure our efforts work together.

Vision

Our vision will link with the vision of the 95 Alive Partnership by “aiming to improve public perceptions of safety, security, and personal confidence in order to be able to choose sustainable modes of travel.”

Links to other public policies

In order to work in a joined up manner both internally and externally, with our partner agencies and neighbouring authorities, we have identified those polices that compliment or even depend upon our fulfilling our role in this area;

Strategic priorities

Support economic growth; improving the perceptions of the reliability and efficiency of transport networks will enable people to make a more informed choice about mode of travel choice and therefore improve accessibility for individuals and for the community as a whole. For example, human nature is such that we routinely overestimate how long it takes to walk short journeys and underestimate how long it takes to drive and find parking. Therefore by improving the understanding of walking journey times alongside physical improvements, more people will be encouraged to choose sustainable modes.

Tackle climate change; Increasing the amount of sustainable travel and reducing reliance on less sustainable options such as the private car can have an important impact on helping to tackle climate change through the reduction in carbon emissions. Whilst in some circumstances the private car can be the
only realistic option to make a journey, there are many instances in which a more sustainable option can be taken.

Other methods such as providing advice and information about good driving techniques can reduce fuel use, resulting in reduced emissions. Additionally the development of alternative fuels such as electric vehicles can help to tackle climate change.

Promote equality of opportunity: The provision and promotion of local services and sustainable transport options can help to improve the access to key services for many transport users. Shared private vehicle use (car sharing etc) public transport and use of new communication channels can offer greater equality of opportunity.. The promotion of locally available services e.g. internet access at local libraries, and encouraging suppliers to prioritise broadband to rural areas, are other ways in which the council can help people to look for work and access training and education without necessarily entailing long and costly journeys.

Improve quality of life and promote a healthy natural environment; People who have an active lifestyle can have a better quality of life both in the short term by being fitter and healthier, and also in terms of longer life expectancy. Active travel is a good way of combining exercise into everyday life. Physical activity also has a positive effect on mood and sense of well being. Sustainable modes of travel such as walking and cycling for shorter journeys do not damage the environment. Public transport and car sharing is less damaging than travelling by private car. Many people are not keen on taking part in sports or physical exercise but could achieve and maintain a better level of physical activity at no cost, simply by walking or cycling shorter, regular journeys instead of taking the car. The resulting reduction in emissions and reduced levels of town centre and on street parking would greatly benefit the local street scene and contribute to fewer emissions.

Health
The pursuit of a healthier lifestyle and setting and maintaining good physical and mental health is a major aim for the Health Service. Our work in developing sustainable travel choices will contribute to these outcomes. The Department for Health has issued a number of strategy documents, including:

- White Paper – Our Health, Our Care, Our Say (2006)
- "Healthy Weight, Healthy Lives" 2008
- "Be Active, Be Healthy - a plan for getting the nation moving" 2009
- “Coalition for Better Health” brings together the health, public and commercial sectors to coordinate their contributions to these aims. This is mirrored through our Partnership within which these agencies also work together and coordinate their work.

Overarching health improvement policy:
• “Choosing health” 2004

And at a regional and more local level;
• “Healthy Ambitions” 2008 (Regional - Yorkshire and Humber Strategic Healthy Authority)

This strategy will coordinate with the wider work of the Strategic Partnership for Health Improvement within the NYSP.

Active travel choices for all age groups are fundamental to these health improvement aims. We work in partnership with our Health Trusts and aim to work with them to make greater improvements to people’s physical and mental health through active, independent travel.

**Education**

Within the education service there is strong emphasis on improving health and the ability to access education and training in preparation for employment. To this end The Education and Inspections Act places a duty on Local Education Authorities to promote and enable sustainable travel to school through the development and implementation of a Sustainable Modes of Travel Strategy and service. By publishing information about the transport infrastructure, the journey between a students home and chosen or potential school can be planned and choices made about which school to apply to, and how to get there. More details can be found in the Sustainable Mode of Travel to School Strategy at Annex F.

**Healthier Travel Strategy**

Our intention is to reduce the number of short, single purpose, single occupant car journeys and to enable and encourage sustainable choices where practical and achievable. These will be people for whom a change from individual private car trips to more sustainable alternatives is readily achievable and reasonable.

Our approach will be to provide consistent messages across the County that raise awareness and provide information. Efforts will be focussed on local areas and particular groups of people who have the choice about how they travel.

In many cases there are practical constraints which mean people cannot readily change the way they travel for a particular journey. However, there are journeys over short distances when people do have the option to walk, cycle or catch a bus.

We recognise, however, that many people in rural communities can also experience social and economic isolation, especially if they have no access to transport including the private car, so there is a balance to be struck. The emphasis will be on encouraging and facilitating sustainable travel choices where practical. For example driving children short journeys to school means
they can miss out on physical exercise and time to talk with their parents. By walking together for all or part of the journey children will gain health benefits, together with experience of the changing seasons, knowledge of their neighbourhood and walk with friends; develop road safety skills and semi-independent travel experience.

The focus of promotional efforts will be to provide a base level of information across the county. Building on that we will work with those communities and target groups where there is the greatest potential to achieve behaviour change.

To enable this change, measures will need to be taken to address people’s perception of safety, which is a strong factor in their choice of how to travel. Research has shown that the biggest factor in changing travel behaviour is personal confidence – i.e. the extent to which people think that it is within their capability to change. We will improve urban design following ‘Manual For Streets’ guidance; feed into the planning process; comment on workplace travel plans, through local cycle routes and signing, and use education, training and publicity (ETP) wherever funds permit.

Subject to availability of funds, we will:

1. Through the development of a tiered approach identify those areas where there is potential to achieve significant changes in travel modes and to provide viable, affordable choices:
   - Promotion of cycling for short journeys to work, school and for other local travel.
   - Promotion of walking for short journeys through the extended use of existing schemes

2. Provide support for initiatives that promote cycling as a health, leisure and tourism activity. Working in partnership with health service partners to develop cycling for health benefits, especially in support of older people returning to cycling. Including advice and technical information to support bids, route development and promotion.

3. Work with schools and colleges to provide information to enable students and parents to make sustainable choices for travel to school and college.

4. Support the 14-19 Agenda – help monitor and address additional travel implications generated by pupils travelling to a variety of sites for education. It may need to form part of our educational inputs at Key Stages 3 and 4. Provide advice concerning the infrastructure around schools with a view to improving safety and the perception of safety where funds permit. Modest improvements, such as widened pavement areas, dropped kerbs, improved lighting and so on, can make a real difference in helping parents who would like to walk their children to school but who find some places on their route difficult or unsafe. We aim to help parents in teaching their children how to use the roads by
walking all or part of the way to school and for them to feel confident and comfortable in doing so. We will continue to work with all schools to help them to implement the measures they identified in their Travel Plans and to review progress, so far as we are able. All primary and secondary schools now have an individual travel plan.

5. Ensure Road Safety Education and Publicity elements are incorporated into local engineering schemes where appropriate.

6. Develop a source of sustainable travel expertise and information to local highways and development planning services. To ensure that every opportunity to minimise additional traffic or congestion is incorporated into planning applications and schemes. This will mean that each District will have a local contact officer – the Road Safety and Travel Awareness Officer - who can provide the link to the most up to date developments and into other schemes e.g. by checking on development plans, the local officer will know about the routes to schools etc that might be affected by a proposal. There may also be scope to undertake other, beneficial work at the same time to save costs and reduce disruption. We will help to identify these opportunities where possible.

Performance management

We will provide help to schools and other organisations to assess and evaluate progress using our expertise in this area.

We will monitor progress and report back to the council and to our partner agencies with proposals for improvements as trends and developments indicate.

<table>
<thead>
<tr>
<th>Ref</th>
<th>Action</th>
<th>Indicator</th>
<th>Term</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Integrate ‘Engineering’ and ‘ETP’ activity, where beneficial to service delivery.</td>
<td>Establishment of methodology</td>
<td>S,M,L</td>
<td>This holistic approach will see remedies developed for routes, people using the roads and local communities as appropriate to their relative risk and need.</td>
</tr>
</tbody>
</table>
| 2   | Target specific road user groups according to risk and need through dynamic data analysis. Currently these are:  
  - All car occupants – wearing of seatbelts  
  - People driving for work  
  - Motorcyclists – riding larger bikes on rural roads  
  - Older drivers – to keep them driving safely for as long as possible  
  - Young, novice drivers | Annual Action Plan and reporting | S,M,L | Reviewed annually and for seasonal issues e.g. motorcycling, cycling. |
| 3   | Develop the provision of road user education and training embedded into each Key Stage of the curriculum in all our schools. Detailed focus and delivery will be adjustable to take account of local conditions and relative levels of risk. | Programme establishment in agreement with CYPS | S,M,L | i.e. the inputs and their methods of delivery will be variable between a suburban or town centre school in Scarborough and a village school in the North York Moors. Overall outcomes will remain the same. This will ensure that every pupil receives an appropriate level of road user education to |
4 **Provide and lead the publicity and campaigns service to the partnership.** This will be the continued lead for marketing and campaigns to provide information to the public, influence behaviours and support operational work and initiatives. Report and evaluation of campaigns and materials. Supported by the DfT guidance and strategy that emphasises the increasing importance of this area of work in changing peoples behaviour.

5 **Selective use of Think!, ACPO and RSGB campaigns and materials where they coincide with local needs and priorities** Record of use Feedback to DfT/Think! and materials

6 **Work with employers and businesses** to develop and promote safe driving for work policy and practice. Annual programme and report. This is a large area of risk both to individuals and to businesses, where good practice can significantly reduce injury and economic loss.

7 **Collaborate on a regional basis or with neighbouring authorities on shared issues** where a regional approach will be more effective. Currently: Participation and reporting on shared programmes and their effectiveness:
   - Older road users
   - Motorcyclists
   - Young drivers

8 **Lead on the coordination of the countywide programme** to rationalise the road safety inputs into schools and colleges by the various agencies and prevent duplication. This will be in line with identified risk and need. Agreement between agencies and publication of dynamic, This will ensure that maximum effort is put into those establishments with greatest need and risk and will prevent duplication or
9 **Further improve comprehensive data analysis in partnership with the other local agencies** and authorities to provide a coordinated service that makes best use of available analysis resources without duplication of effort or compromise of data security and confidence.

10 **Provide the core expertise for road safety education, training, publicity and engineering services to the county and to the partnership in accordance with statutory duties and requirements.** Including the establishment of a short list of key officers who will lead on their area of special expertise to whom our own Directorates and partner agencies can turn for advice.

11 **Engage with local communities to ensure that proposed road safety work is both data led and locally relevant and appropriate.**

   web-based programme calendar Agreement S,M for provision between partner agencies
dysfunction between agencies or some schools being missed out

   Service provision S,M,L List in place and available to partners

   Annual reporting and responses from Area Committees. S,M,L
### Strengths
- Very strong commitment from key partners;
- Depth of knowledge/experience across the partnership;
- Comprehensive countywide coverage;
- Mature partnership – no hidden agendas;
- Strong performance against targets;
- Data led;
- Project Group working;
- ‘Brand’ image?
- Provides the opportunity to be creative and innovative

### Weaknesses
- Duplication of effort/lack of coordination in some areas of delivery;
- Existing organisational structure – lack of/poor communication with some local partners (e-newsletter, calendar of events);
- Informal governance framework/no constitution;
- Need to link up better internally (Engineering/ETP);
- Evaluation of activity;
- Lack of stability – different representatives, poor attendance;
- Relationship with district based partners;
- Brand image?
- Evidence base – countywide speed/volumetric data;
- Differing targets
- Lack of integration with Engineering

### Opportunities
- Cementing relationship and better coordination with CDRPs;
- E-newsletter, calendar of events;
- Emerging governance framework/constitution;
- Brand image?
- Need for more effective regional/pan-regional integration: Regional Road Safety Study;
- Safety cameras?
- Evaluation of activity – DfT Paper out this year;
- SPSS/statistical analysis = stronger evidence base;
- MAST database;
- Road Wise website;
- Better coordination with Engineering;
- PCT Health agenda – obesity/alcohol: active travel/campaigns

### Threats
- Uncertainty over future funding arrangements;
- Influence of ‘externalities’ on casualty numbers: economic downturn = fewer/shorter journeys = less traffic = slower speeds = fewer collisions. Economic upturn = more casualties..? 
- Financial risk of not hitting target.
95 Alive Proposed structure/Oversight

ANNUAL CONFERENCE

Elected Council members

Supporting Partners
- CDRP
- GOYH
- HM Forces
- Scarborough Borough Council
- Harrogate Borough Council
- Yorkshire Ambulance Service
- North York Moors National Park Authority
- Yorkshire Dales National Park Authority

ANNUAL CONFERENCE

North Yorkshire Strategic Partnership

SAFER/JOWG

Steering Group

Officer Working Group

CDRP X 7

Young Driver Project Group

Other Project Groups

Other Project Groups

Reference Groups (CTC, IAM, MAG, Living Streets, single issue focus groups etc)

Chair: (Rotating biennial - NYCC, NYF&R, NYP)
Vice-Chair: (Rotating biennial)
Meeting: Quarterly

Chair: North Yorkshire County Council (permanent)
Meeting: Monthly
Lead Partner membership: North Yorkshire County Council, North Yorkshire Police, North Yorkshire Fire & Rescue Service, City of York Council, Highways Agency, North Yorkshire and York Public Health, 1 x CDRP representative (supporting partner)

See Annex C

Annex C
NYSP Executive

York and North Yorkshire Safer Communities Forum (YNYSCF)
(Safer Communities Thematic Partnership)
(County Strategy Group)
(See Annex D)

York & North Yorkshire Rural Partnership STRONGER

Economy & Enterprise

Adults

Health

Children & Young People

95 Alive Road Safety Partnership (see Annex B)
- Strategic Group
- Practitioners Group

York and North Yorkshire Drug and Alcohol Action Team (DAAT) Board

Local Criminal Justice Board

Joint Officer Working Group (JOWG)
(See Annex D)

District/York CDRPs (x8)

NY Local Resilience Forum Strategic Group

Multi Agency Co-Ordination Group

Joint Operations

Youth Offending Team (YOT)
SAFER THEMATIC FORUM
CHAIR: Chief Fire Officer

- Strategic Direction
- Priorities – CSA & LAA indicators
- Funding allocation
- Partnership development
- Performance (against targets)

JOINT OFFICER WORKING GROUP

- Delivery of Action Plan
- Management of JCG workstreams
- Monitoring performance against Action Plan

Dissolve: Performance; Communications & Horizon Scanning JCG’s 
Transfer: Alcohol to Violent Crime & Late Night Economy Data & Intelligence to Local Information System Funding (maintain until 2010/11 allocations are determined then review.) 
Alcohol T & F Group to be reviewed March 2010.

Community Safety Agreement

J.S.I.A.

Partnership plans

CHILDRENS TRUST

SAFE GUARDING BOARDS

ADULT TP

LCJB

HEALTH inc PCT Alcohol JCG

LINKS TO THEMATIC PARTNERSHIP

CHILDRENS TRUST

SAFE GUARDING BOARDS

ADULT TP

LCJB

HEALTH inc PCT Alcohol JCG

Proposed JCG

Existing JCG

Link to existing groups

CDRP District Level (8)

Violent Crime & NTE

Countywide Anti-Social Behaviour Coordinators Forum

Public Confidence JCG

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

DAAT JCG & PARTNERSHIP BOARD

Domestic Abuse JCG

JSIA WORKING GROUP

JOINT OFFICER WORKING GROUP

JSIA WORKING GROUP

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

Domestic Abuse JCG

JSIA WORKING GROUP

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

Domestic Abuse JCG

JSIA WORKING GROUP

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

Domestic Abuse JCG

JSIA WORKING GROUP

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

Domestic Abuse JCG

JSIA WORKING GROUP

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

Domestic Abuse JCG

JSIA WORKING GROUP

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

Domestic Abuse JCG

JSIA WORKING GROUP

Justice JCG (PPOIOM)

95 Alive PARTNERSHIP

Local Information System

Domestic Abuse JCG

JSIA WORKING GROUP

Justice JCG (PPOIOM)
ANNEX F

Sustainable School Travel Strategy - Education and Inspections Act 2006

Summary

This document represents the latest version of the Sustainable School Travel Strategy for North Yorkshire, as required by the Education and Inspections Act 2006. The act places duties on local authorities that stipulate “Having assessed the needs of pupils, and conducted an audit of the sustainable transport infrastructure that supports travel to school, local authorities must develop a strategy for developing that infrastructure so that it better meets the needs of children and young people in their area.”

This strategy is a statement of the authority's overall approach to enabling pupils and their families to choose sustainable modes of travel to school.

Introduction

The Local Authority (LA) has a responsibility to make suitable travel arrangements in line with its approved school transport policy to allow children access to school. How this is achieved is covered in detail in the Children and Young People’s plan.

North Yorkshire County Council spends in excess of £20 million per year on home to school transport.

The Education and Inspections Act 2006 extended local authorities’ duties to support parental choice, including the provision of free transport for the most disadvantaged families.

This document sets out the County Council’s overall strategy, along with how we aim to promote sustainable travel and transport to access education. This strategy is our aim and aspiration, so far as resources permit.

National and local context – Children and Young People’s issues:

Children and Young People’s Plan (CYPP).

The sustainable school travel strategy will support the objectives set out in the Children and Young People’s plan, in particular objective 5.5: Improve Access to services for all children and young people.

Extended Schools

Since 2004 North Yorkshire has been developing Extended Schools Clusters in 16 areas of the County. The aim being that clusters will work towards offering the core offer of wraparound childcare, study support and community extended schools to their local community. Multi-agency teams deliver a wide range of services that can include children’s social care, health, childcare and family learning.
14-19 Agenda

This is an initiative which provides entitlement for all young people to access the education that is best suited to them; in a setting appropriate to the subjects they are learning, and where standards are assured. Every 14-19 year old will have an entitlement to 14 Diploma lines, in addition to the existing National Curriculum. This will lead to personalised learning plans and will mean that pupils will access education at more than one establishment, which could be a school or college or could be work-based.

It is a key priority at strategic and operational level through the CYPP, which ensures that individual task groups can target funding at particular groups of children so that they can access provision that meets their individual needs. This is supported by 14-19 delivery plan and will be included as part of this strategy. In particular it will support targeting resources in rural areas.

Linkages to Local Transport Plan

The Sustainable School Travel Strategy has been developed as part of the authority’s Local Transport Plan (LTP) - including its accessibility planning and bus strategy.

A copy of the Local Transport Plan is available on our website www.northyorks.gov.uk under transport and streets, transport policy. The LTP sets out the County Council’s approach to transport for the period 2011 to 2016 in the context of an overall transport strategy.

In developing this strategy, we have considered how improvements can help to deliver other objectives, including environmental improvements, (from reduced levels of congestion and pollution), and enhanced child safety and security. The North Yorkshire Local Area Agreement set out a target to develop school travel plans, and every school now has a plan in place.

NYCC already considers accessibility issues, including the accessibility of key public services such as education, as an integral part of our Local Transport Plan. This is in accordance with the Guidance on Accessibility Planning in Local Transport Plans, DfT, December 2004.

We regularly review the school and public transport networks in the county.

The duty to promote sustainable school travel and transport

In accordance with the new act there are four main elements to the duty to promote sustainable school travel and transport that we must satisfy:

• A local assessment of the travel and transport needs of children and young people
• A local assessment of the facilities and services for sustainable modes of travel to, from and within the area.

• Regular review of the authority’s strategy to promote the use of sustainable modes of travel to meet the school travel needs of our area

• The promotion of sustainable modes of travel to school.

The Sustainable School Travel Strategy details how we will address these main elements of the duty to the extent that we are able, given the current uncertainties about future funding.

PART A: Assessment of the travel and transport needs of children and young people within the area

The school census contains a requirement that every school should annually collect data on the method of travel used by each pupil. The census includes pupil postcodes, which allows the authority to analyse how far children travel to school and what means of transport, including walking and cycling, they currently use. This, together with the attitudinal and aspirational data contained in the school travel plan allows for an analysis of need, where this information is up to date.

The most sustainable journey is where a child travels to their nearest school on foot or by bicycle or by bus. The location of the school, distance from home to school and other local factors means that this is not always feasible or practical for all pupils. It is also the case that for a variety of reasons including parental choice a child may attend a school that is further away.

With nearly four hundred schools throughout this large county and the prospect of reduced resources, we must prioritise our efforts. We endeavour to use the best available methods of analysis for this to help identify patterns and methods of travel. Calculations of travel distances examine the boundary of all those living within the statutory walking distances, (2 miles for primary and 3 for secondary), and also examine current practice by analysing existing journeys.

What we will do

We will assemble together all the data on each school in a format that can be read by computer. This will allow analysis of the patterns of travel based on the location of pupil postcodes. This will help identify those schools with greatest potential (based on distance and geography) for lower car use, compared to their current levels measured from the census.

We will focus our initial efforts on two large school cluster groups in our two largest towns where we have the greatest potential for more pupils to walk, cycle or bus to school instead of coming by car. This will make best use of our limited and reducing resources for this work.
PART B: An assessment of the facilities and services for sustainable modes of travel to, from and within the area.

In the area surrounding schools there is the need for people to know about the existing infrastructure, such as footpaths and routes suitable for cyclists and bus routes so that children and their families can make informed decisions about how they can walk or cycle or catch a bus to school. Some of this is recorded on readily available maps but some important features are not so easily identified from maps, such as short-cuts across a playing field and public rights of way.

What we have done

We have produced an audit methodology for examining the potential to improve sustainable travel to our schools. It includes all available data for schools. At present relevant information is stored on a variety of formats and locations. Over the next few years we will try to bring this information together in a way that maximises its value to all.

What we will do

We intend to continue to review school networks to respond to changing demands. There are constraints on the amount of funding we have available to carry out this work so we are prioritising this work to those towns and areas where the most potential for sustainable journeys to school exist.

We will make the data we collect publicly available including the choice advisors. We will identify the schools that have a high potential to increase sustainable travel.

PART C: A strategy to develop the sustainable travel and transport infrastructure within the authority and to promote the use of sustainable modes of travel.

The strategy of the County Council is as contained in the Local Transport Plan, the Home to School transport policy and the Children’s and Young People’s Plan. Within this it is possible to examine how children’s needs can be better met.

PART D: The promotion of sustainable travel and transport modes on the journey to, from and between schools and other institutions

We offer a road safety education service to all schools based on needs and potential risks by age and Key Stage group. Since 2000 we have also promoted travel awareness in schools.
What we will do

We will continue our successful approach to all schools so far as we are able and use the findings of the audit of need and infrastructure to provide the information that parents and students need to make informed choices about how they get to and from school.

We will similarly target road safety activities in areas of most need and link this work with those schools with the greatest potential for more children to choose to walk or cycle to school.

Publication of sustainable school travel strategy

The Education and Inspections Act 2006 requires local authorities to publish the authority's general arrangements and policies in respect of transport for pupils of compulsory school age and below to and from schools and institutions within the further education sector including, in particular:

(a) the provisions for free transport and relevant criteria;
(b) the carriage on school buses of pupils for whom free transport is not provided; and
(c) the payment in whole or in part of reasonable travelling expenses in certain cases.

The Regulations also require each authority to publish its arrangements and policies in respect of transport for pupils with Special Educational Needs (of compulsory school age and below) to and from maintained and non-maintained special schools and independent schools.

We propose to integrate the sustainable school travel strategy into these policy statements, and publish them at the same time so that parents have clear information to assist their choice.

Local authorities are not required to publish certain types of information if that information is also published in the composite prospectus (regulation 7(5)). We will, as a matter of good practice, publish our school travel policies in the composite prospectus.

For detailed information the composite prospectus should include information as to where and by what means parents may access sources of information relating to school travel and transport policies.

Summary

This strategy seeks to outline the County Council’s approach to the assessment of travel needs of children and young people in North Yorkshire and how a process of audit and published information along with promotional activities can help cater for these travel needs in a sustainable way, subject to the limitations of future funding.
NORTH YORKSHIRE COUNTY COUNCIL

Local Transport Plan 3

Appendix 4

Access to Services
IMPROVING EQUALITY OF OPPORTUNITY ANNEX

Contents:

1. Introduction
   1.1 Economic Challenge

2. Background and Context
   2.1 Key Achievements and Lessons Learnt from Delivery of Current LTP2
   2.11 Sub Maintaining Accessible Public Transport
   2.12 Rural Transport Solutions: Craven Hubs Initiative
   2.13 Localised Delivery

3. Analysis of Accessibility
   3.1 Survey and consultation summary
   3.11 LTP3 - Phase 1 Consultation
   3.12 LTP3 - Phase 2 Consultation

4. Analysis of ‘Place’
   4.1 Core Accessibility Indicators
   4.2 Connectivity – Key Travel Flows
   4.3 Public Transport network

5. Analysis of ‘People’
   5.1 Individual differences in accessing services

6. Key Issues/Problems
   6.1 Commitment to Transport
   6.11 Children and Young People
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7. Measures and Interventions Toolkit

8. Delivery Action Plan

9. Performance Management
1. INTRODUCTION

The County Council’s vision begins “North Yorkshire is a place of equal opportunity …”; through the Local Transport Plan and this strategy we will set out how transport will support that equal opportunity ambition.

Government’s goal for equal opportunity is “to promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society”

In interpreting these visions we should think about access in terms of ‘place’ and ‘people’

- **Place**: where our transport policies and delivery supports vibrant communities
- **People**: where our transport policies and delivery aims to remove the barriers faced by different groups preventing their full participation in a vibrant North Yorkshire.

*This strategy will aim to contribute to a fully inclusive society where all people in North Yorkshire are able to access the essential services and facilities they need.*

It will do this through measures that will support the following Access Policy Priorities:

**Priority Strand 1:**
*Ensure the network of road (highway) rail, public and community transport is appropriate to meet peoples need to access key services*

**Priority Strand 2:**
*Develop strong strategic inter urban and cross boundary links to support labour market movement and economic activity*

**Priority Strand 3:**
*Ensure people are well informed and have easy access to information to enable them to make positive choices in their mode of access to services*

**Priority Strand 4:**
*Encourage positive integration both between transport modes and across services providers*

**Priority Strand 5:**
*Encourage innovative local solutions to meet small scale local access issues*

**Priority Strand 6:**
*Remove Barriers to Social Isolation*

1.1 Economic Challenge

Whilst these priorities are designed to achieve our long term vision, it must be recognised that in the current economic climate, it will not be possible to do all we would like to deliver change in the short term. Resources therefore will be targeted at maintaining necessary access and at measures to mitigate the impact of reduced funding before improvements are considered.
Measures and interventions are set out later in this chapter and these are intended as a toolkit of options rather than a plan for delivery. Should conditions change and the opportunity is available once again to invest in high quality public transport services, infrastructure and information then programs for delivering these will be developed.

2. BACKGROUND AND CONTEXT

Good transport is a vital factor in building sustainable local communities. It contributes to:

- stronger and safer communities,
- healthier children and young people,
- improved equality and social inclusion,
- environmental and economic objectives

In developing this annex of the Local Transport Plan, promoting Equality of Opportunity, it is necessary to recognise the contribution transport can make to the delivery of other local strategic priorities. This annex has reviewed various County Council documents including Children and Young People’s Plan, Adult Social Care Strategies and the Social Inclusion Strategy.

The previous Government’s long term transport strategy document, ‘Developing a Sustainable Transport System’ (DaSTS), identifies five goals for transport. These are reflected in this 3rd LTP and this annex articulates transport related measures to support the goal to promote equal opportunity. Early indications from the Coalition government suggest that these will remain priorities, albeit within an overarching principal priority of budget deficit reduction.

The enactment of the Local Transport Act 2008 (LTA2008), also impacts on passenger transport planning and delivery, and the opportunities provided in the legislation also have informed the development of this strategy. LTA2008 has revised the regulations relating to quality partnerships and provides greater opportunities to work in partnership with bus operators or other stakeholders.

The Act also makes changes for services being provided by the community transport sector. These will make it much easier for the sector to contribute to innovative schemes to deliver local improved accessibility. We have seen that the voluntary sector makes a positive impact on rural accessibility and we will work to support their continued development.

2.1 Key achievements and lessons learnt from delivery of current LTP2

During the implementation of LTP2 we found that partnership working helps to deliver substantial gains in terms of increased patronage and improved quality, and this we feel is the most effective way to maintain good access to services.

This strategy builds on the achievements and successes delivered over the last 5 years. A variety of initiatives and interventions have made a difference, these include maintaining accessible public transport, expanding rural community transport, and two very local projects which have been cited as examples of best practice in a Commission for Rural Communities\(^1\) report.

\(^1\) Commission for Rural Communities; Rural Accessibility Best Practice Case Studies August 2009
2.11 Maintaining Accessible Public Transport

Over the past 10 years, the quality of bus services provided has increased significantly. A number of operators have invested heavily in new high quality accessible vehicles for those services which are provided commercially. This has resulted in the average age of the fleet used to provide local bus services in North Yorkshire of 7.4 years, this compares favourably with the average for England (8.3 years). We do not propose to set a target for the age of vehicles, rather to encourage operators to maintain high standards of quality and condition of their buses, in order to maintain high levels of accessibility and ride quality.

This investment in new vehicles has also seen the numbers of accessible buses increase. Now 80% of the fleet, carrying more than 85% of all passenger journeys are low floor accessible vehicles. This again compares favourably with the national picture where only 62% of the bus fleet is accessible.

The council has encouraged and supported this move to newer accessible vehicles through our tendering process for contracted services. Over the last 5 years we have seen the number of low floor vehicles on contracted services amongst smaller operators increase from fewer than a dozen to over 50. For contracted services, where they are the main all day service for an area, the tendering process provides for Premier Specification Contracts. These contracts were first introduced in the first LTP and further developed in LTP2. We are now proposing that all tendered services (other than occasional or demand responsive services) will require a minimum standard that will be focused on delivering a high quality service for bus users. This will include:

- Low floor buses
- A marketing & publicity budget
- Driver Training
- Customer Charter

2.12 Rural Transport Solutions: Craven Hubs Initiative

The county council and many others have long held the view that Community Transport has an important role to play in improving access to services, we have seen in our two urban areas, that the Dial a Ride operations provide a lifeline for people who have mobility difficulties. For the Craven scheme, we felt that it was time to put some investment into the sector and see how far we could improve issues of rural isolation. The Craven Hubs initiative therefore is a partnership scheme, where the Council invested over £360,000 to purchase 8 new minibuses and provide infrastructure improvements at two Hubs; Bentham Station and Settle Station. The council also supports the operating costs through a series of contracts for home to school or adult social care transport.

This project aims to improve accessibility for Craven residents, and to provide sustainable support for the community transport sector in Craven. It is achieving this in the following four key areas:

- Supporting the community transport sector to take on an enhanced role in transport delivery
- Building Bentham and Settle as new transport hubs along with Skipton
- Promotion of community transport services and joint-marketing of all transport modes
- Developing capacity for off-peak travel options for younger people

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Has this scheme improved access?

It is still early in the project, but in the first full year of its operation:

- there has been an increase of 60% in passenger journeys;
- it has now introduced demand responsive journeys in North Craven, Malhamdale, Wharfedale, and Airedale in the south;
- it has created and distributed a new set of publicity leaflets and promotional material;
- it is operating in a financially sustainable way.

More importantly, the people who use it find it invaluable.

2.13 Localised Delivery:

Veggie Box Scheme in Selby

The County Council supported a pilot scheme run by the Selby Association for Voluntary Services which grows fresh fruit and vegetables on land that became available at the Stockbridge Technology Centre. It then sells the produce in three sizes of boxes (now replaced by bags) to those who have difficulty in affording or accessing fresh produce. An average of 80 bags per week is distributed through a variety of outlets such as schools, nurseries, public houses and community centres. The provision of the produce is also supported by cooking demonstrations and recipe cards. In addition to supplying fresh food, the scheme is a training opportunity for those who are out of work or are struggling to get back into mainstream life after having had alcohol or drug addictions or mental health problems. It also provides exercise in the open air – a green gym as it has been called.

This scheme showed that with a small amount of money, a little imagination and a lot of commitment from the third sector it is possible to make a significant difference to people’s lives. It has also featured in a Commission for Rural Communities publication as an example of good practice.

Grow Green Grow Healthy

This project provides the opportunities and resources for local people to learn how to grow their own food, encourage exercise and enable young people from nearby schools to learn about growing food on the site as part of healthy eating education programme. The funding from the Local Strategic Partnership Community Grants and NYCC Accessibility fund has secured allotment sites in Wensleydale, Colburn and Richmond and provided each site with both training and gardening tools. Working with Northdale Horticulture and NYCC tutors, each allotment group has received qualitative training in crop rotation, cooking with grown produce, food safety and hygiene. Courses were carefully scheduled in line with the growing season and over 17 individuals have participated. The site in Wensleydale continues to be used by both community and school with advice being delivered by the more experienced gardeners mentoring those with little knowledge. A shed and greenhouse have been erected and chickens purchased. Monthly e-mails containing information on jobs to do during the month are also...
circulated to learners at all 3 sites.
The project has successfully established a grow your own culture in the communities targeted and each will continue to be supported by the Community Development Workers to maintain and develop the project with a view to surplus produce being sold to the wider community.

3. ANALYSIS OF ACCESSIBILITY

The following sections examine accessibility in North Yorkshire, from the perspective of:

- its residents by examining consultation and engagement results;
- ‘place’ ie the opportunity to access services, by examining the national core indicators and the public transport networks;
- ‘people’ ie the factors that impact on individuals ability to access services, by examining demographic data and barriers that different people may face.

This will be discussed using:

a) Survey and Consultation findings ie what people say
b) Analysis of Place ie how accessible different parts of the county are as seen in the national core indicators, cross boundary commuting and labour market flow and the network of public transport provision.
c) Analysis of ‘People’ ie issues that impact peoples ability to access services and issues from emerging policy

3.1 Survey and Consultation Summary

In developing this Equality of Opportunity Annex, we have considered the results from several consultation and engagement exercises. The following paragraphs highlight some of the more significant findings from LTP3 phase one engagement, LTP3 phase two engagement, Citizens Panel surveys; and Place Survey 2008.

3.11 LTP3 Phase 1 consultation

The first phase of consultation for LTP 34 was designed to find out what stakeholders and local people thought were the highest priorities for transport in the County and identify how they thought these issues could best be addressed.

A questionnaire asked people to rank 5 transport objectives, together with an option to select ‘other’, and then to consider within each priority how transport funding should be spent.

4 See http://www.northyorks.gov.uk/LTP for the full consultation results
Looking at respondent's first ranked objectives, it can be seen that the largest proportion felt that supporting the local economy objective was the highest priority, followed by Accessibility then Safety and Health. Taking all rankings into consideration, however, no single objective came out as a clear main priority.

In general terms there was strong support for economy, accessibility, safety and quality of life, whilst protecting the environment was seen as slightly less important.

Thinking about the Accessibility priority, people were asked to indicate where transport funding should be spent.
The above table details responses; it shows a clear majority thought that improved bus / rail facilities and services was the best method of improving accessibility, followed by local delivery of services, and improved community transport.

3.12 LTP Phase 2 consultation

LTP phase two consultation invited the public and stakeholders to complete a questionnaire which set out questions to get comments in four areas:- The proposed objectives and priorities; the Challenges; Proposed Solutions; and the principle of Manage, Maintain and Improve.

The opportunity to complete the questionnaire was available through the council’s website and at a series of public exhibitions and stakeholder group workshops held across the country.

In summary the consultation found:-

Accessibility was the most commonly discussed priority. Respondents felt that all areas were important, but that this was often the priority most people could relate to.

In terms of challenges, access for communities was amongst the top five challenges that emerged, along with funding, seasonal impacts on the road network, maintenance and providing alternatives to private motorised transport.

Asked about proposed solutions, Public Transport, Partnership Working and the Promotion of sustainable modes of transport were discussed. Issues relating to public transport were discussed at each of the engagement events.

We set out a hierarchy of action which followed a commitment to Manage, Maintain and Improve. Overwhelmingly, people understood and supported the approach, commenting that it is better keep what you have in good order before building new infrastructure.

The full report is available at www.northyorks.gov.uk/LTP


In preparation for drafting the Accessibility Strategy for LTP2 in 2005, we distributed a questionnaire to gain an understanding of people’s perception of their level of access to various key services and in 2009 we repeated this questionnaire to see what if anything had changed. The following paragraphs highlight the comparison between the two surveys in access to key facilities.

In 2005 34% of respondents were able to access a primary school within 5 minutes; in 2009 this had increased to 41%. At the other end of the scale, in 2005, 10% were able to access a primary school in between 31 minutes and 1 hour, compared with 2% in the same category in 2009. This suggests that access to primary schools has improved, with more people being able to reach them more quickly.

Looking at access to work, those able to access work within 30 minutes in 2005 was 67%, compared with 61% in 2009. This suggests that a small percentage is now travelling
further to work than in 2005. The category 31 minutes to 1 hour is very similar: in 2005 26% and 27% in 2009. The trend towards travelling further for employment is supported in the longer commuting journey times; in 2009 11% are travelling more than an hour to work compared with 6% in 2005.

Access to **doctor's surgeries** has improved, with 97% reporting access within 30 minutes in 2009, compared to 93% in 2006. The improvement is more marked in the shorter travel time bands; in 2009, 64% of respondents were able to reach their surgery within 10 minutes, compared to only 52% in 2005.

Access to the nearest **general hospital** follows a similar change to GP’s. In 2009, 63% report the ability to access a hospital within 30 minutes, compared to 61% in 2005. In the lower time bands however, there is a more marked change, with 20% reporting access within 10 minutes in 2009, compared to only 11% in 2005.

We have seen a sharp increase in those being able to access **food stores** within 10 minutes: 61% in 2005 and 72% in 2009. Those within an 11 and 30 minute journey time represented 31% in 2005 and 26% in 2009. Those travelling more than 31 minutes have fallen from 8% in 2005 to 2% in 2009.

All these are positive outcomes and show improvement. Overall, in 2009, just over **three-quarters of respondents expressed satisfaction** with their level of access to key services, only 4% were dissatisfied and 19% neither satisfied nor dissatisfied.

### 3.14 Place Survey 2008 - Public Transport

The following summarises the detailed breakdown and analysis of the Place Survey 2008/9 by equality strands (age, disability, gender and ethnic origin) and by district. The analysis focuses on the questions relating to public transport and quality of life indicators. The full detailed analysis is available on request (email LTP@northyorks.gov.uk). All percentages given below refer to the percentage of total respondents.

#### Quality of Life Issues

This looks at the things people feel are important to make somewhere a good place to live, and what people feel are most in need of improvement. People made a selection from a list of 20 quality of life factors. Generally there was a consistency in the top 5 amongst each of the equality strands, and between bus users and the sample as a whole.

