## 3. ANALYSIS OF PROBLEMS AND OPPORTUNITIES

This chapter analyses the individual issues within each of the seven local transport objectives described in the previous chapter. Clearly travel is but a means to an end, and a thorough understanding of the needs within the area is vital to achieve a successful strategy to deliver the County's vision. The range of options to deal with each of the issues identified in this chapter are detailed within the subsequent strategy chapters (5 to 11).

### 3.1 ACCESSIBILITY

This section highlights the diverse problems of accessibility in the Plan area, and in particular how these issues are being identified by accessibility planning techniques, including use of the DfT's bespoke software 'Accession'.

In the North Nottinghamshire Personal Perceptions Survey (June 2005), a tenth of respondents with access to a car ranked accessibility as the most important of the shared and local transport priorities for the area; this figure increased to a fifth for those who do not have access to a car. This highlights the importance of ensuring continual improvements in narrowing the relative distance and time between services and people – particularly for those from less affluent and rural areas.

Accessibility planning is one of a range of cross-governmental policies and initiatives which emerged from the recommendations of the Social Exclusion Unit's 2003 report 'Making the Connections'. This document sets out to define the reasons for poor accessibility to work and other key destinations which have a critical impact on opportunity and quality of life, and to propose solutions to those problems.

As a result, all local transport authorities are now required to develop accessibility strategies as an integral part of their Local Transport Plan process, with considerations of accessibility underpinning the whole document. Accessibility planning extends Nottinghamshire County Council's approach to partnership working in developing its transport strategy, setting out a way of engaging expert organisations in identifying problems which people experience in reaching a range of services and jobs.

The integration of this process into the LTP is essential to efficiently target resources for maximum impact. Consequently, a summary of the Accessibility Strategy has been included within the text of this Plan. The County Council has produced the final Accessibility Strategy as a separate document to this Full Local Transport Plan. It is considered that this approach has assisted in partnership working where reference to a concise and separate Accessibility Strategy has promoted understanding and 'buy in' from participants.

This section explores the accessibility needs within the LTP area, together with the identification of priorities to be addressed within the period 2006/07 to 2010/11, and explains the opportunities and how critical the stakeholder organisations and data analysis has been to this work.

Nottinghamshire County Council's vision, objectives and forward plan for improving accessibility are laid out in summary within Chapter 5 of this document, and in full in the separate Accessibility Strategy document. Links are made to the wider goals of the LTP and the Accessibility Strategy demonstrates how the policies and plans laid out within it – including public transport, cycling, walking strategies and promotion of travel options - affect people's ability to reach a range of facilities and opportunities.

## 3.1.1 Plan area overview

Maps have been produced to assist in the identification of problem areas in the Plan area. The three categories of maps which have been produced are:

 Maps of key national and local data-sets such as car ownership and Index of Multiple Deprivation

- 2. Maps showing the public transport network in Nottinghamshire, particularly service frequencies and the extent of services provided by the commercial bus network
- 3. Accessibility maps showing the results of the calculations of the core accessibility indicators for Nottinghamshire undertaken by Nottinghamshire County Council in January 2006. These were produced using Accession and MapInfo software.

Discussion with stakeholders and mapping at an LTP-wide level has revealed the following characteristics of the area:

## **Car ownership levels**

Car ownership levels in North Nottinghamshire at census ward level have been highlighted previously in Chapter 2. Figure 2.2 shows the percentage of households with no car across the North Nottinghamshire area based at census output area level and interpolated across the plan area. It can be seen that car ownership levels are lowest in the urban parts of North Nottinghamshire, particularly in the Ashfield/Mansfield and Worksop sub-areas. However, the map also shows small isolated areas of low car ownership in rural areas, and it is these areas which may not be able to support a conventional commercial bus service due to low levels of population.

The percentage of households in each sub-area with one car, but with two or more people over 17 in the household has been calculated. This has been investigated in order to identify households where access to the family car may vary by time of day and by members of the household. The distinction between rural and urban areas is less marked; the overall car ownership figure for North Nottinghamshire is 31%, the highest figures being 32% in Mansfield/Ashfield and Worksop, the lowest figures being 28% in both Newark and Retford. Thus, although rural areas may have higher levels of car ownership than urban areas, there may be people living in rural areas who still have difficulties accessing key facilities because they cannot access the household car at certain times.

### **Index of Multiple Deprivation**

Figure 3.1 shows the 2004 Index of Multiple Deprivation (IMD) across the North Nottinghamshire area, with the darker areas being areas of high deprivation. Deprivation levels are highest in the urban parts of North Nottinghamshire, particularly in the Ashfield/Mansfield and Worksop sub-areas. However, the map does show small isolated pockets of deprivation in rural areas, particularly in the area to the south east of Retford. This area in particular is at risk to changes in the revenue budget used to support socially necessary bus services. As figure 2.3 shows, all bus services in this area are wholly provided by the supported bus network with no alternatives being provided by commercial bus services.

#### **Social Need in Nottinghamshire**

Figure 3.5 in section 3.3.2 shows the results of the 2004 Social Need in Nottinghamshire Study. A variety of deprivation indicators have been used to compile the overall index of Social Need, including car ownership levels, income levels, family composition and babies born with a low birthweight. The areas categorised as 'extreme social need' roughly correspond to the most deprived areas in the 2004 Index of Multiple Deprivation. If this map is compared with the map showing bus service provision, it can be seen that the areas experiencing high levels of social need tend to be areas favourable to commercial public transport provision. Such areas tend to be of high population density, and have large numbers of people on low incomes such as people without access to a car, students and pensioner households.

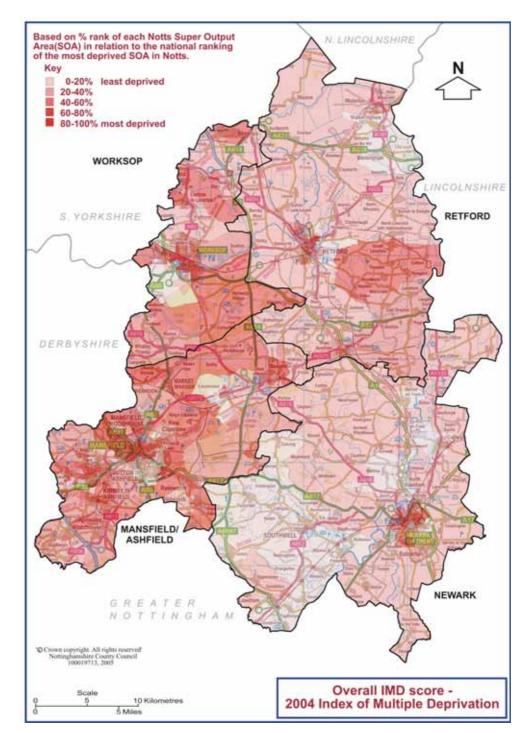


Figure 3.1 overall IMD score- 2004 Index of multiple Deprivation

### Population with a limiting long-term illness (LLTI)

This is a key indicator of deprivation, and Figure 3.2 shows the percentage of the population with a limiting long-term illness, calculated at census output area level and interpolated across the Plan area using a grid function. 21% of the total population in North Nottinghamshire have a limiting long-term illness, the highest levels being observed in the Mansfield/Ashfield area (23%). The high incidence of illness in the former mining communities of the former West Nottinghamshire coalfield should be noted. More information on this is included within Section 7.6 of the Quality of Life chapter.