The importance of public transport increases with age, from 12th in the 18-44 year olds to ranked 3rd most important in the 65+ age group. The results for Black and Minority Ethnic (BME) respondents vary from the sample as a whole; this may be because the sample size is very low (150 respondents), nevertheless, for things that most need improving, wage levels are in the top 5 priorities amongst BME responses, as opposed to in the bottom 5 for the sample as a whole. Public transport is seen as a measure that is both important, and one which needs improving in all strands other that 18-44 year olds.
Satisfaction

This measure examined satisfaction with bus services and timetable information: Satisfaction is highest in Harrogate and lowest in Richmondshire both for information and for bus service. Richmondshire is the only district with a net dissatisfaction with information value. There is a strong correlation between frequency of use and satisfaction with over 70% of daily users either very or fairly satisfied; this drops to under 30% with infrequent or non users.

Satisfaction is highest amongst the 65+ age group (74% very or fairly satisfied with bus services) for the other age bands the satisfaction is broadly equal at c40%.

Despite Scarborough borough having the highest proportion of frequent bus users (there are more than twice the number of daily users than the rest of NY), it only achieves the 4th highest net satisfaction with information value across the county and is less than half the value of Harrogate.

Usage

This looks at frequency of bus use across equality groups and districts

Scarborough is the district with the most daily bus users at 14%, almost double the average for the other districts, Harrogate has 11% daily bus use.

Taking daily and weekly bus usage together, Scarborough and Harrogate have the highest proportion at 37% and 34% respectively. All the other districts have a similar proportion at c24%

Amongst equality strands, the 65+ age group is twice as likely to use bus services frequently and amongst disabled people frequent travel is c30% more prevalent.

Use of information inversely correlates with frequency of bus use, other than amongst seldom or non users. Daily bus users record the lowest use of information this gradually rises to the most frequent users of bus information is amongst the ‘within 6 months’ group.

Across the equality strands, there is no significant difference between any group, other than with the BME group who express a higher use of information for daily and monthly travellers
4 ANALYSIS OF ‘PLACE’

4.1 Core Accessibility Indicators

In November 2009 Department for Transport (DfT) published the Core National Accessibility Indicators results for 2008\(^5\) and these have been used as a reference for this analysis. This report examines the availability of means of accessing key services within different journey times and measures this for all residents and for ‘at risk’ groups (see below). The services chosen are: Employment, GP surgery; Hospitals; Primary Schools; Secondary Schools; and Food shops. We have further included access to a central point in the nearest town or village, to represent access to general high street shops and facilities.

The analysis represents access to the nearest facility, not necessarily to the facility of choice for an individual. This therefore provides an indication of the accessibility for the community. Two journey time lengths have been used, a lower time (15 – 20 minutes) and a higher time (30 – 45 minutes). The lower time represents the median (most frequent) time for the trips taken from data from the national travel survey. The higher time band is the time within which most (80-90\%) of all journeys were made.

The journey options used are access by public transport or walking, and the ‘at risk’ populations are ‘no car households’; except for employment where it is ‘residents in receipt of job seekers allowance’, and education, where it is ‘pupils who are eligible for free school meals’.

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\(^{5}\) 2008 Core National Local Authority Accessibility Indicators: November 2009
The analysis measures access from a central point in Lower Layer Super Output Areas\(^6\) (LSOA) and therefore provides an average. Individual households within the LSOA will experience varying levels of access.

The following tables illustrate levels of accessibility in North Yorkshire compared to England as a whole. It is notable that for the majority of residents, the opportunity to access key services without reliance on the private car is good there will, however, inevitably be some individuals and communities where a car is necessary to go about normal everyday activities.

<table>
<thead>
<tr>
<th></th>
<th>All Population Lower Time</th>
<th>At Risk Population Lower Time</th>
<th>All Population Higher Time</th>
<th>At Risk Population Higher Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>89%</td>
<td>97%</td>
<td>94%</td>
<td>98%</td>
</tr>
<tr>
<td>Food Shopping</td>
<td>82%</td>
<td>95%</td>
<td>91%</td>
<td>98%</td>
</tr>
<tr>
<td>Primary School</td>
<td>93%</td>
<td>98%</td>
<td>97%</td>
<td>99%</td>
</tr>
<tr>
<td>Secondary Sch</td>
<td>67%</td>
<td>88%</td>
<td>74%</td>
<td>93%</td>
</tr>
<tr>
<td>GP Surgery</td>
<td>70%</td>
<td>89%</td>
<td>81%</td>
<td>95%</td>
</tr>
<tr>
<td>Hospital</td>
<td>62%</td>
<td>77%</td>
<td>72%</td>
<td>84%</td>
</tr>
</tbody>
</table>

Percentage of the population with access to services by public transport or walking

Whilst in general, access across the county is broadly similar to the national picture, there are some notable differences and between districts there are more marked variations.

The biggest variation from the table above is in access to secondary school where only 67% of the population, compared to 89% nationally can access secondary school within the lower time band. This calculation however doesn’t take account of the extensive home to school transport network that is contracted by NYCC, this provides access for c12,000 students. Access to health services, either hospital or GP is also notably worse in North Yorkshire than the country as a whole.

Looking at the access to health care services by district, we can see quite a large spread in the level of access between districts. In Scarborough for example, 84% of the population can access a doctor with 15 minutes by public transport or walking, whereas in Ryedale only 59% of the population can do so. Similarly for hospital trips, 77% of residents in Harrogate can access a hospital with 30 minutes, whereas only 37% of the population in Ryedale can achieve this.

Ryedale is consistently the district with the lowest level of accessibility, and the delivery action plan later in this annex will outline measures that will aim to address this.

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\(^6\) LSOA is a defined geographic area with on approximately 1,500 population. There are 370 LSOA’s in North Yorkshire
When looking at access in the higher journey time band, it can be seen that a larger proportion of the population can access services, and this proportion is much closer to the access level for the country as a whole. The longer the journey time the greater the disincentive to actually make the journey, particularly by that mode. So whilst the above demonstrates a theoretical level of accessibility, the reality will be that a much lower percentage of the population will have effective access to services by public transport or walking.

4.2 Connectivity- Key Travel Flows

Access to employment is an important factor both in supporting the local economy and in supporting individuals. The following paragraphs examine commuting and access to labour markets across the county.

Looking at the internal commuting flows we can see that the top 5 flows are Scarborough to Ryedale; Hambleton to Harrogate; Richmondshire to Hambleton; Harrogate to Hambleton; and Ryedale to Scarborough.

From the graph below, it can be seen that the contribution public transport makes overall to internal commuter flows is approximately 4%. Certain corridors attract a higher percentage of public transport commuting, such as the Richmondshire to Hambleton corridor where 6% is made using the bus, however less than 1% is made by bus in the other direction. This could point to a less effective level of cross-boundary bus service and therefore lower levels of access to employment.
Commuting:

Overall there are significantly more people, almost twice as many, who commute out of the county than commute into North Yorkshire, as can be seen in the table below. The largest proportion of this commuting is by road and this is mainly facilitated by the highway.

Summary of cross boundary commuting trips

<table>
<thead>
<tr>
<th>Outbound to Destination</th>
<th>Number of daily trips</th>
<th>Inbound from Origins</th>
<th>Number of daily trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leeds</td>
<td>18,033</td>
<td>York</td>
<td>6,591</td>
</tr>
<tr>
<td>York</td>
<td>11,059</td>
<td>Leeds</td>
<td>6,248</td>
</tr>
<tr>
<td>Bradford</td>
<td>5,611</td>
<td>Bradford</td>
<td>4,406</td>
</tr>
<tr>
<td>Wakefield</td>
<td>5,153</td>
<td>East Riding</td>
<td>4,203</td>
</tr>
<tr>
<td>Middlesbrough</td>
<td>2,314</td>
<td>Wakefield</td>
<td>3,144</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42,170</strong></td>
<td></td>
<td><strong>24,592</strong></td>
</tr>
</tbody>
</table>

The significant corridors out of the county are Harrogate into Leeds, Skipton into Bradford and Selby into York. There are key corridors into the county from Leeds into Harrogate, Bradford into Skipton and York into Selby; to a lesser extent there are flows into Teesside from the northern districts.

Appendix 3 shows travel to work flows into, out of and within the county. It can be seen that the vast majority of trips are made by car, however there are some notable flows which are catered for by Public transport.

Generally outbound cross boundary commuting by public transport accounts for c9% of all trips; inbound only 1% and internally, within the county, c6% are catered for by public transport. These public transport trips are largely by bus, with the exception of Selby where 8% of trips to Leeds are made by train, with only 4% by bus and Harrogate where
bus and rail account for approximately 5% each. Notably in Selby district, c11% of commuting trips to York are catered for by bus, whereas only 1% by rail.

The data we have for commuting travel flows is the same as that used to develop our cross boundary commuting strategy for LTP2 i.e. from the 2001 census data, with regard to the key transport corridors, these are not likely to have changed in relative priority across the county, so will be carried forward into LTP3.

During LTP2 we concentrated on key cross boundary commuting corridors where the largest flows were evident. This was correct for that time, and public transport usage into Leeds from Harrogate and Selby and into York from Selby has seen significant growth over that period. For LTP3 we have looked at flows within county and the lesser flows in the north of the county. Here we can see that the rate of travel by public transport is generally low, particularly travel by rail.

We will refresh this element of this annex at the mid point of LTP3 when new census data will be available.

**Labour Market Area (LMA) Analysis**

As we have seen from the net commuter flows by labour market area, for the majority of North Yorkshire, there is more daily community out of, than into the county. This means that, as discussed above, the road and public transport networks will need to cater for outbound flows in the morning and inbound in the evening. There are a few exceptions where more people commute into an area than leaving, and for these we need to look at services to ensure they are capable of meeting these demands. It should also be noted that where there is a greater inward flow of commuters, the wider the travel to work area of influence will be, also the predominant type of the employment will also impact on this.
The following table identifies the top 5 net positive (inward) migration Labour Market Areas (LMA’s) (Skipton, Northallerton, Harrogate Town, Catterick Garrison and Norton / Malton), and summarises these by employment type, main commuting origins and by public transport access. All of these have a requirement for workers greater than that which is available from within the local area, with net inward flow of between 1,400 and 8,100 FTE employees. A summary of all 35 LMA’s is attached as appendix 2.
### Top 5 Net Positive Migration LMA: Summary of Employment by Industry and Commuting Origins

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skipton</td>
<td>The <strong>banking, finance and insurance</strong> sector accounts for a third of employees (35.8% - double that seen in the sub region – 16.5%) <strong>Distribution, hotels and restaurants</strong> (24.5%) means two sectors account for 60% of all employment, which is also higher than sub regionally (51.9%)</td>
<td>Commuting into the LMA was dominated by other areas in the Craven district (1,850), <strong>Bradford</strong> (nearly 2,000) and <strong>Pendle in Lancashire</strong> (1,250+).</td>
<td>The majority of the travel will be into Skipton Town area. PT is well provided for along the Aire Valley with 4 trains per hour, 3 buses per hour plus hourly to Leeds; from other parts of the district there is at least an hourly bus service. From the Lancashire area there are no rail services, however the recently improved local bus services now provide 3 journeys per hour from Burnley.</td>
</tr>
<tr>
<td>Malton / Norton</td>
<td>The <strong>distribution, hotels and restaurants</strong> (21.6%) and also <strong>public administration, education and health</strong> (18.3%) sectors account for a further 40% of employees</td>
<td>Commuting is primarily from <strong>York</strong>, elsewhere in the Ryedale, together with a high proportion from <strong>Scarborough</strong>.</td>
<td>Hourly rail service from Scarborough and York / Leeds. 3 buses per hour from Leeds / York. Hourly from Whitby and hourly from Scarborough.</td>
</tr>
<tr>
<td>Northallerton</td>
<td>The <strong>public administration, education and health</strong> (52.1%) sector accounts for more than half of all employees (one of the highest percentages seen for a single sector across all of the LMAs). The <strong>distribution, hotels and restaurants sector</strong> accounts for a further 21.2%, making these two sectors account for almost 3/4 of all employment</td>
<td>By far the largest volumes of people commuting were from other parts of the district. Other notable locations were <strong>Richmondshire</strong> and the northern <strong>Teesside</strong> Unitaries.</td>
<td>Two trains per hour through the day, but effectively only one commuting option from Darlington, Middlesbrough and Yarm. Bus services operate from Bedale with a ½ hourly frequency; from Stokesley, Thirsk and Richmondshire, with approximately hourly services.</td>
</tr>
<tr>
<td>Catterick Garrison</td>
<td><strong>Public administration, education and health</strong> accounts for 40.7% of employees</td>
<td>Commuting into the area is primarily from other parts of Richmondshire (nearly 1,250 people).</td>
<td>No rail service. The garrison is served by 15 minute frequency bus service from Darlington and Richmond. No other direct bus service caters for travel to the Garrison; elsewhere a connection would need to be made</td>
</tr>
<tr>
<td>Thirsk and Villages</td>
<td>The <strong>distribution, hotels and restaurants</strong> (26.8%) and public administration, education and health (23.2%) sectors make up half of all employment</td>
<td>Commuting is primarily within the LMA and neighbouring LMA’s (Northallerton and Ripon). There are small numbers of commuters travel from York and Teesside</td>
<td>Thirsk has both bus and rail links to other areas. Two trains per hour through the day, but effectively only one commuting option from Darlington and one from Middlesbrough and Yarm. Buses provide roughly hourly service from York, Easingwold and Northallerton and roughly 2 hourly from Ripon.</td>
</tr>
</tbody>
</table>
Comparing these inward migration areas and commuting flows, we could conclude that for:

### Summary of Connectivity - Key Travel Flows

- **Skipton LMA** - monitor the impact of the recently improved bus links from Lancashire
- **Malton / Norton LMA** – whilst the strategic transport links are present, having the 2nd lowest average income in the county may point to a need for more local transport being required
- **Northallerton and Thirsk LMAs** – priority should be to encourage better rail links from the north
- **Catterick Garrison LMA** – consider improving bus service links from east and south
- **Selby to York** - rail service timetable improvements
- **Investigate network of bus service Hambleton to Richmondshire**

## 4.3 Public Transport Network

### Bus and rail patronage

Bus and rail patronage can be seen to be distributed on primary corridors and on dedicated town services. Together approximately 80% of the bus patronage is catered for on principle corridors where patronage exceeds 200,000 passengers per annum and in the towns with dedicated town services. The table below sets out were the main public transport flows are, and categorises these by priority. Bus services provide more than 3 times as many public transport journeys as rail, and as expected the largest numbers of journeys are made in areas with the larger populations. The table below also identifies the main rail stations and categorises these by priority.

### Summary of Analysis of ‘Place’

- the need for comprehensive network of local bus services is most evident in Scarborough and Craven;
- from the accessibility data, it can be seen that Ryedale has the highest proportion of the population without acceptable access to key services;

## 5. ANALYSIS OF ISSUES FOR PEOPLE

Where our transport policies and their delivery aim to remove the barriers faced by different groups preventing their full participation in a vibrant North Yorkshire.
5.1 Individuals’ differences in accessing services

The following section highlights data that can indicate individuals’ differences in accessing services. We have taken Office of National Statistics (ONS) population projections for 2007 and 2015, as an indication of change to date from the last census and projection of change through the course of the next LTP.

Two significant factors relating to population change will take place during the course of the next LTP. Firstly the age at which students must remain in full time education or training is being extended to 17 in 2013 and 18 from 2015. This will mean that the average age at which young people can become economically active is raised and so access to education and training will be required for longer. Consideration should also be given to raising the age for which child concessionary travel is available. Secondly the pension age for women is increasing with women progressively reaching retirement age later up to 2020 when it will be equal to men at 65 yrs; during the period of LTP3, the pension age will have risen to 63yrs by 2016.

Population change (%) from 2001 to ONS 2007 estimates

The population overall of North Yorkshire has grown slightly more than the national average since 2001, at 4.5% against the national average of 3.3%.\(^7\) Whilst there has been a modest growth in population overall, the above table shows significant increases in the number of older people, with Richmondshire and Hambleton having the largest growth at over 15%. It should be noted that in most cases the rise in older population is accompanied by a decline in the number of children. This is most marked in Hambleton,

\(^7\) Population Estimates Unit, ONS
where the gap between the proportion of older people and children is over 20% and the working age population is 15%. Richmondshire District shows the largest growth, and this is across all age ranges. It is the only district to have seen growth in young people; in all other districts the number of young people is declining. Richmondshire has the largest British army camp in the world, and with a population of 7,480\(^8\), is likely to account for much of the growth.

Breaking population down by age shows that North Yorkshire’s older population is growing faster than the national average and at 11.3% compared to 6.5%, by a significant margin. Only Scarborough Borough is broadly equal to the national average with the other districts well above average. The child population is generally declining at a greater rate than the national average (-2.5% and -3.4% respectively), other than Richmondshire which is the only district in the county to show positive growth, probably due to the influx of young families in the military. Scarborough Borough has the highest decline with a reduction of 6.1%.

The above denotes the change in population from the last census in 2001 to the mid year estimates in 2007. ONS has further estimated population change at 2015, 2020 and 2030, and whilst the further ahead the projections are made the less certain they become, the projection for 2015 provides a reasonable estimate for the change over the course of this LTP. The above chart shows the change in population for the districts and ‘all England’. As can been seen, the trend is for an increasingly aged population for England as a whole (20% larger pensioner population), however when looking at the districts in North

\(^8\) Defence Analytical Services and Advice (DASA): October 2007
Yorkshire we can see there is a larger growth in the older population in all of county, particularly Richmondshire and Selby both of which have an older population over 30% higher than in 2001. In absolute terms, by 2015 it is projected that 22% of the population in North Yorkshire will be of pensionable age.

**Economic and Social Factors**

The following examines demographic data from the 2001 census, whilst this is now quite out of date, it still provides a good indication of issues relevant to each district. The chosen indicators are those that could be considered to demonstrate a greater risk of not being able to travel by private means, and therefore have a greater risk of lack of access and social exclusion. So for example lower wage households may have less access to a car, or pensioner households are more likely to be no longer driving. Considering these factors, we have looked at average wage levels; ‘no car households’; Lone parent households; lone pensioner households; and households with Long Term Limiting Illness. Charts attached as appendix 1.

Income: Average household income for the county as a whole is slightly lower than the national average, however in all districts except Scarborough and Ryedale, household income levels are above the national average. Scarborough is notably less affluent, with weekly average incomes c£100 lower than the national average. In contrast, Harrogate and Hambleton are notably more affluent, with average weekly incomes c£100 more than those in England and Wales.

The table below shows a link between income and bus use, using this as a guide, it would be expected bus usage would be highest in Scarborough and lowest in Harrogate and Hambleton. This is borne out to some extent by usage figures from the Place survey 2008, where Scarborough had twice as many daily bus users than the average of the other districts, and Hambleton was amongst the lowest daily bus users. In Harrogate however, frequent bus use is high despite its relative affluence, and this is likely to be due to a combination of the area being more urban, to targeted promotion by the main bus operator or to other traffic related issues eg congestion.

<table>
<thead>
<tr>
<th>Annual Household Income</th>
<th>% Who have Used Bus in last Month</th>
<th>% Who have not used Bus in last Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to £10K</td>
<td>57</td>
<td>43</td>
</tr>
<tr>
<td>£10K - £20K</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>£20K - £30K</td>
<td>37</td>
<td>63</td>
</tr>
<tr>
<td>£30K - £40K</td>
<td>32</td>
<td>68</td>
</tr>
<tr>
<td>Over £40K</td>
<td>26</td>
<td>74</td>
</tr>
</tbody>
</table>

No car households: All districts in the county except Scarborough have significantly fewer ‘no car households’ than the national average, with the average being 15% as against the national 27%. Scarborough has twice as many no car households as the remainder of the county. This is an indicator with a strong correlation with bus usage, and we can see that Scarborough has almost twice as many daily bus users than the other districts.
Lone pensioner: The average for lone pensioner households in the county is slightly higher than the national average and across the districts the proportion varies. Scarborough has the highest proportion at 18%.

Long Term Limiting Illness (LLTI) households: Long Term Limiting Illness is the terminology used by ONS as an indicator of disability, and is included here as disabled people are more at risk of poorer access to services. For LLTI, all the districts are broadly similar to the national average at 15%, Scarborough, however stands out, having twice as many (30%) of households with a member who is disabled.

Lone Parent households: Lone parent households are often an indicator of lower income which can lead to greater social isolation (see table below). Here again the average for the county is lower than the national average, however Craven has almost twice as many lone parent households. In Craven there are 12% of lone parent households (national average is just over 6%) and within the district, there are some wards where this is higher still. In Skipton North for example, ¼ of all households have a lone parent with dependent children.

### Summary of analysis of ‘people’

- An aging population over the course of the Local Transport Plan will lead to a greater number of people at risk of poor access to services
- Scarborough district is more reliant on public transport for access and therefore more at risk of changes to public transport provision
- Scarborough district consistently features as the most deprived for the chosen indicators
- Pressure on budgets for age related demand led services (concessionary fares) will increase over the course of Local Transport Plan 3.
- From changes to populations, it can be seen that Richmondshire has the fastest growing population overall, and that Hambleton has the most rapidly ageing population.

### 6. KEY ISSUES / PROBLEMS

### 6.1 Commitment to Transport within North Yorkshire County Council

#### 6.1.1 Children and Young People

In 2006, North Yorkshire Children’s Trust first developed the Children’s and Young People’s Plan (CYPP), and this has been updated for the 2nd plan for 2008 to 2011. The Plan recognises the variety of access to specialist services and the differing needs of individuals. One of the CYPP’s main aims is to improve the capacity across the County to provide a broad range of services, delivered in an integrated way at local level. The strategy’s aim is to find out about needs sooner, respond more quickly and flexibly, and to provide effective, preventative services as close to a child’s home area as possible.

In line with the national guidance we will also be identifying the issues raised in the ‘Transport Guidance: Supporting Access to Positive Activities’, produced by the DfT and
Department for Children, Schools and Families, 2009. The document encourages the need to increase Young People’s participation in positive activities. It demonstrates how local authorities from around the Country and their partners worked with Young People to overcome transport barriers, by developing innovative solutions which make the best use of available transport sources and local flexibility. North Yorkshire County Council will aim to reflect best practice and address barriers such as cost, accessibility, safety, rurality and lack of information in the delivery section of this document.

In 2008 Children and Young People (0-19 years) made up approximately 23% of North Yorkshires population, by the end of the plan period this is projected to have declined to 21%. The CYPP recognises the following challenges facing young people in North Yorkshire.

- Pockets of deprivation within a broadly affluent county
- Rural deprivation and isolation
- Lack of choice
- Dispersed vulnerability
- Inclusion and barriers to it
- Integrating dispersed services and multiple partners.

CYPS recognise that a number of Children and Young people are affected by rural isolation and poor access to services. The CYPP makes the following commitments to Transport:

- To ensure that all Children and Young People have appropriate access to activities, including short breaks.
- Ensure transport to and from school and settings is safe and accessible.
- Improve transport to and from school for disabled children
- Ensure the positive contribution made by children and young people is acknowledged.
- Demonstrate the difference made by children and young people’s involvement in service planning and delivery and extend the use of the Youth Charter
- Enable more children and young people to participate on a voluntary basis in out of school and in community based activities and an increasing number will have the opportunity to gain accreditation for those activities if they wish.

Commitments related to road safety and accident reductions will be addressed as part of the Road Safety Annex of the Local Transport Plan 3.

**CYPS 2008 – Consultation response**

A variety of consultation methods were used to inform the CYPP. The Tellus survey is a national survey carried out by the Department for Children, Schools and Families on a sample of children in Year 6 and Year 10. In 2008 there were approximately 350 responses in North Yorkshire, the responses were as follows:

73% children reported feeling very or quite safe on public transport (70% nationally) and 94% felt very or quite safe going to and from school (88% nationally).
In 2008 the Children’s Trust carried out a local parent survey with over 1110 responses, the following transport issues were raised:

52.5% of parents and carers who responded felt that improvement was needed with the number of safe walking or cycling routes to school, with 31% being very dissatisfied with the situation. Levels of dissatisfaction varied across the county with the Craven area showing the highest levels of dissatisfaction (65.3%) and coastal areas showing the lowest levels (43.1%). Further comments included:

- More reasonably priced local transport
- Not a lot of facilities, things to do or support for 16-18 year olds - especially transport considerations to get them into work/ training etc.
- Live in rural area, catchment area difficulties. They should have better choices and transport help.
- Travel routes to school needs to be improved.
- Lack of public transport/ transport to education. Affordable transport that is available throughout the course of the day/evening.
- Better bus services would help access to services
- Better transport facilities to college - free transport
- Continue provision of safe transport to school.
- Cycle routes required, would like to see more opportunities for their children to cycle.

6.12 Adults and Older people

Through Our Future Lives, adopted in 2006, NYCC’s commitments to improve services for older people are as follows:

- Support more people to live at home
- Improve access to practical and other support services to enable people to live independently
- Improve access to and/or participation in cultural, sporting and leisure activities.

In addition, North Yorkshire’s first Joint Strategic Needs Assessment (JSNA) has been produced by the County Council with NHS North Yorkshire and York and other partnerships, in order to inform short and long-term strategic planning,

The JSNA has given people in the local communities the opportunity to give their views in order to gain an overall picture of how they are performing in terms of:

- Being healthy
- Being safe
- People’s quality of life
- People making a positive contribution
- The community’s economic well-being
- Its access to high quality services
Headline messages from the North Yorkshire JSNA

- Maximise access points to information and services
- Improve consistency of access to health and social care services
- Invest in electronic access, particularly to information and assessment
- Promote understanding and use of assistive technology in order to realise its potential
- Work with public transport providers to streamline times and routes
- Improve access to sport and leisure facilities

Public transport was the fourth largest area in terms of comments received; with the highest number coming from Craven district.

The report recognises that creative and innovative initiatives are required in North Yorkshire, where there are relatively more areas with barriers to housing and services than the national average, particularly in Ryedale and Richmondshire and other rural parts of the county. The national indicators that contribute most to North Yorkshire being an ‘outlier’ are those reflecting road distance to key services.

The level of availability and frequency of public transport forces a high reliance on the private car. Not only does this impact upon the environment and traffic congestion, it also greatly inhibits those households that do not have access to a car.

In North Yorkshire the balance of population is shifting. There is both a rise in the number of older people and those suffering from dementia. Many people retire to North Yorkshire and in general the population lives longer, and is healthier than most other places in the country; when health starts to deteriorate, it tends to happen rapidly.

Adult and Community Services (ACS) social workers are currently undergoing training, part of which is aimed at encouraging them to promote independence. The latest approach is to only offer transport if there is clear evidence that the client has no other alternative. Social workers are to mentor their clients to give them the necessary skills to live more independently. For example, how to find out about local bus services or book community transport. In addition, personalised budgets are now in place and being more widely introduced as a phased process.

It is important that ACS and the Community Transport sector work together to identify the impact of this shift in approach to offering transport; the Community Transport sector will require information relating to likely demand and an expected level of income. Currently 64% of care is purchased by self-funders (anyone with £22,000 or more in the bank). Most of those are happy to purchase from the Local Authority, indicating that this is unlikely to change under the new regime, when clients have greater choice. Therefore it is unlikely that the number of people requiring Community Transport services will change significantly, however ongoing funding could be more problematic.

7. MEASURES AND INTERVENTIONS TOOLKIT

These measures and interventions are intended as a toolkit of options rather than a plan for delivery. As economic conditions change and the opportunity is available once again to
invest in high quality public transport services, infrastructure and information then programs for delivering these will be developed.

**Make best use of existing bus services.**
It is estimated that 93% of the population of North Yorkshire live in a Parish which has at least a daily bus service and this has remained broadly stable for the past 10 years. It is essential that we promote these services effectively both to raise awareness and build confidence. In the past few years we have introduced the following initiatives towards this:

- Extensive advertising of the traveline service and internet journey planner.
- Regular press releases on public transport issues.
- Production and distribution of Bus route and frequency guides.
- Programme to mark bus stops.
- Improved quality on contract services.
- Introduced timetables by post
- Delivered marketing campaigns

We will work in partnership with others to continue further development of this work.

**Continue to develop key transport corridors and other areas where buses can relieve congestion and where appropriate develop Quality Bus Partnerships.**
Bus services have an important role to play in offering an alternative to the car. However, we must ensure that we offer the right product then develop and market it to potential users. In the past four years we have worked with bus operators to identify key transport corridors and have jointly developed these to provide high quality vehicles and passenger infrastructure. It is on these corridors that we have seen growth in passenger numbers. These key corridors have formed the basis for informal quality bus partnerships. We maintain and review our prioritised list of services and corridors and this will inform the basis of our work during 2011 – 2016.

**Ensure that new development (building) incorporates proper facilities for public transport walking and cycling.**
Indicative housing allocations were set out in the now deleted Regional Spatial Strategy show significant new housing requirements across North Yorkshire. The majority of District Council’s, as Local Planning Authorities have decided to retain these numbers in their Local Development Frameworks which will set out precisely where the new housing will be built, so whilst the impact on transport for individual sites is not yet known, it is clear that this level of growth will impact on transport at all levels.

If bus travel is going to be seen as an effective part of our transport network then we must ensure that bus friendly design is considered as an integral part of the design stage of new developments. The location must be served by existing bus services, bus services must be able to penetrate sites and be able to turn or manoeuvre, passenger facilities must be provided at appropriate locations. The Council will seek to secure developer contributions for the development of public transport services and facilities as part of new housing developments.
Ensure the best solution is available to meet needs and be innovative and creative in developing these

Demand on the network can be affected by a number of issues, from demographic changes, legislation driven impacts or demand influenced by the economy. It is important therefore that the transport network is able to evolve to meet these challenges and to deliver services in innovative ways. In the past 8 years we have introduced a number of initiatives taking advantage of funding from Rural Bus Challenge and Kickstart. These initiatives included collaboration with the CT sector with for example the Craven Hubs Initiative and through partnership with Bus sector and Airport Authority with the development of improved surface access to Leeds Bradford International Airport.

The ‘best’ solution, however may not necessarily involve motorised transport; walking and cycling offer benefits to health and well being as well as a means to get to where you need to be, and opportunities to facilitate access in these ways should be considered where possible. The Council will continue to identify opportunities for new and experimental services and seek to identify sources of external funding for these where possible.

Ensure that Passenger Transport Services are integrated.

It is not always possible to provide direct journeys particularly in the remoter rural areas where conventional public transport is not the most efficient solution. We need to ensure that services connect at key interchange points and that through ticketing is available between operators and modes. Integration also means better co-ordination and use of school services, social services transport and community transport. The Council has restructured its transport procurement to deliver better coordination and improved access to services. The Council will continue to develop active partnerships to foster greater integration.

Improve reliability and reduce journey times.

If bus services are going to be a viable alternative to the car then we need to ensure that journey times are shortened and reliability is improved. This can be achieved by, for example, giving them priority at key junctions and other locations, through dedicated bus lanes or through traffic light priority control. The Council has established a Punctuality Improvement Partnership in Harrogate and has seen an improvement of the punctuality of bus services. We will continue to work with bus operators to further develop and monitor Punctuality Improvement Plans (PIPs). In particular we will establish PIP’s in Scarborough and other urban locations. Roadworks can cause significant disruption to bus services. The Council will ensure that priority is given to maintaining bus services and minimising disruption to bus passengers by ensuring adequate notice and consultation with bus operators where roadworks are planned.

Ensuring Safety and Security

In the 2008/9 Place Survey, the level of Crime is seen as the most important factor in making a community a good place to live, however of the things that most need improving in NY, improving [reducing] the level of crime was not seen as a priority (ranked 8th); when analysing the results by age, it can be seen that the level of crime is seen as both important and a priority for improvement in the older age categories. With over half of bus passengers being over 60 years old, it is essential that passengers feel safe and secure at all stages of their journey – whether waiting at stops or whilst travelling on vehicles. The Council will work with operators and passengers to identify areas of concern and propose measures to address these by for example introducing CCTV in shelters and on vehicles.
or encourage safer driving standards through the adoption of Safe and Fuel Efficient Driving training.

Fares & Ticketing
A successful transport network has to be seen as affordable to both individuals and family groups and has to be seen as inviting and easy to use. With so many different operators involved in providing services, ticketing and fares can be seen as complicated and expensive, particularly where passengers need to change from one service to another. Through this strategy we will work with operators to identify key links and ensure that interchangeable ticketing is available particularly where cross boundary travel is an issue. The introduction of a free national concessionary fares scheme in April 2008 has reduced costs and improved accessibility for many older and disabled people. The Council welcomes this concession which has encouraged many more journeys being made by pass holders. The scheme provides eligible people with a ‘Smart’ bus pass, ie one that can be read by electronic ticketing systems. Over the coming years we will work with operators and regional partners to develop smart ticketing across the county, this will not only improve the quality of data, it can also provide opportunities for wider use, eg with our adult social care transport.

Developing Passenger Infrastructure
Over the last 8 years, the Council has invested a significant amount of money on improvements to passenger facilities at stops interchange points, these facilities include as a minimum an area of hard-standing a bus stop sign and information case. Where appropriate this will also include a low floor bus boarder to allow easy access to vehicles and a shelter. We feel that much of the county and all the key corridors have been completed and the council will now concentrate on improvements for passenger facilities in the market town and village centres. In these cases the minimum will include raised bus boarders, shelters and a larger information board.

Publicity and Information
The Council recognises that this is an important area and has developed a complementary Bus Information Strategy. The bus information strategy remains a statutory duty, and is an important part of increasing awareness of the extent of existing services and building people’s confidence to make use of public transport services for longer and more complex journeys. This strategy is will be reviewed early in 2011.

Localised Measures to improve Access to Services
The success of the Veggie Bag Scheme in Selby demonstrates there is a need or even a market for reasonably priced fresh fruit and vegetables to be made available for those who do not have access to private transport. Furthermore, from the evidence of the Grow Green, Grow Healthy project in Richmondshire there appears to be a ready supply of volunteers who are prepared grow the produce themselves.

In February 2010 a co-operative formed by the people of Hudswell in North Yorkshire bought the local pub which had been closed for 18 months. The George and Dragon is now owned by Hudswell Community Pub Ltd, which is democratically owned and controlled by its members. On 18 February 2010, when the sale was completed, there were 152 members including 77 from Hudswell. The co-operative has appointed a tenant to run the business. The tenant is free to make all key business decisions but there are various conditions. The co-operative wants to ensure that the pub is used for community
events, celebrations, and cultural and social activities. There are plans to run a small shop from the premises and to develop part of the land as community allotments. There is also planning permission to develop a bed and breakfast annex. Other communities are expected to follow this example which is encouraging a new trend in co-operative ownership of local assets.

North Yorkshire County Council has also funded projects such as the design of a new website for the Rite2 Talk project in Ryedale. The future aim of the project will be to develop safe online counselling services for Young People’s service, to increase awareness within the community of the Young People’s service and to increase awareness amongst outside professionals of safe referral options, promoting multi-agency working with young people.

Such projects seek to improve access to services or facilities which reduce the need to travel. This may be delivering the service more locally or even by a different means altogether either by mobile services or better use of technology. As part of this Strategy North Yorkshire County Council will continue to encourage groups to develop these initiatives in their own parts of the county, by doing so these ‘softer measures’ not only address the barriers of rural isolation and access to services, but on a social level such measures also encourage community involvement, developing the sense of a ‘Community Spirit’ in the area.

8. DELIVERY ACTION PLAN

Our goal in promoting equality of opportunity is to ensure that our transport policies and delivery support:-

- Economic activity in North Yorkshire;
- Access to health services and healthy choices for people;
- Access to education, training and employment;
- Access to necessary services and facilities
- Access to food shopping
- Remove barriers to social inclusion

We have seen in this annex that generally the majority of people are satisfied with their opportunity to access the services and facilities they require (75% of all respondents satisfied with access, 86% of people without a car)\(^9\), however good access is not available for everyone, or equally available across the county.

This section will therefore outline priorities with regard to people’s different needs and with regard to different parts of the county.

**Priority Strand 1:**

Ensure the network of rail, public and community transport is appropriate to meet peoples need to access key services

\(^9\) Citizens Panel 18 : November 2009
In particular

- in Craven and Scarborough, ensure that current levels are maintained where the need is greatest in the county;
- in Ryedale, which has the lowest level of access in the county consider expanding services or introducing more community transport;
- in Richmondshire reflect the growing population
- in Hambleton enhance the network to meet the needs of an ageing population

Priority Strand 2:

Develop strong strategic inter urban and cross boundary links to support labour market migration and economic activity

In particular

- maintain current levels of bus and rail services between Harrogate and Leeds within the Harrogate / Knaresborough conurbation;
- expand public transport access to Northallerton LMA principally rail links from Teesside and Durham;
- maintain service levels in the Aire Valley, and consider opportunities to strengthen services between Skipton and Lancashire
- maintain current services from the north to Catterick Garrison and consider improvements from the south and east;
- strengthen local transport links into Norton / Malton;
- maintain current Selby – York and Selby – Leeds services and consider improving the rail service between Selby and York, and bus services between Selby and Leeds

Priority Strand 3:

Ensure people are well informed and have easy access to information to enable them to make positive choices in their mode of access to services

In particular

- target interventions in areas where satisfaction with information is low, principally in Richmondshire where net satisfaction is negative; and Scarborough where satisfaction is lower relative to the frequency of bus travel;
- carry out further focus group work to understand infrequent travellers information needs;
- develop a public transport promotion strategy to inform people and to provide positive reinforcing messages for bus and rail travellers;
- develop measures, through information and pricing, to encourage 16 to 25 year olds to continue to use public transport;
- provide information in ways which are accessible to all, and in particular target more personalised travel information amongst those most likely to be excluded because of disability, race, gender or age;
Priority Strand 4:

Encourage positive integration both between transport modes and across services providers

In particular

- Bus / rail integration where Rail stations and bus termini are in close proximity, principally Harrogate, Knaresborough, Selby, Malton, Scarborough and Northallerton;
- between conventional public transport and community transport through the continued development of Hubs;
- Strengthened Community Transport that is efficient and available throughout the county;
- Integration with ACS; CYPS; and H&T with the aim of supporting access that best meets clients needs in the most efficient way;
- Integration between health sector and county council, principally to ensure access to hospitals and GPs is provided for in sustainable ways

Priority Strand 5:

Encourage innovative local solutions to meet small scale local access issues

In particular

- Reconsider what is possible with no funding
- Grow healthy, to develop a program to roll out the successful veggie box / bag principle across the whole of North Yorkshire
- Go voluntary, to support the development or continuation of small local community transport or access projects
- Go mobile, where outreach access services are provided
- Go remotely – support for extending remote access to facilities in conjunction with NYnet

Priority Strand 6:

Remove Barriers to Social Isolation

The Equality of Opportunity Annex aims to tackle social isolation by providing better access to services and information to all, in doing so it will aim to remove a number of barriers to employment, education and social opportunities. Both the Bus Information Strategy and the introduction of local strategic measures will be used to address this.