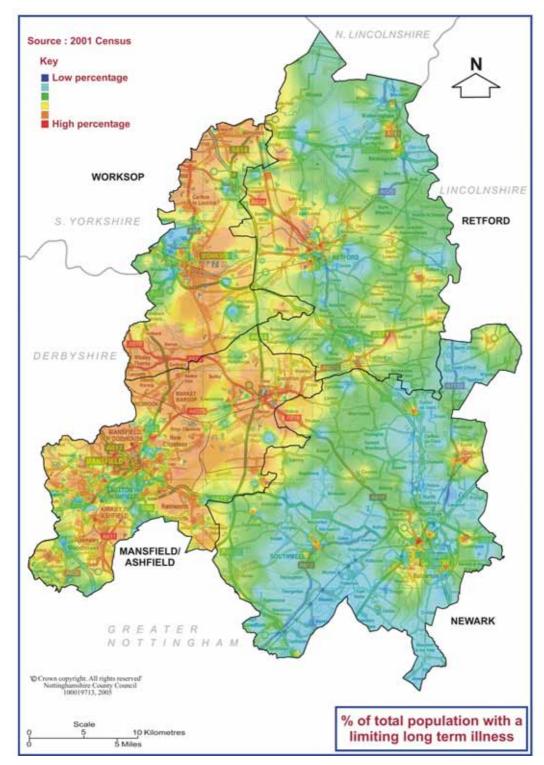


Figure 3.2 % of population with a limiting long term illness

### **Public transport provision**

### **Demand for Public Transport**

In general, demand for public transport is highest in areas where there are a large number of households without access to a car; in areas experiencing high levels of deprivation; areas where there is a high concentration of population on low incomes; and areas with a high population density. Demand for public transport is lowest in rural areas where there are high levels of car ownership, in particular large numbers of households with access to two or more cars. Analysis for North Nottinghamshire, however, shows significant areas where demand for

public transport may not be high enough to justify the provision of commercial services but where there is still a demand for some form of public transport to be provided. The rural areas of Bassetlaw district particularly around Retford fall into this category. One of the challenges of accessibility planning is how best to serve such areas in a cost-effective manner where demand for bus services still exists but not at the level required for services to be provided commercially.

### **Supply of public transport**

An indication of the supply of public transport, in particular conventional bus services is given in Figure 3.3. This service standard relates to all households being within 10 minutes (800m) walk of their nearest bus stop with an hourly service frequency on weekdays 0600-1800 hrs. The map clearly shows the extent of the County's supported bus network, and in particular the important contribution which it makes to general accessibility levels and reducing social exclusion. Services are provided in areas where clearly the demand is not as great as that in urban areas and where demand is not high enough to justify the provision of commercial bus services.

The effect of the County Supported Bus Network on accessibility levels in communities can be seen in Figure 3.4 which shows what the effects would be if funding support for all county supported services was withdrawn, including funding to support a diversion/extension of a commercial route to service a particular community. This hypothetical scenario shows that many communities would face a reduced level of service and some communities would have no services provided at all. In some areas there may be an increase in the distance walked to the nearest bus stop with a desired frequency. These two examples assume a 10 minute walking time from each household to its nearest bus stop with an hourly or better service and averaged for all the households. In practice, many people would not be able to walk such distances particularly if they are elderly, sick or infirm, or if they live in hilly areas.

Data on the extent of commercial bus service provision on Sundays has been collated. The commercial network is even sparser when compared to weekdays, with County-supported services forming a vast majority of the service provision in rural areas, with a large number of rural communities having no services at all on Sundays. The complete Sunday bus service networks in Retford and Newark, and the majority of the Sunday bus network in Worksop are provided by County-supported services.

The County's budget for securing socially necessary bus services has come under increasing pressure in recent years due to continuing withdrawals of marginal services provided by commercial operators, and rising costs. To try and prioritise this revenue funding for tendered bus services in a fair and consistent manner, a performance management framework has been drawn up to assess competing claims on the budget, and the Framework was given full Cabinet approval in October 2005. This will now be used to assess all future claims on the revenue budget for supported services in relation to existing funding commitments, and to assess the feasibility of any initiatives arising out of the accessibility planning process with regards to the likelihood for funding, given existing commitments.

The County Council use the following variables to prioritise each local bus service contract and non-statutory school transport contract:

- Subsidy per passenger
- Passengers per trip
- Journey purpose
- Car ownership levels in the communities which the service serves
- Availability of alternative public transport provision in the communities served
- Index of Multiple Deprivation levels in the communities which the service serves.

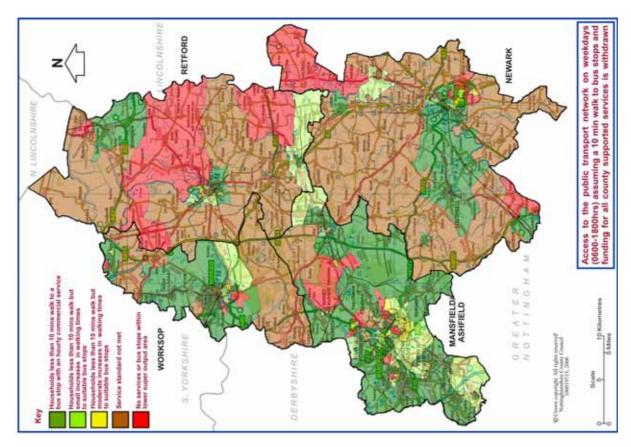


Figure 3.3 Access to public transport network if all county supported services withdrawn

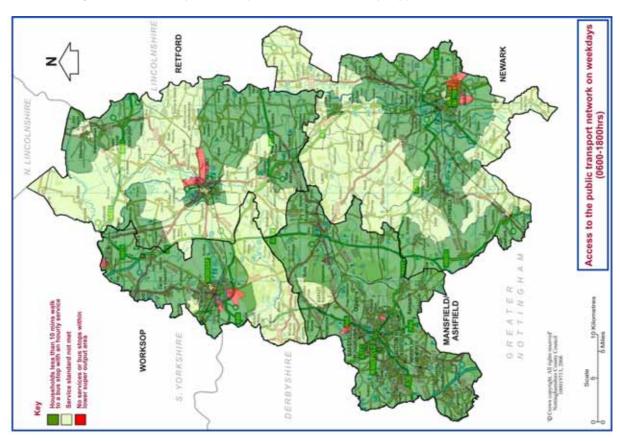


Figure 3.4 Access to public transport network

Accessibility planning will also feed into these variables and the following concepts of accessibility planning have been incorporated into the final three variables noted above:

- Car ownership levels include households with no car and households with one car but with two or more people within the household, on the premise that access to the family car will vary by time of day and each household member
- Availability of alternatives includes an element of local accessibility, where settlements
  are ranked according to the extent to which alternative public transport options are provided
  by the commercial bus network. Thus settlements where services are entirely provided
  by the supported bus network will score more highly than settlements where there are a
  number of alternatives provided by the commercial network. Figure 3.5 provides an
  indication of the level of commercial bus service provision across the area
- The Index of Multiple Deprivation has as one of its domains 'Barriers to Housing and Essential Services'.

In addition to supporting conventional public transport, the County also supports the following schemes designed to supplement the local bus network:

- Three Bus Challenge schemes (Village Lynx Rural Bus Challenge, Ashfield Access Lynx Urban Bus Challenge and Boughton Boomerang Rural Bus Challenge). These schemes are a combination of conventional bus routes and fixed route Demand Responsive Transport
- 14 voluntary car schemes, 13 social car schemes and 10 Community Transport minibus schemes. Figures for the 2004/05 financial year show there were 257 volunteer car scheme drivers and over 2,400 car scheme users making 163,000 trips. There were also 100 volunteer minibus scheme drivers and over 200,000 minibus kms run.

Data on the usage of voluntary car schemes serving rural areas in North Nottinghamshire has been collated. Further data has been collated for two schemes to show the take-up of schemes by residents in neighbouring communities. This data clearly shows the vital services that these schemes provide, particularly in rural areas, in order for people to access key facilities in the absence of good public transport facilities.

## Overall public transport demand and supply

To conclude, demand for public transport in the Plan area in the context of low income households, households without a car and areas of high population density is largely matched by the supply of conventional public transport in the context of commercial bus services, especially on weekdays. Given a limited supply of revenue funding, one of the challenges of accessibility planning is how best to serve areas where there may be a demand for public transport but not at the levels which would justify a commercial bus service.

# 3.1.2 Other survey work

A Personal Travel Survey for the North Nottinghamshire LTP area, similar to the travel surveys carried out on a continuous basis by DfT, was carried out in Summer 2003 and repeated in 2005. Residents in the urban areas of Worksop, Mansfield/Ashfield, Retford and Newark were asked a series of questions on their recent trip-making patterns, and a specific question was included on their opinions of access to key local facilities in their area. The results show that the majority of the public considered access to facilities as generally easy: health 83%, 77% (2005, 2003); school 86%, 87% (2005, 2003); food 90%, 85% (2005, 2003); work 80%, 74% (2005, 2003); and leisure 83%, 89% (2005, 2003). Significantly, a proportion do find access difficult though, most notably to health (10 to 15%), to school (10 to 11%) and to work (10 to 13%). Other significant issues included 20% of people with a disability finding access to health facilities difficult and almost half of those over 60 finding access to both health and food difficult.

A Personal Perceptions Survey for the North Nottinghamshire LTP area was carried out in Spring 2005. Respondents were contacted by telephone and asked for their opinions on the core themes and shared priorities to be included in the forthcoming Local Transport Plan for their area. The data in the original survey was re-weighted to better reflect the distribution of population

between the urban and rural areas of North Nottinghamshire. Results show that respondents' overall views on the ease of access to key destinations was lowest in rural areas (23%), particularly around Retford. Respondents' overall opinion on the provision of public transport services was again lowest in the Retford rural and Newark rural areas (5% and 15% respectively), and it is in these same areas where the overall opinion on the availability of sufficient jobs and services locally was lowest. One in five respondents (20%) without access to a car ranked accessibility as a top priority for their area, and the same proportion of respondents (20%) living in the Retford urban and rural areas respectively ranked accessibility as a top priority.

## Take-up of concessionary travel passes amongst the elderly and disabled

Table 3.1 below shows the take-up of concessionary travel passes for the elderly and disabled throughout the county. Eligible population is defined as all men and women over 60 years and all people permanently sick and disabled in each census ward in the 2001 census. Actual population relates to an extract taken from the Concessionary Pass Issues File in November 2004.

Sub-area	Percentage take-up rate (actual v eligible)
North Nottinghamshire overall	46%
Ashfield / Mansfield	51%
Worksop	46%
Retford	36%
Newark	38%

Table 3.1 Take-up of concessionary travel passes for the elderly and disabled

From the above table it can be seen that take-up of passes is highest in urban areas (Ashfield / Mansfield - high levels of bus service provision and low levels of car ownership) and lowest in the rural areas (Retford and Newark - lower levels of bus service provision and high levels of car ownership). However, in the rural areas there are still a sizeable number (nearly one third) of elderly persons' households without access to a car suggesting there could be some households in these areas having difficulties accessing key facilities, or that these households are not aware of the opportunities offered to them by a concessionary travel pass.

# 3.1.3 Opportunities

In addition to the existing initiatives and possible efficiencies identified by partners through the assessment of needs and priorities process, a number of opportunities for pooling and making more effective use of existing resources in order to achieve joint accessibility goals have emerged. A full appraisal of opportunities and resources available to address accessibility problems is given in the Accessibility Strategy, however, a brief summary of input is provided here.

Nottinghamshire County Council has a crucial role to play in improving accessibility by:

- Adjusting the delivery of any of its large portfolio of services (such as the location of new Council-managed facilities)
- Planning, delivering and managing the local public transport, highways, cycle and footway networks
- Integrating accessibility objectives within the corporate and local vision for their area
- Influencing policy and scheme delivery in non-transport sectors (both internal and external to the Authority).

Nottinghamshire County Council's contribution to the accessibility partnership over the second LTP period will take the form of the following:

- Aligning its policies for transport with those in other areas such as land-use policy, social inclusion, economic regeneration and health
- Capital monies from the LTP settlements, including introducing processes to include accessibility considerations in the assessment of wider transport projects and schemes, including major transport schemes
- Ensuring that Local Authority revenue funding spent on supported bus services and non-statutory concessionary fares provision represents optimum value for money through its performance management framework for tendered bus services
- Ability to apply for possible future Rural or Urban Bus Challenge Bids, or Kickstart pump-priming monies
- More streamlined or co-ordinated use of available or existing resources via Nottinghamshire Integrated Transport Centre
- Supporting the acquisition and maintenance of all data relating to Accessibility Planning through Jupiter in Nottinghamshire, a countywide data sharing partnership involving GIS staff from the County and City Councils
- Leadership and administrative support to the partnership
- Officer time
- Local Accessibility Transport Studies.

## **Local Accessibility Transport Studies**

The County Council's programme of Mobility Management Action Area studies (MMAAs) offers an opportunity to improve access to district centres. These studies will be relaunched under the new name of Local Accessibility Transport Studies (LATS). As with the original MMAAs, LATS will be heavily focussed on identifying local travel needs in a defined geographic area through a series of thorough consultation exercises with stakeholders and the public. Initial consultation will focus on identifying issues of concern, whether they be specific problems such as a lack of crossing facilities at certain places, or more general concerns such as the need for better cycle provision. Following on from this, a series of proposals will be developed and a second round of public and stakeholder consultation will take place in order to gauge opinion before construction work commences.

This approach has allowed the Council to engage more meaningfully with partners and the public and has resulted in the development of co-ordinated programmes of schemes that incorporate improvements to public transport provision, cycling facilities and pedestrian access, especially for disabled pedestrians.

#### Other organisations

The Terms of Reference for the accessibility partnership state that the members will endeavour to:

- Supply or assist in sourcing data and relevant studies to identify where accessibility can be improved
- Oversee the accessibility mapping and modelling of need to be undertaken by Environment Department
- Agree the needs and problems within the LTP areas
- Set out priorities for the five year LTP period (2006-2011)
- Agree the content of the Framework and final Accessibility Strategy
- Demonstrate how a range of interventions can address the problems
- Agree the priority of issues, areas and key groups to take forward through local accessibility action plans
- Prepare local accessibility action plans to tackle specific problems and priorities
- Assist with surveys and consultation with communities where required
- Outline accessibility objectives and targets
- Identify resources within the control of their own organisation and outside to support measures to improve accessibility

- Measure performance
- Impart their local knowledge and expertise throughout the process.

The key stakeholders in the partnership have a similarly vital role to play, and will benefit from improved accessibility. Supporting partner statements are given by the key partners, including the district planning authorities in an annex to the accessibility strategy.

## 3.2 SAFER ROADS

In 2004, 2,227 people were injured on all roads (including trunk roads) in North Nottinghamshire. The cost of these accidents to the community is estimated at £119m and this must be added to the incalculable pain, grief and trauma for those involved.

A detailed breakdown of the road casualties within the LTP area by road user group in 2003, 2004 as well as the 1994-98 baseline is provided in Table 3.2 below. The long-term trend showing casualty reduction performance against targets since 1998 is detailed in Appendix B which details the targets and trajectories for casualty reduction.

	1994-98 average	2003	2004		son of 2004 1 2003		son of 2004 -1998 average
Casualty type				Change	% Change	Change	% Change
All child casualties	(0-15yrs)						
KSI casualties	77	38	55	17	44.7%	-22	-28.6%
Slight casualties	279	222	202	-20	-9.0%	-77	-27.6%
Child pedestrians (	(0-15yrs)						
KSI casualties	36	18	26	8	44.4%	-10	-27.8%
Slight casualties	83	56	63	7	12.5%	-20	-24.1%
Pedestrians (all ag	es)						
KSI casualties	81	64	56	-8	-12.5%	-25	-30.9%
Slight casualties	169	141	135	-6	-4.3%	-34	-20.1%
Pedal cyclists – riders and passengers		ngers					
KSI casualties	46	23	25	2	8.7%	-21	-45.7%
Slight casualties	130	79	108	29	36.7%	-22	-16.9%
Motorcyclists (incl.	mopeds) – ric	ders and pa	ssengers				
KSI casualties	79	102	91	-11	-10.8%	12	15.2%
Slight casualties	93	115	144	29	25.2%	51	54.8%
Car drivers and passengers (incl. taxis)							
KSI casualties	246	211	201	-10	-4.7%	-45	-18.3%
Slight casualties	1448	1443	1265	-178	-12.3%	-183	-12.6%

Table 3.2 Road Casualties in North Nottinghamshire

North Nottinghamshire is characterised by market towns with significant urban areas, together with large rural areas. For the purpose of the LTP these have been divided into four sub-areas.