9. PERFORMANCE MANAGEMENT

Chapter 16 of the LTP3 sets out the approach to performance management for delivery of the Plan. This identifies indicators for all objectives, through Key Performance Questions, and will set appropriate targets for these following the announcement of the capital settlement from the government.
The following are the indicators relating to Access to Services and target values for these will be determined to reflect the level of available funding.

<table>
<thead>
<tr>
<th>Objective / Theme</th>
<th>Key Performance Questions</th>
<th>Key Outcome Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to services</td>
<td>• How easy is it to access the services they need?</td>
<td>• NI 177 Local bus service patronage</td>
</tr>
<tr>
<td></td>
<td>• How much are we improving people’s access to service through better transport?</td>
<td>• Ease of peoples ability to access key services*</td>
</tr>
<tr>
<td></td>
<td>• How much are we improving people’s access to service through local provision of services?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 1

Charts showing proportions of population where access may be an issue

### Average Weekly Income

![Average Weekly Income Chart](chart.png)

### No Car Households

![No Car Households Chart](chart.png)
Long Term Limiting Illness households

Craven
Hambleton
Harrogate
Richmondshire
Ryedale
Selby
Scarborough

LLTI
County
National
## Appendix 2
### Table Summarising Employment by Industry and Commuting Destinations / Origins

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Craven</td>
<td>Grassington and Wharfedale</td>
<td>In terms of employees there is a higher prevalence of employment in <strong>distribution, hotels and restaurants; transport and communication and agriculture</strong> sectors than is seen sub regionally</td>
<td>commuting was primarily to / from elsewhere in the district, with a high proportion of people commuting to Bradford (250+).</td>
</tr>
<tr>
<td>North Craven</td>
<td>The <strong>distribution, hotels and restaurants</strong> sector accounts for 30% of employees</td>
<td>Any commuting was primarily to / from elsewhere in the district, with a high proportion of (out) commuting to Bradford (250+ people).</td>
<td></td>
</tr>
<tr>
<td>Settle</td>
<td><strong>Public administration, education and health</strong> (34.4%) and <strong>distribution, hotels and restaurants</strong> (30.9%) account for more than two thirds of all employees</td>
<td>Any commuting is primarily to / from elsewhere in the district (e.g. 550+ people primarily commuting to Skipton and Gargrave and nearly 500 commuting in were mainly from Ingleton and Clapham)</td>
<td></td>
</tr>
<tr>
<td>Skipton</td>
<td>The <strong>banking, finance and insurance</strong> sector accounts for a third of employees (35.8% - double that seen the sub region – 16.5%) <strong>Distribution, hotels and restaurants</strong> (24.5%) means two sectors account for 60% of all employment, which is also higher than sub regionally (51.9%)</td>
<td>Commuting into the LMA was dominated by other areas in the Craven district (1,850), Bradford (nearly 2,000) and Pendle in Lancashire (1,250+).</td>
<td></td>
</tr>
<tr>
<td>South Craven</td>
<td><strong>Employment in manufacturing, energy and water</strong> (21.5%) is in proportion terms more prevalent than is the case for the sub region as a whole (12.1%)</td>
<td>Commuting (out) from the LMA was dominated by other parts of the Craven district (1,100+) and Bradford (2,200).</td>
<td></td>
</tr>
<tr>
<td>Hambleton</td>
<td>Bedale</td>
<td>The <strong>distribution, hotels and restaurants</strong> sector accounts for more a third of businesses (34.9%) and a quarter (24.2%) of employees</td>
<td>The LMA area sees very similar volumes of people commuting in and out of the area. Commuting was most prevalent to and from other parts of the district, Harrogate and Richmondshire.</td>
</tr>
<tr>
<td>Easingwold</td>
<td>In terms of employees one third (33.1%) work in <strong>public administration</strong> (26.1% in the sub region), with <strong>transport and communications</strong> also seeing notably high levels</td>
<td>The LMA area is a net exporter of labour (in excess of 1,300 jobs). Key commuting was seen to York (1,800+ jobs), although 1,000 York residents travel to work in the Easingwold and villages LMA.</td>
<td></td>
</tr>
<tr>
<td>Northallerton</td>
<td>The <strong>public administration, education and health</strong> (52.1%) sector accounts for more than half of all employees (one of the highest percentages seen for a single sector across all of the LMAs). The <strong>distribution, hotels and restaurants</strong> sector accounts for a further 21.2%, meaning two sectors account for two thirds of all employees</td>
<td>By far the largest volumes of people commuting were to / from other parts of the district. A wide variety of other locations followed, including Richmondshire and also more 'northerly' areas outside of the sub region such as Stockton on Tees.</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Sector Details</td>
<td>Employment Details</td>
<td>Commuting Details</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stokesley</td>
<td><strong>The distribution, hotels and restaurants</strong> sector accounts for more than a quarter (28.1%) of all employees</td>
<td>The outflow of jobs was dominated by 'northerly' areas outside of the sub York and North Yorkshire region. These were Middlesborough (nearly 1,500), Stockton on Tees (1,000+) and Redcar and Cleveland (800+).</td>
<td></td>
</tr>
<tr>
<td>Thirsk</td>
<td>Employment in agriculture is more prevalent than in the sub region as whole (3.9% compared to 1.8%)</td>
<td>Key outflows were however seen to elsewhere in Hambleton (1,300), Harrogate (640) and also areas outside of the York and North Yorkshire sub region, e.g. Middlesborough.</td>
<td></td>
</tr>
<tr>
<td>Harrogate</td>
<td><strong>The distribution, hotels and restaurant</strong> sector accounts for more than a third (37.5%) of employment (notably higher than is seen for the district and sub regionally)</td>
<td>Key commuting was to / from other parts of Harrogate (particularly commuting in from Ripon), Hambleton (including Thirsk and Northallerton), York and Leeds.</td>
<td>Comming was most prevalent to other areas in the Harrogate District (7,400+ people) and Leeds (1,300+ - mainly to the ‘city’ and Wetherby areas).</td>
</tr>
<tr>
<td>Harrogate North</td>
<td><strong>Public administration, education and health</strong> (27.4%) and distribution, hotels and restaurants and transport and communications (27.7%) account for more than half of all employment in the area. The banking, finance and insurance sector accounts for nearly a third of businesses, yet only 11% of employees (compared to 16.5% sub regionally)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrogate South</td>
<td>Employment in the public administration, education and health (32.4%) is higher than seen sub regionally (26.1%)</td>
<td>People commuting into the area were mainly from other areas in the Harrogate District (7,100+ people) and Leeds (1,500).</td>
<td></td>
</tr>
<tr>
<td>Harrogate Town</td>
<td><strong>The distribution, hotels and restaurants</strong> (42.2%) and banking, finance and insurance (27.8%) sectors account for 70% of employees. These sectors also account for a higher proportion of all employees than is the case sub regionally</td>
<td>Over 9,000 people travelled in from elsewhere in the Harrogate district and nearly 1,000 from Leeds.</td>
<td></td>
</tr>
<tr>
<td>Knaresborough</td>
<td><strong>The distribution, hotels and restaurants</strong> sector accounts for more than a third (35.3%) of all employees, which is also higher than is seen sub regionally (27.1%)</td>
<td></td>
<td>Over 3,600 people travelled to elsewhere in the Harrogate district, 2,100+ to Leeds and nearly 500 to York.</td>
</tr>
<tr>
<td>Nidderdale</td>
<td><strong>The distribution, hotels and restaurants</strong> (23.1%) and public administration, education and health (22.6%) sectors account for nearly half of all employees. Employment in agriculture and other services is more prevalent than sub regionally</td>
<td>In 2001 there was a net outflow (-1,000+) from the LMA. Nearly 2,500 people travelled from elsewhere in the Harrogate district and 1,100+ from Leeds.</td>
<td></td>
</tr>
<tr>
<td>Ripon and Bishop Monkton</td>
<td><strong>The distribution, hotels and restaurants</strong> (44.1%) sector accounts for more than half of all employment in the area (compared to 27.1% sub regionally). Employment in public administration, education and health sector (24.5%) means two sectors account for more than two thirds of all employees</td>
<td>Commuting was most prevalent to other areas in the Harrogate District (2000 people), Hambleton (400), Leeds (270) and York (100+).</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Key Points</td>
<td>Examples</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Richmondshire</strong> A66</td>
<td>The distribution, hotels and restaurant sector accounts for nearly 40% of employees (compared to 27.1% in the sub region)</td>
<td>Commuting was most prevalent to Darlington (700+ people), other parts of Richmondshire (nearly 500 people) and Hambleton (200+).</td>
<td></td>
</tr>
<tr>
<td>Lower Wensleydale</td>
<td>Approaching half of all employees work in distribution, hotels and restaurants and transport (26.2%) and public administration, education and health (21.0%) sectors</td>
<td>In terms of travel to work patterns, the LMA area relatively self contained. Commuting is primarily to / from elsewhere in the district (nearly 400 people) and Hambleton (nearly 250 people and particularly Northallerton and Bedale).</td>
<td></td>
</tr>
<tr>
<td>Richmondshire Central</td>
<td>The distribution, hotels and restaurant sector accounts for 28.3% of employees. This and the public administration, education and health (22.0%) sector account for half of all employment</td>
<td>Comming was most prevalent to other parts of Richmondshire (1,300+ people), Hambleton (800+) and Darlington (550+).</td>
<td></td>
</tr>
<tr>
<td>Garrison</td>
<td>Public administration, education and health accounts for 40.7% of employees</td>
<td>Any commuting into the area primarily from other parts of Richmondshire (nearly 1,250 people).</td>
<td></td>
</tr>
<tr>
<td>Upper Dales</td>
<td>Distribution, hotels and restaurants, transport and communications (34.7%) make up a third of all employees</td>
<td>The key outflows was to elsewhere in Richmondshire (nearly 500 and primarily to Leyburn).</td>
<td></td>
</tr>
<tr>
<td>Ryedale</td>
<td>Helmsley and Kirbymoorside 76.8% of employees work in distribution, hotels and restaurants and transport (65%) and public administration, education and health (11.6%) sectors</td>
<td>In terms of any commuting (whether in or out of the LMA area), elsewhere in the Ryedale district, York and Hambleton were key.</td>
<td></td>
</tr>
<tr>
<td>Malton-Norton</td>
<td>The distribution, hotels and restaurants (21.6%) and also public administration, education and health (18.3%) sectors account for a further 40% of employees</td>
<td>Key commuting was to elsewhere in the Ryedale district, Scarborough and York.</td>
<td></td>
</tr>
<tr>
<td>Pickering</td>
<td>Distribution, hotels and restaurants make up 30.4% of employees and Public administration, education &amp; health make up 25.3%.</td>
<td>The Scarborough district also provides a disproportionate volume of people commuting into the LMA.</td>
<td></td>
</tr>
<tr>
<td>Rillington, Sherburn &amp; Wolds</td>
<td>Manufacturing, energy and water and construction (52.9%) account for more than half of all employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scarborough</td>
<td>Filey The manufacturing, energy and water (particularly it’s large volumes of employees) and distribution, hotels and restaurants sectors are more prevalent than sub regionally</td>
<td>In terms of travel to work patterns, in 2001 the LMA area saw similar volumes of people commuting in and out of the area. Any commuting was primarily to / from elsewhere in the district and the East Riding (mainly Bridlington).</td>
<td></td>
</tr>
<tr>
<td>Scarborough and Villages</td>
<td>The distribution, hotels and restaurants (34.4%) and public administration, education and health (33.6%) sectors account for more than two thirds of all employment.</td>
<td>Key commuting was to elsewhere in the district and Scarborough.</td>
<td></td>
</tr>
<tr>
<td>Whitby and Villages</td>
<td>The distribution, hotels and restaurant (42.1%) and public administration, education and health (24.7%) sectors account for two thirds of all employment.</td>
<td>The outflow of jobs were primarily to elsewhere in the district (700 people), Ryedale (400+) and to ‘northerly’ areas outside of the sub York and North Yorkshire region, particularly Redcar and Cleveland (800+).</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Sector</td>
<td>Employment Distribution</td>
<td>Key Commuting</td>
</tr>
<tr>
<td>-------------------</td>
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<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Selby</td>
<td>The <strong>manufacturing, energy and water sector</strong> accounts for a quarter (26.8%) of employment (compared to 12.1% in the sub region) Employment in <strong>distribution, hotels and restaurants</strong> (23.4%) mean two sectors account for half of all employees</td>
<td>Key commuting was to <strong>Leeds</strong> (1,800+, primarily to the ‘city’, <strong>Whetherby</strong> and <strong>Garforth</strong>), <strong>Wakefield</strong> (900+), other parts of Selby (650+, primarily <strong>Tadcaster</strong>) and <strong>York</strong> (200+).</td>
<td></td>
</tr>
<tr>
<td>Selby Rural</td>
<td><strong>Public administration, education and health</strong> (20.2%) and <strong>distribution, hotels and restaurants</strong> (19.1%) mean four (out of a total of eight) sectors account for nearly 85% of all employees</td>
<td>Key commuting was seen to <strong>York</strong> (2,000+), elsewhere in <strong>Selby</strong> (1,600+, primarily to <strong>Selby Town</strong> LMA area) and <strong>Leeds</strong> (930). To a lesser degree East Riding and Wakefield also featured.</td>
<td></td>
</tr>
<tr>
<td>Selby Town</td>
<td><strong>Public administration, education and health</strong> (31.9%) and <strong>distribution, hotels and restaurants</strong> (26.2%) account for more nearly 60% of all employees</td>
<td>Key commuting was to <strong>York</strong> (940), elsewhere in Selby (1,700) and <strong>Leeds</strong> (670+). To a lesser degree East Riding and Wakefield also featured.</td>
<td></td>
</tr>
<tr>
<td>South Selby</td>
<td>The <strong>manufacturing, energy and water sector</strong> accounts for nearly half of employment (48.4%, compared to 12.1% in the sub region) Employment in <strong>agriculture</strong> is more prevalent than sub regionally (4.3% compared to 1.8%)</td>
<td>Key commuting was seen to elsewhere in Selby (1,400+, primarily to the <strong>Selby Town</strong> LMA area), <strong>Wakefield</strong> (1,100+) and <strong>Leeds</strong> (1,000+, primarily to the ‘city’). To a lesser degree York and East Riding also featured.</td>
<td></td>
</tr>
<tr>
<td>Tadcaster Area</td>
<td>The <strong>Banking, finance and insurance</strong>, etc. (34.6% compared to 16.5% in the sub region) and <strong>distribution, hotels and restaurants</strong> (23.1%) sectors account for more than half of all employees</td>
<td>Key commuting was to <strong>Leeds</strong> (nearly 1,900, primarily to <strong>Whetherby</strong>), <strong>York</strong> (650), and elsewhere in <strong>Selby</strong> (230, primarily to <strong>Sherburn</strong>). To a lesser degree Harrogate and Wakefield also featured.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3
Cross Boundary and intra county commuting
NORTH YORKSHIRE COUNTY COUNCIL

Local Transport Plan 3

Appendix 5

Highway Maintenance
APPENDIX 5 - HIGHWAY MAINTENANCE

The highway network is the most highly valued asset which the Council manages and as such its maintenance is a significant factor in ensuring that people and goods move freely, safely and efficiently around the County.

Although the main purpose of highway maintenance is to maintain the highway network this needs to be set within the wider context of integrated transport, efficient and effective uses of resources and the corporate vision of the County Council.

RESPONSIBILITIES

Responsibility for highway maintenance in North Yorkshire is divided between the Department for Transport (Highways Agency which manages Trunk roads and motorways) and North Yorkshire County Council. Some other organisations such as District Councils, housing associations and the Ministry of Defence manage those ‘private’ highways within their control.

There is a wide range of legislation affecting highway maintenance, either directly or indirectly, imposing powers or duties on Highway Authorities.

The principles that underpin and define the objectives of highway maintenance are:

a) **Network Safety**: Complying with statutory obligations

b) **Network Serviceability**: Maintaining reliability and enhancing condition

c) **Network Sustainability**: Minimising cost over time and minimising environmental impact.

LEGAL FRAMEWORK

Much of highway maintenance activity is based upon statutory powers and duties contained in legislation and precedents developed over time as a result of claims and legal proceedings. It is crucially important that all those involved in highway maintenance have a clear understanding of these powers and duties, and their implications.
AIMS AND DUTIES

The County Council has a duty as the local Highway Authority for the County of North Yorkshire, excluding the strategic and national network (motorways and trunk roads), to ensure that all roads and footways are maintained in a safe condition. This will take into account the amount and nature of the traffic using them. It is also the aim to provide a road network with a condition that is acceptable to the people of North Yorkshire and the travelling public.

To undertake this duty the following objectives have been used:

- To develop a Transport Asset Management Plan (TAMP). (see Annex 1)
- To give a high priority to the Principal Road Network, heavily trafficked routes and areas of high pedestrian usage.
- To prioritise works, having taken into account the results of user consultations.
- To collect condition data in accordance with the development of UKPMS.
- To keep the highway network safe and well maintained.
- To reduce congestion on the network by co-ordinating the works programmes of all those organisations affecting the network.
- To apply the principles of sustainable development via the increased use of recycled materials and by the adoption of a whole-life costing strategy.
- To monitor and improve service through the effective use of performance management tools.

Although highway maintenance is a contributory element to some of the challenges and targets in the Plan, the key challenges are:

- Managing the condition of the network and identifying and implementing cost effective measures which delay the need for more expensive maintenance treatments.
- Eliminating the maintenance backlog for local roads, bridges and street lighting.
- Halting the deterioration in local road condition.

HIGHWAY MAINTENANCE LTP OBJECTIVES

All typical highway maintenance schemes incorporating carriageway, footway, bridge or street lighting improvement works will make a positive contribution to the County Councils objectives. The ability of transport users to travel throughout North Yorkshire safely on a sustainably maintained network is an essential element of achieving the LTP objectives

Support Economic Growth

- Keep the road network in a safe and serviceable condition;
- Keep the footways clear and free from obstructions;
- Remove unevenness from the carriageway, footway and cycleway surfaces;
- Improve the skid resistance of the surfaces;
- Winter maintenance will keep the network open for all commercial and personal traffic;
- Make the road network easier to use during the hours of darkness;
• Improved management of all highway works (including those of public utilities) will reduce disruption and lead to consistent journey times; and,
• Greater use of local materials will help to support the local economy.

Contribute to better safety, security and health

• Repair trips in the footways and where paths cross roads;
• Improve the surface skid resistance;
• Maintaining street lighting (including improved efficiency lanterns) to increase night visibility for all users, reducing the fear of crime and the risk of night time accidents;
• Winter maintenance activities reduce the risk of collisions on the roads and reduce the risk of slips for pedestrians;
• Improve safety fencing for vehicles and pedestrians,
• Assess those roads which run close to rail lines to prevent future vehicle/rail incidents.

Tackle Climate Change

• Keeping traffic moving through better information, planned diversions and alternative routes;
• Using special cold mix materials (as opposed to traditional hot mix materials) will reduce production plant exhaust emissions into the atmosphere;
• Transporting materials over shorter distances through the use of in-situ recycling techniques, and maximising the use of local materials; decreasing vehicle exhaust emissions, fuel costs and road noise;
• Works planning and co-ordination to reduce lengthy disruptions; and,
• Use of more efficient street lighting equipment.

Quality of Life

• Maintaining street lighting to increase night visibility for all users, reducing the fear of crime and the risk of night time accidents;
• Prevent polluted effluent from highway drainage affecting watercourses;
• Install energy efficient lamps to reduce energy consumption;
• Improve the smoothness of the roads and cycleways and improved condition of footways and cycleway;
• Winter maintenance ensures people are able to go about their business with the minimal disruption;
• Consistent journey times;
• Ensure the Unsurfaced Roads are maintained to the level appropriate to their use (for walkers, equestrians and motorists as identified);
• Maintenance of signs and lines ensures both pedestrians and motorists are able to reach their destination and minimise the use by HCV’s of inappropriate roads; and,
• Removal of unauthorised signs will prevent the obstruction of footways and visibility splays.
Promote equality of opportunity

- Enforcement of parked cars on footway keeps the footways clear and prevents damage to the footways which subsequently require maintenance;
- Maintaining the network of roads, footways and cycleways including dropped kerbs, pedestrian crossings and signals ensures that all have access to services; and,
- Removal of unauthorised advertising signs will keep footways unobstructed especially for the mobility impaired.
- Provide a well maintained network suitable for use by public and community transport services.

MAINTENANCE CATEGORIES

The scope of the highway maintenance service is very wide ranging and encompasses the following types of activity:

- Regulatory Activities – Inspecting and regulating the activities of others.
- Reactive Maintenance – Responding to inspections, complaints or emergencies.
- Routine Maintenance – Regular schedules of patching and cleaning.
- Programmed Maintenance – Planned schemes usually resurfacing or reconstruction.
- Winter Service – Precautionary salting, ploughing and snow-blowing.
- Weather and other emergencies – In response to flooding and the consequences.

Within each type there are various categories that are considered in relation to the core objectives of safety, serviceability and sustainability, and these are summarised as follows:

Regulatory
- Highway Safety Inspections
- maintenance of highway register and definitive map
- co-ordination of road and street works
- charging schemes and permits for highway occupation (Traffic Manager responsibility) e.g. Skips, scaffolding, hoardings, street cafés etc
- other regulatory functions – encroachment, illegal signs, parking etc.

Reactive
- sign and make safe for safety purposes
- provide initial temporary repair for safety purposes
- provide permanent repair for safety purposes

Routine
- programme of minor works and patching
- drainage systems – cleansing and repair
- embankments and cuttings – stability
- landscaped areas and trees – management
• verges – grass cutting
• fences and barriers – repair
• traffic signs and bollards – cleansing and repair
• road marking and studs – replacement
• lighting installations – cleansing and repair
• bridges and structures – cleansing and minor works

Programmed
• Highway Network Condition Surveys
• carriageways – resurfacing, strengthening or reconstruction
• footways – minor works, resurfacing, strengthening or reconstruction
• cycle routes – minor works, resurfacing, strengthening or reconstruction

Winter Service
• pre-treatment
• post-treatment
• clearance of ice and snow

Weather and other Emergencies
• flooding
• high winds
• high temperatures
• other emergencies

RISK MANAGEMENT

Risk management is an integral element of the highway maintenance process and provides the Council with the information and processes required to successfully defend insurance claims. All highway maintenance activities are undertaken against an assessment of the risks and consequences involved in either undertaking activities or not undertaking them.

The highest profile risks affecting the highway maintenance service are those relating to the safety of the network and accident, injury or health risks to users (including employees).
HIGHWAY MANAGEMENT INFORMATION SYSTEM (HMIS)

The Council has commenced production of a web-hosted HMIS service – ‘Insight’ by Symology. This system is available across the County and will provide the catalyst for implementation of electronic data collection by Hand Held Data Capture Devices in support of:

- UKPMS (United Kingdom Pavement Management System – a system to optimise the performance of the highway network over time).
- reactive, routine and regulatory maintenance activities.
- highway inspections.
- street works register.
- accident investigation.
- bridges/structures, retaining walls and other highway apparatus.
- street lighting maintenance.

This comprehensive system will also provide a useful database for the management of service enquiries, as well as allowing accurate information to be made more readily available to the public on road works and temporary traffic diversions etc, which will result in more efficient use of the network and allow us to monitor our progress in effectively delivering the Network Management Duty.

INTEGRATED WORKS PROGRAMMES

Routine and Cyclic Maintenance
The introduction of the HMIS will increase the opportunity to better co-ordinate this work in conjunction with other maintenance programmes and integrated transport schemes and initiatives. Through the availability of condition/defect data it will also ensure more effective use of resources to increase the proactive maintenance across the county, preventing major defects from occurring. Minor structural repair budgets in particular will be targeted at those isolated defects that would not otherwise be identified through UKPMS analysis but which still contribute to improving network condition.

Structural Carriageway and Footway Maintenance Schemes
The HMIS is central to this process and that of the continual asset management based approach to highway maintenance. During LTP3 we will continue to implement an appropriate asset management strategy focussing on preventative maintenance techniques. The Council carries out its structural carriageway maintenance programme based on need. All carriageways are assessed by a team of accredited highway condition surveyors. The resulting data is analysed within the HMIS and a prioritised list of schemes is programmed. This will be in the form of permanent structural patching and surface treatments (surface course renewal, surface dressing, micro surfacing and slurry surfacing). These are designed to improve structural integrity (structural patching), and reduce the rate of deterioration (and also maintain in-service skid resistance performance). Those assets which are nearing the end of their life are assessed for strengthening and reconstruction using economic assessment techniques, balancing the increasing cost of unscheduled repairs with the substantial cost of renewal. To further improve our management of the highway network we are using the HMIS to assist in the preparation of rolling programmes of work. This allows much better coordination and
reduce disruption of the network and allow greater integration of maintenance schemes with planned improvement schemes.

NETWORK HIERARCHY

A network hierarchy is a means of categorising the maintenance network on the basis of the volume of traffic using it whilst recognising the difference in traffic levels between urban and rural roads. The hierarchy also takes account of the volume of HCVs.

The aim of the road hierarchy is to:

- Set level of inspections to enable statutory duties to be fulfilled.
- Set spending levels according to the importance of the road within the network.
- Set policies according to the importance of the road within the network.

The network hierarchy is sub-divided into three sections to cover carriageways, footways and cycleways, and the local hierarchies for North Yorkshire are as follows:

Footways

<table>
<thead>
<tr>
<th>Category</th>
<th>Hierarchy Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Prestige Pedestrian Zone</td>
<td>Pedestrianised areas</td>
</tr>
<tr>
<td>1</td>
<td>Primary Pedestrian Route</td>
<td>Busy town centre shopping and business areas, and main pedestrian routes linking transport interchanges to the town centre.</td>
</tr>
<tr>
<td>2</td>
<td>Secondary Pedestrian Route</td>
<td>High usage routes connecting a number of residential areas and providing access to the primary routes, shopping centres, large schools, leisure complexes and industrial centres.</td>
</tr>
<tr>
<td>3</td>
<td>Link Footway</td>
<td>High/Medium usage routes providing a link for a residential area to the primary and secondary walking routes.</td>
</tr>
<tr>
<td>4</td>
<td>Local Access Footway - Urban</td>
<td>Urban low usage footways, usually on housing estates.</td>
</tr>
<tr>
<td>5</td>
<td>Local Access Footway - Rural</td>
<td>Rural, Low usage, usually between villages</td>
</tr>
</tbody>
</table>

Cycleways

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cycle route or lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure points with exemptions for cycle access.</td>
</tr>
<tr>
<td>B</td>
<td>Cycle track, a route not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or unsegregated.</td>
</tr>
<tr>
<td>C</td>
<td>Cycle trails, leisure routes through open spaces, not necessarily the responsibility of the Highway Authority (may be surfaced in unbound materials).</td>
</tr>
</tbody>
</table>
## Carriageways

<table>
<thead>
<tr>
<th>Category</th>
<th>Hierarchy Description</th>
<th>Type of Road General Description</th>
<th>Detailed Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Motorway</td>
<td>Not applicable</td>
<td>The Council is not responsible for motorways (this is the responsibility of the Highways Agency)</td>
</tr>
<tr>
<td>2</td>
<td>Strategic Route</td>
<td>Trunk and some Principal A roads between Primary Destinations</td>
<td>Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.</td>
</tr>
<tr>
<td>3a</td>
<td>Main Distributor</td>
<td>Major Urban Network and Inter-Primary Links. Short to medium distance Traffic</td>
<td>Routes between Strategic Routes and linking towns to the strategic network with limited frontage access. In urban areas speed limits are usually 40mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.</td>
</tr>
<tr>
<td>3b</td>
<td>Secondary Distributor</td>
<td>B and some C class roads. Some unclassified urban bus routes carrying local traffic with frontage access and frequent junctions</td>
<td>In rural areas these roads link the larger villages and industrial sites to the Strategic and Main Distributor Network. In built up areas these roads have 30mph speed limits and very high levels of pedestrian activity with some crossing facilities. On street parking is generally unrestricted.</td>
</tr>
<tr>
<td>4a</td>
<td>Link Road</td>
<td>Roads linking between the Main and Secondary Distributor Network</td>
<td>In rural areas these roads link the smaller villages to the distributor roads. In urban areas they are residential or industrial or inter-connecting roads with 30mph speed limits, random pedestrian movements and uncontrolled parking.</td>
</tr>
<tr>
<td>4b</td>
<td>Local Access Road</td>
<td>Roads serving limited numbers of properties carrying only access traffic</td>
<td>In rural areas these roads serve small settlements and provide access to individual properties and land. They are sometimes only single lane width and unsuitable for HGV. In urban areas they are often residential loop roads or culs de sacs.</td>
</tr>
<tr>
<td>5</td>
<td>Back Street</td>
<td>Roads serving limited numbers of properties</td>
<td>Only applicable to urban areas, will typically be the rear access road to terraced properties</td>
</tr>
<tr>
<td>6</td>
<td>Unsurfaced Road</td>
<td>Roads serving limited numbers of properties</td>
<td>Only applicable in rural locations includes those roads locally known as ‘Green Lanes’ or ‘County Roads’.</td>
</tr>
</tbody>
</table>

The carriageway hierarchy was derived from a review of the current traffic flows.
SAFETY INSPECTIONS

Safety inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the network or the wider community. These defects are subdivided into two categories:

- **Category 1** – those that require prompt attention within 24 hours because they represent an immediate or imminent hazard
- **Category 2** - all other defects.

A safety inspection regime comprises the following elements:

- Items for inspection.
- Inspection frequency.
- Significance of defect.
- Type of response required.

Safety inspections are to be undertaken at frequencies to reflect the importance of the feature and the category of road and are carried out by trained staff on foot or from a slow moving vehicle.

**Frequencies of Inspection**

Frequencies for safety inspections are based on the network hierarchy categories defined earlier and are as follows:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Category</th>
<th>Description</th>
<th>Frequency of Safety Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads</td>
<td>2</td>
<td>Strategic Route</td>
<td>1 month</td>
</tr>
<tr>
<td></td>
<td>3a</td>
<td>Main Distributor</td>
<td>1 month</td>
</tr>
<tr>
<td></td>
<td>3b</td>
<td>Secondary Distributor</td>
<td>1 month</td>
</tr>
<tr>
<td></td>
<td>4a</td>
<td>Link Road</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>4b</td>
<td>Access Road</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Back Street</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Unsurfaced Road</td>
<td>12 months</td>
</tr>
<tr>
<td>Footways</td>
<td>1a</td>
<td>Pedestrian Areas</td>
<td>1 month</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Primary Pedestrian Route</td>
<td>1 month</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Secondary Pedestrian Route</td>
<td>3 months</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Link Footway</td>
<td>6 months</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Local Access Footway - Urban</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Local Access Footway - Rural</td>
<td>12 months</td>
</tr>
<tr>
<td>Cycleways</td>
<td>A</td>
<td>Part of carriageway</td>
<td>As for road</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Remote from Carriageway</td>
<td>12 months</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>Cycletrails (if forming part of the adopted highway network)</td>
<td>12 months</td>
</tr>
</tbody>
</table>
Particular attention has been paid to linking carriageway and footway inspections to similar frequencies wherever possible so that efficiency is improved.

**Items for Inspection**

The list of highway inventory to be observed in a Safety Inspection for possible defects is as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Defect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carriageway and Cycleway</td>
<td>pot hole/spalling, ridge, hump, depression/sunken cover or gap/crack</td>
</tr>
<tr>
<td>Footway</td>
<td>trip/pot hole/sunken cover, rocking slab/block or open joint</td>
</tr>
<tr>
<td>Kerb</td>
<td>misaligned, loose/rocking or missing</td>
</tr>
<tr>
<td>Verge</td>
<td>sunken area adjacent to and running parallel with the carriageway/footway edge or obstruction</td>
</tr>
<tr>
<td>Iron Work</td>
<td>gaps within framework, level differences within framework, rocking/cracked/broken/worn/polished or missing covers</td>
</tr>
<tr>
<td>Flooding – where conditions allow</td>
<td>standing water 2 hours after cessation of rainfall, substantial flow of running water across carriageway/footway or significant flooding of property</td>
</tr>
<tr>
<td>Drainage</td>
<td>substantial standing water adjacent to edge of carriageway, blocked gully/kerb outlet or collapsed/ blocked/settled items or systems</td>
</tr>
<tr>
<td>Road Markings</td>
<td>faded or worn markings</td>
</tr>
<tr>
<td>Road Studs</td>
<td>missing, void left in carriageway, displaced items on carriageway or defective studs</td>
</tr>
<tr>
<td>Signs/Bollards/Lights/Traffic signals</td>
<td>damaged/misaligned items causing a hazard, missing items causing a hazard, lights/signals not operating correctly/malfunctioning, signals pointing the wrong way, signal lamp failure, exposed wiring, missing doors to lamp columns, items missing or items obscured/dirty/faded</td>
</tr>
<tr>
<td>Safety Fencing/Barriers</td>
<td>damaged/misaligned items projecting into carriageway or footway or structurally unstable items likely to cause danger</td>
</tr>
<tr>
<td>Hedges and trees</td>
<td>overhanging trees and vegetation or unstable trees and branches</td>
</tr>
<tr>
<td>Highway General</td>
<td>oil/debris/mud/stones/gravel likely to cause a hazard, illegal signs, obstructions on the highway, obstructed sight lines, ramps in carriageway to aid vehicular movement, footway damage caused by vehicular access where no vehicle crossing, scaffolding or skips likely to cause a hazard, unprotected building materials on the highway or abandoned vehicles likely to cause a hazard</td>
</tr>
<tr>
<td>Anything Dangerous</td>
<td>anything considered dangerous on the highway which could affect either highway users or the general public</td>
</tr>
</tbody>
</table>

**General Information**

**Ironwork** – This may necessitate repairs to, and the occasional replacement of, all types of gratings and covers that are the responsibility of the Highway Authority. It is also
necessary on occasions to repair items that are the responsibility of other parties if there is a hazard and to recover the costs incurred from the other parties.

**Highway Drainage** – Standing water reduces safety if allowed to accumulate on trafficked surfaces of the highway. The effects of this are readily observable and correct action is taken as soon as practicable, especially on high speed roads.

**Road Markings** – To be effective, road markings must not be reduced or obscured.

**Signs/Bollards/Lights** – Many signs are required to be lit and their legal status is affected if the illumination has faded. Other signs may be left in a dangerous condition after road traffic accidents. Particular attention is paid to damaged or defective lighting equipment since this may constitute an immediate hazard, especially where vehicular impact has occurred or where the electrical wiring is exposed.

**Traffic Signals** – Modern signal equipment is expected to operate correctly without regular routine adjustments. The requirement of this section is in the event of failure to bring back the installation to its required standard.

**Hedges and Trees** – This applies to hedges and trees that are the responsibility of the Highway Authority together with those that are the responsibility of others but which affect users of the highway. Normal growth of hedges and trees can give rise to hazardous conditions to road users by causing obstruction to visibility and movement.

**Response Times**
The categories of response time are as follows:

- **Priority 1** – within 24 hours (make safe or repair)
- **Priority 2** – within 28 days (repair)
- **Priority 3** – within 3 months (repair)
- **Priority 4** – within 6 months (repair)
- **Priority 5** – repair during next programme/schedule a more detailed inspection/review condition at next inspection

The presence of electrical equipment relating to street lighting, illuminated signs and bollards and traffic signals requires special attention to ensure the safety of users and the community.

**CONDITION SURVEYS**
Network Condition monitoring surveys are undertaken to collect data on carriageway deterioration in order to determine the most appropriate maintenance treatment. The resulting technical analysis provides input into network condition modelling and informs the maintenance strategies, which contributes to the key objective of reducing the general rate of deterioration across the network. At the same time, it also allows us to reduce the maintenance backlog and provides the basis for the scheme identification process.
The survey methods applicable in North Yorkshire include:

**SCANNER** (Surface Condition Assessment of the National Network of Roads)
Scanner surveys are automated vehicular surface condition surveys which collect the following data:
- Location Co-ordinates
- Road Geometry
- In-line Profile
- Wheelpath Rutting
- Texture Profile
- Road Cracking

**Coarse Visual Inspection (CVI)**
Visual survey to collect basic defects in accordance with UKPMS requirements on the highway network. CVI surveys are carried out on all roads within the network. The survey is also used to identify programmed carriageway schemes.

**SCRIM**
The Sideway-force Coefficient Routine Investigation Machine (SCRIM) is used to monitor the skid resistance of the category 2, 3a and 3b roads on an annual basis.

**Griptester**
The Griptester is used to measure the skid resistance of roads at accident sites.

**Detailed Visual Inspection (DVI)**
Detailed visual inspection surveys are carried out in accordance with UKPMS requirements on the footway. The survey is also used to identify programmed footway schemes.

**Inventory Survey**
Inventory surveys are carried out to accurately record the type and amount of the highway infrastructure asset.

**SKID RESISTANCE**

**Policy**
The Council’s policy on skid resistance aligns with current legal requirements for the trunk roads and motorways found in the Design Manual for Roads and Bridges Volume 7 (HD28/04). Our most important roads (Cat 2, 3a & 3b) have also benefited from specific category investigations on site.

An important aspect of maintaining the safe condition of the road is to provide an adequate wet road surface condition. Accident rates can be reduced by improving skid resistance at targeted locations. As a consequence, the Council routinely monitors high priority routes within the highway network and in addition carries out investigation at specific locations where problems have been identified, in line with road safety policy.
Site Investigation
Site Investigations shall be prioritised and carried out by experienced staff.
The objectives of the site investigation shall be:
a) To determine whether a surface treatment is justified to reduce the risk of accidents;
b) To determine whether some other form of action is required; and,
c) To determine whether the site be kept under review.

Warning Signs
Where the skid resistance is lower than specified, slippery road signs shall be erected as a matter of urgency.
Slippery road signs shall be removed as soon as they are no longer required. This shall be after the remedial action has been taken and skid resistance levels have returned to an appropriate standard.

Prioritisation and Treatment
Where there are clear indications that improving the condition of the surfacing is likely to significantly reduce the risk of accidents occurring, then remedial treatment shall be prioritised.

CONDITION STANDARDS
CARRIAGEWAYS/ FOOTWAYS/ CYCLEWAYS
Maintenance of highway pavements is undertaken under the three headings of:

• Resurfacing and Reconstruction (R & R)
• Surface Treatments
• Basic Maintenance

Resurfacing and Reconstruction (R & R)
R & R schemes are structural maintenance schemes where a defined need has been identified and they comprise:

• Reconstruction.
• Overlay.
• Resurfacing.

The objectives are:
• to restore the structural integrity.
• to ensure user safety by preventing further deterioration, restore skid resistance and restore ride quality.
• to meet the expectations of the travelling public with regard to the standards of the network.

The schemes are individually planned and costed and the various treatments are described as follows:

• Reconstruction – The removal of the structural layers of the pavement and their replacement with new material, including the new surfacing
• **Overlay** – A layer of material laid onto the existing surface course to restore the strength of the pavement.
• **Resurfacing** – The replacement of the existing surface course to restore the running surface. Including overlays up to 50mm.

Schemes for inclusion in the R & R programme will be decided on a priority basis taking account of the network condition surveys and assessed countywide.

**Surface Treatments**
Surface treatments are non-structural treatments laid onto the existing surface and include:
• Surface Dressing Carriageways (Tar and chippings).
• Slurry sealing.
• High friction surfacing (to improve skid resistance).
• Re-texturing (of the existing surface).

These treatments are used to further extend the life of a pavement before major maintenance is required. All sites are identified for appropriate treatment and prioritised. The various treatments are:

• **Surface dressing** – Restore skid resistance and to seal the road surface from the ingress of water and stop further weakening of the road surface. This will extend the working life of the road and provide a cost effective treatment which will also improve the appearance.

• **Slurry seal** – Seal the surface from the ingress of water and stop further weakening of the surface. This will extend the working life and provide a cost effective treatment which will also improve the appearance. As per Surface Dressing, treatment is considered as an option particularly as for urban estate roads, minor cul-de-sacs, heavily parked areas and footways.

• **High friction surfacing** – Improve skid resistance. To be used at accident remedial sites where appropriate and sites where good skid resistance is essential such as the approaches to pedestrian crossings.

• **Re-texturing** – Improve skid resistance. Can be considered for all roads. This is a specialist process carried out by various methods which generally remove excess bitumen from the surface to allow the original surface texture to be re-established.

**Basic Maintenance**
Basic maintenance comprises minor works. Needs are assessed through the highway inspection regime, local knowledge and reports from the public.

These works comprise all patching and minor repairs including haunching and are determined through inspections, local knowledge or reports from the public.

The objective is to repair defective areas to maintain a satisfactory running surface and to prevent damage by ingress of water and frost. Highway safety is ensured by implementing continual programmes of work.
Types of defects to be recorded are:

- a pothole forming in any road which creates a hazard.
- failed existing patching.
- edge weakening which causes cracking, fretting, potholing and deformation of the carriageway.
- rutting and over-running which causes potholing of the edge of the verge or standing water.
- defective kerbs giving rise to a hazard.
- dangerously rocking flagstones and cracks or gaps between flagstones.
- projections including manhole frames and other ironwork.
- slippery surfaces.
- In-line cracking of kerbs.
- badly aligned and sunken kerbs.

HIGHWAY DRAINAGE SYSTEMS

Highway drainage systems fall into the main headings of:

- culverts (piped watercourses).
- grips and ditches (open watercourses).
- piped drainage.
- pumps.

Under these headings there are two distinct categories of drainage system maintenance and cleansing.

Drainage system maintenance:

- maintenance of existing carriageway drainage systems (gullies and pipework).
- replacement of kerbs for drainage purposes (kerbed drainage systems).
- maintenance of culverts.
- maintenance to pumps (carried out by specialist contractors).

The objectives of drainage system maintenance are to prevent water remaining on the carriageway, to prevent the ingress of water into the pavement structure and to maintain the highway in a safe condition.

The policy is to undertake minor works to ensure that existing drainage systems continue to function and to assess more major works in a R & R or improvement programme. Needs are assessed by the regular inspection of the highway, local knowledge and reports from the public.
Drainage cleansing:

- The testing and jetting of the highway drainage system. This includes drains, gullies, piped ditches, grips, carriageway drainage on structures and drainage of subways.
- As a guide all surface water drainage systems (the sole purpose of which is to remove water from the highway) are cleaned.
- The maintenance of ditches and grips through the removal of silt, vegetation growth and damage to allow free passage of water from the highway. The maintenance is confined to those ditches which are the responsibility of the Highway Authority (usually, ditches are the responsibility of the adjoining landowner, however S100 of the Highway Act 1980 gives powers to authorities to keep open ditches on land adjoining the highway).

As a consequence of limited resources and historically poor recording of drainage systems, it is not possible to undertake a programme of inspection for the entire highway drainage system; however, Area Highway Offices undertake a programme of investigation and cleansing using a high-pressure jetter. Priority is given to inspecting and cleansing sections which pose a high risk of flooding.

SOFT LANDSCAPED AREAS AND TREES

Maintenance of soft landscaped areas and trees includes grass cutting, highway tree and hedge maintenance, weed control and other verge maintenance.

Grass cutting (Urban): Roads subject to speed limits of 40mph or less, on land as defined in the highway register (maximum of eight cuts per season).

Grass cutting (Rural): Roads subject to speed limits greater than 40mph and at the following locations:

a) A and B roads (Cat 2, 3a & 3b)
   A width of 3 metres (where attainable) and visibility areas is cut twice per season. Any verge area more than 3 metres away from the carriageway is cut every two years (if necessary).

b) All other Rural Roads (Cat 4a & 4b)
   Verges shall be cut for visibility at road junctions, at road signs alongside well used footways and carriageways which have heavy pedestrian use. In addition, a single swathe cut 1.0 to 1.5 metre cut width on each side may be made once per season.

Tree and hedge maintenance: Foliage within or immediately adjoining the highway. The main functions are pruning and the removal of dangerous growth presenting a hazard.

The objectives include the Highways Authority’s duty under S96 of the Highways Act 1980. The policy is to examine all trees, shrubs and hedges within or adjoining the highway on an annual basis to establish if they are in a potentially dangerous condition.

Trees are important for visual amenity and nature conservation reasons and are retained and protected wherever possible. Pruning or felling of trees can be the subject of significant local concern, and is only done with specialist advice.
Particular care is given to privately owned trees where the owner is warned of any danger and given notice to take the necessary action.

Subject to failing to take action, S154 of the Highways Act 1980 empowers authorities to deal with hedges, trees and shrubs growing on adjacent land which overhang the highway and to recharge the reasonable costs of action.

Where trees are protected by a Tree Preservation Order, the Local Planning Authority will be consulted and an application for consent to do work is submitted.

Any action taken is in accordance with the requirements of the EC Nesting Birds Directive and the Wildlife and Countryside Act 1981 with regard to protection for birds and their nests. Any trimming will be done in late winter to avoid the bird nesting season and to allow birds and mammals the maximum opportunity to take advantage of any fruits and seeds present.

**Weed control:** Spraying to prevent weed damage to roads, footways and paved areas.

The objectives are to prevent the growth and establishment of noxious and other weeds and to prevent damage to footways by the growth of weeds. All weed spraying is carried out using approved pesticides in accordance with the Control of Pesticides Regulations 1986.

Sprays can also be used to eliminate weeds and control growth around posts carrying signs, along guard rails, along the edges of kerbs, growth of grass on the strip adjoining the edge of the carriageway and on central reservations. Further legislation is contained in the Ragwort Control Act 2003.

The Weeds Act 1959 requires authorities to take action to prevent growth of injurious weeds growing within the highway. The prescribed injurious weeds are:

- Ragwort
- Broad leaved dock
- Curled dock
- Creeping thistle
- Spear thistle.

Specialist advice is sought prior to dealing with these weeds.

In North Yorkshire, ragwort is a significant problem and must be pulled and removed. However, highway inspectors are able to identify all noxious weeds including Japanese Knot Weed and Giant Hog Weed.

**Verge Management for Biodiversity**

Roadside verges are now being seen as essential areas of wildlife habitat and the intention is to manage our verges to support the growth of wildflowers which will in turn provide food and shelter for pollinating insects, other invertebrates, birds and small mammals. Although the policy is in its infancy some of the actions include cutting the
verges before and after (but not during) flowering, this will allow the natural seeding of the verges.

A ‘Verge Aware’ scheme will be piloted in order that all staff working on verges, including council staff and those working for the utility companies, know what is to be achieved.

**FENCING AND BARRIERS**

Fencing and barriers comprise safety fencing, pedestrian guard rails, and (where the Highway Authority is responsible) boundary fencing and walls.

The objective of maintaining fences and barriers is to ensure they are in a structural condition fit for purpose and not be a danger.

**ROAD MARKINGS AND STUDS**

This category comprises the maintenance and replacement of existing road markings and studs (also called ‘cats-eyes’).

The objective of road markings and studs is to define carriageway lanes and edges. They also provide information regarding warning, parking, waiting and other restrictions in a manner clearly visible by day and night.

The policy is to ensure that the objective is achieved by renewal or replacement as necessary and needs are assessed by:

- reports of defects from highway inspections.
- complaints of from members of the public.
- replacement of lines as a result of carriageway repairs.
- identification of missing road studs upon completion of winter service operations.

The standards for markings and studs are as follows:

- road markings – renewed on main roads when approximately 30% of the area becomes ineffective.
- lines and studs – replaced after surfacing or surface dressing works.

During resurfacing works, ‘No Road Markings’ boards are displayed until all markings have been replaced.

**TRAFFIC SIGNS AND BOLLARDS**

This category comprises the cleaning and replacement of existing signs, posts and bollards

The objectives are to keep traffic signs legible at all times and remove obsolete signs.

Needs are assessed through routine highway inspections, reports of defective signs from cleaning operatives and defect reports from members of the public. The policy is to clean, repair, replace or remove as necessary.
Examples of defects are:
- anything affecting the legality of important warning or regulatory signs.
- damage to signs and bollards resulting in the sign being in a dangerous condition.
- missing traffic cylinders across gaps in central reserve fencing.

**TRAFFIC SIGNALS, PEDESTRIAN AND CYCLE CROSSINGS**

The use of traffic signals within North Yorkshire has been used to provide:-
- improved facilities for vulnerable road users e.g. pedestrian crossings
- address congestion and safety issues at problem junctions
- swing bridge traffic management/ narrow bridge traffic management
- bus priority

There are 294 traffic signal sites in the County, about 70% of these are pedestrian crossings. This figure has been growing at about 7 sites per year over the last ten years and this growth is expected to continue.

The Council employs a contractor to maintain the existing traffic signals stock. The existing contract has been amended to allow for improved service delivery and reduced costs.

As part of the Council’s developing asset management based approach to highway maintenance, traffic signal sites are being assessed and refurbishment prioritised through whole life costing and site specific criteria. The primary objective is to keep the signal controlled crossings effective as far as possible.

**STREET LIGHTING**

Road lighting is provided in the following locations:
- Adjacent to speed humps
- To illuminate build-outs installed as part of traffic calming measures
- On new mini roundabouts
- As part of a highway improvement project
- Adjacent to new traffic signals that have a pedestrian phase
- As identified in accident investigation and analysis which identifies lack of lighting as a potential contributing factor

The programme of replacement street lighting columns (for damaged or dangerous street lighting columns) is identified as a consequence of routine structural testing.

The Council is committed to continuing the agreed 10 year replacement programme of defective concrete columns and has allocated £10 million over this period. The street lighting lamp replacement programme is directed towards reducing carbon emissions by using low energy bulbs.
BRIDGES

The use of the network hierarchy and extensive structures condition monitoring surveys within an overall asset management strategy is becoming the primary tools for planning the maintenance of all structures.

The current structures works programme is based upon the detailed analysis of structures inspections which are subject to an objective ranking system. Continued development of the HMMIS Structures module will enable better analysis of the data and Bridge Condition Indicators (BCIs) to be calculated which will allow the generation of works programmes based upon whole life costs and economic assessment.

The overall structures works programme includes a plan for the repair and strengthening of retaining walls. Condition surveys are being undertaken, the results of which are subject to an objective ranking assessment producing a prioritised list for maintenance.

REGULATORY FUNCTIONS

Standards in respect of regulatory functions are governed by law and can be the responsibility of organisations other than the County Council. In these cases affective co-ordination and liaison is essential.

New Roads and Street Works Act 1991
The New Roads and Street Works Act 1991 (NRSWA) is the legislation that enables utility companies to dig up the roads and footways. Objectives of the legislation are that Highway Authorities and Utilities co-operate with each other to ensure that disruption to all road users is minimised as far as possible, the integrity of the highway structure is maintained and the safety of those using the highway is not compromised.

Traffic Management Act 2004
The purpose of the Act is to ‘keep traffic moving’ by minimising congestion and disruption on the highway networks. In this respect, there is a statutory duty as Local Traffic Authority to "Manage the road network with a view to achieving, as far as may be reasonably practicable having regard to other obligations, policies and objectives, the following objective:

(a) securing the expeditious movement of traffic on the authority’s roads network
(b) facilitating the expeditious movement of traffic on roads networks for which another authority is the traffic authority"

The Council has nominated a Traffic Manager with responsibility for this ‘Network Management Duty’.

Further regulatory and enforcement duties include:

- footway vehicular crossings;
- public right of way;
- adoption of highways;
- highway register;
- licensing skips, hoardings, scaffolding, temporary road closure and Street Café’s etc;
• encroachments on the highway;
• illegal and unauthorised signs; and,
• illegal parking on verges and footways

WINTER SERVICE

The Council’s aim is to provide an efficient winter service, which will permit the safe movement of traffic throughout the County and keep delays to a minimum.

Legislation
The winter service policy has been developed in compliance with S41 and S150 of the Highways Act 1980.
The Railways and Transport Safety Act 2003 Section 111 introduced an amendment to S41 of the Highways Act 1980. This revision states that the Highway Authority is under a duty to ensure, as far as reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

Pre / Post Salt Applications

Routes

Priority 1 Includes all principal roads and important B Class, C Class and unclassified routes as approved by Members.

Priority 2 Includes the remainder of B Class and appropriate C class and unclassified roads as approved by Members. Note not all remaining C Class roads will be Priority 2.

Priority 3 The remainder of the network including estate roads.

Treatment

Winter Maintenance involves treating the highway to:

1. Prevent ice from forming known as "precautionary salting" or "pre-salting";
2. Melt ice and snow already formed, "post-salting".

Target Spread Rates of Salt

(a) Precautionary Salting
   (i) Salt stored under cover 10g/m² - 20g/m²
   (ii) Salt stored in the open 20g/m²

(b) Post Treatment Salting
    All methods of storage
    (i) Prior to snowfall, dependent upon forecast conditions 20g-40g/m²
(ii) Snow already on the road - depths in excess of 30mm ploughing and salting (up to 40g/m²)

(c) Hard Packed Snow and Ice

(i) Air temperature above -8C successive salting at 20-40g/m²

(ii) Air temperature below -8C gritting with single size abrasive aggregate not exceeding 6mm or 5mm sharp sand

Priority 1 routes will receive preferential treatment in all conditions. Pre-salting will only be carried out on Priority 1 routes unless the forecast is for extreme winter conditions in which case pre-salting of Priority 2 may be considered. Treatment will be completed within the times stated in this policy.

Pre-salting will normally be completed on an evening except where precipitation is likely to occur overnight. Where an evening pre-salt takes place with no precipitation some Priority 2 post-salting may take place the following morning subject to resources. If precipitation occurs after an evening pre-salt then Priority 1 post-salting will take place the following morning before any Priority 2 treatment is considered.

In widespread freezing and wet conditions Priority 1 and Priority 2 routes will be treated, as resources permit, but with preference to Priority 1 routes.

Priority 3 routes will not normally receive treatment unless freezing conditions persist for more than 72 hours. Treatment of Priority 3 routes in advance of the 72 hour rule in certain weather conditions will be allowed.

Timing

The majority of Priority 1 routes should be treated by 0700 hrs with the remainder by 0730 hrs, subject to changes in forecast and/or weather conditions.

In general, treatment will not take place between 2300 hrs and 0500 hrs, however specific conditions may require attention.

Priority 2 and 3 routes will be treated as soon as practicable after Priority 1 routes have been completed.

Priority 2 routes are treated every morning (when the weather requires it) after the Priority 1 routes are completed unless the prevailing conditions and the forecast in the judgment of the Local Area Manager renders further treatment unnecessary.

For guidance this would mean that, in general, Priority 2 routes will be treated unless conditions were improving and any ice/frost would thaw before the treatment of the route is completed.

Footways
Category 1 footways will be post salted in exceptional conditions before 09:00hrs with the remaining footways and cycling network being treated in priority order subject to available resources. Cycleways, not contiguous with carriageways, will not be treated.

**Snow Clearance Priority**

**Carriageways**

Light snow (up to 25mm) - as pre-salting

Moderate snowfall (25mm to 100mm)
- Priority 1 routes passable in three hours
- Priority 2 routes will be cleared when conditions allow resources to be freed from Priority 1 routes

Heavy snowfall (over 100mm)
- In these circumstances available resources including reserves, contractors and farmers will be mobilised to keep Priority 1 routes passable and to maintain at least one route to all centres of population.

It should be noted that continuous snowfall and strong winds will influence snow clearing operations considerably and will therefore delay completion times.

**Footways**

When conditions and resources permit snow will be cleared from shopping streets, then heavily used footways (main access routes) then other footways in prolonged conditions.

**Unadopted Roads**

The County Council will not carry out winter maintenance on unadopted roads. However, specific requests from District and Parish Councils may be considered only if resources are available and all relevant costs are paid by them.

**Snowploughing**

No policy has been approved for snowploughing operations. Reference should be made to Department of Transport Winter Maintenance Code of Practice: Section 10

**Snow Fences**

Snow fences are not in use in this County but powers to erect fences and secure easements are provided in the Highways Act 1980, covered by Sections 102, 249, 251, 291 and 292. For guidance in design and location of snow fences references should be made to TRRL Report LR 362 “SNOW FENCES”.

**Salt Bins / Salt Heaps**

Salt bins or salt heaps will only be provided in accordance with the criteria set out in the salt bin / heap assessment form. Salt bins or salt heaps will be spaced a minimum of 40metres apart and contain a maximum of 0.5 tonne of salt. A salt bin will be provided
at the main access to each school which is not on a priority 1 treatment route. Care must be taken to avoid locating the bins where they may be used for the disposal of litter or act as litter traps.

The County Council will consider provision of salt bins at locations not meeting the criteria, where salt bins and their replenishment with salt is funded by another local authority.

Forecasts and Decision Making
An important part of our Winter Service is to maintain essential access to remote communities during periods of extreme snowfall, which sometimes means removing snow drifts many feet thick.

The Council has twelve Ice Prediction Stations (IPS) across the County which supply detailed information on the weather and collects information from an additional three stations operated by the Highways Agency on the adjacent Trunk Road network, this information is provided direct to computers located in each Area Highway Office and at County Hall. We also have access to another thirteen stations outside the County for monitoring purposes.

In order to improve the quality of weather forecasting information the Council has entered into a Winter Bureau Service contract with Meteogroup and Vaisala which includes a 24 hour consultancy service. As part of our ongoing system of improvements we will install cameras at all IPS and install surface temperature sensors and cameras on the most remote parts of the network.

The Council has produced an information leaflet entitled ‘Your Guide to Winter Service in North Yorkshire’. This leaflet details the service provided and explains the Winter Service policy. It also provides contact details for enquiries and gives advice on travelling in winter conditions. The information in this leaflet is also included annually in the autumn edition of the NY Times, delivered to every home in the County and is available on the North Yorkshire website.

More details regarding salting, weather forecasts and snow clearance can be found in the Council’s Winter Service Operational Manual.

WEATHER AND OTHER EMERGENCIES

Climate Change
Predictions for the future indicate that the climate is changing. During the past few years evidence is emerging of hot, dry summers and warm, wet winters with episodes of intense rain and increased incidence of flooding.

Climate change will influence highway maintenance as follows:

- increased risk of flooding from rivers and sea
- increased flooding from inadequate drainage
- deterioration and damage to highway infrastructure from subsidence, heave and high temperature
- damage to bridges, signs and tall structures from increased wind speed
increased road safety problems from adverse driving conditions and deterioration of infrastructure

effects on the management of trees, landscape and biodiversity.

In response to the increased frequency of flooding and the Flood and Water Management Act the Council has appointed a Flood Management Officer, who’s responsibility will be to draft the Council’s Flood Management Plans in conjunction with District Councils, landowners, water companies and other relevant drainage authorities.

Emergency response in North Yorkshire is governed by the nature and extent of the emergency and is categorised as major and minor.

**Major**

Major civil emergencies are situations where extensive relief needs to be organised following an accident such as a severe explosion, an aircraft crash, a natural disaster or a major hazard from toxic chemicals. In such a situation, the Council will provide support to the emergency services in the form of plant, vehicles and manpower. Detailed procedures and information are contained within the Council’s Civil Emergency Scheme.

**Minor**

Minor emergencies include:

- Localised flooding
- High winds
- High temperatures
- Structural collapse
- Road accidents
- Spillages

The seven Area Highway Offices under the control of the Area Managers provide response to these emergencies. Guidance and procedures for dealing with these situations are contained within the Minor Emergency Operational Plan. Highways North Yorkshire has a network of ‘out of hours’ contacts to which minor emergencies can be reported outside normal working hours.

The Emergency Planning Unit is an additional contact for Environment Agency Flood Warnings and Meteorological Office Severe Weather Warnings. On receipt copies are faxed to the Area Highway Offices to provide early warning and trigger the planning and mobilisation of the resources necessary to deal with the anticipated problems.

**PERFORMANCE MANAGEMENT**

**Introduction**

Performance management is a fundamental component of highway maintenance and there is a requirement for authorities to secure continuous improvement in the way we carry out our functions.

In order to demonstrate continuous improvement, performance is continually measured.

**PERFORMANCE INDICATORS**
The Performance Indicators that are applicable to highway maintenance monitored by the Council are as follows:

- The Number of Highway works on Traffic Sensitive Streets
- The Condition of heavily used footways (Cat 1, 1a & 2)
- The Condition of Principal roads
- The Condition of Non-Principal classified roads
- The Condition of Non-Principal unclassified roads
- Damage to roads and pavements – The total number of reported incidents of dangerous damage to roads and pavements repaired or made safe within 24 hours from the time that the authority first became aware of the damage, as a percentage of such incidents.

BENCHMARKING
Benchmarking is a systematic approach to business improvement and is usually a method of comparing performance against similar organisations that can then be integrated into an authority’s own service delivery.

The participation of an authority in a benchmarking club, which is both suitable and appropriate for its needs, is an essential component in enabling performance to be properly measured and compared. It will also assist in promoting targets that are both achievable and can demonstrate continuous improvement.

The Council joins in with the ‘National Highways & Transport Survey’ which is carried out by Ipsos MORI for a range of local councils across England including. The results of the survey enable us to find out what people think about local transport services and to compare this with what residents think in other parts of the country. This provides us with an important way of assessing our performance and allow us to focus our improvements on where they are wanted.

PUBLIC ENGAGEMENT
In addition to the comprehensive consultations carried out on the Local Transport Plan, consultations on highway maintenance have also been introduced as part of the Citizen’s Panel surveys.

Prior to individual highway maintenance schemes commencing, a series of notification measures are carried out, including the erection of advance warning information boards on routes and letters sent out to affected residents and interested parties including business, elected members and Parish Councils. Information provided includes the reason for the works, projected duration, any diversion routes and plans, how residents are affected and a contact name for further enquiries.

STATUTORY PRIORITIES
The highest priority for any highway maintenance activity is the compliance with minimum statutory duties and safety obligations. Statutory duties are defined under various enactments with particular emphasis in the Highways Act 1980.
In the main, the statutory obligations in regard to highway maintenance cover safety implications of risks to highway users. The definition of minimum statutory duty is therefore covered by risk management and the costs of undertaking such works must take first priority on the maintenance budget.

PARTNERING AND SERVICE DELIVERY

PARTNERED WORKS CONTRACT

In regard to service delivery of highway maintenance works, the County Council has a partnership contract to procure most works with contractor Balfour Beatty Workplace (BBW)

The services covered under this contract include:

- Basic Maintenance
- New Traffic Signs
- Maintenance of Traffic Signs
- Gully Emptying
- Grass Cutting
- Resurfacing and Reconstruction (Non-Principal Roads)
- Resurfacing and Reconstruction (Principal Roads)
- Flood Damage Repair Works
- Road Lighting (Works)
- Surface Dressing (Non-Principal Roads)
- Surface Dressing (Principal Roads)
- Winter Service
- Traffic Regulation Orders
- Emergency Sweeping
- Public Rights of Way Maintenance
- Bridge Maintenance
- Horticultural Maintenance
- Rechargeable Works

High value schemes are subject to individual tenders. Traffic signal maintenance is dealt with under a separate term contract.

PARTNERING

Considerable effort has been expended by the tripartite group; ‘Highways North Yorkshire’ (North Yorkshire Highways & Transportation, Jacobs Consultancy and BBW) to foster closer forms of partnership.

These arrangements are based on:

- Commitment to shared culture, values and trust
- Joint management structures
- Open book accounting and financial systems integration
- Shared management systems (environmental management)
- Performance management regime
- Agreed system for shared risk and reward
INNOVATION
The Highways North Yorkshire innovation group comprising the County Council and the two partners (currently Jacobs and BBW) has developed an Innovations Group which is responsible for ensuring all the staff within the partnership are actively seeking innovative methods to improve the service including a register of innovative solutions and their application to highway engineering activities. The process includes the identification of novel procedures and new materials which are tested in specific areas, monitored and if found to be suitable are rolled out for use around the County. The partnership sees innovation as a way to carry out improvements to service delivery standards, whilst bringing down service costs.

INTER-AUTHORITY COLLABORATION
Joint arrangements with neighbouring local authorities are actively encouraged with the following examples:
- Shared Framework Contract for Highway Information data collection and Weather Forecast contract jointly with City of York
- Asset Valuation working group with North of England and Yorkshire and Humberside local authorities.
- Cross-boundary agreements for maintenance operations with our twelve neighbouring Highway Authorities and the Highways Agency.
# Glossary of Terms

## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AADT</td>
<td>Annual Average Daily Traffic total</td>
</tr>
<tr>
<td>BB</td>
<td>Balfour Beatty</td>
</tr>
<tr>
<td>BVPI</td>
<td>Best Value Performance Indicator</td>
</tr>
<tr>
<td>CI</td>
<td>Condition Index</td>
</tr>
<tr>
<td>CSC</td>
<td>Characteristic Scrim Coefficient</td>
</tr>
<tr>
<td>CSS</td>
<td>County Surveyors Society</td>
</tr>
<tr>
<td>CV</td>
<td>Commercial Vehicles</td>
</tr>
<tr>
<td>CVI</td>
<td>Coarse Visual Inspection</td>
</tr>
<tr>
<td>DEFRA</td>
<td>Department for Food and Rural Affairs</td>
</tr>
<tr>
<td>DfT</td>
<td>Department for Transport</td>
</tr>
<tr>
<td>DMRB</td>
<td>Design Manual for Roads and Bridges</td>
</tr>
<tr>
<td>DVI</td>
<td>Detailed Visual Inspection</td>
</tr>
<tr>
<td>GPRS</td>
<td>Ground Penetrating Radar Survey</td>
</tr>
<tr>
<td>HA</td>
<td>Highways Agency</td>
</tr>
<tr>
<td>HCV</td>
<td>Heavy Commercial Vehicle</td>
</tr>
<tr>
<td>IAN</td>
<td>Interim Advice Note</td>
</tr>
<tr>
<td>IHT</td>
<td>Institution of Highways and Transportation</td>
</tr>
<tr>
<td>IL</td>
<td>Investigatory Level</td>
</tr>
<tr>
<td>ISO</td>
<td>International Standards Organisation</td>
</tr>
<tr>
<td>LTP</td>
<td>Local Transport Plan</td>
</tr>
<tr>
<td>NRSWA</td>
<td>New Roads and Street Works Act</td>
</tr>
<tr>
<td>OSCAR</td>
<td>Ordnance Survey Centreline Alignment of Roads</td>
</tr>
<tr>
<td>PSV</td>
<td>Polished Stone Value</td>
</tr>
<tr>
<td>RIS 3</td>
<td>Risk Management Protocol Version 3</td>
</tr>
<tr>
<td>RP</td>
<td>Rules and Parameters</td>
</tr>
<tr>
<td>R&amp;R</td>
<td>Resurfacing and Reconstruction</td>
</tr>
<tr>
<td>SCANNER</td>
<td>Surface Condition Assessment for the National Network of Roads</td>
</tr>
<tr>
<td>SCRIM</td>
<td>Sideways force Coefficient Routine Investigation Machine</td>
</tr>
<tr>
<td>SHW</td>
<td>Specification for Highway Works</td>
</tr>
<tr>
<td>TAMP</td>
<td>Transport Asset Management Plan</td>
</tr>
<tr>
<td>VMS</td>
<td>Variable Message Sign</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UKPMS</td>
<td>United Kingdom Pavement Management System</td>
</tr>
</tbody>
</table>
Annex 1 - Transport Asset Management Plan

What is Transport Asset Management?
“Asset management is a strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers.”

Background
In 2004 the County Surveyors Society (CSS) produced the Framework for Highway Asset Management to assist Local Highway Authorities in the development and implementation of Asset Management. Central to Asset Management is the development of cost effective long term plans, and the importance of these has also been recognised by the Government:

“Transport is vital to the economy and the way we live. Decisions we make now will have an impact for decades to come. It is essential that we take the long-term view.”

The Future for Transport: A Network for 2030
White Paper, Department for Transport, 2004

A fundamental component of long term planning is to ensure the asset base is preserved and replenished in a sustainable way without imposing an undue financial burden on future generations.

The Importance of Transport Asset Management

The local highway network and other local transport infrastructure assets represent by far the biggest capital asset that the UK public sector holds. It is vital to national economic prosperity. The comfort and safety in which people can move from place to place and the appearance of local streets are important contributors to the quality of life. But few authorities know what their infrastructure is worth, and detailed information on what it consists of, and the condition it is in, is patchy and often out of date. Nationally there is a perception that spending is insufficient to maintain our transport infrastructure to satisfactory standards. Neither Central Government (Department for Transport) nor Local Government (Highway Authorities) have robust consistent information about the true cost of holding and maintaining the assets, or the size of maintenance and investment backlogs that it needs to drive down the cost base and improve service delivery.

Asset management could and should play a key role in tackling these problems. In other countries and other UK sectors where infrastructure asset management is well established, it has delivered significant value for money savings and service benefits. North Yorkshire will, in implementing transport asset management be able to demonstrate both the potential to achieve equivalent benefits and that it is possible to prioritise implementation so as to gain early benefits from focused initial investment.

Development and Implementation of the North Yorkshire Transport Asset Management Plan
“Asset management is a strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers.”

The definition brings together themes that define an asset management approach:

<table>
<thead>
<tr>
<th>Strategic Approach</th>
<th>A systematic process that takes a long term view</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole of Life</td>
<td>The whole-life / life-cycle of an asset is considered</td>
</tr>
<tr>
<td>Optimisation</td>
<td>Maximising benefits by balancing competing demands</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>Allocation of resources based on assessed needs</td>
</tr>
<tr>
<td>Customer Focus</td>
<td>Explicit consideration of customer expectations</td>
</tr>
</tbody>
</table>

A typical highway network comprises road pavements, footways, streetlights, cycleways, earthworks, signs, drains, road markings, traffic signals, street furniture, structures and verges. The principles of asset management should be applied to the management of all these components of the asset.

**What are the benefits of Asset Management?**

**What is a Benefit?**
A benefit occurs when the customer receives an improved level of service for the resources available, i.e.:

- The same or better level of service at a reduced cost
- A better level of service at the same or marginally increased cost or
- Where, owing to budgetary constraints, it is not possible to maintain the level of service, the effects of the reduced level of service is mitigated through the efficient use of resources

**Specific Benefits**
Specific benefits of an asset management approach are:

- Reduced life-cycle costs
- Defined levels of service
- The ability to track performance
- Improved transparency in decision making
- The ability to predict the consequences of funding decisions
- Decreased financial, operational and legal risk and
- Ability to discharge statutory valuation and financial reporting responsibilities

The specific benefits of asset management are stepping-stones to the realisation of better value.

**Better Value**
Asset management facilitates better decision-making by supplementing instinctive engineering judgement and supposition with analysis (financial, economic and engineering). It thereby enables an authority to better understand and manage the relationship between cost and performance. The equation is presented below.
where: \[ \text{Performance} = \sum \text{Level of service; condition, availability, safety etc} \]

A better understanding of this relationship will facilitate more informed discussion and will enable the highway authority to document the effects of under-funding on the levels of service provided and allow an assessment of the concurrent risk taken.

**Implementing Asset Management**

The following simple macro process is an example of a method used to implement asset management.

![Macro process diagram](image)

It recognises that asset management is not entirely new and that each authority will already be practicing elements of the required processes. Implementation needs therefore to result in a method, which complements current Practice.

Asset management is a process that enables the people who manage the asset to do so in a more informed manner. The structured approach it necessitates can require amendment of established practices and a change of mindset. Implementation Plans therefore need to address issues that include:

<table>
<thead>
<tr>
<th>Processes</th>
<th>Existing and desired procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data &amp; Systems</td>
<td>Collection, storage, management and analysis of asset related data</td>
</tr>
<tr>
<td>People</td>
<td>Organisation, cultural change and resistance</td>
</tr>
</tbody>
</table>

33
As part of our earlier preparatory work we identified an **assessment model** for the further development, improvement and implementation of asset management practice within North Yorkshire.

The model illustrated identifies **6 key components** considered essential to the long term successful implementation of asset management practice. It should be noted that an asset management plan is only one of these. A range of issues must be addressed in addition to the production of an appropriate document.

- **People**: As part of the Council’s commitment to Investors In People assist in identifying learning and development opportunities to assist in the service wide implementation of asset management practice.

- **Data**: Create a formalised data model and information management practices and police them properly to demonstrate their importance. Focus data collection activities upon the recording and formalised corroboration of age and expected service life estimates.

- **Process**: review current business processes with a view to defining the core of an asset management system. The system should be built around the delivery of information into key decision making processes of establishing budgets, allocating budgets, communicating risk, obtaining formal approval of service standards / Levels of Service (LoS) and engaging with customers over expectations and LoS.

- **Systems**: The County Council has recently entered into a contract with Symology Limited for the provision of an integrated Highways Management information System (Insight). Implementation is currently ongoing but the County Council would benefit from advice and assistance in ensuring that the system fulfills its potential and that it would benefit having a proper documented understanding of the processes the system is designed to support.

- **Finance**: Assistance with the development of an alternative budget based upon asset management principles and to critically review it and to recognise and plan for improvements in data quality and expected life predictions.

- **Transport Asset Management Plan**: Assistance with the improvement of the County Councils draft TAMP and its migration towards an adopted policy document.
In order to progress the development and implementation Asset Management the County Council has entered into Framework Contracts with a number of Engineering Consultancy Partners. Tender / Contract evaluation was primarily quality based and in accordance with the initial OJEC procurement notice the following organizations are included in the framework agreement:
Atkins, Capita Symonds, EC Harris, Exp Consulting, Halcrow, Jacobs UK and Chris Britton Consultancy

The Development Framework

The framework is based on a generic asset management system. It is shown diagrammatically below and described in more detail in the remainder of this document. The framework illustrates how various activities are linked. It is the linking of these activities into an overall management framework that is the principal difference between asset management and current practice.

Key elements of the Transport Asset Management Plan are therefore:

A. A robust framework of policies and objectives for the service

B. A defined hierarchy for all elements of the highway network

C. A detailed inventory of all relevant components of the asset
To be operationally effective these key components need to be supplemented by:

- A comprehensive management information system for inspecting, recording, analysing, prioritising and programming all maintenance works

- A comprehensive set of financial management information about transport assets which is robust and consistent between transport authorities

Goals, Objectives and Priorities

Highway asset management is a way of running the ‘business’ of operating a highway network. The development of asset management processes and plans must therefore be guided by the existing overarching corporate objectives of the authority. It is essential to define the relationship that is desired between asset management priorities and other corporate goals and objectives.

In April 2006 as part of the LTP2 process the County Council adopted its Highway Maintenance Plan which was based on the national code of practice for Highway Maintenance but adapted for use on the County highway network.

The key outcome of the work to develop the Highway Maintenance Plan was the definition and identification of the Network Hierarchy. The Network Hierarchy is a means of classifying the network on the basis of the volume and composition of traffic using it whilst recognising the difference in traffic levels between urban and rural roads. The hierarchy also takes account of risk assessments and the role of the particular section of the carriageway, footway or cycleway in the network.

The Network Hierarchy forms the foundation upon which all maintenance functions and activities are based. Such activities include the frequency of highway inspections, details of highway defects to be recorded, the frequency and type of routine and cyclic maintenance activities (gully emptying, urban and rural grass cutting etc), the frequency and type of annual network condition surveys (i.e. it provides a robust framework of policies and objectives for the service) and as such will form the basis for the development and evolution of a number of the elements necessary to implement the TAMP.

A Defined Network Hierarchy

The hierarchy is the foundation of a coherent, consistent and auditable maintenance strategy and is fundamental in determining policy priorities. It is the link between maintenance policy and implementation and will assist in determining standards for design and new construction.

It is important that hierarchies are regularly reviewed to reflect changes in network characteristics and use so that maintenance policies, practices and standards reflect the actual current use of the network. The aim of the road hierarchy is to:

- allow programmes of inspections to be set to enable statutory duties to be fulfilled
- allocate resources according to the importance of the road within the network
- set policies and standards according to the importance of the road within the network

It is the intention to use the hierarchy as the basis for the specification of the standard of repair required to keep the road / footway / cycleway in reasonable condition having regard to its function and the volume of traffic using it.