It is, however, difficult to compare the casualty numbers within the four sub-areas (see figure 2.1), as they are different in population, length and make-up of the network as well as vehicle kilometres travelled. Analysis of the casualty details does, however, show that whilst there are variances in the numbers of accidents/casualties within the four sub-areas, these broadly reflect the differing populations, length and make-up of the network, and vehicle kilometres travelled within each area. Analysis of the casualties does, however, indicate that the four sub-areas share similar road safety problems which are detailed below.

The County Council's road safety strategy, as set out in the Cross-Service Road Safety Improvement Plan (2003-2010), details the measures/work programmes that will be used to address the four problems listed below, as well as all the other tasks carried out to help meet the national 2010 road casualty reduction targets and their associated outcomes. More information on the Road Safety Plan as well as detailed strategy for each of the areas below are included within Chapter 6 of this LTP.

## 3.2.1 Motorcycles including mopeds

Following decreases in the late 80s and early 90s, the number of licensed motorcycles in the whole of Nottinghamshire increased by almost 72% between 1998 and 2004. The number of casualties has not, however, increased at the same rate. During the same period the number of killed or seriously injured (KSI) motorcycle casualties in the whole of Nottinghamshire increased by only 6% with a 37% increase in slight motorcycle casualties.

Motorcyclist casualties are however, an area of concern throughout Nottinghamshire as despite their small modal share of traffic, they accounted for 23% of all the KSI casualties in the North Nottinghamshire area of the County in 2004. Also despite a reduction of 11% in KSI motorcycle casualties in 2004 when compared to the previous year, the numbers of KSI casualties has increased by 15% when compared to the 1994-98 baseline.

Analysis of motorcycle casualties have identified two specific groups being involved in motorcycle accidents:

- Riders of larger machines, predominantly ridden by those aged over 30
- Riders of smaller machines, predominantly ridden by young riders (mirroring the increase in popularity of 'twist and go' scooters).

Nottinghamshire County Council was a founding member of the Shiny Side Up Partnership, established in 2001 to address the number of casualties involving sports bike riders. This partnership now includes all the local authorities in the region, and has carried out various innovative publicity and training campaigns as well as undertaking research to better understand the psyche of sports bike riders. The partnership has also enhanced the sharing of best practice amongst all the authorities involved, allowing for the development of new campaigns as well as sharing existing campaigns with each other. The 'Bare Bones' project has also been established in partnership with Nottingham City Council and the Police targeting younger riders on scooters.

A motorcycle strategy for Nottinghamshire has been developed and a motorcycle forum has been established, both with the aim of helping to make motorcycling in Nottinghamshire safer and more convenient.

Nottinghamshire will continue to work in partnerships such as these to take the opportunity not only to learn from other authorities and motorcyclists, but to pool resources and also to adopt more consistent road safety programmes across the region in order to maximise their impact.

## 3.2.2 Children

Good progress has been made in reducing child road casualties in Nottinghamshire during the period of the first LTP, and child road casualty reduction in North Nottinghamshire is on target to meet Government's 2010 child road casualty reduction target. Despite continuously meeting the required trajectory related to Government's 2010 target, the numbers of child road casualties has, however, fluctuated during the period of the last five years, possibly due to the small numbers involved.

A 'child safety audit' is carried out annually to identify the road safety problems for children in Nottinghamshire, and the audit is used to help identify the appropriate strategies and actions required to deal with these problems.

The audit includes a comprehensive analysis of child road casualties, looking at the various circumstances in which accidents occurred. The results of the analysis are then used to inform a wide range of education, engineering and publicity solutions. In carrying out the child safety audit the County Council also reviews how successful its education and engineering programmes have been, as well as identifying any possible problem areas that may not have been dealt with through existing road safety programmes. The child safety audit results in the formulation of the overall strategy to address child road casualties.

The audit also looks at measures to address other pertinent issues such as measures that aim to help pupils access schools (School Crossing Patrols and Safer Routes to School Schemes), and School Travel Plans which aim to reduce congestion and improve health.

The audit has identified that in North Nottinghamshire, around half of the number of pupils surveyed walk to school. It also identified that around one fifth of all 0-15 year old pedestrian and pedal cyclist casualties (4 KSI and 26 slight) occur on school journeys in North Nottinghamshire. There are therefore opportunities to implement Safer Routes to School Schemes across the Plan area to continue to promote walking and cycling to school and to help the pupils who do so to travel safely.

## 3.2.3 Speed / rural

Speed is nationally recognised as a major contributory factor in road vehicle collisions. The majority of casualties (69% KSI and 57% slight) involving car drivers and passengers in North Nottinghamshire occur on rural roads, and there is a particular problem with KSI on rural links. Analysis of these casualties has shown that driving too fast for the conditions or excessive speed were contributory factors in over a third of all fatal accidents on rural roads in Nottinghamshire.

Such problems can sometimes be difficult to treat with engineering solutions because they tend to be somewhat random in geographical location and circumstance. Traffic management measures such as signing and lining schemes, inter-active signs and marker posts, speed limits and safety cameras are, however, used when appropriate, along with education/publicity campaigns, such as radio campaigns and bus back advertising on buses that travel within rural areas. And where casualties occur over lengths of roads, route management strategies are implemented along the whole length of the route.

# 3.2.4 Journey purpose

Whilst information concerning County Council vehicles involved in collisions is held by the County Council, unfortunately until recently the only journey purpose reported by the Police via STATS19 forms was journey to school and therefore the extent of any work related road safety problem in Nottinghamshire is not fully known yet. From 2005, however, journey purpose has been recorded as part of the Police reporting process.

This information will be monitored and it is expected that the number of casualties involved in accidents whilst at work will become a priority during the lifetime of this Plan. The first nine months of 2004 have indicated that around 10% of all KSI casualties occurred on work related journeys (not including commuting to and from work). During this nine month period, however, 19% of all KSI car drivers and passenger casualties occurred on work related journeys (not including commuting to and from work).

Recognising that work related road safety problems are likely to be an issue in Nottinghamshire, as it is elsewhere across the country, the County Council has carried out some pilot programmes and is currently developing further programmes of work to help address these problems.

## 3.3 QUALITY OF LIFE

In satisfaction surveys (carried out in 2003), when asked to comment on what was important to them in their choice of place to live, the people of Nottinghamshire highlighted 'quality of life' as one of the most important factors. Of course many elements can make up an individual's perception of 'quality of life', and these will range across the spectrum of social, economic and environmental factors. Access to local services, a safe and attractive environment, community cohesion and access to 'learning and earning', all play a fundamental part in the level of satisfaction people feel in their communities. Despite the difficulties in the absolute measurement of this concept, it is considered essential to acknowledge in this LTP2 the importance people put on their general satisfaction with living in a place and to consider how this can be influenced by the proposals in this transport plan.

In this section a number of factors (in addition to physical environment) have been identified which are considered to have an impact on 'quality of life'. These factors are in addition to the core priorities already being addressed in the plan, i.e. accessibility, congestion, safety, air quality and regeneration, and can all to some extent be influenced by the policies and measures in the LTP2. These additional factors have been examined in the following sections to provide some commentary on existing problems and to highlight opportunities which could be developed when integrated with LTP2 proposals. These factors are:

- Social needs
- Needs of disabled people
- Education and training
- Health
- Physical environment
- Crime and fear of crime.

## **Partnerships**

In Nottinghamshire, concerns about the quality of the environment have played a significant part in shaping the policies of the Council over the past 20 years. The scars of previous heavy industry have severely impacted on both urban and rural environments in the county, and major capital investment programmes (currently the 'Building Better Communities' initiative) are still considered necessary by the Council to improve the physical environment. The integration of the LTP2 proposals with the ongoing environmental programmes is seen as essential to maximise impacts and benefits. Strong links are also maintained with the Department of Environment Food and Rural Affairs, the Countryside Agency, English Nature, English Heritage and the Environment Agency, together with non-statutory organisations such as the Wildlife Trust and the Campaign for the Protection of Rural England. This close working relationship has many benefits, and offers significant opportunities in not only meeting joint objectives, but also in establishing funding partnerships that provide additional resources to improve both the environment and access to it.

### **Consultation**

### **Nottinghamshire satisfaction survey**

A recent Mori survey (Dec 2004) indicated that the majority of Nottinghamshire residents (85%) were satisfied with their local area as a place to live. In fact nearly half of the 85% were very satisfied, with only 8% of the total respondents dissatisfied. Highest satisfaction rates were recorded in Bassetlaw, with Mansfield a close second. Newark & Sherwood and Ashfield trailed in some way behind in third and fourth places. Results of this survey is shown in table 3.3 below. The Mori survey also indicates the top five priorities for improvement in each district area and these are detailed in table 3.4 below.

County Council	%	%
	Satisfied	Dissatisfied
County Average	85	8
Bassetlaw	91	3
Mansfield	86	5
Newark & Sherwood	80	15
Ashfield	79	11

Table 3.3 Satisfaction rates in North Nottinghamshire districts

Ashfield	Bassetlaw	Mansfield	Newark & Sherwood
Low level of crime	Low level of crime	Low level of crime	Low level of crime
Good schools	Good schools	Good quality hospitals	A clean area
Good local health service	Good local health service	Good quality jobs	Good local health service
A clean area	A quiet area	High employment	Good facilities for young people
Good facilities for young people	A clean area	Good schools	Good schools

Table 3.4 Mori survey showing the top five priorities for improvement by district

#### Consultation on the shared priorities

As part of the consultation on the development of the second LTP, a separate survey focusing on the four shared priorities of congestion, accessibility, safety and air quality, together with local priorities of regeneration and quality of life, was commissioned for North Nottinghamshire in May 2005.

Taken as an average across the North Nottinghamshire plan area, quality of life was rated as the most important of all the priorities. In the four sub-areas, quality of life was recorded as the top priority in all areas except Retford, where it was the second most important issue behind congestion. More details on this survey can be found in section 2.5, Consultation.

## 3.3.1 Social needs

In 2004 a joint study was undertaken by Nottinghamshire County and Nottingham City Councils to assess the distribution of social need across the geographic county of Nottinghamshire. The study was designed to provide a more local perspective to the Government's indices of deprivation. This was the fourth study into social need undertaken in Nottinghamshire.

As part of this study, the main aspects of social need have been identified as:

- Low income
- Unemployment
- Poor housing

- Poor health and disability
- Family difficulties and crime
- Educational difficulties
- Lack of skills.

Twenty-two indicators were selected to measure these themes. Very often, individuals, households or groups of people who experience difficulties regarding any of the above will be affected by several others and will therefore suffer from multiple disadvantage. This, together with a lack of access to opportunities, can be defined as social need.

Nottinghamshire and Nottingham have been subdivided into 380 zones. Each zone is defined as a sufficiently large population to provide reliable results and wherever possible reflects the boundaries of locally identifiable communities with similar social and economic characteristics. Zones have been ranked on the basis of their total indices score to identify those areas with the highest social need. Those zones with above average social need have been ranked into extreme social needs, serious social needs and moderate social needs. Zones with below the average score were regarded as having below average social need. 134 zones have been identified with above average social need.

The districts with the most widespread problems are Mansfield and Ashfield, each of which has multiple zones exhibiting serious and moderate social needs. The most extensive area of highest social need is in Mansfield which has four zones with extreme need, whereas Bassetlaw and Newark and Sherwood each have one zone with extreme need as can be seen in Table 3.6 below and also in Figure 3.5.

Sub-area	Total zones	Extreme Social Need	Serious Social Need	Moderate Social Need	% Zones above average social need by district
Ashfield/Mansfield	74	4	9	21	46%
Newark and hinterland	41	1	2	6	22%
Retford and hinterland	16	0	2	2	25%
Worksop and hinterland	26	1	3	6	38%

Table 3.5 Extreme, serious and moderate social need by district

Within the sub areas, Worksop and its hinterlands has the zone with the highest social need in Nottinghamshire, namely Manton North. The Newark and hinterlands area, however, has the most marked cluster of zones with social need in the county. In the Ashfield/Mansfield sub-area there is a marked concentration of serious need in Sutton-in-Ashfield, whilst the Mansfield district has the highest overall social needs score outside of the city of Nottingham. Four zones in Mansfield Woodhouse have extreme need and five others, elsewhere in the district, serious need. Half of all Mansfield's 44 four zones are classified as having above average social need.

The study also identified that the groups that have been identified as most likely to have serious or extreme social need in Nottinghamshire are the elderly and non-white British.

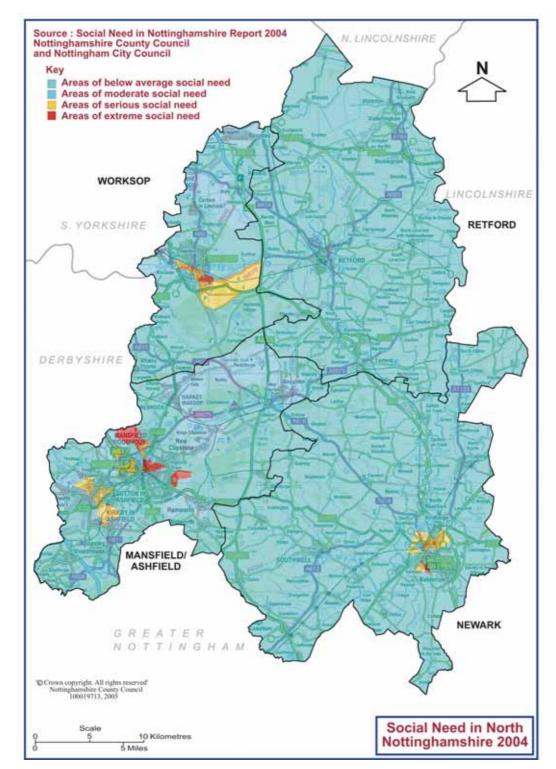


Figure 3.5 Social need in North Nottinghamshire

Clearly, social needs cannot be met solely through the policies and measures included in LTP2. These needs are wide and endemic and can only be altered by a fundamental change in the community's educational aspirations and desire for improvement. These wide ranging needs are fully understood by the Council and efforts to assist these communities through targeted policies to improve education, provide skills training and to encourage local employment are key priorities in its strategic plan. To complement this, areas of high social need such as Manton in Worksop, have benefited in recent years from the development of local employment sites at

Manton Wood and the Old Manton Wood Colliery site. Access links to the Manton Estate have been considerably improved by the provision of better footways, new cycle lanes and a new bus service through the programmes of the previous local transport plan.

The very nature of communities like Manton means that there is a much higher need for medical and social services and a much reduced ability, through reduced car ownership and disposable income, to access these services. Access to education, skills training and suitable employment is vital to sustain and eventually rebuild these communities and these are areas where the policies and the time-tabling of the measures in LTP2 can make a difference, when linked with wider strategies. The integration of LTP2 measures with the Council's own environmental improvement programmes can also play a significant part in creating better environments for these communities - environments in which the community can take pride in.

The regeneration and accessibility planning sections of this document cover many of the opportunities that would help reduce some of the above problem. The accessibility planning techniques will be invaluable in defining the magnitude of the need and in identifying priorities for intervention measures. These will include improved access to education, employment and skills training, environmental improvements, recreational facilities, safety improvements and in general a better quality of life.

Local district councils in their roles as planning authority, housing authority, lead agency for crime prevention partnerships and partners in regeneration initiatives have a key role to play, and a close working relationship with the County Council is essential. The introduction of local development framework area action plans will offer the opportunity to work together to integrate the joint aspirations of both councils.