The network hierarchy is sub-divided into three sections to cover carriageways, footways and cycleways, and the local hierarchies for North Yorkshire in 2009-10 are as follows:

### Carriageways

<table>
<thead>
<tr>
<th>Category</th>
<th>Hierarchy</th>
<th>Type of Road</th>
<th>Detailed Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Motorway</td>
<td>Not applicable</td>
<td>Not maintained by the County Council</td>
</tr>
<tr>
<td>2</td>
<td>Strategic Route</td>
<td>Trunk and some Principal &quot;A&quot; roads between Primary Destinations</td>
<td>Trunk Roads are not maintained by the County Council, otherwise Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.</td>
</tr>
<tr>
<td>3a</td>
<td>Main Distributor</td>
<td>Major Urban Network and Inter-Primary Links. Short-medium distance Traffic</td>
<td>Routes between Strategic Routes and linking towns to the strategic network with limited frontage access. In urban areas speed limits are usually 40mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.</td>
</tr>
<tr>
<td>3b</td>
<td>Secondary Distributor</td>
<td>B and some C class roads. Some unclassified urban bus routes carrying local traffic with frontage access and frequent junctions</td>
<td>In rural areas these roads link the larger villages and industrial sites to the Strategic and Main Distributor Network. In built up areas these roads have 30mph speed limits and very high levels of pedestrian activity with some crossing facilities. On street parking is generally unrestricted.</td>
</tr>
<tr>
<td>4a</td>
<td>Link Road</td>
<td>Roads linking between the Main and Secondary Distributor Network</td>
<td>In rural areas these roads link the smaller villages to the distributor roads. In urban areas they are residential or industrial or inter-connecting roads with 30mph speed limits random pedestrian movements and uncontrolled parking.</td>
</tr>
<tr>
<td>4b</td>
<td>Local Access Road</td>
<td>Roads serving limited numbers of properties carrying only access traffic</td>
<td>In rural areas these roads serve small settlements and provide access to individual properties and land. They are sometimes only single lane width and unsuitable for HGV. In urban areas they are often residential loop roads or culs de sac.</td>
</tr>
<tr>
<td>5</td>
<td>Back Street</td>
<td>Roads serving limited numbers of properties</td>
<td>Only applicable to urban areas, will typically be the rear access road to terraced properties</td>
</tr>
<tr>
<td>6</td>
<td>Unsurfaced Road</td>
<td>Unsurfaced Road, may provide access to residential / commercial properties or connect to the surfaced highway network</td>
<td>Only applicable in 'rural' locations includes those roads locally known as 'Green Lanes'.</td>
</tr>
</tbody>
</table>

The Road Class Network / Categorised Network Hierarchy is better reflected in the following table:
<table>
<thead>
<tr>
<th>Road Class</th>
<th>Hierarchy / Category</th>
<th>Network Length / Km</th>
<th>Road Class Network Length / Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>357.072</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3a</td>
<td>471.403</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3b</td>
<td>71.374</td>
<td>899.849</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>1.956</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3a</td>
<td>141.819</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3b</td>
<td>470.763</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>4a</td>
<td>41.647</td>
<td>656.185</td>
</tr>
<tr>
<td>C</td>
<td>3a</td>
<td>6.538</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3b</td>
<td>502.681</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4a</td>
<td>1,492.432</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4b</td>
<td>747.765</td>
<td>2,749.416</td>
</tr>
<tr>
<td>U</td>
<td>3a</td>
<td>7.341</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>3b</td>
<td>77.783</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>4a</td>
<td>304.015</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>4b</td>
<td>3,638.535</td>
<td>4,027.674</td>
</tr>
<tr>
<td>U</td>
<td>5</td>
<td>43.767</td>
<td>43.767</td>
</tr>
<tr>
<td>UUR</td>
<td>6</td>
<td>740.364</td>
<td>740.364</td>
</tr>
</tbody>
</table>

Totals 9,117.255 9,117.255

And in summary:

<table>
<thead>
<tr>
<th>Road Category</th>
<th>Network Length / Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>359.028</td>
</tr>
<tr>
<td>3a</td>
<td>627.101</td>
</tr>
<tr>
<td>3b</td>
<td>1,122.601</td>
</tr>
<tr>
<td>4a</td>
<td>1,838.094</td>
</tr>
<tr>
<td>4b</td>
<td>4,386.300</td>
</tr>
<tr>
<td>5</td>
<td>43.767</td>
</tr>
<tr>
<td>6</td>
<td>740.364</td>
</tr>
<tr>
<td>Total</td>
<td>9,117.255</td>
</tr>
</tbody>
</table>

Footway Hierarchy

<table>
<thead>
<tr>
<th>Category</th>
<th>Name</th>
<th>Description</th>
<th>Length / Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Prestige Walking</td>
<td>Very busy areas of towns and cities with high public zones space and streetscene contribution</td>
<td>6.052</td>
</tr>
<tr>
<td>1</td>
<td>Primary Walking</td>
<td>Busy urban shopping and business areas and main Routes pedestrian routes</td>
<td>49.409</td>
</tr>
<tr>
<td>2</td>
<td>Secondary Walking</td>
<td>Medium usage routes through local areas feeding into Routes primary routes, local shopping centres etc</td>
<td>144.339</td>
</tr>
<tr>
<td>3</td>
<td>Link Footways</td>
<td>Linking local access footways through urban areas</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Local Access Footways</td>
<td>associated with low usage, short estate roads to the main routes and cul-de-sacs</td>
<td>Approx 4,142.672</td>
</tr>
<tr>
<td>5</td>
<td>Rural Footways</td>
<td>Footways linking rural communities</td>
<td></td>
</tr>
</tbody>
</table>

Total 4,342.472

We have yet to collect and collate inventory data for the remainder of the Category 3, 4 and 5 Footway Network

Cycleway Hierarchy
We have yet to collect and collate inventory data for the Cycleway Network

**North Yorkshire Strategic Traffic Model (NYSTM)**

The current categorised Network Hierarchy model was based upon a static traffic model developed from the traffic data held within the County Councils Traffic Count database. The Network Hierarchy model was due to be re-assessed during 2010/11, however, as a consequence of higher than anticipated traffic growth across the County Councils network we have chosen to undertake this development work during the latter part of 2009/10 so that amendments to the maintenance network categories can be in place for the LTP3 period.

The County Council has commissioned its Engineering Consultancy partner, Jacobs UK to develop a county wide Strategic Traffic Model (NYSTM), the analysis of which will enable the Categorised network hierarchy to be updated (and reviewed more effectively, efficiently and economically).

As with previous detailed traffic models developed for North Yorkshire by Jacobs, we intend to use the VISUM software package to construct the NYSTM. VISUM is a ‘strategic’ macroscopic traffic modelling tool, which enables large areas of the transport network to be modelled. As the detailed local models have been developed using VISUM software, it ensures a consistent and therefore compatible modelling approach to network wide modelling.

In order to produce a validated base model that represents the specified daily it is necessary to use a large amount of survey data. The scope of the model is such that it would not be cost effective to undertake a bespoke survey exercise. Moreover, the County Council already has a comprehensive set of permanent ATC sites on the major roads within the County. The model development will therefore only make use of existing data. A desk based data collection exercise will therefore be undertaken where the following sets of data will be sought:

- Automatic Traffic Counts (ATCs)
- RSI Data (if fit for purpose)
- Manually Classified Counts (for splitting ATC data)
- Traffic speeds from traffic master
- Digital mapping data
- Aerial photography

<table>
<thead>
<tr>
<th>Category</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cycle Lane</td>
<td>A cycle lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure point (no entries allowing cycle access)</td>
</tr>
<tr>
<td>B</td>
<td>Cycle Track</td>
<td>A highway route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or un-segregated</td>
</tr>
<tr>
<td>C</td>
<td>Cycle Trails</td>
<td>Leisure routes through open spaces. These are not necessarily the responsibility of the highway authority, but may be maintained by an authority under other powers or duties</td>
</tr>
</tbody>
</table>
- Population
- Employment
- Public transport routes & timetables
- Accident data
- Car park locations
- Traffic regulation orders

In addition to the above, the data used in the development of any future local traffic models will be migrated to the County Wide model to allow for compatibility of flows between the two model hierarchies.

**A Detailed Inventory of all relevant components of the Transport Asset**

Asset inventory is the foundation stone on which asset management processes are built. It is only when appropriate inventory and condition data are available to all staff involved in the process that an overall view and consistent management approach can be achieved.

When analysed in combination with condition and other data sets, e.g. accidents, traffic flows, this data can provide new information on which critical decisions can be based. It is then possible to start implementation of some of the more advanced asset management processes such as optimisation and risk management that all rely on the existence of a comprehensive, accurate and up to date asset inventory.

During 2008/09 the County Council entered into a number of Framework Contracts (effective from the 1st April 2009) for the collection of a broad spectrum of highway condition (SCANNER, SCRIM, UKPMS CVI, UKPMS DVI, Falling Weight Deflectometer etc) and inventory data (covering both manual and machine based data capture options plus the potential to gather more sub-surface ‘construction’ information using GPR (Ground Penetrating Radar).

The development of a robust, fully detailed inventory requires both expenditure and manpower and needs to be carefully prioritised within the context of a considered information strategy and covers the following asset groups:

- Carriageways
- Footways
- Cycleways
- Structures
- Street Lighting and illuminated signs
- Traffic Management systems
- Street furniture (e.g. safety fencing, signs etc)

In conjunction with our preferred contractor (Atkins) we have reviewed previously captured asset information and future surveys will include the collection of ‘asset condition’ data (e.g. good, adequate, poor or ‘out of specification’) which will be used as we improve our asset management regimes.
The final tranche of the initial Asset Inventory collection surveys will be undertaken during 2009/10 and 2010/11 by which time we will have collected ‘surface’ data from the ‘surfaced’ highway network (Cat 2, 3a, 3b, 4a, 4b and 5 carriageways).

Essentially the priorities are obvious, in the first instance we need to concentrate on the large high value / high spend items first and then progressively tackle the lower value, lower spend items and extend the detail of the inventory.

For most authorities carriageways and footways typically represent 70-80% of gross asset value, and account for the majority of capital maintenance expenditure. Having good information about these is essential for both asset management and valuation. The County Council has an accurate and detailed record of carriageway lengths (as these are required to be reported to the Department for Transport on an annual basis) but has limited knowledge of carriageway widths. The County Council does not however have particularly good records pertaining to footways or Cycleways in terms of length and width except for those heavily used footways whose condition is monitored under BVPI 187. The acquisition of this information is therefore a high priority.

Structures typically represent between 10 and 20% of the gross asset value. The County Council has good information on bridges (e.g. inventory and condition data in accordance with the national CSS guidance), and bridges normally constitute the major part of highway structures, information on other structure types (e.g. retaining walls, structural earthworks etc) is not as good, although information on the number / quantity of these assets and condition information is being targeted for improvement.

The County Council has good information about street lighting and traffic management systems but has little information about street furniture, but since this typically accounts for a very small proportion of gross value inventory collection is not a first priority.

**Other Ongoing Asset / Inventory Collection Exercises**

**Drainage** – We make a capital allocation of £500,000pa to undertake drainage replacement and improvement works targeted at locations of highway flooding (where residential properties are affected); a key outcome is the generation of drainage location and inventory records.

**Weather / Meteorological Stations** – We have a network of 15 Weather Stations primarily used in conjunction with our winter service (weather forecasts and thermal mapping of the network to identify climatic zones) for which we have both an annual inspection regime and capital replacement programme (£20,000pa).

**Traffic Data Collection** – We have 225 permanent traffic data collection counters (vehicular and cycle) which are monitored on a monthly basis for which we have a full inventory and are currently developing a capital replacement programme (contract cost £69,300pa)

**Traffic Signals** – Whilst we have a cyclic inspection regime in place we currently only have basic inventory data, we are currently undertaking detailed inventory and condition data collection for the traffic signal stock at a cost of £30,000.
Street Lighting – As a consequence of introducing structural integrity testing on the Councils stock of concrete street lighting columns (21,500) the service has been awarded £10M of internal capital funding over a 10 year period to accelerate the column replacement programme.

Bridges – In addition to the annual inspection and assessment programme of bridges (£140,000pa) we are currently implementing a programme of inventory and condition data surveys on highway retaining walls (£30,000pa). The structures Bridge Condition Indicator (BCI) is a key element in the prioritisation of the Bridges works programme.

Highway Plans - In addition to the statutory ‘List of Streets’ (Highways Act 1980, Section 36(6) - (highways maintainable at the public expense) the County Council has both inherited and developed (pre and post 1974) a map based interpretation of the List of Streets. In order to improve the availability of these records we are currently undertaking a digitisation project worth £250,000 funded through the County Councils corporate performance and transformation programme.

Network Referencing

In accordance with emerging best practice (since the early 1990’s) the County Council has developed two distinct network models to facilitate service delivery to resolve how collected / received data is location referenced.

A Highway Maintenance Network based upon Ordnance Survey road centreline data (originally OSCAR data but now superseded by ITN [integrated transport network] data which is broken down into links and nodes to facilitate the referencing of Network Condition data (derived from driven surveys which are either machine or visual based surveys) and asset / inventory data (which also includes National Grid Coordinates).

A Local Street Gazetteer (LSG) which provides the street network for the Electronic Street Works Register (ESWR) that is required by the New Roads and Street Works Act 1991 for the registration of all Utility Company and Third Party construction and maintenance activity on the highway network. The LSG now forms the underlying network model for the District Councils Local Land and Property Gazetteer (LLPG).

Despite the differing specifications / requirements of both networks there is increasing demand for data integration and an ability to combine data sets in order to interrogate the combined data for trends and exceptions. As a consequence of these demands we have initiated a detailed analysis of both networks with the intention of, where feasible reflecting the LSG in the Highway Maintenance Link and Node network.

Network Condition and Best Value Performance Indicators

The County Council holds high volumes of data about the condition of its carriageways and the more heavily used footways in the UK Pavement Management System (UKPMS). The County Council currently uses the UKPMS within Symology to both generate Network Condition Performance Indicators and support its management of
maintenance strategies and works programme development. Symology, as an accredited system developer is working with the Department for Transport to ensure that future system improvements and development support the emerging requirements of Asset Management programmes.

Some initial modifications have already been made and its asset management capabilities will be enhanced over the next few years, in particular to provide for more detailed deterioration modelling. We anticipate that we will be able to use UKPMS as a tool to explore and cost alternative maintenance strategies and their effects on the condition of the network and to prioritise work so as to maximise value for any given budget scenario.

We monitor and assess the condition of large elements of the road network on an annual basis. The condition data, collected using nationally specified and accredited machine and visual surveys, is analysed using the Symology Insight (Highways Management Information System – HMIS) Pavement Condition Information System module, abbreviated to PCIS (previously known as UKPMS, United Kingdom Pavement Management System). The initial analysis of the data is used to produce the annual Network Condition and Best Value Performance Indicators which cover the following:

- **NI 168**, Condition of the Principal A Road network
- **NI 169**, Condition of the Non Principal B and C Road networks
- **BVPI 224b**, Condition of the (surfaced) Unclassified Road network

that reflect the Department for Transports (DfT) 3 funding streams for Structural Highway Maintenance. The performance indicator in each case is the percentage of the network requiring maintenance treatment (i.e. where the measured condition is lower than the ‘national’ set of condition standards for each road class).

The two National Indicators covering the Classified (A, B and C) Road networks require network condition data to be collected by the **SCANNER (Surface Condition Assessment of the National NEtwork of Roads)** machine based survey whilst the BVPI for Unclassified Roads requires survey data to be collected using the driven UKPMS CVI (Coarse Visual Inspection) survey by nationally accredited ‘Network Surveyors’.

Of the many surface attributes captured by the SCANNER survey one is specifically associated with in-service skid resistance, that of texture depth (the depth between the upper most part of the aggregate and the asphalt / bitumen matrix) which is required to maintain skid resistance performance in wet conditions. Whilst texture depth (macro-texture) is the primary contributor to skid resistance on rural roads (> 40mph or where the national speed limit applies) the abrasiveness of the aggregate within the surface becomes increasingly important at lower speeds (Micro-texture).
In order to monitor in-service skid resistance of the road surface in a more robust manner we undertake SCRIM (Side-ways force Co-efficient Routine Investigation Machine) surveys in both directions on the category 2,3a and 3b networks on an annual basis.

In order to deliver a more consistent highway network we apply the following condition survey methodology which is based upon the carriageway Category within the Hierarchy, not Road Class. A comparison of the two table indicates that some roads are the subject of more than one network condition survey because its condition is reported both nationally (by Road Class) and locally (by Road Category) *Highlighted in yellow.*

<table>
<thead>
<tr>
<th>Carriageway Network</th>
<th>Condition Indicator Survey Regime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Class</td>
<td>Hierarchy / Category</td>
</tr>
<tr>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>3a</td>
</tr>
<tr>
<td>A</td>
<td>3b</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>3a</td>
</tr>
<tr>
<td>B</td>
<td>3b</td>
</tr>
<tr>
<td>B</td>
<td>4a</td>
</tr>
<tr>
<td>C</td>
<td>3a</td>
</tr>
<tr>
<td>C</td>
<td>3b</td>
</tr>
<tr>
<td>C</td>
<td>4a</td>
</tr>
<tr>
<td>C</td>
<td>4b</td>
</tr>
<tr>
<td>U</td>
<td>3a</td>
</tr>
<tr>
<td>U</td>
<td>3b</td>
</tr>
<tr>
<td>U</td>
<td>4a</td>
</tr>
<tr>
<td>U</td>
<td>4b</td>
</tr>
<tr>
<td>U</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Annual Survey Length</strong></td>
<td><strong>4,305.450</strong></td>
</tr>
<tr>
<td><strong>Additional Survey Length</strong></td>
<td><strong>85.124</strong></td>
</tr>
</tbody>
</table>
In summary, as a consequence of the adapted survey methodology the County Council can now monitor and report upon the condition of its road network in both greater and more appropriate detail, i.e. both against National and North Yorkshire Condition Indicator ‘standards’.

<table>
<thead>
<tr>
<th>Road Category</th>
<th>Network Length / Km</th>
<th>UKPMS Network Condition Survey</th>
<th>Proposed NI or BVPI ‘Standards’ Data Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>359.028</td>
<td>SCANNER and SCRAM</td>
<td>NI 168 (Principal A Roads)</td>
</tr>
<tr>
<td>3a</td>
<td>627.101</td>
<td>SCANNER and SCRAM</td>
<td>NI 169 (Non Principal B Roads)</td>
</tr>
<tr>
<td>3b</td>
<td>1,122.601</td>
<td>SCANNER and SCRAM</td>
<td>NI 169 (Non Principal C Roads)</td>
</tr>
<tr>
<td>4a</td>
<td>1,838.094</td>
<td>UKPMS CVI</td>
<td>BVPI 224b Unclassified Roads</td>
</tr>
<tr>
<td>4b</td>
<td>4,386.300</td>
<td>UKPMS CVI</td>
<td>BVPI 224b Unclassified Roads</td>
</tr>
<tr>
<td>5</td>
<td>43.767</td>
<td>UKPMS CVI</td>
<td>BVPI 224b Unclassified Roads</td>
</tr>
<tr>
<td></td>
<td>8,376.891</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Good practice in asset management requires that the strategy for maintaining an asset should be based on appropriate life cycle planning that endeavours to anticipate the future performance of the asset under various scenarios. Where possible, this analysis should take into account operational costs as well as maintenance and renewal costs and any other significant factors or constraints, and the end product will be a series of ‘options and consequences’ – different possible costed outcomes.

The degree of detail and complexity required for modelling will vary between different types of asset. For example, street furniture, even in a developed form, will be relatively simple, with a limited number of components and treatments. Further guidance on componentisation and distinguishing finite and indefinite life components is given in the later chapters that deal with individual asset types. For the most complex assets, carriageways, footways and major structures, specific modelling approaches are being developed.

Many Authorities use criteria to assess whether risk likelihood and impact/severity are high, medium or low and a typical approach is detailed below as an example. It will be necessary to check that the matrix proposed for highway risk assessments is compatible with the Corporate risk matrix.
As noted above many authorities’ application of risk management leads to departmental risk registers and the identification of risks to the organisation from risk of safety, loss of key staff and damage to the council’s reputation. Whilst individual approaches to risk management will vary from authority to authority they will almost all be built around the following generic steps:

Hazard Identification
Identifying the risks associated with the council’s ownership of a road network and the duties of the council as highway authority (principally to maintain the network in a safe condition) and the risks that could prevent the council delivering an acceptable or target level of service to the road users/customers that use the network.

Analysis
For the purposes of assessing highway asset risks a series of risk categories should be defined. The categories represent the area of potential impact from an adverse occurrence. They will typically include safety, availability, Financial / Economic, political, image, Corporate / Strategic and increasingly environment / sustainability.

Control
Identifies what actions are applied to treat risks including mitigation treatments, do nothing and monitor, insure against etc.

Monitoring
How risks are monitored, by whom and in what way, this is likely to involve establishing a risk register, ascribing each risk to a risk “owner”, regular review of risk registers and treatments, and also how risks are reported, to whom, by whom, when and how often.

North Yorkshire County Council is preparing a 10 year forward programme for each asset grouping based on the evaluation and ranking of alternative improvement projects and maintenance treatments, and including all routine maintenance functions. These individual programmes will subsequently be amalgamated to form an Integrated Forward Works Programme (IWP), which will include all assets and services and input from other organisations who may have an interest in or an effect on the management of the highway network.

The IWP will integrate the works required from all the funding streams and initiatives, and by bringing all of the proposed works on the network into one location enable co-ordination of works to take place. It will be able to assist with both short term road space/traffic management issues and longer term planning.

With good quality condition data available for analysis it will be possible to predict the likely future maintenance schemes and their locations. The timing of other works can be reviewed to ensure new works are not adversely affected by subsequent activities.

This long term programme will be built initially on projections using currently held data and knowledge; as such there will be significant limitations on the reliability of the projections. The reliability of projections regarding the precise nature and location of the
works for the later years of the programme will be relatively low; however an aggregation of the anticipated need is a valid method of predicting future funding requirements. The anticipate levels of confidence in the long term programme are detailed below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Confidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Work in Progress</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>Firm Recommendation</td>
<td>95%</td>
</tr>
<tr>
<td>3-5</td>
<td>Reasonable Assessment</td>
<td>75%</td>
</tr>
<tr>
<td>6-10</td>
<td>Informed Assessment</td>
<td>50%</td>
</tr>
</tbody>
</table>

The programme in years 1-5 will be used as a tool to assist with specific management of schemes on the ground. Beyond year 5, the programme will initially be used to assist with long term asset investment planning i.e. to calculate and report anticipated long term funding needs.

To be operationally effective these key components need to be supplemented by:
- A comprehensive management information system for inspecting, recording, analysing, prioritising and programming all maintenance works
- A comprehensive set of financial management information about transport assets which is robust and consistent between transport authorities

**Highways Management Information System (HMIS)**
The County Council currently uses the Symology Insight system to provide an integrated Highways Management Information System (HMIS) for inspecting, recording, analysing, prioritising and programming all maintenance works. The spatially enabled Insight system which incorporates a highly integrated embedded Geographical (mapping) Information System is used to manage the following operational service areas:
- Street Works Co-ordination and Management
- Highways Maintenance Management
- Street Lighting Management
- Bridges / Structures Management
- General Highways Asset Management & Valuation
- Street Gazetteer & Associated Street Data Maintenance
- Network Management
- United Kingdom Pavement Management System (road and footway condition assessments and analysis)
- Customer Service Management
- Manage Highways Licences i.e. Skips, Scaffolds and Hoardings etc.
- Traffic Signals
The following diagramme identifies both the core and peripheral system modules which make up the full Symology Insight Integrated Highways Management Information System.

Financial Management Information
Developing a financial information model to support asset management and financial reporting

A key principle of data and asset management is that the same data should serve the needs of asset management, financial management, budgeting and financial reporting.

Good asset management needs:

- up to date cost information
- good inventory data, with an appropriate degree of componentisation
- good current condition data and deterioration modelling
- to be life cycle plan based
- to be whole life cost based

The model described below seeks to bring all these things together in a consistent, systematic way. It should be used for all types of infrastructure asset, although application will vary depending on the complexity of particular asset types.
The basic model

**Step 1: determine asset groupings and component breakdowns**

The classification has three levels. These are defined as:

Level 1: Asset Types – broad categories based on the general function of the assets. They divide the asset base into categories that may be suitable for reporting in the financial statement and provide an appropriate basis for high level management information.

Level 2: Asset Groups – used to distinguish between assets that have a similar function and form.

Level 3: Components - distinguishes between components that are likely to require individual depreciation and impairment models, e.g. different service lives and/or rates of deterioration.
For example the County Council ‘model’ will in the first instance utilise the following carriageway groups:

Urban – (roads with a speed limit up to and including 40 mph)
- ‘A’ Roads
- ‘B’ Roads
- ‘C’ Roads
- Unclassified Roads

Rural – (roads with a speed limit of more than 40 mph)
- ‘A’ Roads
- ‘B’ Roads
- ‘C’ Roads
- Unclassified Roads

**Step 2**: determine whether individual components have finite or indefinite lives and for the latter whether any treatments are required to allow the component to maintain in use indefinitely.

Assets and components fall into one of two categories:

- those with a **finite life**, at the end of which they will need to be replaced – typically 20 – 40 years though some assets will have considerably shorter or longer lives; and
- those which, given any necessary capital maintenance, will have an **indefinite life**

Indefinite life components can be further sub-divided into ones that require capital maintenance to allow them to achieve their expected life and those that do not.

For a finite life asset or component, the life cycle period will be the whole of the anticipated life. For an indefinite life component the period will be based on the life of any capital treatments necessary to keep it in use. Judgement needs to be applied here. If, say, over time an asset would receive a number of cheaper, shorter lasting treatments, plus a single major long-lasting one, then the life cycle should be based on
the latter, to ensure that the activities and costs captured are fully representative over the longer term.

**Step 3**: for each component type identified, develop a life cycle plan which includes:

- the expected life of the component or for indefinite life components the life of the treatment cycle the timing, nature and cost of all the capital treatments (in-life maintenance and end-life replacement) needed to maintain the service potential of the component over its useful life
- the plan should be designed to optimise value on a whole life cost basis over the cycle

It should be noted that whole life cost optimisation is not simply about achieving the lowest economic cost over the cycle. The assumptions built into the life cycle plan need to reflect non-economic benefits as well. This should be done through setting local service standards. Whole life cost optimisation can then be targeted at delivering the required service specification at the lowest economic cost

Authorities will need to use condition data, supported as appropriate by deterioration modelling, to develop the initial assumptions, particularly about component lives, and then to monitor and, where necessary, adjust those assumptions.

**Step 4**: for each component the assumptions and outputs from the life cycle plan should be modelled. The key elements here are estimated asset life, treatment type and treatment costs, including replacements. The latter should be assigned to the year in which they are expected to arise.
The starting point for life cycle planning should always be whole life cost based and reflect good engineering practice. Except insofar as affordability has been taken into account in setting local standards of service, the life cycle plan should not initially take account of future funding constraints, though it will of course reflect the consequences of past funding constraints. This way the model can provide a clear and consistent measure of the true cost of holding the assets. This also provides a fixed starting point from which to model the consequences of alternative funding scenarios.

Regular monitoring and updating is essential. The model needs to be updated:

- when a component is added to or removed from the inventory
- whenever a capital treatment is carried out
- annually to update cost rates and to review assumed asset lives and life cycle plans
If something happens in-year which indicates that the assumptions made about the life of a particular component are wrong, then the issue should be investigated immediately and the model revised as appropriate without waiting till the annual review.

Estimated life should not be extended if the component is no longer in a serviceable condition, but affordability or other constraints prevent its timely replacement. The model should however be revised to pick up the cost consequences of the failure to carry out works at the optimal time. An example of this would be where failure to renew a surface treatment in time resulted in damage to underlying layers.

Further guidance on componentisation and distinguishing finite and indefinite life components is given in the later sections that deal with individual asset types. The degree of detail and complexity required for modelling will vary between different types of asset. For example, street furniture, even in a developed form, will be relatively simple, with a limited number of components and treatments. For the most complex assets, carriageways, footways and major structures, specific modelling approaches are being developed. Again these are described in greater detail in the asset specific sections of the Code.

It is recognised that authorities will not initially have all the information needed to produce detailed life cycle plans and models. In these cases the approach should be to start with whatever data is available and to refine assumptions and increase the level of detail over time as systems and data improve. For example, an authority might initially have only two life cycle plans for its lighting stock i.e. recognising the different life cycles of column and luminaire and with broad brush assumptions about age and average life across the stock as a whole. But in time, as data allows, separate life cycle plans might be produced to reflect factors such as different types of column or local circumstances where these materially affect performance, for example to recognise that lighting in exposed rural areas will have a significantly shorter life than in more sheltered areas.

Authorities may also wish to identify and build the costs of revenue treatments into their life cycle plans and financial models. Indeed this is necessary for whole life cost purposes. However revenue costs must be clearly and separately identified so that the two types of expenditure can be aggregated separately. This is important not only for financial planning but also because only the capital expenditure will be taken into account when the model is used to calculate depreciation.

In developing and implementing the model it is important that asset managers and finance staff work closely together to ensure that the model as implemented and maintained delivers outputs that are robust, consistent and up to date, and serve the needs of both.
NORTH YORKSHIRE COUNTY COUNCIL

Local Transport Plan 3

Appendix 6

Scheme Identification
1.0 Introduction
As we enter the third LTP period, the County Council will have been managing, maintaining and improving the highways for 26 years. While we feel we are aware of most of the major issues that affect the network as it stands now, the network is an ever changing part of the County's infrastructure. It is important therefore that we continue to develop different channels of communication with those who use it on a daily basis.

Looking to the future, a major influence on the network will be the implementation of the Local Development Frameworks. Prepared by the Local Planning Authorities (LPA), these are the successors to the Local Plans and set out the development strategy for the next 15 years for the various districts that make up the county.

The need to maintain the roads, footways and bridges will continue and the processes we use to identify the issues on the network will be described later in this annex.

2.0 Integrated Transport Problem Identification

2.1 Evidence Base
Effectively identifying transport problems, issues and appropriate solutions forms a key part of our approach to delivering local transport and was firmly embedded in LTP 2. Although a common range of issue themes exist across the County, how they impact on specific communities and at individual locations varies.

The County Council will use knowledge and data gained through the delivery of previous local transport plans alongside new data and evidence to identify specific local transport issues and problems. Examples of data to be considered include personal accident history, traffic flows, road classification and hierarchy and stakeholder views and opinions.

2.2 Building on LTP2
During both LTP1 and LTP2 the County Council developed a range of strategies aimed at identifying localised transport issues in all parts of the County.

During LTP1 Town Centre Traffic Management Strategies were aimed at identifying transport issues within 14 town centres across the County. The extent of these strategies was limited; however they were able to address issues affecting a high proportion of the County's population, as the town centres identified were the larger conurbations providing a range of key services. Despite covering 14 of the major towns across the County, it was recognised during the development of LTP2 that this approach needed to be widened to ensure coverage of the whole of the County. As a result the County Council has developed 28 Service Centre Transportation Strategies (SCTS), during LTP2.

The development of the 28 Service Centre Transportation Strategies has now been completed. Identified management, maintenance and improvement schemes will continue to be implemented throughout the first three years of LTP3.

The SCTS process has provided a comprehensive method for identifying local transport related issues. The aim of scheme identification through LTP3 is to build on the knowledge gained during LTP2. Whilst the County Council will not be repeating an intense programme of scheme identification, the service centre areas as defined in LTP2 will remain an important tool in identifying and delivering schemes across North Yorkshire.
The County Council will continue to engage with local stakeholders and parish councils on the progress of the SCTS implementation across the County. This will involve the production of a brief annual update of the progress and performance of the implementation of the identified maintenance and integrated transport improvement schemes. It will also provide the opportunity for local people to identify any new transport related issues that they want the County Council to consider.

Added to this, the local knowledge developed through the ongoing local delivery of transport services by the County Council has made us aware of many of the issues around the County. However it is important that we continue to monitor these issues and liaise with transport users to ensure the Council’s awareness of issues is maintained.

2.3 Local Transport Partnerships
In addition to the feedback received from the annual SCTS progress report process, the County Council will establish six new transport partnerships in addition to the existing partnership in the Scarborough District. This will provide a Transport Partnership for each District in the County.

The partnerships will be made up of a range of key stakeholders including, District, Town and Parish Councils, the Highways Agency and National Parks (if applicable), local strategic partnerships, local business organisations, residents associations, transport operators, civic groups and other stakeholders as deemed necessary.

It is planned for the partnerships to meet on a six monthly basis. They will provide the opportunity for local issues to be discussed and possible solutions to be identified. The partnerships will also provide a useful opportunity to update stakeholders on any emerging transport issues, (local, countywide and regional) and update on the progress on the delivery of both maintenance and improvement schemes in the partnership areas.

It is essential that the agenda of each partnership is flexible enough to meet the specific transport needs of each area. This is important to reflect differing issues and priorities in different Districts. Known issues and problems identified during the SCTS process will be used as a starting point for the transport partnerships.

2.4 Direct Public and Stakeholder Requests
Whilst several more formal mechanisms for scheme identification will be established enabling members of the public to raise issues and schemes, the County Council will continue to encourage the public and stakeholders to contact the Council to raise other issues.

The primary method for this communication will continue to be through the seven area offices across the county. The area teams have an in depth knowledge of the specific transport issues facing their area, and where appropriate will be able to generate potential schemes and initiatives from any received requests.

2.5 Integrated Passenger Transport
Many schemes suggested by the public and stakeholders, through SCTS feedback and local transport partnerships are likely to be related to public transport improvements. The County Council will continue to undertake reviews of the public transport provision across the County.
In total seven service reviews will be completed across the County during LTP3, one for each of the seven districts across the County. This follows on from the timetable of reviews undertaken during LTP2. The timetable for these reviews during LTP3 is shown in Table 1.0 below.

<table>
<thead>
<tr>
<th>Area(s)</th>
<th>Planned Service Review Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harrogate</td>
<td></td>
</tr>
<tr>
<td>Richmond</td>
<td></td>
</tr>
<tr>
<td>Hambleton</td>
<td>2011</td>
</tr>
<tr>
<td>Craven</td>
<td></td>
</tr>
<tr>
<td>Ryedale</td>
<td>2012</td>
</tr>
<tr>
<td>Selby</td>
<td>2013</td>
</tr>
<tr>
<td>Scarborough</td>
<td>2014</td>
</tr>
</tbody>
</table>

Table 1.0  Public Transport Service Review Dates

Each review will look at the provision of all public and community transport services including bus, rail, coach, taxi and community based services. Potential improvements to both bus services and capital infrastructure such as bus stop and station improvements will be considered. The district Transport Partnerships will be fully involved in these reviews.

2.6 Connectivity Studies
Several key transport corridors across the County are identified in the Economy section of the Local Transport Strategy. These corridors act as the main transport links in the County, connecting towns within the County and also in neighbouring areas. In order to identify the transport issues and deliverable schemes and initiatives to address them, the County Council will complete connectivity studies for these corridors.

These studies will use accident data, travel to work information, traffic volumes, and journey time data, to identify what issues exist on the corridor and potential solutions. Information and data collated through the SCTS processes and other sources will also be used to inform the production and final outcome of the studies. As part of the NY&Y Sub Region the County Council commissioned in early 2010 a pilot connectivity study on the A64 corridor.

2.7 Identifying Accessibility Issues
Throughout LTP2 various specific localised accessibility issues were identified. The County Council will build on these to develop an evidence base for identifying the key accessibility issues across the County. A key tool in this process will be Accession software. This software analyses transport infrastructure and services and compares them to the location of key services (e.g. doctors, hospitals, schools etc.) to help identify where there are gaps that are likely to cause people difficulties in gaining access to these services. This information will be shared with partners and service providers to help inform and develop local strategies to improve access to health, education, employment and food shopping.

2.8 Air Quality Monitoring
The seven District Councils have responsibility for monitoring air quality across the County. Where air quality falls below EU defined intervention levels as a direct result of transport related activities, the County Council will work alongside the district councils and other relevant parties to develop schemes to help to address the issues.
Deterioration in air quality to a point below prescribed limits will not be the only trigger point for action. The County Council will work in partnership with district authorities to ensure that mitigating schemes and initiatives are developed and implemented to prevent air quality from dropping past designated limits.

2.9 Local Development Framework (LDF)

As mentioned above one of the major changes affecting the highway network during the period of LTP3 will be the implementation of the proposals outlined in the Local Development Frameworks of the ten Local Planning Authorities. One of the initial functions of the Local Development Frameworks was to deliver the proposals outlined in the Regional Spatial Strategy for Yorkshire and the Humber. However, since its election the Coalition Government has decided that it no longer sees the Regional Spatial Strategies as being the vehicle for delivering regional planning policy and has cancelled them. At the time of writing it is not clear how the level of development will be decided but it is thought likely that individual LPAs will be able to set its own level of housing and commercial development within its Local Development Framework.

Whatever each Authority decides there will still be a need for changes to the highway network to cater for the additional demand the new developments will make. It is clear therefore that in specific areas the network will need to cope with large increases in traffic movements generated by the developments included in the ten different frameworks that are currently in varying stages of preparation across North Yorkshire.

The Local Planning Authorities are:-

- Craven District Council
- Hambleton District Council
- Harrogate Borough Council
- North Yorkshire County Council – Minerals and Waste
- North York Moors National Park Authority
- Richmondshire District Council
- Ryedale District Council
- Scarborough Borough Council
- Selby District Council
- Yorkshire Dales National Park Authority

If as expected each LPA is required to identify land that it intends to allocate to deliver the number of housing units it considers necessary to meet demand over the period of the framework, some of these areas could be very large – providing up to 5,000 units in some cases. Government guidance recommends that these developments are located close to, or include land for employment to reduce the need to travel. This will also have an affect on the highway network, as some commercial uses will generate a significant number of movements by larger (HCV) vehicles – retail parks for example.

The key transport related issue arising from the LDF developments is the growth in housing. The following table illustrates the proposed housing growth across the County that was included in the RSS and also the potential associated growth in car trips. It is anticipated that there will be changes to this growth will be small.
### Table 2.0 Proposed LDF allocations in North Yorkshire

<table>
<thead>
<tr>
<th>District</th>
<th>Annual Additions 2008 - 2026</th>
<th>Total Additions 2008 – 2026 inclusive</th>
<th>Housing distribution</th>
<th>Potential new car trips per day (@ 6 per household)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Craven</td>
<td>250</td>
<td>4,750</td>
<td>40% in Skipton</td>
<td>29,000</td>
</tr>
<tr>
<td>Hambleton</td>
<td>280</td>
<td>5,320</td>
<td>Bulk in Northallerton and Thirsk</td>
<td>32,000</td>
</tr>
<tr>
<td>Harrogate</td>
<td>390</td>
<td>7,410</td>
<td>Urban extension to Harrogate/Knaresborough</td>
<td>44,000</td>
</tr>
<tr>
<td>Richmondshire</td>
<td>200</td>
<td>3,800</td>
<td>Bulk in Catterick Garrison and Colburn</td>
<td>23,000</td>
</tr>
<tr>
<td>Ryedale</td>
<td>200</td>
<td>3,800</td>
<td>Bulk in Malton/Norton</td>
<td>23,000</td>
</tr>
<tr>
<td>Scarborough</td>
<td>560</td>
<td>10,640</td>
<td>75% in Scarborough</td>
<td>64,000</td>
</tr>
<tr>
<td>Selby</td>
<td>440</td>
<td>8,360</td>
<td>Bulk in Selby</td>
<td>50,000</td>
</tr>
<tr>
<td><strong>NY &amp; York Total</strong></td>
<td><strong>2320</strong></td>
<td><strong>44,080</strong></td>
<td></td>
<td><strong>265,000</strong></td>
</tr>
</tbody>
</table>

Initial indications of overall housing growth are between 20-25% across the County; however growth in the Richmondshire and Scarborough areas is likely to exceed 25%. This housing growth and the associated population increase will have a significant impact on the County’s transport network.