## 3.3.2 Disabled users

The County Council is committed to meeting the needs of mobility, learning and visually impaired people through the delivery of its services and has strategy in place to address the problems that people with disabilities face. The two main transport problems that people with disabilities face is access to services (such as health, employment, training and other essential services) and using transport services (such as infrastructure - for example, footways and crossings - as well as mode of transport - for example, buses and trains - and publicity and information - for example, bus timetables).

Systems are in place to help identify these problems and resolve them but accessibility planning work, as well as working in partnership with disability groups offers the opportunity to identify further areas that need continued development to improve access for people with disabilities.

Specific measures to help address the transport needs of disabled users are detailed within the vulnerable road user strategy in section 5.6, Accessibility and chapter 7, Quality of Life.

### 3.3.3 Education

The County Council acknowledges that a good education and access to lifelong learning contribute to thriving and sustainable communities.

The Council's vision is to promote education, lifelong learning and skills training linked to good employment opportunities to help everyone contribute to a cohesive society. The Council will help offer the opportunities for all people to gain the right skills for a rewarding and productive job and will stimulate enterprise, small firm formation and growth, job creation and a diverse local economy.

The Council recognises the role education and skills development plays in building a healthy economy, and will, through 'Building Learning Communities', encourage higher collective aspiration in towns and villages and contribute to healthy and sustainable communities. The Council wants everyone of all ages to reach their full potential.

The economy in Nottinghamshire is still recovering from the coalfield closures of the early 1990s and subsequent clothing and textiles job losses. Although the economy is moving out of dependence on manufacturing and into services, food and drink there is an under-performance in the transition to knowledge based industries compared with national trends. General unemployment rates are only slightly above the national average, however, new employment opportunities have tended to focus on lower paid work – this is particularly evident in the north of the county. Unemployment is still high, however, in some pockets of the county, focused mainly around areas of high deprivation.

Previous reliance on relatively well paid low skilled work in industries such as mining has engendered a non-academic culture which has struggled to embrace the opportunities of the knowledge economy. Compounding this problem, businesses tend to view areas of North Nottinghamshire as sources of cheap unskilled labour and are consequently locating lower paid employment opportunities here. Many jobs are low value and concentrated in low wage industries. The key to getting away from this spiral of underachievement and lower paid work is education and training.

Particular problems in North Nottinghamshire are:

- 23% of adults in Nottinghamshire having literacy and numeracy needs
- Skill levels at 19 are 20% lower than those specified in national training targets
- 13.5% of young people do not go on to further education, training or work at age 16
- Exam results overall for fourteen and sixteen year olds are still below the national average.

Once again, accessibility planning work over the plan period will offer good opportunities, being able to define those areas of the county that have the greatest problems with educational attainment, skills training and access to employment sites. This will then offer the opportunity to develop measures to improve access for those communities. This LTP will also seek to support regeneration schemes that will enhance the viability and vitality of towns and villages to encourage greater inward investment from businesses.

## 3.3.4 Health

Illness and insufficient levels of physical activity are contributing to poor levels of public health. The Department of Health recommends that each person "should do 30 minutes of moderate exercise five times each week", however nationally 60% of men and 75% of women do not reach these targets.

The East Midlands personal travel survey undertaken in 2005 indicated that in Nottinghamshire only 10% of the sample of adults did 30 minutes of exercise five times each week and this figure has reduced from 12% in 2003. The results of Sport England's Active People Survey, which is currently being undertaken, should be available in November 2006, and will be used to monitor this further.

Historically much of this exercise would have come from walking and cycling in the normal course of daily life but this is no longer the case. Physical activity is vital in tackling obesity as well as contributing to preventing coronary heart disease, stroke, diabetes and hypertension. It also maintains respiratory capacity and helps prevent osteoporosis. The 2001 Census shows that 20% of the population in the whole county of Nottinghamshire has a limiting long-term illness, which is above the national average (17.9%). Three of the districts in North Nottinghamshire, however, have even higher percentages with a limiting long-term illness, as:

- 22.1% of the population in Ashfield district has a limiting long-term illness
- 21.9% of the population in Bassetlaw district has a limiting long-term illness
- 24.2% of the population in Mansfield district has a limiting long-term illness
- 19.7% of the population in Newark & Sherwood district has a limiting long-term illness.

The effects of transport on health, both positive and negative, are well documented. The increasing reliance on cars for transport and a general decline in physical activity across all age groups, has contributed to the rise of a number of health problems. Negative impacts of the increased usage of cars for example can be both direct and indirect and can include:

- Increased road accidents
- Increased air pollution causing more respiratory diseases
- Stress caused by congestion
- Stress and sleeplessness caused by noise
- Lack of physical exercise and a more sedentary lifestyle.

The lack of available transport, can also be prejudicial to health as it can mean:

- Lack of access to healthcare facilities
- Mental health problems caused by isolation
- Inability to access food choice and other essential services
- Reduced income and earning potential.

Conversely, having access to a range of transport modes can provide substantial health benefits by increasing levels of activity through cycling and walking, particularly where these are undertaken regularly. These benefits will have a positive impact on the illnesses detailed earlier. Improved public transport can lead to wider benefits of greater access to education, services and employment, with the consequent improvements to standards of living.

The health community has particular priorities associated with tackling health inequalities, obesity and coronary heart disease. The LTP offers a significant opportunity to contribute to meeting these health priorities and other objectives through measures to promote cycling and walking, increase accessibility to health establishments, and reduce congestion, air pollution and accidents.

## 3.3.5 Physical environment

The well-being of people living in the county is a central strand of the Council's Strategic Plan. The quality of the environment in Nottinghamshire has a major impact on many aspects of community life in the county. Improvements to the environment can have a positive social and economic regeneration impact. There is clear evidence that the response of individuals to their environment is closely linked to the quality of their everyday surroundings. It affects the pride that people have in their community and has a major influence on their outlook on the wider world.

Poor streetscape and quality of public spaces which are not up to the public's expectations do not engender pride, and can lead to anti-social behaviour. Improving streetscape quality and public spaces can therefore encourage public activity and allows pedestrians to move freely through uncluttered streets. It assists the orderly, efficient and safe movement of people and goods and encourages people to drive less and walk more. Improving conditions for walking is identified as important (or higher) by 83% of North Nottinghamshire residents.

Nottinghamshire is a diverse county that ranges from idyllic rural villages in prosperous farming areas to run down deprived urban areas and isolated ex-mining villages. The countryside equally reflects those differences with some areas still showing the scars of heavy industry that has long gone, whilst other areas exhibit the undisturbed maturity of ancient forests and arable land.

The county's historic and natural environment includes Sherwood Forest and the former ducal estates of Clumber Park, Rufford Abbey, Thoresby and Welbeck, most of which are now accessible for recreation and tourism and which provide huge natural assets for local people and tourists. Less than 2% of the county's natural environment is nationally important for its wildlife,

compared with 7% nationally, reflecting intensive land use and an environment that has been affected by its industrial heritage. The county has 2,590km of public footpaths, bridleways and other rights of way.

Some key pressures on the environment include: **housing** - it is estimated that around 50,000 new dwellings will be required in Nottinghamshire between now and 2021; **transport** - road traffic in the county continues to grow, for example, between 1990 and 2000 there was a 15% increase in traffic on Nottinghamshire's rural A roads; **waste** - industry, commerce and households in Nottinghamshire produce around 2.5m tonnes of waste each year. Disposal of municipal waste costs the County Council alone £11m each year; **wildlife** - Nottinghamshire contains fewer protected landscapes and wildlife sites than neighbouring counties. The county has 50% less ancient woodland than in 1920, 90% less heathland than in 1922 and 97% less wildflower-rich grassland than in 1930.

The urban environment is varied in its quality and ranges from the picturesque settlements of Southwell and Newark, to the heartland of previous heavy industry in Mansfield, Worksop, Sutton-in-Ashfield, Kirkby-in-Ashfield and Hucknall. High density living in poor quality housing built for previous generations, still typifies many settlements along the industrial spine to the west of the plan area.

## **Building Better Communities - Creating a better place to live and work**

The second LTP plays an important role in shaping the environment that we live in. The integration of the LTP2 strategy with the continued endeavours by the Council to lift the quality of the county's environment will provide added value in meeting many common objectives.

Nottinghamshire has a well respected tradition for environmental improvement work over the last 30 years through specific programmes and the drawing in of external funding, such as Alliance SSP and WREN. These programmes have complemented and added value to many schemes funded through other programmes, such as the award winning Worksop Town Centre improvements.

The 'Putting the Pride Back' initiative, launched in 1997, which ran until 2000, invested £5.5m in the county (£1.5m funded by the County Council), drawing in £4m of external funding from a number of partners and sources such as the Single Regeneration Budget and other European funds, district councils and the Coalfield Regeneration Trust to provide environmental improvements.

Recent Mori poll's reveal that the quality of the local environment was named as a top five priority by 40% of residents interviewed. In addition 90% of all petitions presented to the County Council relate to environmental matters. In direct response to this the Building Better Communities (BBC) initiative was approved by Council during January 2004.

The initiative developed from a 'total environment strategy' to achieve urban and rural renaissance in Nottinghamshire with an emphasis to be placed upon town centre regeneration in the more deprived parts of the county.

The County Council see this type of work as essential throughout the county and has committed £25m of funding to the five year programme of BBC improvements which runs from 2004 to 2009.

The initiative is focusing on the opportunities to improve five key areas of action:

- **Better neighbourhoods** improve the quality and image of our towns and villages including the refurbishing of town centres
- **Better countryside** improve the quality of rural areas, including reclaiming derelict land
- **Better business** widen the range of land-based local industries, including regenerating rural shops and facilities

- **Better leisure** promote tourism, recreation, health and leisure
- **Better awareness** develop environmental education and understanding, including fostering pride of place and sense of local history.

BBC monies have been, and will continue to be, combined with other funding sources to realise the opportunities offered through pooling and maximising available resources. This enables the provision of transport and environmental enhancement schemes to a quality that could not be provided by each funding stream alone.

## 3.3.6 Community and personal safety

People will only use public transport, walk or cycle if they think it is safe to do so. Fear of crime affects some sectors of the population more than others, with women, parents, the young and the elderly and ethnic minorities having particular safety concerns that need to be taken account in transport provision. These concerns become even more acute when they relate to trips after dark. Of all the modes of travel, car journeys are seen to carry the least risk in terms of fear of crime due to the door to door nature of such journeys. Crime and the fear of crime is therefore a factor which continues to act against the move towards an increased use of more sustainable modes of travel, and tackling these represents a key opportunity to increase the use of more sustainable modes of travel.

Crime figures relating to the Plan area are shown in table 3.6 below.

	1992	1997	2002	2003	2004
North Nottinghamshire Plan Area					
Taking of motor vehicle without owner's consent	5405	3587	2628	2323	1980
Theft from a motor vehicle	9254	5973	6047	6085	4732
Cycle theft	2749	1691	1041	1110	895
Total	17408	11251	9716	9518	7607

Table 3.6 Crime figures within North Nottinghamshire

## 3.4 CONGESTION

The results of analysis and monitoring lead the County Council to believe that current levels of congestion on the Plan area highway network are unlikely to be detrimental to the health or economic well-being of the whole Plan area now or in the near future (traffic flows on main routes are detailed within Figure 3.6, whilst an annualised index of traffic flows are shown in Figure 3.7). This belief is supported by the fact that there are no air quality exceedences within the Plan area. Localised problems do exist though, particularly in Mansfield and parts of Bassetlaw and Newark, but it is considered that these problems can largely be mitigated by prudent improvements to the local highway network and the promotion of alternatives to the car.

Congestion has an impact on several of the LTP's other priorities, such as improving air quality and health, regeneration, quality of life and making best use of the existing network (particularly in relation to the Network Management Duty). It is therefore essential that current levels of traffic are managed effectively and that congestion does not become a problem in the future. Similarly, it is important to address public perceptions of congestion. As such the strategy to deal with congestion will focus on continued monitoring of traffic levels and the provision of both demand-side solutions and supply-side solutions to restrain traffic growth (as detailed within Chapter 8). This pro-active approach to congestion management will hopefully prevent increasing traffic volumes to significantly worsen and cause congestion.

Where necessary, additional resources will also be allocated to reducing congestion at known hot-spots, particularly where this congestion also has a detrimental impact on public transport services. Where localised congestion does exist and is also being flagged up as an additional concern by bus operators for service reliability issues (or through the Bus Punctuality Improvement Partnership), added weight will be given to these localised problem sites. It is recognised that congestion should ideally be measured by person delays and not vehicle delays. This information is not currently available within the Plan area but the County Council is currently investigating the most appropriate method of collecting this data.

The Council believes that due to the current congestion levels, setting congestion reduction targets will not provide any appreciable benefit. If, however, traffic monitoring indicates congestion is worsening in particular areas, local targets will be considered as necessary. The Council has set a target to limit traffic growth to 8% and will thus be monitoring traffic levels throughout the plan period.

## 3.4.1 Journey delays

Journey time surveys (using the floating observer method) were undertaken in 2002 to ascertain congestion levels on the radial routes in the Mansfield, Newark, Retford and Worksop areas (surveys are due to be carried out throughout the Plan period) and Table 3.7 below gives the results of these surveys. It should be noted that these results are statistically significant at a 90% level of confidence.

Town	Average traffic speed (mph)	Number of junctions with an average delay of greater than one minute
Mansfield	16.9	5
Newark	18.6	1
Retford	23.7	0
Worksop	20.7	3

Table 3.7 Table of morning peak period journey time survey results

Note: these results relate only to speed of, and delays to, vehicles travelling on the radial routes in the peak direction during peak periods. They do not include delays to side road traffic or traffic on other routes.

### **Mansfield**

The lowest average speeds were recorded in Mansfield; however, only five junctions in the town suffered delays of more than one minute during the peak period, suggesting that congestion should not be considered a high priority among the shared priorities. The longest journey times into the town centre were recorded on the A60 through Mansfield Woodhouse: even here, however, journeys take on average only 11 minutes to reach the town centre from the edge of the urban area in Mansfield Woodhouse. Several routes take only 6 minutes to travel from the edge of the built up area to the town centre.

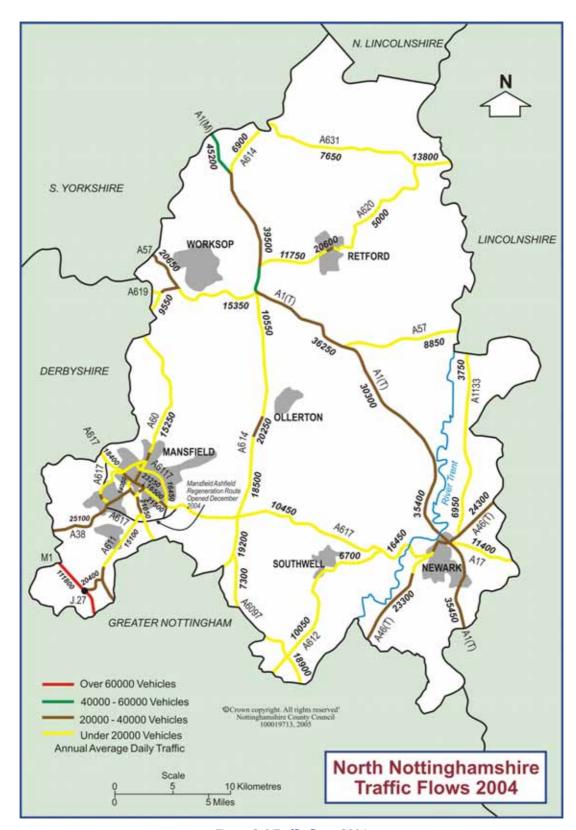


Figure 3.6 Traffic flows 2004

It should be noted that these surveys were undertaken prior to the commencement of the construction of the A617 Mansfield Ashfield Regeneration Route. At the time of writing, surveys to measure the impact of MARR have yet to be undertaken (national guidance suggests that surveys should not be undertaken until at least a year after opening: the next 'neutral month' in which surveys can be undertaken is therefore April 2006). Through modelling it is expected that journeys times on the radial routes will have improved, as traffic is diverted off the former

A617 onto the new route. However, where new junctions have been created (such as on the A60 Nottingham Road, A38 Sutton Bypass and A617 Chesterfield Road West) new delays may have been created. If this is the case, further monitoring and strategy will be developed, as necessary, to deal with such delays.