Whilst most of the proposed development will be incremental over the next 15 years it is important that appropriate measures are identified and developed in order to accommodate and mitigate their impact on transport.

We will seek to ensure that developments are sustainable and the transport impacts are minimised through effective planning to reduce the need to travel. This will be achieved through the provision of services and employment in close proximity to new housing developments. This effective management of developments and associated traffic movements will be developed to be future proof and allow for the provision planned developments.

In many cases the cost of the necessary infrastructure to allow this level of new housing is substantial (in excess of £10m per town). With the significant constraints on public funding for transport it is neither possible nor appropriate for the County Council to provide the funding for this.

We are working with the 10 planning authorities and the Highways Agency to identify what strategic transport improvements are required to facilitate proposed developments. The requirements will form part of a Strategic Transport Improvement Master Plan (STIMP). It is intended that a Countywide agreement on building public / private sector funding packages will be produced as part of this. These packages will provide the necessary transport infrastructure to allow the delivery of the LDFs and to bring about transport improvements for existing users.

The requirements within the STIMP will be identified through a process of modelling the current situation and adding proposed developments and their associated traffic growth to the model. From this it will be possible to identify what measures are required to enable the development to take place to accommodate with the increased traffic demand. Measures identified will be management, maintenance and improvement based.
The STIMP process is currently being developed alongside all 10 LPAs in the county. At the time of writing the process is at an embryonic stage, however a standard approach will be adopted with a bespoke appendix of the STIMP process for each LPA area. The appendix will have more area specific detail, outlining required measures. At this stage information on the exact details of the STIMP process is not yet available. It is planned to have a draft STIMP proposal for the LDF process in North Yorkshire available in early Summer 2011. As this is likely to form part of the LDF document, more detailed consultation on these proposals will take place.

Increased traffic from new developments may also have an impact on the maintenance needs of the adjacent roads. The County Council will also seek to address the extra maintenance funding required through this public / private sector funding package.

2.10 Green Travel Plans
As part of standard planning requirements the County Council requires new developments (that typically generate more than 60 vehicle movements in an hour) to provide a travel plan, demonstrating how they can increase the amount sustainable travel. It is anticipated that schemes and initiatives identified through this process will normally be funded by developers.

Green travel plans are not limited to the provision of new schemes from new developments. The County Council will continue to encourage existing businesses to develop travel plans. Whilst no specific budget exists for the implementation of these schemes the County Council aims to assist where possible by providing guidance to businesses through travel awareness and behavioural changes.

2.11 School Travel Plans
All schools, both state and the vast majority of independent establishments, across North Yorkshire have developed travel plans. These plans have identified a range of actions and potential schemes, many of which have been implemented during LTP2. The County Council will continue to work with schools across the County to update travel plans and identify any new measures that may be required. Similar to the green travel plans it is likely that many of these measures will be aimed at behavioural change.

2.12 Road Safety Problem Identification
Several methods exist to identify road safety schemes and improvements. All methods are data and evidence led and they are aimed at targeting improvements at sites with a proven accident record. Sites with a proven accident record will be dealt with prior to those with a perceived accident risk; however perceived issues will be identified for possible future interventions.

2.13 High Risk Sites
The County Council collates all personal injury accident data that is supplied by North Yorkshire Police. All casualty data is recorded and each specific accident location is ranked in order of the number and severity of casualties at each site.

The County Council uses this data to prioritise high risk sites (sites with 4 or more personal injury causing collisions in a 100m radius) across the County and enables a data led approach to targeting measures at actual accident locations. These high risk sites will continue to be examined by the County Council to identify the cause of the accidents and what the most appropriate measures are to stop or reduce future accidents.
Wherever possible any improvements proposed will also seek to address other LTP3 objectives alongside improving safety, such as improving accessibility for all. However the improvement of road safety remains the key aim of schemes in these locations.

2.14 Route Studies
Through the analysis of accident data, trends and issues along specific routes can be identified. When routes are identified, the County Council will undertake a route action study to identify a range of measures to improve safety for all road users along the route. A consistent approach to identifying issues will be taken along the full of extent of the route.

2.15 Fatal Collision Investigations
The County Council investigates all fatal collisions on all County Council roads across North Yorkshire. Investigations are carried out alongside key partners including North Yorkshire Police and North Yorkshire Fire & Rescue service and the coroner. to identify any improvements which could have an impact on the number of killed and seriously injured casualties in the future.

3.0 Developing Appropriate Solutions
Once the issues have been identified the County Council develops options as to how they could be resolved. There are a wide variety of measures that are available and these fall into three main categories – manage, maintain and improve.

Highway and footway maintenance and bridges and structures maintenance issues are identified through appropriate surveys and inspections, which will be addressed as part of the ongoing maintenance regime. In addition there will also be a wide range of local problems and issues identified through the other means.

When selecting suitable solutions to these problems and issues the hierarchy of ‘Manage, Maintain and Improve’ will be followed. This is to ensure that obtaining the best use of the current network and services is considered prior to improving the current network and service.

The following process is used, to select the most appropriate and cost effective solution. Wherever possible, management and maintenance solutions will be considered before improvement solutions. This ensures that the County Council continues to ensure that the most possible benefit is obtained from the existing network.
1. Is there a management based initiative that can address the issue? Such as improving parking management to reduce congestion to improve the efficiency of the existing network.

2. If no management measure is appropriate, can maintenance of the network address the issue? - Such as repairing damage to a footway to improve access to services in a market town.

3. If no management or maintenance measure is appropriate, are new infrastructure or services required to address the problem? - Such as a new pedestrian crossing facility to provide safer access to services.
Whilst the County Council recognises that many problems across the County are likely to be broadly similar, it is also important to recognise that any identified solution addresses the specific problem that was originally identified.

These solutions may differ dependent upon the individual circumstances of the problem such as geography, population, local road speeds and location within National Park. This localised and specific solution identification ensures that the best possible solution is identified.

An example of this is that a solution to an accessibility problem in one area of the County may be to make people more aware of pedestrian routes that already exist whereas a solution elsewhere may be to reconstruct a section of footway or even to provide a new footway.

The County Council has developed a generic toolkit of possible solutions. For each possible solution a summary of how it can contribute to the Local Transport Objectives has also been identified. This contribution will be taken into consideration when selecting the most appropriate solution. Wherever possible, solutions that contribute to more than one objective will be considered. For example if a junction improvement is being considered to address a road safety issue, improving accessibility through the provision of appropriate pedestrian crossing facilities will be considered.

4.0 Scheme Prioritisation

The funding available for transport improvement has always been insufficient to meet the demand and desires. Based on the initial indications of budgets from central Government it is likely that for most of the period of LTP3 the available funding for capital transport improvement schemes will be significantly less than was available during LTP2.

It is therefore vital to ensure that we get the best value for every pound that we spend. This is done by ensuring that all schemes and initiatives are strictly prioritised in line with their relative contribution to the LTP3 and our need to fulfil our statutory safety duties.

The scheme identification process identifies specific issues and problems, considers possible solutions and identifies a final solution. The scheme prioritisation process is designed to compare final solutions against one another to determine how transport funding should be spent efficiently in the County.

The process is largely based upon the scheme prioritisation system that was developed as part of LTP2. As LTP3 is an evolution of LTP2 and not a fundamental policy change, amendments to the prioritisation process are incremental.

It is likely that the majority of schemes that are proposed will cost between £1K-£250K. The prioritisation process is designed to be fit for purpose in that the level of expense and the effort put in prioritising schemes is proportional to the size and scale of the schemes. As the schemes are relatively low cost a full appraisal approach similar to NATA is not required.

4.1 What are final scheme proposals assessed against?

Scheme proposals are assessed against how they meet the main objectives of LTP3 taking into account the cost of the scheme.

1. Supporting the Local Economy
2. Protecting the Environment
3. Improving Safety Security and Health
4. Improving Access to Services
5. Improving Quality of Life

Within these objectives there are a range of specific factors that each scheme will be assessed against. In order to assess the scheme, several questions are asked, to identify how the scheme helps to contribute towards the overall LTP objectives.

Once a scheme proposal is received for prioritisation, the contribution of the proposal to meeting the LTP3 objectives is assessed. The assessment is both quantitative and qualitative. A judgement is made based upon available data and the individual circumstances of the scheme. Determining how the scheme meets the objectives is identified and explained in more detail in the following section.

4.2 Supporting Local Economy

Improving Connectivity.

Within North Yorkshire
Are transport users able to travel more easily between towns in North Yorkshire to access employment, make deliveries, access key services etc as a result of the scheme proposal?

Linking North Yorkshire to other areas
Are transport users able to travel more easily between North Yorkshire and other areas (such as Leeds City Region, Tees Valley and York), to access employment, make deliveries and access services etc as a result of the proposed scheme?

Reducing Traffic Congestion

How well does the scheme help to reduce traffic congestion, both at a local level at a specific location and in the surrounding area?

Does the scheme help to:-
• Reduce travel demand?
• Assist in modal shift to more sustainable travel options?
• Effectively manage the network to improve traffic flow?
• Improve traffic management to improve traffic flow?
• Provide additional capacity to assist in reducing congestion?

Role of scheme in supporting LDF’s and land use planning across the County

Does the scheme help to ;-?
• Free up proposed development land?
• Provide transport access to proposed LDF sites?
• Provide part(s) of the STIMPS requirements for a specific area?
• Support sustainable transport by reducing the transport demand arising from a development?

4.3 Environment and Climate Change

Role of scheme in contributing to reducing the impact of Climate Change
Does the scheme help to :
- Reduce emissions of greenhouse gases?
- Promote the use sustainable modes of transport?
- Reduce the demand for travel?
- Promote and support the use of low carbon technology?

**Role of the scheme in helping to adapt to climate change**

Does the scheme help to :
- Address flooding issues?
- Reduce the impact of coastal erosion?
- Reduce the impact of severe weather?

**Role of the scheme in helping to natural and built environment and the detrimental impact of transport on residents and visitors to North Yorkshire**

Does the scheme help to;
- Improve air quality in Air Quality Management Areas?
- Improve air quality in non AQMAs?
- Reduce noise and disturbance?
- Preserve tranquillity?
- Contribute to preserving the existing landscape / townscape

**4.4 Safety Security & Health**

**Role of the scheme in improving road safety**

- Is the scheme in a proven accident location?
- How well will the proposed scheme address the accident issues in this location? (% of accidents that would be avoided through scheme implementation)

**Role of the scheme in helping to improve the health of residents of North Yorkshire**

- Does the scheme help to promote and encourage healthier forms of travel such as walking and cycling?

**Role of the scheme in helping transport users to feel more secure in North Yorkshire**

- Does the scheme help to improve the actual and perceived personal security of transport users?

**4.5 Access to Services**

**Role of the scheme in improving accessibility issues as a result of place issues**

Does the scheme help to
- Reduce community severance by improving facilities for pedestrians and cyclists.
- Provide improved information on travel options
- Provide alternatives to using the private car for journeys
- Improve availability and patronage of public and community transport services
- Provide sustainable access to services for those living in remote rural areas.
- Deliver services locally, reducing the need to travel
Role of the scheme in improving accessibility for all irrespective of their personal situation

Does the scheme help to
- Provide alternative options for transport for people without access to or unable to use a private car
- Improve accessibility within identified areas of deprivation.
- Support access to services (especially health) for those with illness / disability

4.6 Quality Of Life

Role of the scheme in helping to preserve and improve Quality of Life in North Yorkshire.

Does the scheme help to
- Provide access to non essential services such as social and leisure opportunities
- Improve public space
- Supporting the development of local communities

The Quality of Life objective will be achieved through working towards all of the other objectives.

4.7 How do we assess?
Each of the priorities is weighted taking into account the statutory duties of the County Council and the ranking of priorities received through LTP3 consultation.

The outcome of this, based upon consultation and reviews of the statutory duties has identified that Road Safety has the highest priority and that all the other objectives have an equal rating.

Costs
Both the actual implementation cost and the whole life cost are taken into consideration. The whole life cost incorporates an assessment of future maintenance and upkeep costs over 25 years. The use of the whole life cost as part of the assessment allows available funding to be targeted on schemes that will provide the best value for money over their whole life.

Where contributions towards the costs from other sources are available this will be taken in to consideration as part of the assessment process.

Outcomes and Programming
The process enables an assessment of the effects (both positive and negative) per unit of cost of the scheme on all of the LTP 3 objectives to be established. This value or “score” is comparative to other schemes only. A high score does not necessarily indicate good value for money in absolute terms only that it is better than other schemes being assessed. The score is used to prioritise expenditure by ensuring that the highest scoring (best value for money) schemes are taken forward for possible implementation.

The prioritisation system is the main but not the only factor considered in making decisions on what schemes should be taken forward for implementation. Engineering input, assessment of deliverability and the views and opinions of
relevant stakeholders (local county councillors, the local community and other interested parties) are also taken into account.

Once all of this information has been collated a programme of schemes to match available budgets is developed. A two year rolling programme is used. This provides a firm proposal for the forthcoming financial year (year 1) supplemented by an indication of the proposed schemes for the year after (year 2). The rolling nature of this programme allows the County Council to manage the programme more effectively, enabling schemes to be potentially brought forward or moved back in the programme if required.

4.8 Programme Management and Review
Throughout the delivery of the programme actual performance against planned delivery is monitored. This ensures that any delays, cost increases and other issues are identified as early as possible and that appropriate action can be taken.

Scheme progress 'gateways' will be to improve deliver, control costs and ensure that the objectives of the scheme are achieved. These gateways are at the following points within the scheme delivery process

1 Scheme Inception
2 Preliminary Design
3 Consultation
4 Detailed Design
5 Construction

At each stage an assessment is made of the scheme to ensure that any cost variations or design changes etc are taken into consideration. The scheme is reassessed and reprioritised based on any new information to ensure that it is still cost effective and still meets the LTP3 objectives. Only when this has been established can the scheme progress to the next gateway.

This gateway process ensures that the final scheme will contribute to the overall LTP3 objectives in the way that were originally envisaged and to an extent that justifies its cost. If, on reassessment, the scheme is found not to be contributing to LTP objectives to the previously anticipated level, then the scheme may be revised, a lower cost alternative may be considered or the scheme may be discontinued. If changes are to be made, costs that have already been incurred will be considered, to ensure that any abortive costs are kept to an absolute minimum.

5.0 Carriageway Maintenance Problem Identification
We monitor and assess the condition of large elements of the road network on an annual basis. The condition data, collected using a nationally specified and accredited machine and visual surveys, is analysed using the Symology Insight (Highways Management Information System – HMIS) Pavement Condition Information System module, abbreviated to PCIS (previously known as UKPMS, United Kingdom Pavement Management System).
<table>
<thead>
<tr>
<th>SURVEY TYPE</th>
<th>Class</th>
<th>%age of Network Surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCANNER</td>
<td>A, B, C</td>
<td>100% annually in one direction (Lane)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4305.450 Lane Km</td>
</tr>
<tr>
<td>Coarse Visual Inspection</td>
<td>(surfaced)</td>
<td>25% annually (full width)</td>
</tr>
<tr>
<td>(CVI)</td>
<td>Unclassified</td>
<td>1017.860 C’way Km</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5323.310 Km</td>
</tr>
</tbody>
</table>

Table 3.0 Types of Survey Technique

This detailed analysis serves in the first instance two purposes;

Network Condition and Best Value Performance Indicators

The first is the production of the Network Condition and Best Value Performance Indicators which cover the following:

NI 168, Condition of the Principal A Road network
NI 169, Condition of the Non Principal B and C Road networks
BVPI 224b, Condition of the (surfaced) Unclassified Road network

These reflect the Department for Transports’ (DfT) 3 funding streams for Structural Highway Maintenance. The performance indicator in each case is the percentage of the network requiring maintenance treatment (i.e. where the measured condition is lower than the ‘national’ set of condition standards for each road class). The two National Indicators covering the Classified (A, B and C) Road networks require network condition data to be collected by the SCANNER (Surface Condition Assessment of the National NEtwork of Roads) machine based survey whilst the BVPI for Unclassified Roads requires survey data to be collected using the driven UKPMS CVI (Coarse Visual Inspection) survey by nationally accredited ‘Network Surveyors’.

In North Yorkshire, during the development of our Highway Maintenance Plan we identified a categorised highway network hierarchy (based upon traffic flow) which is the basis for all maintenance standards and the cyclic frequency of maintenance activities (e.g. safety inspections, grass cutting, gully emptying etc) for the road network.
The Road Class Network / Categorised Network Hierarchy is shown in table 4.0.

<table>
<thead>
<tr>
<th>Road Class</th>
<th>Hierarchy / Category</th>
<th>Network Length / Km</th>
<th>Road Class Network Length / Km</th>
<th>R199b Network Length / Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>357.072</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3a</td>
<td>471.403</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>3b</td>
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<td>899.849</td>
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<tr>
<td>B</td>
<td>2</td>
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<td></td>
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<td>B</td>
<td>3a</td>
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<td>B</td>
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<td>B</td>
<td>4a</td>
<td>41.647</td>
<td>656.185</td>
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<tr>
<td>C</td>
<td>3a</td>
<td>6.538</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3b</td>
<td>502.681</td>
<td></td>
<td></td>
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<td>C</td>
<td>4a</td>
<td>1,492.432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>4b</td>
<td>747.765</td>
<td>2,749.416</td>
<td>3,405.601</td>
</tr>
<tr>
<td>U</td>
<td>3a</td>
<td>7.341</td>
<td></td>
<td></td>
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<tr>
<td>U</td>
<td>3b</td>
<td>77.783</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>4a</td>
<td>304.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>4b</td>
<td>3,638.535</td>
<td>4,027.674</td>
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<td>43.767</td>
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<tr>
<td>UUR</td>
<td>6</td>
<td>740.364</td>
<td>740.364</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.0 The Road Class Network / Categorised Network Hierarchy

NB. The Annual Statutory Return on Road Length (R199b) specifically excludes the Unsurfaced Unclassified Road element of the Highway Network (NYCC Category 6 ‘roads’), Back Streets (NYCC Category 5) are itemised separately due to their minimal and restricted width.

In order to deliver a more consistent highway network we apply the following condition survey methodology (see table 5.0) which is based upon the carriageway Category within the Hierarchy, not Road Class. A comparison of the two table indicates that some roads are the subject of more than one network condition survey because its condition is reported both nationally (by Road Class) and locally (by Road Category) **Highlighted in yellow.**
<table>
<thead>
<tr>
<th>Road Class</th>
<th>Hierarchy / Category</th>
<th>Network Length / Km</th>
<th>Road Class Network Length / Km</th>
<th>Scanner (NI)</th>
<th>CVI (NI)</th>
<th>Scanner (NYCC)</th>
<th>CVI (NYCC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
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<td>357.072</td>
<td>357.072</td>
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<td></td>
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<tr>
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<td>3a</td>
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<td>471.403</td>
<td>471.403</td>
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<td></td>
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</tr>
<tr>
<td>A</td>
<td>3b</td>
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<td>899.849</td>
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<td>71.374</td>
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<td></td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>1.956</td>
<td>1.956</td>
<td>1.956</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3a</td>
<td>141.819</td>
<td>141.819</td>
<td>141.819</td>
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<td>B</td>
<td>3b</td>
<td>470.763</td>
<td>470.763</td>
<td>470.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>656.185</td>
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<td></td>
</tr>
<tr>
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<td>6.538</td>
<td>6.538</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3b</td>
<td>502.681</td>
<td>502.681</td>
<td>502.681</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
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<td>1,492.432</td>
<td>1492.432</td>
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<td></td>
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<tr>
<td>C</td>
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<td>2,749.42</td>
<td>747.765</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
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<td>7.341</td>
<td>7.341</td>
<td>7.341</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>3b</td>
<td>77.783</td>
<td>77.783</td>
<td>77.783</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>4a</td>
<td>304.015</td>
<td>304.015</td>
<td>304.015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>4b</td>
<td>3638.535</td>
<td>4,027.67</td>
<td>3,638.535</td>
<td>3,638.535</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>5</td>
<td>43.767</td>
<td>43.767</td>
<td>43.767</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8,376.891 8,376.891 4,305.450 4,071.441 2,108.730 6,268.161

### Annual Survey Length
4,305.450 1,017.860 2,108.730 1,567.040

### Additional Survey Length
85.124 570.461

<table>
<thead>
<tr>
<th>SCANNER Survey</th>
<th>4,390.574</th>
<th>Lane Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVI Survey</td>
<td>1,588.321</td>
<td>C’way Km</td>
</tr>
<tr>
<td>SCRIM Survey</td>
<td>4,217.460</td>
<td>Lane Km</td>
</tr>
</tbody>
</table>

Table 5.0 Condition Indicator Survey Regime for each Network hierarchy category.

Of the many surface attributes captured by the SCANNER survey one is specifically associated with in-service skid resistance, that of texture depth (the depth between the upper most part of the aggregate and the asphalt / bitumen matrix) which is required to maintain skid resistance performance in wet conditions. Whilst texture depth (macro-texture) is the primary contributor to skid resistance on rural roads (> 40mph or where the national speed limit applies) the abrasiveness of the aggregate within the surface becomes increasingly important at lower speeds (Micro-texture). Fig 2.0 illustrates the different texture depths.

In order to monitor in-service skid resistance of the road surface in a more robust manner we undertake SCRIM (Side-ways force Co-efficient Routine Investigation Machine) surveys in both directions on the category 2,3a and 3b networks on an annual basis.
As a consequence of the adapted survey methodology the County Council can now monitor and report upon the condition of its road network in both greater and more appropriate detail, i.e. both against National and North Yorkshire Condition Indicator ‘standards’.

<table>
<thead>
<tr>
<th>Road Category</th>
<th>Network Length / Km</th>
<th>PCIS Network Condition Survey</th>
<th>NI or BVPI ‘Standards’ Data Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>359.028</td>
<td>SCANNER</td>
<td>NI 168 (Principal A Roads)</td>
</tr>
<tr>
<td>3a</td>
<td>627.101</td>
<td>SCANNER</td>
<td>NI 169 (Non Principal B Roads)</td>
</tr>
<tr>
<td>3b</td>
<td>1,122.601</td>
<td>SCANNER</td>
<td>NI 169 (Non Principal C Roads)</td>
</tr>
<tr>
<td>4a</td>
<td>1,838.094</td>
<td>UKPMS CVI</td>
<td>BVPI 224b Unclassified Roads</td>
</tr>
<tr>
<td>4b</td>
<td>4,386.300</td>
<td>UKPMS CVI</td>
<td>BVPI 224b Unclassified Roads</td>
</tr>
<tr>
<td>5</td>
<td>43.767</td>
<td>UKPMS CVI</td>
<td>BVPI 224b Unclassified Roads</td>
</tr>
<tr>
<td></td>
<td>8,376.891</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.0 Condition survey and National indicator per road category.

The second output is the identification of those locations of the road networks that due to their condition contribute to either the performance indicators which objectively measure the ‘need for maintenance’ against a set of national condition parameters for each road class and environment (built up / non built up) or that fall below the requirements for in-service skid resistance.

5.1 Carriageway Scheme Identification

As the condition surveys collect / record condition data at (typically) 10 metre intervals and for machine surveys in one lane only the output report file is substantial as it identifies ‘defect’ lengths as short as 10 metres in length. We then re-process this data within the PCIS to extract, amalgamate and combine defective sections into both scheme (minimum 90 metres) and sub-scheme (i.e. between 10 and <90 metres) length, the subsequent report provides a more detailed and therefore useful list of locations that require a more detailed assessment.
The scheme length locations are then subjected to a UKMS DVI (Detailed Visual Inspection), again by nationally accredited Network Surveyors who physically identify, measure and record the extent of defects on site.

The condition data is processed and analysed using specialist software that provides an indicative ‘maintenance treatment’, a Condition Index (or objective ranking) ‘score’ that reflects the relative need for maintenance (i.e. the higher the score the greater the need for maintenance), an outline efficiency percentage and an outline estimate of the likely cost of maintenance. The final stage of the scheme identification process then follows which comprises the confirmation of:

- **Maintenance treatment**
  Treatment options are categorised into:-
  - **Surface Treatments** (Surface Dressing / high friction surfacing/ slurry sealing / micro-asphalt / replacement of the surface layer)
  - **Resurfacing and Reconstruction** (R&R) (Replacement of the surface and structural layers/ edge strengthening (kerbing / haunching) / reconstruction)

- **Scheme extent** (from which a detailed scheme efficiency percentage [minimum target 50%] is calculated, the outline efficiency percentage is always 100% as the process only identifies those areas of the road whose condition triggers the defect standard where, as the final scheme extent will include both sides of the road some of which will not be defective. By adopting this more holistic approach we can, where appropriate, reduce the potential for a patchwork quilt effect of repairs / maintenance treatments on the road network

- **Detailed cost estimate.** The full cost of the scheme including all design and works costs.

The outcome of this business process is a list of maintenance schemes, prioritised by Road category then by Condition Index (or objective ranking) ‘score’. The list is then sub-divided by Road Class i.e. into the DfT budget headings of:

- Principal A Road network
- Non Principal B and C Road networks
- Unclassified Road network

A ‘Road Class’ programme budget is then allocated which enables the County Council’s programme of maintenance schemes to be identified, the number of schemes implemented being restricted by the available budget.

In addition to these major works programmes the County Council also makes a capital budget available which supports the revenue operational budget for programmes of minor patching and repair works.

The sub-scheme ‘defect’ lengths produced as part of the scheme identification process mentioned previously add to the information collected by Highway Inspectors who undertake cyclic and routine safety inspections on all elements of the network and form the basis for network wide programmes of minor patching and repair work.
5.3 Carriageway Maintenance Performance Challenges
The Department for Transport set two targets for Structural Highway Maintenance at the start of LTP2. This will be carried forward as part of LTP3

**Halt the general deterioration of the network and**

**Remove the maintenance backlog**

The County Councils strategy for the identification and prioritisation of carriageway works is designed to address both targets in the following ways:

General deterioration commences almost within months of new surfacing being laid and is attributed to oxidation of the bitumen which bonds the aggregate together in a matrix. In the same way the passage of vehicles over the surface wears the bitumen away exposing the aggregate underneath to provide the appropriate level of skid resistance especially in the wet. The more traffic uses the route the quicker the road attains its operation skid resistance but equally however the quicker the road surface needs replacing as the exposed aggregate polishes and wears out. This general deterioration / loss of skid resistance is most economically managed by programmes of extensive Surface Treatments which include surface dressing / high friction surfacing / slurry sealing / micro-asphalt which are designed to prevent the ingress of water into the road surface and improve the in-service skid resistance.

Preventing water from penetrating the road surface is a major challenge especially on our extensive rural network the majority of which has evolved over time and has not been designed or constructed in the same way as the urban or A and B Road networks which are typically more than 450mm deep (18") in overall thickness. The network of less busy rural roads tend to be very thin in terms of construction (less than 250mm or 10” thick) and flex under traffic loading, it is this flexing that is the catalyst for cracks to form which subsequently allows water to penetrate the relatively thin construction. During the winter any water getting into the road construction is likely to be the subject of the freeze / thaw process which manifests itself as potholes. The more prolonged the severe weather (for example the Christmas / New Year period 2009/10) the worse the affect on road condition.

Not withstanding the issue off general deterioration there are also many other reasons why roads fail and require maintenance treatments. Whilst traffic volume plays its part in wearing the upper surfaces away it is the volume of commercial vehicles that cause physical damage to roads in particular those mentioned above that have not been designed either in terms of construction or geometry. Commercial and agricultural vehicles require wider roads especially on bends, the insides of which suffer from over-run and tend to crack and break away, with concentrated volumes of commercial vehicles one outcome is the ‘plastic’ failure of the upper tarmac layers and the consequential formation of ‘wheel track ruts’ which in wet weather can hold water further reducing in-service skid resistance.

In the same way that ingress of water into the upper layers causes roads to fail, when water penetrates and stays within the lower layers and under traffic loading the supporting sub-grade is weakened. This can accelerate localised failure, causing depressions in the road surface which affect ride quality (an attribute measured by SCANNER surveys).

The maintenance treatments necessary to rectify these modes of failure are therefore more structural in nature and consequentially more expensive to undertake than those necessary to treat general deterioration issues. Effective treatments include
those previously identified as Resurfacing and Reconstruction Schemes (such as replacement of the surface and lower structural layers / edge strengthening (in the form of kerbing / haunching) / and at the most extreme reconstruction).

Where the most cost effective solution is more structural (and expensive) in nature the short term strategy is to attempt to defer the treatment by undertaking ‘temporary’ localised repairs (in order to maintain road safety) until it is more financially beneficial to undertake the full scheme.

The underlying philosophy of the County Councils approach to managing the condition of the network (footway or carriageway) is best illustrated in the following graph:

![Fig 3.0 Approach to managing footway and carriageway network](image)

As part of the annual reporting process for performance indicators we routinely compare our performance with similar authorities (e.g. the Shire Counties who have similar road network issues).

One identified anomaly that is peculiar to North Yorkshire is the size (in terms of length [2,749.42Km] and proportion [33%] of the whole network) of our C Road network and the broad spectrum of traffic use (by category) ranging from Category 3a (a reasonably busy A road) to 4b (the equivalent of a residential culs de sac).

In prioritising works by Road Category (in an attempt to achieve consistent standards across the same road category) within a Road Class based budget process the outcome is that very few of the lower category C roads (4a and 4b) are targeted for funding which obviously affects our ability to improve the overall condition of the combined B and C Road network (monitored through NI 169).

As a short term solution during 2009/10 and 2010/11 the County Council has invested additional funding to target the C Road network. This coincides with the migration towards a more proactive asset management approach that will replace the current Road Class based budget process with one which is Road Category based thus ensuring that each section of road will only be competing with the same category of road elsewhere on the network (from 2011/12 onwards) and enable us to monitor the network on a more appropriate basis e.g.
6.0 Footway and Cycleway Maintenance Problem Identification

In the same way that we monitor and assess the condition of the road network we undertake condition surveys of the footway network not however on the same scale as all footways are required to be walked UKPMS DVI surveys that physically measure and record all visible defects making the surveys uneconomic for whole of network surveys (even at 25% network coverage per annum). The condition data is analysed using the same system as is used for carriageways.

In a similar way as for the road network, during the development of our Highway Maintenance Plan we identified a categorised Footway network hierarchy (based upon footfall), the subsequent hierarchy is the basis for all maintenance standards and the cyclic frequency of maintenance activities (e.g. safety inspections) for the Footway network.

<table>
<thead>
<tr>
<th>Footway Category</th>
<th>Cat 1a / Km</th>
<th>Cat 1/ Km</th>
<th>Cat 2 /Km</th>
<th>Total Length Cat 1a, 1 and 2 / Km</th>
<th>Other Footways (Cat 3, 4) and 5 estimated / Km</th>
<th>Total Combined estimated Length of Footways / Km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examples</td>
<td>Pedestrian Areas</td>
<td>High Streets / Shopping areas</td>
<td>Feeder Footways</td>
<td>Residential estate, culs de sac and rural footways</td>
<td>Residential estate, culs de sac and rural footways</td>
<td>Residential estate, culs de sac and rural footways</td>
</tr>
<tr>
<td>Length</td>
<td>6.052</td>
<td>49.409</td>
<td>144.339</td>
<td>199.800</td>
<td>4,142.672</td>
<td>4,342.472</td>
</tr>
<tr>
<td>% of total footways</td>
<td>0.14%</td>
<td>1.13%</td>
<td>3.33%</td>
<td>4.60%</td>
<td>95.40%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 7.0 Footway category information

As a consequence of the cost implications for local authorities the Department for Transport only introduced the first element of their performance monitoring regime for footways. The first outcome of the condition data analysis is the BVPI Performance indicator for footways:

BVPI 187a Condition of the Cat 1a, 1 and 2 Footway Network

The performance indicator is the percentage of the network requiring maintenance treatment (i.e. where the measured condition is lower than the ‘national’ set of condition standards) and requires that 50% of the network is assessed on an annual basis, the calculation is based on 2 consecutive years data covering 100% of the network.

6.1 Footway and Cycleway Scheme Identification

The Footway Network table clearly indicates that more than 95% of the Footway Network is not assessed using the UKPMS condition survey. In order to identify potential footway schemes the Highway Inspectors who undertake routine safety inspections (on between 1 month and 12 month cycles depending upon category) are responsible for identifying potential schemes for condition assessment.

The Network Surveyors undertake UKPMS DVI (Detailed Visual Inspections) on approx 100Km of Cat 1a, 1 and 2 Footways and on a further 100 locations submitted for assessment by the Highway Inspectors on an annual basis.

The condition surveys collect / record condition data at (typically) 5 metre intervals the output report file is substantial as it identifies ‘defect’ lengths as short as 10
metres in length. We then re-process this data within the PCIS to extract, amalgamate and combine defective sections into both scheme (minimum 40 metres, specifically for short residential culs de sac) and sub-scheme (i.e. between 5 and <40 metres) length, the subsequent report provides a more detailed and therefore useful list of locations that require a more detailed assessment.

The condition data from these location specific surveys is processed and analysed using the same specialist software that we use for carriageways and the output provides an indicative ‘maintenance treatment’, a Condition Index (or objective ranking) ‘score’ that reflects the relative need for maintenance (i.e. the higher the score the greater the need for maintenance), an outline efficiency %age and an outline estimate of the likely cost of maintenance. The final stage of the scheme identification process then follows which comprises the confirmation of:

- **Maintenance treatment**
  Treatment options are categorised into:-
  - **Surface Treatments** (slurry sealing / replacement of the surface layer)
  - **Resurfacing and Reconstruction** (R&R) (Replacement of the surface and structural layers/ edge strengthening (kerbing / pin kerbs) / reconstruction)

- **Scheme extent** (from which a detailed scheme efficiency percentage [minimum target 50%] is calculated, the outline efficiency percentage is always 100% as the process only identifies those areas of the road whose condition triggers the defect standard where as the final scheme extent may include footways on both sides of the road some of which will not be defective but by adopting this more holistic approach we can, where appropriate reduce the potential for a patchwork quilt effect of repairs / maintenance treatments on the footway network

- **Detailed cost estimate** The full cost of the scheme including all design and works costs.

The outcome of this business process is a list of maintenance schemes, prioritised by Road category then by Condition Index (or objective ranking) ‘score’. The list is then sub-divided by Footway Category under the budget headings of:

- Cat 1a, 1 and 2 Footways
- Cat 3, 4 and 5 Footways

A Footway category programme budget is then allocated which enables the County Council’s programme of maintenance schemes to be identified, the number of schemes implemented being restricted by the available budget.

In addition to these major works programmes the County Council also makes a capital budget available which supports the revenue operational budget for programmes of minor patching and repair works.

The sub-scheme ‘defect’ lengths produced as part of the scheme identification process mentioned previously add to the information collected by Highway Inspectors who undertake cyclic and routine safety inspections on all elements of the network and form the basis for network wide programmes of minor patching and repair work.
6.2 Footway and Cycleway Maintenance Performance Challenges

The introduction of a network wide footway condition assessment survey would assist the County Council in identifying the potential maintenance need (maintenance backlog) on the Category 3, 4 and 5 Footways which make up 95% of the footway network. The UKPMS DVI condition assessment methodology is too highly detailed and therefore too expensive too introduce hence why it was never introduced by the DfT as a BVPI.

As part of a national initiative instigated by the Roads Liaison Group a survey methodology (FNS – Footway Network Survey) has been developed and trials are currently being undertaken to ensure that the survey is both repeatable and reproducible (Repeatable measures the success rate [accuracy] in successive surveys, possibly conducted by the same people. Reproducibility relates to the agreement of test results with different operators using the same survey methodology) which is of paramount importance when analysing network condition.

The proposed survey would be undertaken as part of the walked routine highway safety inspections which are undertaken by Area based Highway Inspectors. The survey categorises the footway network into four condition bands which is summarised in table 8.0

<table>
<thead>
<tr>
<th>Condition Level</th>
<th>Description</th>
<th>Example</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>As new footway</td>
<td>Brand new footway / recently reconstructed</td>
<td>Currently identified as not defective in DVI surveys</td>
</tr>
<tr>
<td>2</td>
<td>Aesthetically impaired</td>
<td>Sound footway with patching</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modular footways with sound bituminous patches</td>
<td>No equivalent in existing DVI surveys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modular footway with elements of different colour / age / material</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Faded bituminous materials (especially coloured bituminous e.g. green / red)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Functionally impaired</td>
<td>Cracked but level flags / blocks</td>
<td>Based upon existing DVI 'minor' defects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minor surface deterioration / fretting / fatting up of bituminous surfaces</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Structurally unsound</td>
<td>Cracked and / or uneven flags</td>
<td>Based upon existing DVI 'major' defects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major fretting and potholing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major cracking</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor profile 9e.g. dips and crowns</td>
<td></td>
</tr>
</tbody>
</table>

Table 8.0 Footway Condition bands

Once we have initiated this survey methodology and analysed the data we will be able to identify the maintenance need (works backlog) within each of the footway categories and commence the migration towards a more proactive asset management approach that will enable us to both allocate budgets and monitor network condition within each category, shown below in table 9.0
<table>
<thead>
<tr>
<th>Budget Heading / Road Category</th>
<th>Network Length / Km</th>
<th>UKPMS Network Condition Survey</th>
<th>Performance Monitoring NI or BVPI ‘Standards’ Data Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>6.052</td>
<td>UKPMS DVI Survey</td>
<td>BVPI 187 + NYCC Intervention Level Index</td>
</tr>
<tr>
<td>1</td>
<td>49.409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>144.339</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>n/a</td>
<td>UKPMS FNS</td>
<td>TBC + NYCC Intervention Level Index</td>
</tr>
<tr>
<td>5</td>
<td>n/a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,342.472</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9.0 Network condition / performance monitoring for footways.
7.0 Bridges and Structure Maintenance
The Highway network of North Yorkshire is predominantly rural with few urbanised areas. In North Yorkshire roads designated as unclassified can be of significant local importance as they may be the only viable access route to a settlement. Accordingly seemingly small bridges and structures are equally important in providing access to many locations across the County. Many communities would be completely isolated without a bridge connecting them to the rest of the County’s transport network. Strategic routes would not be able to function without bridges.

It is essential that available funding for bridges and structures is used in an appropriate manner to ensure that it is targeted at bridges and structures that have the greatest need. Due to the age of the bridge stock across the County, with over 75% of the bridges over 50 years old (and the majority of these being over 100 years old), it is essential that in order to keep the transport network open and the County moving, bridges and structures across the County are maintained to a safe and suitable standard.

7.1 Bridges and Structure Problem Identification
Through an agreed timetable of inspections using various techniques, the County Council identifies the need for maintenance and repair of bridges and structures across the County. This involves regular superficial inspections identifying obvious defects and deficiencies in the structure through to full structural assessments.

Superficial Inspections
Basic superficial inspections are undertaken by the local highways inspectors on a regular basis as part of the standard highway inspections carried out across the County. These inspections of the bridge deck and structure are often in response to issues raised by members of the public or as a result of damage caused by the vehicle accidents. Where required, further more detailed inspections will be requested.

General Inspections
Every two years a more detailed general visual inspection is completed. This involves a visual inspection of all parts of the structure and where suitable adjacent earthworks and waterways that impact on the stability of the structure and also where river debris can damage the structure.

Principal Inspections
Every six years a principal inspection is carried out. This is more detailed than a general inspection and involves a close examination within touching distance of all accessible parts of the structure. Where applicable temporary access is provided and portable camera equipment is used to ensure inspection of obscured and difficult to reach areas of the structure.

Diving Assessments
The County Council has identified a number of key bridges across major waterways where suitable diving inspections are required. These diving inspections enable parts of the structure that are below water to be inspected. These inspections are carried on a six yearly basis, with approximately 40 bridges per year being subject to a diving inspection.
Structural Assessments
A full detailed structural assessment is completed on all structures every 12 years. This involves a full inspection similar to those carried out as part of the principal inspections and this is supplemented by a full engineering assessment of the structures load carrying capacity.

Special Inspections
Where issues are identified related to a specific part of a bridge or structure or in relation to a specific event (such as an abnormal heavy load or following flooding) a special inspection will be carried out. This is outside of the normal inspection routine.

Acceptance Inspections
When new bridges and structures come under the County Council’s control, either as new construction or when ownership of an existing structure is transferred to the County Council acceptance inspections are carried out. This is done to ensure that the structure is of a suitable and acceptable standard prior to the County Council taking responsibility for it. Any defects or remedial works are identified at this stage and completed to a suitable standard prior to the ownership of the scheme being transferred to the County Council.

The information collated as part of the inspection techniques is used to assist in the prioritisation and programming of bridges and structures maintenance and repair schemes. Where inspections reveal unsafe defects and issues that require immediate attention and repair, the County Council ensures that appropriate measures are completed to make the structure safe for use.

7.2 Bridges and structures scheme prioritisation and programming
Using specialist software the result of the inspections is collated to produce a priority rating for each bridge and structure. The higher the rating the greater the maintenance need.

This priority score is used alongside a range of socio economic factors (such as the access for local communities that the bridge provides or if the bridge is on a bus route) to determine which schemes should be completed. For example if two bridges had a similar maintenance inspection rating, a bridge that provided the only link to a community would take precedence over a bridge that was not a sole link to a community. This process takes in to consideration the economic loss to the local community if the bridge was closed.

Schemes are ranked in priority order, these schemes are then matched against the available budget to identify what schemes can be implemented. This ensures that the highest priority schemes are delivered.

7.3 Bridges and structures solution selection
Once an appropriate programme of maintenance issues has been identified, development of appropriate solutions takes place. This is based on available funding.

There are over 2000 bridges across the County, each with its own specific design and characteristics. Even those with similar designs, will be located on different types of roads, carrying varying levels of traffic and will span different watercourses.

As a result any solutions developed will generally be bespoke to address the identified issue. Standard techniques and measures implemented elsewhere are adapted to meet the individual requirements of the structure. When developing an
appropriate scheme several factors are taken in to consideration including traffic levels using the structure, the local environment, the material that the structure is built from. These are used to ensure that the repairs and maintenance completed ensure that the bridge is kept in a safe and fit for purpose condition.

Additionally using experience from previous schemes, such as difficulties encountered during implementation and reasons for structure failure can assist in developing appropriate solutions.

This approach to developing schemes ensures that they are implemented to address the identified need. This helps to make sure that the best value for money is obtained.

Once the programme of schemes has been assembled and the implementation process begins, the County Council will actively monitor the progress of the delivery process. The County Council is committed to, wherever possible delivering schemes on time and to budge. Monitoring of the programme ensures that any issues can be managed appropriately.
Local Transport Plan 3

Strategic Environmental Assessment
Environmental Report

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1. Introduction

1.1 Background
This is the Strategic Environmental Assessment (SEA) Environmental Report for the North Yorkshire Local Transport Plan 3 (LTP 3) which complies with European Directive 2001/42/EC1 (SEA Directive). The SEA Directive requires an assessment of the effects of certain plans and programmes on the environment. The requirements of the SEA Directive were transposed into English law in July 2004 in the Environmental Assessment of Plans and Programmes Regulations 2004. The Regulations are applied to plans and programmes whose formal preparation and modifications to them, began after 21 July 2001, it also applies to plans and programmes whose formal preparations began before that date, if they have not been adopted by July 21 2006.

1.2 Strategic Environmental Assessment
The objective of the SEA Directive is “to provide for a high level of protection of the environment and to contribute to the integration of environmental consideration into the preparation and adoption of plans … with a view to promoting sustainable development” (Article 1). The SEA process also works to inform the decision making process through the identification and assessment of the significant and cumulative effects a plan or programme will have on the environment at the strategic level and consultation on the potential effects with a wide range of stakeholders.

The main requirements of the Environmental Assessment of Plans and Programmes Regulations 2004 are:

- findings of the SEA are presented in an Environmental Report that identifies and describes the potential significant effects on the environment of implementing LTP3 and reasonable alternatives2 taking into account the objectives and geographical scope of the LTP3
- the draft LTP3 and accompanying Environmental Report are made available for consultation and the responses are taken into account when adopting LTP3
- details of how environmental considerations have been integrated into the LTP3 and how the Environmental Report has been taken into account are made available; and
- significant environmental effects of implementation of the LTP3 are monitored to identifying unforeseen adverse effects of implementation of the LTP3 are monitored to identifying unforeseen adverse effects at an early stage and remedial action is undertaken (Appendix 1)

1.3 Transport Analysis Guidance
The SEA is undertaken in accordance with the Department of Transport (DfT) Transport Analysis Guidance (TAG) entitled Strategic Environmental Assessment for Transport Plans and Programmes (December 2004) (TAG Unit 2.11) which outlines five key stages to be followed for the SEA process:

**SEA Process**

- **Stage A:** Setting the context, identifying objectives, problems and opportunities and establishing the baseline

---

2 Alternatives may be described as the range of rational choices open to plan and programme makers for delivering the plan objectives. It is not the explicit purpose of the SEA to decide which alternative should be chosen, indeed the Directive does not create a specific requirement to put forward alternatives. The role of the SEA is to provide information on the relative environmental performance of alternatives, if presented.
- Stage B: Developing alternatives and deciding the scope of the SEA
- Stage C: Predicting and assessing the effects of the plan, mitigating any significant adverse effects
- Stage D: Consulting on the draft plan and Environmental Report, decision making and provision of information on the plan; and
- Stage E: Developing aims and methods for monitoring, responding to adverse effects

This report covers Stage D, the Environmental Report of the SEA process, Stage A, the Scoping Report, was completed November 2009 and consulted on with the three statutory consultees, English Heritage (EH), Natural England (NE) and the Environment Agency (EA) as well as partner agencies.

1.4 New Approach to Appraisal
In 1998 the New Approach to Appraisal (NATA) was an assessment tool developed to provide a structure review of transport proposals in terms of the objectives set out in the Government White Papers: A New Deal for Transport and A New Deal for Trunk Roads. In 2007 the Eddington Study and Stern Review prompted the DfT to review NATA. This was to partly address issues emerging after ten years of using NATA and partly to adapt NATA to the new Delivering a Sustainable Transport System\(^3\) (DaSTS) policy goals, especially the challenges around economic growth and the environmental and social impacts of policies or interventions. NATA identifies the Government’s five objectives:

- To protect and enhance the built and natural environment
- To improve safety for travellers
- To contribute to an efficient economy, supporting sustainable economic growth in appropriate locations
- To promote accessibility to everyday facilities for all, especially those without a car
- To promote the integration of all forms of transport and land use planning, leading to a better, more efficient transport system

The guidance addresses many aspects of the SEA Directive. Figure 1 outlines NATA’s requirements and Figure 2 outlines the principle steps of the NATA process grouped into the five key stages of SEA.

The New Approach to Appraisal (NATA)
NATA is an approach for improving the consistency and transparency with which transport decisions are made. It presents the key economic, environmental and social impacts of decisions in a clear, consistent and balanced way using an Appraisal Summary Table and associated worksheets. NATA is the basis for appraising multi-modal studies, Highways Agency road schemes, Local Transport Plans major road and public transport schemes, Strategic Rail Authority schemes, seaports and the Government’s airports strategy.

NATA involves:
- agreeing a set of objectives
- analysing present and future problems of, or relating to, the transport system
- exploring potential solutions for solving problems and meeting the objectives
- appraising options, seeking combinations which perform better as a whole that the sum of the individual components and
- selecting and phasing the preferred solution
- undertaking supporting analyses of practically and public acceptability; affordability and financial sustainability; and distribution and equity

Appraisal is in relation to the Governments five objectives for transport:

**Environment** – to protect the built and natural environment
- to reduce noise
- to improve local air quality
- to reduce greenhouse gasses
- to protect and enhance the landscape
- to protect and enhance townscape
- to protect the heritage of historic resources
- to support biodiversity
- to protect the water environment
- to encourage physical fitness
- to improve journey ambience

**Safety** – to improve safety
- to reduce accidents
- to improve security

**Economy** – to support sustainable economic activity and get good value for money
- to get good value for money in relation to impacts on public accounts
- to improve transport economic efficiency for business users and transport providers
- to improve transport economic efficiency for consumer users
- to improve reliability
- to provide beneficial wider economic impacts

**Accessibility** – to improve access to facilities for those without a car and to reduce severance
- to improve access to the transport system
- to increase option values
- to reduce severance

**Integration** – to ensure that all decisions are taken in the context of the Governments integrated transport policy
- to improve transport interchange
- to integrate transport policy with land-use policy
- to integrate transport policy with other Government policies

Reference: TAG Unit 2.11: Strategic Environmental Assessment for Transport Plans and Programmes (December 2004)
Figure 2: Relationship between NATA and SEA

Reference: TAG Unit 2.11: Strategic Environmental Assessment for Transport Plans and Programmes (December 2004)
1.5 Health Impact Assessment

Inline with best practice the SEA process will incorporate a Health Impact Assessment (HIA), a non statutory process[^4] that uses a range of methods and approaches to identify and consider the likely health and equity impacts of a proposal on a given population. There is no statutory remit to produce HIAs nor is there a prescribed formal guidance document.

The SEA process presents an opportunity to prevent ill health and promote good health influencing the wider detriments of health (transport, housing, education, employment, community safety and the built environment)[^5]. Potential benefits are detailed below:

- improvements in the health of the population though providing the right environment for healthier lifestyles;
- ensuring the wider determinants of health are considered by plan makers where relevant;
- reduction in health inequalities;
- reduction in the financial burden on the PCT – both by reducing the prevalent of ill health and by preventing illness at an earlier stage;
- aid in meeting PCT national and local targets;
- strengthened partnerships between planning and health stakeholders;
- capacity building will increase the ease of health issues in strategic planning decisions;
- other health organisations encouraged to help the PCT deliver its health targets;
- the opportunity to focus on longer-term health objectives, tackling the causes of ill health rather than ‘fire fighting’ present problems; and
- improved community engagement.

In order to ensure that HIA was integrated into the SEA process the review of Plans, Programmes and Policies and collection of baseline data included the consideration of health issues ensuring that relevant health issues and problems were identified and addressed through the inclusion of appropriate objectives.

2.6 Habitat Regulations Assessment

The SEA Directive also requires that the affects of a plan upon Natura 2000[^6] sites be considered under Directive 92/43/EEC[^7], the Conservation of Natural Habitats and of Wild Fauna and Flora; and under Directive 79/409/EEC[^8] on the Conservation of Wild Birds. Within the boundary for North Yorkshire there are 17 (including Stensall common in York) Special Areas of Conservation[^9] (SAC), 5 Special Protection Areas[^10] (SPA) and 2 Ramsar[^11] sites, which are listed in Table 1 while Appendix 2 outlines details of each site and Appendix 3 shows their geographical location.

[^4]: It should be noted that it is a statutory requirement of the SEA Directive to consider human health (Annex 1); HIA is a closely related process which has been designed for use in the absence of SEA. For reasons of completeness, the SEA of the LTP 3 will include HIA.
[^5]: Draft Guidance on Health in strategic Environmental Assessment Consultation Document 2007 (Department of Health)
[^6]: http://www.natura.org/
[^7]: http://www.jncc.gov.uk/page-1374
[^8]: http://www.jncc.gov.uk/page-1373
[^9]: http://www.jncc.gov.uk/page-23
[^10]: http://www.jncc.gov.uk/page-162
Table 1: Summary of Natura 2000 sites within North Yorkshire

<table>
<thead>
<tr>
<th>Designation</th>
<th>Site Name</th>
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<tbody>
<tr>
<td>SPA</td>
<td>North Pennine Moors, Lower Derwent Valley, Flamborough Head and Bempton Cliffs, South Pennine Moors Phase 2, North York Moors</td>
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<tr>
<td>RAMSAR</td>
<td>Lower Derwent Valley, Malham Tarn</td>
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A Screening Report will be undertaken and consulted on separately as to ascertain if an Appreciate Assessment is required for the LTP 3.
2 North Yorkshire Local Transport Plan 3 2011 – 2016

2.1 Purpose of Local Transport Plans
Local Transport Plans are statutory plans prepared by all local authorities setting out priorities and objectives for the development of transport. The plan is then used to bid for funds from the government.

The key objectives of the plan are consistent with national transport policy and address the main impacts that transport has on local people namely – Accessibility, Economy, Environment, Safety and Quality of Life.

2.2 Main Influences on Setting the LTP 3 Objectives
In setting the objectives for LTP 3 the County Council has reviewed LTP 2, taken account of the national, regional and local policy context, and undertaken extensive partner and public engagement while having regard to legal duties as the local highway authority.

2.2.1 North Yorkshire LTP2
The first North Yorkshire Local Transport Strategy was set out in LTP2. Following extensive public and stakeholder consultation in 2004 and 2005 the headline objectives of Accessibility, Safety, Environment, Congestion, Quality of Life, Economy and Efficiency were adopted.

Throughout the period of LTP2 (2006 – 2011) the County Council and partners developed and implemented schemes and initiatives which contributed towards achieving these objectives.

2.2.2 Policy Context
Developing a Sustainable Transport System
During 2009 the Government published their long term transport strategy titled ‘Developing a Sustainable Transport System’ (DaSTS). This document set out the national vision for transport and identified five ‘Goals’ for transport to contribute towards. These are:

- to support national economic competitiveness and growth, by delivering reliable and efficient transport networks
- reduce transport’s emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change
- to contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport, and by promoting travel modes that are beneficial to health
- to promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society
- to improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.

As can be seen the governments ‘Goals’ for transport are not significantly different from the North Yorkshire LTP2 Objectives.

Sustainable Community Strategy for North Yorkshire
The Sustainable Community Strategy (2008 - 2018) is the top-level strategy for North Yorkshire and everything that the County Council does should contribute to its Vision. The SCS and its Vision was developed by the North Yorkshire Strategic Partnership (NYSP) which is a partnership of public, private and voluntary sector organisations who are working together to meet the needs of North Yorkshire’s communities. The Local Transport Plan is intended to ensure transport helps to meet the needs of people in North Yorkshire. It will therefore share and contribute towards the SCS Vision.
North Yorkshire County Council, Council Plan
The corporate objectives set out in the Council Plan (2009-2012 are:

- to ensure good access for all
- to help people to live in safe communities
- to help all children and young people to develop their full potential
- to promote a flourishing economy
- to maintain and enhance our environment and heritage
- to improve health and well being and give people effective support when they need it.

A key role of the LTP is to ensure that transport contributes towards these corporate objectives.

2.3 North Yorkshire Local Transport Plan 3
The North Yorkshire LTP 3 sets out North Yorkshire County Council's strategy, vision and implementation programme for all forms of transport for the five year period. The national level key priorities are reflected in the vision, objectives and commitment of the North Yorkshire LTP 3:

LTP 3 Vision
To contribute towards the Sustainable community Strategy vision of:
North Yorkshire is a place of equal opportunity where all can develop their full potential, participate in a flourishing economy, live and thrive in secure communities, see their high-quality environment and cultural assets maintained and enhanced, and receive effective support when they need it.

LTP 3 Objectives
By:
- Supporting flourishing local economies by delivering reliable and efficient transport networks and services. (local economies)
- Reducing the impact of transport on the natural and built environment and tackling climate change. (environment and climate change)
- Improving transport safety and security and promoting healthier travel. (safety and healthier travel)
- Promoting greater equality of opportunity for all by improving peoples access to all necessary services. (access to services)
- Ensuring transport helps improve quality of life for all. (quality of life)

LTP 3 Commitment
And which can be achieved through our commitment to:
Manage, maintain and improve transport networks and services

The LTP3 will cover the period from April 2011 to March 2016 replacing LTP2 which covered the period 2006-2011 and is made up of two main sections:

Section 1
The Local Transport Strategy (LTS) for North Yorkshire which sets out:
- What North Yorkshire hope to achieve through LTP3
- What are the main issues facing residents and visitors to the county
- What types of actions can be taken to achieve the objectives
Section 2
The Delivery Plan which sets out:
- How North Yorkshire will manage, maintain and improve transport networks and services to achieve the objectives for transport and to address local problems
- How North Yorkshire will monitor performance to ensure that objectives are being achieved efficiently.
- How North Yorkshire will improve performance
3. Environmental Planning Context

3.1 The SEA Process
The Scoping Report for LTP 3 covered stages A and B of the SEA which involved setting the context and objectives, establishing the baseline and deciding on the scope of the assessment. The scoping stage ensures that the SEA addresses the relevant environmental issues and that the focus of the assessment fulfils the requirements of all relevant stakeholders.

The Scoping Report for LTP 3 covered Stages A and B of the SEA process:

- A description of the baseline environmental conditions
- Links between the plan and other relevant plans and programmes
- Identification of existing environmental problems affecting the plan and the identification of significant issues
- Assessment methodology including technical, procedural and other difficulties encountered; and
- The strategic options that will be assessed and the future stages of the SEA

The Environmental Report summarises the information contained in the Scoping Report and covers stages C – D of the SEA process:

- A description of the baseline environmental conditions
- Links between the plan and other relevant plans or programmes
- Identification of existing environmental problems affecting the plan and the identification of significant issues
- Description of alternative options
- Assessment of the LTP options
- Mitigation and monitoring proposals

3.2 The Broad Scope
The broad topics\(^\text{12}\) and spatial scope of the LTP 3 covers:

Topics

- Transport;
- Biodiversity and Landscape
- Cultural Heritage and the Historic Environment
- Population and Health
- Safety and Security
- Air Quality and Climate Change
- Noise
- Water
- Agriculture
- Waste
- Material assets, including resource efficiency and waste;
- The inter relationship between the above

Spatial scope
The spatial scope for the LTP 3 and relating SEA covers the county of North Yorkshire, incorporating the seven District Councils of Craven, Hambleton, Harrogate, Richmondshire,

\(^\text{12}\) The broad scope of the baseline data covers the topics listed in the SEA Directive Annex 1 (f) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML
Ryedale, Scarborough and Selby as well as two National Parks Planning Authorities, North York Moors and Yorkshire Dales, as shown in Figure 3.

Figure 3: LTP 3 Spatial Scope

3.3 Links to other relevant Policies, Plans and Programmes
A review of relevant policies, plans and programmes (PPPs) was undertaken in order to identify environmental objectives which in turn may provide constraints or synergies with the LTP 3. The PPPs cover International and European, National, Regional and Local policies, plans and programmes. A summary of the PPPs reviewed is provided in Table 2. The full list of PPPs can be found in Appendix 4.
Table 2: A Summary of the Policies Plans and Programmes for the LTP 3

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<th>Summary of Plans Programmes Policies</th>
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<td><strong>International Context</strong></td>
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<tr>
<td>United Nations Framework Convention on Climate Change &amp; Kyoto Protocol (UNFCCC, 1994 &amp; 1997)</td>
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<td>The Water Framework Directive (2000/60/EC)</td>
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<td>EC Directive on the Conservation of Natural Habitats of Wild Fauna and Flora 92/43/EEC</td>
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<td><strong>National Context</strong></td>
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<td>The Future of Transport White Paper 2004</td>
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<td>Transport Act 2000</td>
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<td>PPG13 Transport ODPM (2001)</td>
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<td>Securing the Future – The UK Government Sustainable Development Strategy 2005</td>
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<td>Environment Act 1995</td>
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### National Context

- To sustain and enhance the distinctive environment, economy and social fabric of the English countryside for the benefit of everyone

- Good design and planning which makes it practical to live in a more environmentally sustainable way, with less noise, pollution and traffic congestion;
- Towns and cities able to create and share prosperity, investing to help all their citizens reach their full potential; and
- Good quality services – health, education, housing, transport, finance, shopping, leisure and protection from crime – that meet the needs of people and businesses wherever they are.

**Climate Change Act (2008)**
- To improve carbon management and help the transition towards a low-carbon economy in the UK
- To demonstrate UK leadership internationally, signalling that we are committed to taking our share of responsibility for reducing global emissions in the context of developing negotiations on a post-2012 global agreement at Copenhagen in December 2009

**Energy White Paper – Meeting the Challenge (DTI, 2007)**
- Establish an international framework to tackle climate change
- Provide legally binding carbon targets for the whole UK economy, progressively reducing emissions
- Make further progress in achieving fully competitive and transparent international markets
- Encourage more energy saving through better information, incentives and regulation
- Provide more support for low carbon technologies
- Ensure the right conditions for investment

**Countryside and Rights of Way Act, DEFRA 2000**
- To allow the public a new right of public access on foot to areas of open land comprising mountain, moor, heath, down, and registered common land, and contains provisions for extending the right to coastal land

**Local Government Act 2000**
- To promote economic, social and environmental well-being

### Regional Context

**Growing Together – Integrated Regional Framework (YHA 2008)**
- To support sustainable transport
- To reduce the impact of future climate change
- To increase the regions resilience to climate change
- To improve productivity increasing innovation
- To improve public health and reduce obesity
- To achieve sustainable growth

**The Regional Economic Strategy (RES) for Yorkshire and Humber 2006-2015 (Yorkshire Forward & YHA 2006)**
- More new businesses that last
- Competitive businesses
- More skilled people
- A way to connect people to good jobs
- Better transport, infrastructure and environment
- Stronger cities, towns and rural communities
Regional Context


- To improve the accessibility of goods, services and recreational opportunities.
- To improve and promote the use of the network for people with a range of expectations, interests and levels of ability.
- To maintain rights of way in a manner that reflects current and future demand.
- To maintain and maximise the significant benefit the rights of way network provides to the local and regional economy.
- To develop rights of way to meet current and future demand.
- To sustainably manage and promote the rights of way network and maximise its contribution to a more sustainable environment.
- To encourage the use of rights of way to promote health and well-being as part of an active lifestyle.
- To improve the safety of non-motorised users both on highways shared with motor vehicles and on the rights of way network.
- To promote partnership at all levels in delivering this plan.

Local Context

Craven, Hambleton, Harrogate, Richmondshire, Ryedale, Scarborough, Selby, North York Moors National Park and Yorkshire Dales National Park Biodiversity Action Plans

- To work through partnerships to identify local priorities and to determine the contribution they can make to the delivery of the UK BAP

Hambleton, Harrogate, and North York Moors National Park Local Development Frameworks

- To conform to the Regional Spatial Strategy
- To promote social progress which recognises the needs of everyone
- To effectively protect the environment
- To ensure the prudent use of natural resources; and
- To ensure the maintenance of high and stable levels of economic growth and employment


- To consider the social, economic and environmental impacts of actions and promote sustainable development.

Hambleton Community Plan (2006 - 2011)

- To improve the quality of life for people in the District by addressing economic, social and environmental issues

Scarborough Community Strategy (2006 – 2009)

- To promote and improve the social, economic and environmental well being of the area and contribute to the achievement of sustainable development in the UK

3.4 Environmental Baseline

Following the review of the relevant policies, plans and programmes, the collection of environmental baseline data was undertaken for both the SEA and the LTP 3. These datasets not only help to shape the environmental objectives but also provide a basis for predicting and monitoring environmental effects throughout the lifecycle of the LTP 3.

3.4.1 Transport

- North Yorkshire has good transport links to the surrounding area (Appendix 4). By road, the A1 provides a major north-south route through North Yorkshire, the A168/A19 linking the A1 to Teesside, the A64 linking Leeds and the A1 to the east coast at Scarborough, the A66 trans Pennine route, the A629/A65 linking West Yorkshire to Cumbria and a short section of the M62 in the south of the County.
• With over 40 railway stations the rail routes serving the County include the East Coast Main Line and Trans-Pennine route.
• There are three local airports serving the County, Leeds Bradford, Durham Tees Valley and Robin Hood Airport Doncaster Sheffield as well as cross-Pennine links to Manchester Airport.
• There are also significant port facilities to and from mainland Europe on the Humber Estuary at Hull and around Middlesbrough on Teesside.
• Public rights of way are important recreational and community assets, providing a means of access to local schools, work, shops, public transport hubs, health and community centres and other goods and services as well as recreational facilities. There are over 10,000 km of rights of way which is the longest network in England and 36,920 hectares of open access land.

3.4.2 Biodiversity and Landscape
• There are 23 internationally designation sites (Appendix 2); 5 Special Protection Areas (SPAs) (Appendix 3a), 16 Special Areas of Conservation (SAC) (Appendix 3b) and 2 RAMSAR sites (Appendix 3c).
• North Yorkshire is characterised by significant areas of upland five of which carry national designations13 (Appendix 5):
  • The Yorkshire Dales National Park
  • The North York Moors National Park
  • The Forest of Bowland AONB (shared with Lancashire)
  • Nidderdale AONB
  • The Howardian Hills AONB
• The Yorkshire Heritage Coast designation stretches from Staithes down to North Bay, Scarborough (Appendix 6).
• There are 244 Special Sites of Scientific Interest (SSSI’s) sites of which almost 80% of which are at ‘favourable or recovering’ status, marginally higher than that for the region (Appendix 7).
• There are 1140 Sites of Importance for Nature Conservation (SINC’s) of which 77 sites are managed (Appendix 8).
• The county has the greatest amount of woodland cover14 in the Yorkshire and Humber region with approximately 7.8% coverage (Appendix 9).
• A green infrastructure evidence base is being developed to ensure a consistent approach to delivering policy throughout the region enabling local authorities and partner agencies to (Appendix 10):
  • Protect strategic and local green infrastructure corridors and networks
  • Focus green infrastructure enhancement in areas where gains will be maximised
  • Increase awareness of which green infrastructure functions exist where and how they complement one another
  • Establish a baseline of green infrastructure information from which change can be measured

3.4.3 Cultural Heritage and Historic Environment
• The World Heritage Site of Fountains Abbey and Studley Royal is situated in North Yorkshire with an estate covering 800 acres of countryside and is home to the largest abbey ruins in the country.

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13 North Yorkshire also contains 2.6 sq km of the North Pennines AONB
14 The woodland cover in this report refers to the following: Accessible Woodland; Ancient Woodland; Community Forests; Forestry Commission Land and; Woodland Trust Sites
• The county has a rich historic environment comprising of over 40 Registered Parks and Gardens (of which 5 are on the At Risk Register), over 1900 Scheduled Monuments (of which over 200 are on the At Risk Register), over 300 Conservation Areas (of which 3 are on the At Risk Register), over 13,500 listed buildings (of which 42 are on the At Risk Register) and 6 registered battlefields (of which 2 are on the At Risk Register), (Appendix 11).

3.4.4 Population and Health
• Currently around 595,500 people live in the county with a fifth living in the main urban areas with the majority living in the small towns and villages. Over half of the county is sparsely populated with fewer than four people a hectare, creating challenges for both the public and private sectors in providing consistently good quality and accessible services to scattered communities over such a wide geographical area.
• As population density is low 73 schools have fewer than 50 pupils and 166 have fewer than 100.
• The most marked demographic change in North Yorkshire's population will be the estimated rise in the population of those over 65 years old which will increase from 111,400 (18.8 per cent) in 2006 to 152,400 (23.7 per cent) in 2018. A significant element of this rise is because of inward migration with many finding North Yorkshire a pleasant place to live in retirement. This growing elderly population places increasing pressures on delivery of social care services
• North Yorkshire is also the home of Catterick Garrison which has a military population of over 17,000. The Garrison and other military bases in North Yorkshire have major economic and social implications for the surrounding area.
• There are seven district and borough councils Craven, Hambleton, Harrogate, Richmondshire, Ryedale, Selby and Scarborough. Each district has its own strategic partnership for its area focussing on local problems.
• There are 731 parishes with 588 parish councils.
• A single primary care trust commissions and provides health care across the County and the City of York and the Fire and Police services also cover the county and City area.
• The quality of life in North Yorkshire is good but there are pockets of deprivation in Scarborough, Selby and Colburn and areas of rural poverty (Appendix 12a and 12b).
• Scarborough has seven Super Output Areas that fall within the worst 10 per cent of deprived areas nationally. Health indices are good with life expectancy high, but there are inequalities, (for example in Ryedale you can expect to live 1.4 years longer than in Scarborough).
• House prices are high and there is significant demand for second homes leading to a significant lack of affordable housing. The lack of supply is compounded by the low wages seen in many areas of the county.
• Figures for 2010 show car ownership in North Yorkshire is increasing, with 87% of households having a car and 40% having a second car, this is an increase from 2009 figures of 63% and 26% respectively
• Educational attainment is high. Young people remain in education longer but then move out of the county. This makes it difficult for the public sector to recruit and keep young staff.
• Unemployment remains below the national average but some groups are losing jobs more readily than others. 18 to 24 year olds are being hardest hit by job losses. The main industries centre on tourism and agriculture. Small businesses dominate, with 85 per cent of businesses employing fewer than ten people, and there are high levels of self employment.
• The health of people living in North Yorkshire is higher than the average for England and life expectancy and early deaths from heart disease, strokes and cancer are better than the England average.
• Rates of children classified as obese are similar to the England average with almost 10% of reception year children being obese.
• Levels of physical activity in senior school children are better than the England average.

3.4.5 Safety and Security
• Road accidents occurring in North Yorkshire differ in type in some respects from the national picture. They are often single vehicle, high speed crashes resulting in serious injury or death. Often the result of unfamiliarity with the county's roads coupled with unfit or thrill-seeking driving. As a result, road casualties, including deaths, are rather high.
• The street lighting service contributes to community safety and security. It supports the County Councils Social Inclusion Strategy as it provides a positive aid to commercial, leisure and tourist activities and can increase pedestrian movement and access to services.

3.4.6 Air Quality and Climate Change
• Air quality in North Yorkshire is not generally a major problem, however there are a number of locations where high volumes of traffic, (usually coupled with developments either side of the road) create a canyon like effect causing air quality issues. Air Quality is measured and monitored by the District Councils who have identified where there are transport air quality issues.
  
  • Hambleton District   A167 Friargate Street, Northallerton
  • Harrogate Borough   A661 Woodlands Junction
                      A59 Bond End, Knaresborough
                      B6265 Skellgate, Ripon
  • Ryedale District   B1248 Butch Corner, Malton

  Of these Bond End, Skellgate and Butch Corner are likely to be declared Air Quality Management Areas\textsuperscript{15} (AQMAs) in the near future.

• Nationally, greenhouse gas emissions from transport represent 21% the vast majority of which is produced in main urban areas of the country, whereas regionally, transport represents 30% of emissions\textsuperscript{16}.
• In recent years, North Yorkshire has experienced significant floods across the county, especially around Selby, Malton, Norton, Pickering, Filey and the western edges of the North York Moors.

3.4.7 Noise
• Noise levels in North Yorkshire are relatively low in comparison to a major city and no urban areas meet the European Directive 2002/49/EC\textsuperscript{17} requirements for further action.
• An annual visitor survey for North Yorkshire revealed 40% came to the area for the "peacefulness and tranquillity" of the area.

3.4.8 Water

\textsuperscript{15} An AQMA is an area where pollution has reached a level set by the European Parliament as requiring remedial action. The relevant authorities (County Council and District Council) must prepare and Air Quality Action Plan to seek to reduce pollution in there areas.
\textsuperscript{16} http://www.yourclimate.org/pages/action-plan
\textsuperscript{17} http://ec.europa.eu/environment/noise/directive.htm
The principal rivers in the County are the Rivers Aire, Esk, Derwent, Swale, Ure, Wharf, Nidd and Ouse. All of North Yorkshires primary rivers, with the exception of the River Esk, confluence to form the River Ouse. The River Ouse joins the sea south of the County via the Humber Estuary. The only outfalls to the North Sea in the County are the River Esk at Whitby and small streams and becks along the coastline. (Appendix 13)

There are five Environmental Agency River Catchments which cover the County, they are:

- Aire
- Esk and Coastal Streams
- Derwent
- Ouse
- Hull and Coastal Tributaries

River water quality is one of the Government’s 15 headline indicators of sustainable development. Within the Yorkshire and Humber Region the percentage of total river length considered to be of good or fair quality has improved greatly in recent years. In 2002, 90% of the region’s total river length was considered to be good or fair in terms of both chemical quality and biological quality.

The county is vulnerable to extreme weather events including flooding. Snow clearance is a problem in the rural uplands and there are problems with coastal erosion. These issues place demands on emergency planning, highways engineering, maintenance teams and partner agencies.

3.4.9 Agriculture

North Yorkshire is predominantly rural in character. The majority of the land in the County comprises land with an Agricultural Land Classification of Grade 3 and just over half of being Grades 1, 2 and 3. (Appendix 14)

The significant levels of high quality agricultural land are found predominantly between the Yorkshire Dales and the North York Moors National Parks.

3.4.10 Waste

In 2007/08 the amount of waste generated each week by households in the region was similar to the England average of 22kg.

The proportion of household waste that was recycled was only 31% compared with 35% in England as a whole, the third lowest figure of any region.

The percentage of municipal waste going to landfill stood at 60% in 2007/08, the second highest of the English regions after the North West.

3.4.11 Material Assets

The construction, operation and maintenance of the transport network requires the use of a wide range of materials, including energy. Over recent years North Yorkshire has committed to:

- Increase % of recycled materials used in highways maintenance
- Decrease % of Highway waste disposal to landfill
- Identify trial sites for planning to be used in new surfacing
- Identify opportunities for the use of recycled and secondary materials

18 The region refers to Yorkshire and the Humber
19 Transport and Telecommunications Services Overview and Scrutiny Committee: Roads to Re-Use and Recycling, January 2006 and 2010
3.5 Challenges and Opportunities
The analysis of baseline information highlighted the following key challenges and opportunities relevant to the plan:

- Traffic growth and congestion
- Cross boundary transport links
- Continued and effective management and maintenance of the transport and public rights of way networks
- Safeguarding biodiversity
- Continued protection of designated landscapes and habitats
- Using and developing land
- Safeguarding the historic environment
- Continued protection of designated cultural assets
- Access to and the provision of services
- Increasing older population
- Increase of car ownership
- Economic regeneration and growth
- Access to public and alternative means of transport
- Continued improvement to and the investment of safety and security
- Air quality and climate change
- Safeguarding river quality
- Noise
- Human Health
- Material assets
- Use of natural resources and minimising waste material
- Transportation of goods and waste

3.6 Environmental Objectives
The SEA Directive does not specifically require the use of objectives or indicators, but they are a recognised way in which environmental effects can be identified, analysed and compared and are fundamental to the NATA. The Environmental Objectives are separate to the LTP 3 objectives and provide a statement of intention from an environmental perspective, and which the LTP 3 performance can be measured against.

To fulfil the requirements of the SEA Directive, objectives must cover biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and interrelationships between them (2001/42/EC, Annex 1f)

There are 16 environmental objectives which have been identified during consultation between the LTP Environment Group, the LTP3 Production Team, the SEA team, statutory and partner agencies, which are as follows:

1. Minimise the noise, vibration and light pollution impact from transport related activities in sensitive areas
2. Minimise the impacts of the transportation network on air quality
3. Minimise greenhouse gas emissions from transportation and through the maintenance of the network
4. Incorporate measures that improve the resilience of local transport to the impact of climate change

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20 In particular, those relating to any areas of particular environmental importance such as areas designated pursuant to Directives 79/409/EEC (Birds Directive) and 92/43/EEC (Habitats Directive)” (Annex 1 (c))
5. Preserve and enhance the county’s landscape
6. Protect and minimise the use of natural resources and minimise waste
7. Protect and enhance townscape character
8. Protect, enhance and improve access to historic and environment assets of the county whilst preserving their setting and minimising the adverse impacts of transport
9. Conserve and enhance biodiversity and geological diversity and minimise the adverse impacts of transport on biodiversity and geological diversity across the county
10. Minimise the impact of transport on water resources
11. Encourage healthier lifestyles through transport choice
12. Improve safety and security
13. Minimise community severance
14. Encourage and promote cycle, pedestrian and public transport passenger movement
15. Improve access to public amenities and green infrastructure
16. Support the development of the local economy by ensuring good transport links whilst protecting the environment

3.7 LTP 3 Objectives
As highlighted in section 2.3, the LTP 3 aims to support the vision of the Sustainable Community Strategy through the following 5 objectives:

1. Supporting flourishing local economies by delivering reliable and efficient transport networks and services. (local economies)
2. Reducing the impact of transport on the natural and built environment and tackling climate change. (environment and climate change)
3. Improving transport safety and security and promoting healthier travel. (safety and healthier travel)
4. Promoting greater equality of opportunity for all by improving peoples access to all necessary services. (access to services)
5. Ensuring transport helps improve quality of life for all. (quality of life)

3.8 Compatibility of the LTP 3 and Environmental Objectives
Stage B of the SEA process, and in line with DfT Guidance, involves testing the LTP objectives against the environmental objectives which is used as an indicator highlighting any areas where there is potential conflict, Table 3.

The compatibility between LTP 3 and the environmental objectives in the main is good and there are clear environmental objectives which support LTP 3 objectives. However, there are many areas of uncertainty and several areas of potential conflict especially supporting flourishing local economies by delivering reliable and efficient transport networks and services which may impact on air quality, greenhouse gas emissions and issues such as noise, vibration, light issues within sensitive areas and will require mitigation measures in order to achieve a more balanced and consistent outcome.
Table 3: Testing the LTP 3 Objectives against the Environmental Objectives

<table>
<thead>
<tr>
<th>Environmental Objectives</th>
<th>LTP 3 Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Minimise the noise, vibration and light pollution impact from transport related activities in sensitive areas</td>
<td><img src="compatible" alt="Cell" /></td>
</tr>
<tr>
<td>2 Minimise the impacts of the transportation network on air quality</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>3 Minimise greenhouse gas emissions from transportation and through the maintenance of the network</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>4. Incorporate measures that improve the resilience of local transport to the impact of climate change</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>5. Preserve and enhance the county’s landscape</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>6. Protect and minimise the use of natural resources and minimise waste</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>7. Protect and enhance townscape character</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>8. Protect, enhance and improve access to historic and environment assets of the county whilst preserving their setting and minimising the adverse impacts of transport</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>9. Conserve and enhance biodiversity and geological diversity and minimise the adverse impacts of transport on biodiversity and geological diversity across the county</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>10. Minimise the impact of transport on water resources</td>
<td><img src="neutral" alt="Cell" /></td>
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<tr>
<td>11. Encourage healthier lifestyles through transport choice</td>
<td><img src="compatible" alt="Cell" /></td>
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<tr>
<td>12. Improve safety and security</td>
<td><img src="neutral" alt="Cell" /></td>
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<tr>
<td>13. Minimise community severance</td>
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<tr>
<td>14. Encourage and promote cycle, pedestrian and public transport passenger movement</td>
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<tr>
<td>15. Improve access to public amenities and green infrastructure</td>
<td><img src="neutral" alt="Cell" /></td>
</tr>
<tr>
<td>16. Support the development of the local economy by ensuring good transport links whilst protecting the environment</td>
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</table>
3.9 Environmental Objectives and Indicators

LTP 3 will be measured using the environmental objectives, which meet the requirements of both NATA and the SEA Directive (Appendix 15). The subsequent indicators, shown in Table 4 will be linked to measurable targets, they add definition to the environmental objectives and will inform the monitoring and review of the LTP 3 once adopted.
<table>
<thead>
<tr>
<th>SEA TOPIC</th>
<th>ENVIRONMENTAL OBJECTIVES</th>
<th>Draft Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Health, population, inter-relationships</td>
<td>Minimise the noise and vibration from transport related activities in sensitive areas</td>
<td>• noise mapping&lt;br&gt;• tranquillity mapping&lt;br&gt;• planning applications with conditions on access attached</td>
</tr>
<tr>
<td>Air, Human Health, Population</td>
<td>Reduce the impacts of the transportation network on air quality</td>
<td>• average journey time per mile during morning peak (NI 167)&lt;br&gt;• number of AQMA’s&lt;br&gt;• mode of transport used to travel to school (NI 198)</td>
</tr>
<tr>
<td>Climatic Factors</td>
<td>Reduce greenhouse gas emissions from transportation and through the maintenance of the network</td>
<td>• study of low carbon asphalt&lt;br&gt;• % principal roads where maintenance considered and undertaken&lt;br&gt;• % non principal roads where maintenance considered and undertaken</td>
</tr>
<tr>
<td>Landscape</td>
<td>Preserve and enhance the county’s natural landscape</td>
<td>• major schemes and their location to green belts&lt;br&gt;• location and areas of greenbelts&lt;br&gt;• utilising green infrastructure to inform, preserve and enhance the natural landscape&lt;br&gt;• green infrastructure projects implemented&lt;br&gt;• km of new access routes created</td>
</tr>
<tr>
<td></td>
<td>Protect and enhance townscape character</td>
<td>• location and number of conservation areas&lt;br&gt;• % conservation areas with management proposals&lt;br&gt;• number of conservation areas at risk&lt;br&gt;• adoption of the North Yorkshire Highway Construction Manual</td>
</tr>
<tr>
<td>Cultural Heritage including Architectural and Archaeological Heritage</td>
<td>Conserve, enhance and improve access to the historic assets of the county</td>
<td>• number and % of designated assets at risk&lt;br&gt;• Number of designated historic assets and their settings affected, either positively or negatively by LTP 3 proposals&lt;br&gt;• number of Resisted Parks and Gardens&lt;br&gt;• number of visits to historic sites&lt;br&gt;• % of planning applications for which archaeological investigations are required prior to approval in relation to transport</td>
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<tr>
<td>SEA TOPIC</td>
<td>ENVIRONMENTAL OBJECTIVES</td>
<td>Draft Indicators</td>
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<tr>
<td>Biodiversity, Fauna, Flora, Soil</td>
<td>Conserve and enhance biodiversity across the county</td>
<td>• % of SSSIs in favourable condition</td>
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<td></td>
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<td>• % of SSSIs in unfavourable condition</td>
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<td></td>
<td></td>
<td>• % of county covered by national and international protected areas</td>
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<td></td>
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<td>• % of county covered by woodland</td>
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<td></td>
<td>Reduce the adverse impacts of transport on biodiversity across the county</td>
<td>• proportion of Local Sites where positive conservation management has been or is being implemented (NI 197)</td>
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<td></td>
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<td>• types of BAP habitats created or enhanced</td>
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<tr>
<td>Water</td>
<td>Reduce and minimise the negative impact of transport on the county’s water resources</td>
<td>• % of the region’s total river length to be in good or fair in terms of both chemical quality and biological quality</td>
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<td>• number of category 1-2 Pollution Incidents where source is transport</td>
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<tr>
<td>Human Health, Population</td>
<td>Encourage healthier lifestyles through transport choice</td>
<td>• index of multiple deprivation</td>
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<td>• obesity statistics</td>
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<td></td>
<td>• number of cycling trips</td>
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<td></td>
<td></td>
<td>• % of journeys to work by cycling</td>
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<tr>
<td></td>
<td>Improve safety and security</td>
<td>• people killed or seriously injured (KSI) in road traffic accidents (NI 148)</td>
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<td></td>
<td></td>
<td>• children KSI in road traffic accidents (NI 48)</td>
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<td></td>
<td></td>
<td>• all road casualties with slight injuries</td>
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<tr>
<td>Population</td>
<td>Reduce community severance</td>
<td>• public perception studies</td>
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<td>• public transport information satisfaction</td>
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<td>• local bus services satisfaction</td>
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<td></td>
<td></td>
<td>• bus service running on time (NI 178)</td>
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<td></td>
<td>• number of days of temporary traffic controls or road closures on traffic roads caused by roadworks</td>
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<td></td>
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<td>• average journey time per mile during morning peak (NI 167)</td>
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<td>• number of AQMA’s</td>
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<tr>
<td>SEA TOPIC</td>
<td>ENVIRONMENTAL OBJECTIVES</td>
<td>Draft Indicators</td>
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</tr>
</tbody>
</table>
| Population | Improve accessibility to services and facilities | • working age people with access to employment by public transport and other specified modes (NI 176)  
• local bus passenger journeys in the authority area |
| Encourage and promote cycle, pedestrian and public transport passenger movement | | • access to services and facilities by public transport, walking, cycling (to increase the number of inaccessible parishes which have access to community transport journey opportunities and to increase overall patronage) – (NI 175) |
| Improve access to public amenities and open areas | | • % of total length of footpaths and other rights of way easy to use by the public |
| Material Assets | Support the development of the local economy by ensuring good transport links whilst protecting the environment | • rural access to opportunities programme  
• urban renaissance programme  
• North Yorkshire Geographic programme  
• access to services and facilities by public transport, walking, cycling (to increase the number of inaccessible parishes which have access to community transport journey opportunities and to increase overall patronage) – (NI 175)  
• working age people with access to employment by public transport and other specified modes (NI 176) |
4. Consultation and Delivery

4.1 Structure for LTP 3 Delivery
The LTP 3 Production Team and Plan Partners were part of a wider structure, shown in Figure 4, they reviewed national, regional and local policy, and also undertook research, held workshops with senior management and partner agencies, formed theme groups and carried out a series of consultation events with the wider public and partner agencies in order to identify policy areas and shape the key objectives.

Figure 4: The LTP 3 Structure for Delivery

4.2 Stakeholder Consultation and Engagement
As the LTP 3 intends to help deliver the needs of people in North Yorkshire, the LTP 3 Productions Team engaged widely with stakeholders and the public to seek their views.

The stakeholder consultation\(^\text{21}\) for LTP 3 lasted 14 weeks and consisted of questionnaires issued to 922 key stakeholders, including 626 of the county’s Parish Councils and 296 other key stakeholders from different categories including Councillors, local transport operators, emergency service representatives and local freight operators. Respondents were asked to rank what they perceived to be the highest priority for transport related objectives in the county (Figure 5) and identify areas within these objectives areas that required the most attention (Figure 6).

\(^{21}\) Local Transport Plan 3 Consultation: Results of Stakeholder Engagement (Jacobs 19 November 2009)
Figure 5: A Summary of Stakeholder Ranking of LTP 3 Objectives

Transport Related Objectives

- Supporting the local economy
- Protecting the environment
- Ensuring better safety and health
- Improving accessibility
- Improving quality of life
- Other
Analysis of the consultation results showed that although more consultees thought that supporting the local economy was the most important objective, this was still only approximately 30% of all the respondents; the health and safety, accessibility and quality of life objectives each having approximately 20% of consultees feeling they were most important. Overall therefore the responses from consultees suggested that they felt all of the five objectives that were consulted on were important therefore none will be given higher priority as was done with LTP 2 and will be regarded with equal importance. Additionally no ‘other’ objective was consistently identified as being important.

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22 Each question within the LTP questionnaire had the option of completing an “Other Comments” section all were examined and have been reported in detail on the Results of Stakeholder Engagement Report.
4.3 Practicality and Deliverability
North Yorkshire County Council is the Highway Authority for local roads in the County as defined by the
Highways Act 1980. As the local highway authority the County Council has a number of statutory
duties placed upon it, including a Network Management Duty (Traffic Management Act 2004), a duty to
maintain the highway (Highways Act 1980, section 41) and a duty to ‘prepare and carry out a
programme of measures designed to promote road safety’ (Road Traffic Act 1988, section 39). However, the Highway Authority has ‘powers’ rather than a ‘duty’ to improve the highway network and
other transport infrastructure and services for other purposes.

The County Council will give higher priority to fulfilling its statutory duties rather than exercising its
powers. Due to reduced funding for transport, statutory duties must and will take priority over its
discretionary powers; therefore there will be a need to ensure that the County Council uses the best
and most cost effective means of achieving the Vision and Objectives.

As highlighted earlier the County Council has adopted the commitment for LTP3 to manage, maintain
and improve transport networks and services as a hierarchy of action.

- **Manage** the transport network and services to make the best use of what we have. As previously
  highlighted the County Council has a duty to manage the network. This may involve things like
  better co-ordination of roadwork's to reduce congestion and delays, encouraging more people to
  use public transport or walking to reduce the number of cars causing congestion and pollution and
  managing parking on the road to reduce obstructions. In most cases these types of management
  measures are relatively low cost.

- **Maintain** transport networks and services. As with Management, this is a duty on the County
  Council. Measures could include from better maintenance of footways to encourage more people to
  walk, making sure roads are in a good state of repair to reduce accidents or providing support for
  suitable network of public transport services where these are not commercially viable. These types
  of measure are likely to be more expensive than management measures but cheaper than
  improvement.

- **Improve** transport networks and services. Unlike Management and Maintenance this is a
discretionary power for the County Council rather than a duty, it must therefore take a lower priority
than fulfilling duties. However, where management or maintenance cannot address a transport
related issue we will seek to provided appropriate new infrastructure or services where resources
allow in accordance with the County Councils scheme prioritisation system. These may range from
supporting new community transport services, new sections of footways or crossing facilities
through to new Park and Ride sites and services. These types of improvements tend to be more
expensive that management and maintenance measures.
### List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AA</td>
<td>Appropriate Assessment</td>
</tr>
<tr>
<td>AONB</td>
<td>Area of Outstanding Natural Beauty</td>
</tr>
<tr>
<td>AQMAs</td>
<td>Air Quality Management Areas</td>
</tr>
<tr>
<td>BAP</td>
<td>Biodiversity Action Plan</td>
</tr>
<tr>
<td>BES</td>
<td>Business and Environmental Services</td>
</tr>
<tr>
<td>DaSTS</td>
<td>Developing a Sustainable Transport System</td>
</tr>
<tr>
<td>DEFRA</td>
<td>Department of Environment Food and Rural Affairs</td>
</tr>
<tr>
<td>DETR</td>
<td>Department of Environment Transport and Regions</td>
</tr>
<tr>
<td>DfT</td>
<td>Department of Transport</td>
</tr>
<tr>
<td>DTI</td>
<td>Department of Trade and Industry</td>
</tr>
<tr>
<td>EA</td>
<td>Environment Agency</td>
</tr>
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<td>EH</td>
<td>English Heritage</td>
</tr>
<tr>
<td>HIA</td>
<td>Health Impact Assessment</td>
</tr>
<tr>
<td>HRA</td>
<td>Habitat Regulations Assessment</td>
</tr>
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<td>KSI</td>
<td>Killed or Seriously Injured</td>
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<tr>
<td>LTP</td>
<td>Local Transport Plan</td>
</tr>
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<td>LTS</td>
<td>Local Transport Strategy</td>
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<tr>
<td>NATA</td>
<td>New Approach to Appraisal</td>
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<tr>
<td>NE</td>
<td>Natural England</td>
</tr>
<tr>
<td>NI</td>
<td>National Indicator</td>
</tr>
<tr>
<td>ODPM</td>
<td>Office of the Deputy Prime Minister</td>
</tr>
<tr>
<td>PPG</td>
<td>Planning Policy Guidance</td>
</tr>
<tr>
<td>PPPs</td>
<td>Policies, Plans and Programmes</td>
</tr>
<tr>
<td>PPS</td>
<td>Planning Policy Statement</td>
</tr>
<tr>
<td>Ramsar</td>
<td><em>Convention Conservation and Wise use of Wetlands</em></td>
</tr>
<tr>
<td>SAC</td>
<td>Special Areas of Conservation</td>
</tr>
<tr>
<td>SEA</td>
<td>Strategic Environmental Assessment</td>
</tr>
<tr>
<td>SINCs</td>
<td>Sites of Importance for Nature Conservation</td>
</tr>
<tr>
<td>SPA</td>
<td>Special Protection Areas</td>
</tr>
<tr>
<td>SSSI</td>
<td>Sites of Special Scientific Interest</td>
</tr>
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<td>TAG</td>
<td>Transport Analysis Guidance</td>
</tr>
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<td>YHA</td>
<td>Yorkshire and Humber Assembly</td>
</tr>
</tbody>
</table>
Appendix
### Appendix 1: Main requirements of the SEA Directive

**Requirements.**

- Already generally carried out as part of good practice transport appraisal

**Preparing an Environmental Report,** in which the likely significant effects on the environment of implementing the plan are identified, described and assessed. Reasonable alternatives taking into account the objectives and geographical scope of the plan should also be described. The information to be given is set out in (Article 5 and Annex I):

  a) An outline of the contents, main objectives of the plan, and the relationship with other relevant plans and programmes;

  b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan;

  c) The environmental characteristics of areas likely to be significantly affected;

  d) Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;

  e) The environmental protection objectives, established at international, Community or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation;

  f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);

  g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;

  h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know how) encountered in compiling the required information;

  i) A description of measures envisaged concerning monitoring in accordance with Article 10;

  j) A non-technical summary of the information provided under the above headings.

The report must include information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Article 5.2)

**Consulting:**

- Authorities with environmental responsibilities, when deciding on the scope and level of detail of the information which must be included in the Environmental Report (Article 5.4);

- Authorities with environmental responsibilities and the public, to give them an early and effective opportunity within appropriate time frames to express their opinion on the draft plan and the accompanying Environmental Report before the adoption of the plan (Article 6.1, 6.2);

- Other EU Member States, where the implementation of the plan is likely to have significant effects on the environment in these countries (Article 7).

**Taking the Environmental Report and the results of the consultations into account in decision making** (Article 8)
Providing information on the decision:
When the plan is adopted, the public and any countries consulted under Article 7 must be informed and the following made available to those so informed:

- the plan as adopted;
- a statement summarising how environmental considerations have been integrated into the plan and how the Environmental Report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Article 7 have been taken into account in accordance with Article 8, and the reasons for choosing the plan as adopted, in the light of the other reasonable alternatives dealt with; and
- the measures decided concerning monitoring (Article 9).

Monitoring the significant environmental effects of the plan's implementation (Article 10).

*Department for Transport (2004) Strategic Environmental Assessment for Transport Plans and Programmes (TAG Unit 2.11)*
### Appendix 2: Details of the Natura 2000 and Ramsar Sites within North Yorkshire

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Area</th>
<th>Primary Reason for Designation (Habits and/or Species)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arncliff and Park Hole Wood SAC</td>
<td>52.49 ha</td>
<td>The SAC contains a greater number of sporophytes that found elsewhere in the UK. However the plans are small, and in many cases not fully developed, with mature spore-producing plants are extremely rare. The great significance of this site lies in that the sporophytes appear to be recently developed from gametophytes, a phenomenon that has only been rarely recorded elsewhere in the UK.</td>
</tr>
<tr>
<td>Beast Cliffs SAC</td>
<td>260.2 ha</td>
<td>Beast Cliffs is an east coast complex of hard and soft cliffs. The combination of geology, topography and plan communities found on the site are unique and it is one of the best examples of vegetated sea cliffs on the north-east coast of England. Vertical hard cliffs support maritime crevice and ledge vegetation, and the more gently sloping parts of Beast Cliff itself are covered by scrub and woodland. Sandstone boulders support a luxuriant growth of mosses and ferns and pools on the cliff shelf support wetland plans and scrub. North of Beast Cliff to Ravenscar the vegetation is more open and reflects alternating strata of rich and poor base-status. Areas of calcareous grassland and wet flush plant communities, whereas heathland species occur on more acidic sandstone outcrops. From Ravenscar north to Robin Hood’s Bay the cliffs are composed either partly or entirely of soft boulder clay. This clay is continually being eroded by wave action and slippage, and supports pioneer plan communities typical of this changing habitat.</td>
</tr>
<tr>
<td>Craven Limestone Complex SAC</td>
<td>5,328.25 ha</td>
<td>The Craven Limestone Complex is the second most extensive area of calcareous grassland in the UK. Craven is one of four sites representing Limestone pavements in northern England. The site is selected on the basis of its size and as an example of mid-altitude pavement. The Complex is the single remaining native site for Lady’s Slipper orchid Cypripedium calceolus.</td>
</tr>
<tr>
<td>Eller’s Wood and Sand Dale SAC</td>
<td>4.0 ha</td>
<td>The SAC consists largely of humid and mesophile grassland, with a 25% coverage of bogs, marshes, water fringed vegetation and fens and a small amount of heath, scrub, marquis and garrigue and phrygana. This site provides a lowland representation of Geyer’s whorl snail Vertigo geyeri in north-east England; the population exists at this site in a tufa-rich flush.</td>
</tr>
<tr>
<td>Fen Bog SAC</td>
<td>27.49 ha</td>
<td>93% of the SEA consists of bogs, marshes, water fringed vegetation and fens. The peat deposit is up to 18 meters deep, and is now mostly covered with acidophilous mire vegetation.</td>
</tr>
<tr>
<td>Flamborough Head SAC</td>
<td>212.17 ha</td>
<td>The Flamborough Head SAC and the Flamborough Head and Bempton Cliffs SPA is an area of shingle, sea cliffs and islets, located near Bridlington, East Riding. Flamborough Head represents the most northerly outcrop of coastal chalk in the UK and the most southerly area of bedrock on the North Sea. The site is characterised by high chalk cliffs - up to 135m high and covering a distance of about 16 km - which are partly vegetated, over 200 caves and a chalk reef which extends up to 6km offshore.</td>
</tr>
<tr>
<td>Flamborough Head and Bempton Cliffs SPA</td>
<td>212.17 ha</td>
<td></td>
</tr>
<tr>
<td>Ingleborough Complex SAC</td>
<td>5,769.28 ha</td>
<td>Ingleborough Complex site, along with Craven Limestone Complex SAC is one of four sites in norther England representing Limestone pavements on Carboniferous limestone. Ingleborough has the most extensive series of Limestone pavements in the UK, varying from moderate altitude to montane in character (300-640m).</td>
</tr>
<tr>
<td>Kirk Deighton SAC</td>
<td>4.03 ha</td>
<td>The site comprises improved grassland with some non-forest areas cultivated with woody plants, and some standing water bodies. The site is situated in Kirk Deighton, near Weatherby. The site is considered to be one of the best areas in the UK for Great Crested Newts</td>
</tr>
<tr>
<td>Site Name</td>
<td>Area</td>
<td>Primary Reason for Designation (Habitats and/or Species)</td>
</tr>
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</tr>
<tr>
<td>Lower Derwent Valley SAC</td>
<td>915.45 ha</td>
<td>The site located to the south and east of York is predominantly humid and mesophile grassland – largely agricultural and seasonally flooded – with a significant presence of bogs, marshes, water fringed vegetation and fens.</td>
</tr>
<tr>
<td>SPA</td>
<td>915.91 ha</td>
<td></td>
</tr>
<tr>
<td>Ramsar</td>
<td>915.45 ha</td>
<td>Malham Tarn Ramsar is considered the best example of an upland stonewort Chara-dominated lake in England. It is an example of a lake on limestone and is the highest marl lake in the UK. Malham Tarn Moss represents active raised bogs in central and northern England, in an area overlying limestone where wetlands are more typically base rich fens. It displays a classic raised dome with transition from raised bog (base-poor) to base rich conditions at the bog margin where it interfaces with land influenced by water from the limestone.</td>
</tr>
<tr>
<td>North Pennines Dales Meadows</td>
<td>497.09 ha</td>
<td>The Dales contain a series of isolated fields within several north Pennine and Cumbrian valleys. The site encompasses the range of variation exhibited by Mountain Hay Meadows in the UK and contains the major part of the remaining UK resource of this habitat type. The grasslands included within the site exhibit very limited effects of agricultural improvement and show good conservation of structure and function. A wide range of rare and local meadow species are contained within the meadows.</td>
</tr>
<tr>
<td>SAC</td>
<td>103,109.42 ha</td>
<td>Almost half the site is classified as bogs, marshes; water fringed vegetation and fens, with significant amounts of heath scrub, maquis and garrigue and phygrana, as well as dry grassland and steppes, with a small amount of broad leaved deciduous woodland.</td>
</tr>
<tr>
<td>SPA</td>
<td>147,246.41 ha</td>
<td></td>
</tr>
<tr>
<td>North York Moors SAC</td>
<td>44,082.25 ha</td>
<td>The site located in north-east Yorkshire within the North York Moors National Park. The site is largely classified as heath, scrub, maquis and garrigue and phygrana with 15% coverage of dry grassland and steppes and small amounts of inland water bodies, bogs, marshes, water fringed vegetation and fens and woodland.</td>
</tr>
<tr>
<td>SPA</td>
<td>44,087.68 ha</td>
<td></td>
</tr>
<tr>
<td>Ox close SAC</td>
<td>141.25 ha</td>
<td>The site representing Calaminarian grassland in the central Pennines. The site is unusual in that it encompasses the three main situations in which this habitat occurs in the UK, including near-natural forms on cliffs and scars, old spoil heaps from past lead-mining, and metal-enriched river alluvium. This site supports a rich metallophyte flora with substantial populations of five species of higher plant metallophytes.</td>
</tr>
<tr>
<td>River Derwent SAC</td>
<td>411.23 ha</td>
<td>The site in the Vale of Pickering to Long Drax is one example of river lamprey Lampetra fluviatilis populations which inhabit the many rivers flowing into the Humber estuary in eastern England. Only the lower reaches of the Derwent are designated, reflecting the spawning distribution of the species in the Derwent system.</td>
</tr>
<tr>
<td>Skipwith Common SAC</td>
<td>295.2 ha</td>
<td>Skipwith Common is one of the only two extensive areas of open heathland remaining in the Vale of York. Approximately half the site is classified as heath, scrub, maquis and garrigue and phygrana, with just over a quarter being broad-leaved deciduous and mixed woodland and a small coverage of inland water bodies (standing water, running water), bogs, marshes, water fringed vegetation and fens as well as some dry grassland and steppes.</td>
</tr>
<tr>
<td>Site Name</td>
<td>Area</td>
<td>Primary Reason for Designation (Habitats and/or Species)</td>
</tr>
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<td>---------------------------------</td>
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</tr>
<tr>
<td>South Pennine Moors SAC</td>
<td>64,983.13 ha</td>
<td>The site is largely enclosed on two sides by large industrial urban areas, which means that large numbers of people use the area for recreational activities. Around two-thirds is within the Peak District National Park. Land management is primarily driven by agriculture, rough grazing for sheep, and grouse-shooting. Approximately half the site is classified as bogs, marshes, water fringed vegetation and fens, and half as heath and scrub. There are also small amounts of grassland, inland water bodies and woodland.</td>
</tr>
<tr>
<td>South Pennine Moors Phase 2 SPA</td>
<td>66,207.1 ha</td>
<td></td>
</tr>
<tr>
<td>Strensall Common SAC</td>
<td>596.63 ha</td>
<td>65% of the site is classified as heath, scrub, marquis and garrigue and phygrana, 24% as broad-leaved deciduous woodland with a small coverage of inland water bodies, bogs, marshes, water fringed vegetation, fens, dry grassland, steppes and coniferous woodland.</td>
</tr>
</tbody>
</table>
Appendix 3a Special Protection Areas

Special Protection Areas

- North Pennine Moors
- North York Moors
- Flamborough Head
- Lower Derent Valley
- South Pennine Moors Phase 2

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Appendix 3c Ramsar Sites
### International/European Context

<table>
<thead>
<tr>
<th>Policy/Conventions/Programmes</th>
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</thead>
<tbody>
<tr>
<td>Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)</td>
</tr>
<tr>
<td>Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979) amended</td>
</tr>
<tr>
<td>1985, 1988</td>
</tr>
<tr>
<td>European Landscape Convention (EC 2004)</td>
</tr>
<tr>
<td>UNESCO World Heritage Convention 1972</td>
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<tr>
<td>The Convention for the Protection of the Architectural Heritage of Europe (Granada Convention)</td>
</tr>
<tr>
<td>Directive on Ambient Air Quality and Cleaner Air for Europe (Directive 2008/50/EC) (to be</td>
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<tr>
<td>transposed into national legislation in June 2010)</td>
</tr>
<tr>
<td>European Spatial Development Perspective 97/150/EC</td>
</tr>
<tr>
<td>EU Ambient Air Quality and Management Directive 1996/62/EC</td>
</tr>
<tr>
<td>and daughter Directives 1&lt;sup&gt;st&lt;/sup&gt; – 1999/30/EC; 2&lt;sup&gt;nd&lt;/sup&gt; – 2000/69/EC; 3&lt;sup&gt;rd&lt;/sup&gt; –</td>
</tr>
<tr>
<td>2002/3/EC; 4&lt;sup&gt;th&lt;/sup&gt; – 2004/107/EC</td>
</tr>
<tr>
<td>EU Bathing Water Directive 76/160/EC</td>
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<tr>
<td>EU Birds Directive (79/409/ECC)</td>
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<tr>
<td>EU Convention on the Protection of the Archaeological Heritage (Revised) (Valletta Convention)</td>
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<tr>
<td>(1992)</td>
</tr>
<tr>
<td>EU Floods Directive (2007/60/EC)</td>
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<td>EU Habitats Directive (92/43/ECC)</td>
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<tr>
<td>EU Nitrate Directive 91/676/ECC</td>
</tr>
<tr>
<td>EU Sixth Environment Action Plan (Environment 2010: Our Future Our Choice)</td>
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<tr>
<td>Renewed EU Sustainable Development Strategy (June 2006)</td>
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<tr>
<td>EU Transport White Paper (‘Time to decide’) (2001)</td>
</tr>
<tr>
<td>EU Water Framework Directive 2000/60/EC</td>
</tr>
<tr>
<td>EU Integrated Pollution and Prevention and Control (IPPC) Directive 96/61/EC (European</td>
</tr>
<tr>
<td>Commission, 1996)</td>
</tr>
<tr>
<td>Johannesburg Declaration on Sustainable Development 2002</td>
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<tr>
<td>Kyoto Agreement on Climate Change</td>
</tr>
<tr>
<td>Ramsar Convention on Wetlands of international importance, especially waterfowl habitat</td>
</tr>
<tr>
<td>(1971)</td>
</tr>
<tr>
<td>Proposal for a Directive establishing a framework for the protection of soil (2006/0086)</td>
</tr>
<tr>
<td>(COD)</td>
</tr>
<tr>
<td>UN Convention on Biological Diversity 1992</td>
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</tbody>
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### National Context

<table>
<thead>
<tr>
<th>Policy/Programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Strategy for English Heritage’s Historic Environment Research in Protected Landscapes (AONBs &amp;</td>
</tr>
<tr>
<td>National Parks)</td>
</tr>
<tr>
<td>BREEAM/Code for Sustainable Homes</td>
</tr>
<tr>
<td>Climate Change Act 2008</td>
</tr>
</tbody>
</table>
## National Context

<p>| Climate Change: The UK Programme (Defra, 2006) |
| Conservation (Natural Habitats, &amp;c.) (Amendment) Regulations 2007' |
| Contaminated Land Report 11: Model Procedures for the Management of Land Contamination |
| Countryside and Rights of Way Act, DEFRA 2000 |
| Energy White Paper – Meeting the Challenge (DTI, 2007) |
| The Government’s Statement on the Historic Environment for England 2010 |
| Ancient Monuments and Archaeological Areas Act 1979 |
| Low Carbon Transport: A Greener Future – A carbon reduction strategy for transport (July 2008) |
| Natural England Landscape Policy (2009) |
| Climate Change and Biodiversity Adaptation: The Role of the Spatial Planning System (Natural England 2009) |
| Biodiversity by Design (TCPA 2004) |
| Natural Environment and Rural Communities Act 2006 |
| Control of Pollution Act 1974 Amending Acts: 1989 |
| Environment Act 1995 |
| Environmental Protection Act 1990 |
| The Yorkshire and Humber Plan Regional Spatial Strategy to 2026 (This document has now been abolished) |
| PPS 1 Delivering Sustainable Development |
| Planning and Climate Change Supplement to PPS1 |
| PPG 2 Green Belts |
| PPS 3 Housing |
| PPS 4 Planning for Sustainable Economic Growth |
| PPS 5 Planning for the Historic Environment |
| PPS 7 Sustainable Development in Rural Areas |
| PPS 9 Biodiversity and Geological Conservation |
| PPS 10 Planning for Sustainable Waste Management |
| PPS 11 Regional Spatial Strategies |
| PPS 12 Spatial Planning |
| PPG 13 Transport |
| PPG 14 Development on Unstable Land |
| PPG 17 Planning for Open Space, Sport and Recreation |
| PPG 20 Coastal Planning |
| PPS 23 Planning and Pollution Control |
| PPG 24 Planning and Noise |</p>
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<td>PPS 25 Development and Flood Risk</td>
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<tr>
<td>Safeguarding our Soils: A Strategy for England (Sept 2009)</td>
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<tr>
<td>Securing the Future-The UK Government Sustainable Development Strategy 2005</td>
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<td>UK Biodiversity Action Plan (1994)</td>
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<tr>
<td>The Rural Strategy 2004. DEFRA</td>
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<td>Wildlife and Countryside Act 1981, ‘as amended’</td>
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<tr>
<th>Regional Context</th>
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<td>Forest of Bowland AONB Management Plan 2009 – 2014</td>
</tr>
<tr>
<td>Howardian Hills AONB Management Plan 2009 – 2014</td>
</tr>
<tr>
<td>Our Region Our Health Regional Framework for Health (GO for Yorkshire and Humber, 2008)</td>
</tr>
<tr>
<td>The Regional Economic Strategy (RES) for Yorkshire and Humber 2006-2015 (Yorkshire Forward &amp; YHA 2006)</td>
</tr>
<tr>
<td>Streets for All – Yorkshire and Humber (English Heritage 2005)</td>
</tr>
<tr>
<td>The Historic Environment Strategy for Yorkshire and the Humber Region 2009 - 2013</td>
</tr>
<tr>
<td>The Strategic Framework for Trees, Woods and Forest in Yorkshire and The Humber Region – The Value of Trees in Our Changing Region (Forestry Commission 2005)</td>
</tr>
<tr>
<td>Yorkshire and Humber Environmental Enhancement Strategy (2008-2013)</td>
</tr>
<tr>
<td>Yorkshire and Humber Regional Biodiversity Strategy (2009)</td>
</tr>
<tr>
<td>Yorkshire and Humber Rural Framework (2006)</td>
</tr>
<tr>
<td>North Yorkshire Cultural Strategy 2010 – 2015 (draft)</td>
</tr>
<tr>
<td>Yorkshire and Humber Regional Climate Change Action Plan 2008 – 2013 (draft)</td>
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<tr>
<td>Flamborough Head Management Plan 2007</td>
</tr>
<tr>
<td>North Yorkshire and Cleveland Management Plan 2007 to 2012</td>
</tr>
<tr>
<td>Sustainable Community Strategy for North Yorkshire 2008 – 2018 (NYCC)</td>
</tr>
<tr>
<td>Fountains Abbey and Studley Royal World Heritage Site Management Plan 2008 – 2013 (draft)</td>
</tr>
<tr>
<td>North Yorkshire Policing Plan 2008 - 2011</td>
</tr>
<tr>
<td>Local Context</td>
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<tr>
<td>--------------</td>
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<tr>
<td>District Context</td>
</tr>
<tr>
<td>Craven, Hambleton, Harrogate, Richmondshire, Ryedale, Scarborough, Selby, North York Moors National Park and Yorkshire Dales National Park Biodiversity Action Plans</td>
</tr>
<tr>
<td>Hambleton, Harrogate, North York Moors National Park Core Strategy (adopted)</td>
</tr>
<tr>
<td>Craven Sustainable Community Strategy 2007 – 2013</td>
</tr>
<tr>
<td>Community Plan for Hambleton 2006 - 2011</td>
</tr>
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<td>Harrogate District Sustainable Community Strategy</td>
</tr>
<tr>
<td>Imagine Ryedale ten years from now…</td>
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<tr>
<td>Richmondshire 2021 Sustainable Community Strategy</td>
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<td>Community Strategy for the Borough of Scarborough 2006 - 2009</td>
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<td>Selby District Local Strategic Partnership Sustainable Community Strategy 2005 - 2010</td>
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Appendix 5: National Designated Sites
APPENDIX 6: Heritage Coast
APPENDIX 7: Sites of Special Scientific Interest
APPENDIX 9: Woodland Cover within North Yorkshire
APPENDIX 10: Green Infrastructure Corridors
APPENDIX 12a: Areas of Deprivation

North Yorkshire SOA's Within 20% Most Deprived in England
Living Environment Domain, Indices of Deprivation 2007

Notes
4. Filename: l:\policy\imd 2007\mapping\worst 20\imd 20%.wor
APPENDIX 12b: Areas of Rural Poverty

North Yorkshire SOA’s Within 20% Most Deprived in England
Barriers to Housing & Services Domain, Indices of Deprivation 2007

Notes
4. Filename: l:\policy\imd 2007\mapping\worst 20\imd 20\wor
APPENDIX 13: Principal Rivers in North Yorkshire
APPENDIX 14: Agricultural Land Classification
<table>
<thead>
<tr>
<th>NATA Objectives</th>
<th>NATA SUB-OBJECTIVES</th>
<th>SEA TOPIC</th>
<th>LTP 3 OBJECTIVES</th>
<th>ENVIRONMENTAL OBJECTIVES</th>
</tr>
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<tbody>
<tr>
<td>Environment</td>
<td>Noise</td>
<td>Human Health, population, inter-relationships</td>
<td>2/5</td>
<td>Minimise the noise and vibration from transport related activities in sensitive areas</td>
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<tr>
<td>Local Air Quality</td>
<td>Air, Human Health, Population</td>
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<td>2/5</td>
<td>Reduce the impacts of the transportation network on air quality</td>
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<td>Greenhouse Gases</td>
<td>Climatic Factors</td>
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<td>2/5</td>
<td>Reduce greenhouse gas emissions from transportation and through the maintenance of the network</td>
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<td>Landscape</td>
<td>Landscape</td>
<td></td>
<td>1/2/4</td>
<td>Preserve and enhance the county’s natural landscape</td>
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<tr>
<td>Townscape</td>
<td>Cultural Heritage including Architectural and Archaeological Heritage</td>
<td></td>
<td>1/2/4</td>
<td>Protect and enhance townscape character</td>
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<tr>
<td>Heritage</td>
<td>Biodiversity, Fauna, Flora, Soil</td>
<td></td>
<td>1/2/4</td>
<td>Conserve, enhance and improve access to historic assets of the county</td>
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<tr>
<td>Biodiversity</td>
<td>Biodiversity, Fauna, Flora, Soil</td>
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<td>2/5</td>
<td>Conserve and enhance biodiversity across the county</td>
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<tr>
<td>Water Environment</td>
<td>Water</td>
<td></td>
<td>2/5</td>
<td>Reduce the adverse impacts of transport on biodiversity across the county</td>
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<tr>
<td>Physical Fitness</td>
<td>Human Health, Population</td>
<td></td>
<td>1/4/5</td>
<td>Encourage healthier lifestyles through transport choice</td>
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<tr>
<td>Safety</td>
<td>Accidents</td>
<td>Human Health, Population</td>
<td>3</td>
<td>Improve safety and security</td>
</tr>
<tr>
<td></td>
<td>Security</td>
<td>Human Health, Population</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>NATA Objectives</td>
<td>NATA SUB-OBJECTIVES</td>
<td>SEA TOPIC</td>
<td>LTP 3 OBJECTIVES</td>
<td>ENVIRONMENTAL OBJECTIVES</td>
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<td>-----------------</td>
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<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Community severance</td>
<td>Population</td>
<td>1/4</td>
<td>Reduce community severance</td>
</tr>
<tr>
<td></td>
<td>Access to the Transport system</td>
<td></td>
<td>4</td>
<td>Improve accessibility to services and facilities</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Encourage and promote cycle, pedestrian and public transport passenger movement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Improve access to public amenities and open areas</td>
</tr>
<tr>
<td>Economy</td>
<td>Public Accounts</td>
<td>Material Assets</td>
<td>1/4</td>
<td>Support the development of the local economy by ensuring good transport links whilst protecting the environment</td>
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<tr>
<td></td>
<td>Business Users and Providers</td>
<td></td>
<td>1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consumer Users</td>
<td></td>
<td>1/3/4</td>
<td></td>
</tr>
</tbody>
</table>