#### **Newark**

As a thriving market town, Newark does from time to time experience localised congestion, particularly close to the town centre where several radial routes converge, and near the large supermarkets. However, the journey time surveys show that congestion is not a problem overall. The town centre can be accessed along all the radial routes in less than five minutes. The exception is the B6326 through Balderton - which acts as the main route into the town from the A1 south – along which journeys take 10 minutes in the peak.

#### Retford

Retford is a compact market town, with very few signalised junctions outside the town centre. Consequently, the average journey times in the peak periods are very short: the town centre can be accessed along all of the radial routes in less than three minutes. As with Newark, local congestion does occasionally occur near the busier signalised junctions and supermarkets, however, it is not considered a high priority amongst the shared priorities.

#### Worksop

Again, although average speeds are relatively low, only three junctions in the town suffer delays of more than one minute during the peak period, suggesting that congestion should not be considered a high priority among the shared priorities. The longest journey times into the town centre were recorded on the B6040 Carlton Road but even here journeys take on average only ten minutes to reach the town centre from the edge of the urban area. Several routes take less than five minutes to travel from the edge of the built up area to the town centre.

#### Rural

There are significant differences in opinion in urban and rural areas. Only 45.3% of people in rural areas think that congestion is either a serious or significant problem compared with 69.9% of people in urban areas. Outside of these urban areas there is no comprehensive information on congestion levels and problem sites are investigated on a responsive community led basis.

### **Public perceptions**

Public opinion suggests that traffic congestion is a problem, with 62% (across the whole Plan area) saying that it is either a serious or significant problem. However, this masks the significant differences in urban and rural areas. Clearly this public opinion is not supported by the survey data: this is evidenced in Retford where respondents quoted congestion as their number one concern whilst peak period journey times are very short. Although congestion was highlighted as a problem, for the majority of people traffic levels do not influence how they travel, with only around one third of the population quoting this as a major influencing factor. Congestion is a very emotive subject and something that is difficult to quantify in simplistic terms, such that perceived levels of congestion in different urban areas are difficult to compare.

The strategy detailed within Chapter 8, Congestion of the Plan do, however, aim to address the public's concerns regarding perceived high levels of congestion as they detail how the Council will manage and restrict current traffic levels and traffic growth.

# 3.4.2 Traffic growth trends

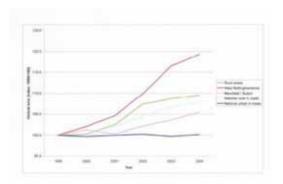
Congestion is very closely linked with traffic flow levels and, although modelling and monitoring has identified that congestion is not currently a high priority in most of North Nottinghamshire, increases in traffic volumes have been measured across the Plan area in the last five years. This has significant impacts for both air quality and the emission of greenhouse gases. A

significant side effect of increased traffic levels is 'rat-running' along inappropriate routes that can adversely impact on both urban and rural communities as well as being a serious road safety concern. Congestion, like most of the other objectives, is therefore closely tied in to the County Council's strategy as it impacts on accessibility, air quality, safety, regeneration and quality of life. The benefits of schemes under this heading are more likely to be measured by the knock-on benefits through the other objectives.

Traffic flows in North Nottinghamshire have been monitored regularly since 1986. This data was supplemented by a new regime of surveys commenced in 1999 as a result of the requirements of the Road Traffic Reduction Act (1997). Traffic levels between 1999 and 2004 have increased in the Mansfield/Ashfield sub-area (referred to as West Nottinghamshire in the graph below) by 19.3%, and in the other three sub areas (referred to as Rural Areas) by 9.5%. (The results of the 2005 surveys are not available at the time of publishing but will be reported in full in the Annual Progress Report submission in July 2006).

The growth in the West Nottinghamshire sub-area is particularly marked, and appears to be mainly due to an increased number of trips outside Mansfield town centre, within which traffic growth has been limited to 5.4%.

The graph below compares the annual traffic growth in the Plan area with national data over the same period. All flows are measured in vehicle kilometres.



## 3.5 AIR QUALITY

The Nottinghamshire Environmental Protection Working Group was established in the 1980s and is a partnership between all of the district councils, the City Council and the County Council as well as the Health Protection Agency and Environment Agency. As part of its remit the group is responsible for co-ordinating the review and assessment of air quality in Nottinghamshire.

In 2001, the Group produced the Nottinghamshire Air Quality Strategy, which set out the approach to reducing emissions of key pollutants across the area. The approach detailed the 'framework for action' to help local authorities manage and improve ambient air quality in Nottinghamshire and to protect the health and well being of the public in a co-ordinated and integrated manner. Work is currently underway to update and review this strategy, and a full assessment of the air quality and factors which affect it will be published later in 2006.

The County Council will continue to use the opportunity of working in partnership with the authorities in the Group to ensure this consistent approach to assessing and monitoring air quality throughout the Plan area. Working within the Group also aids the cross-boundary work that may be required to address any locations where air quality objectives are unlikely to be met.

Monitoring of congestion within the urban market towns within the Plan area indicate that there are no significant congestion areas and these findings are reflected within the air quality monitoring assessments.

The various air pollutants are monitored regularly throughout the Plan area to ensure that they do not exceed air quality objectives. Results of recent air quality modelling and assessments for the areas within the Plan are detailed below and have shown that there are no problem areas, in that no Air Quality Management Areas (AQMAs) have been declared within the Plan area. Monitoring and assessment within the Plan area also indicates that air quality is expected to remain within national objectives during the Plan period, but air quality will be subject to continued assessment and monitoring.

## 3.5.1 Ashfield and Mansfield

No AQMAs have been declared within the Ashfield or Mansfield areas.

In 2003 'Updating and Screening Assessment' (USA) suggested no pollutants required further detailed assessment except in the location of Pinxton Green, where the USA had indicated that the 24-hour mean objective for particles ( $PM_{10}$ ) might be compromised. It was determined that further detailed monitoring should be undertaken at this location. This monitoring, conducted from July 2003 until February 2004, has shown that the air quality objectives for  $PM_{10}$  will be achieved in this location.

The likely outcomes of the new Mansfield Ashfield Regeneration Route have been modelled and found that pollutants will be reduced in the areas surrounding it.

Monitoring of pollutants in narrow congested streets with residential properties close to the kerb highlighted 15 locations that required further investigation in the Mansfield area. Modelling was therefore undertaken at these sites which determined that there were no predicted exceedences for 2005 in any of these locations. Monitoring also identified 16 'busy junctions' locations within the Mansfield area. Further monitoring found that all of these junctions however, met 2005 objectives. Similarly a few borderline sites for  $NO_2$  pollutants were identified. These however, do not exceed the 2005 objectives.

## 3.5.2 Newark and its Hinterland

No AQMAs have been declared within this area and all the objectives are likely to be met and in 2003 USA indicated that no pollutants require further detailed assessment. Similarly, no roads fall into the categories of 'busy'.

## 3.5.3 Retford and its Hinterland

No AQMAs have been declared within this area and all the objectives are likely to be met and in 2003 USA indicated that no pollutants require further detailed assessment. Similarly, no roads fall into the categories of 'busy'.

# 3.5.4 Worksop and its Hinterland

No AQMAs have been declared within this area and all the objectives are likely to be met and in 2003 USA indicated that no pollutants require further detailed assessment. Urban sites in Worksop will continue to be monitored in further detail to ensure that they continue to meet objectives.

# 3.5.5 Future modelling

Ongoing assessment will continue to be undertaken in each of the four sub-areas to monitor levels of pollutants to help identify existing or potential exceedences in the future. More detail on this is included within Chapter 9, Air Quality. Given the close links between air quality and congestion, the measures detailed within Chapter 8, Congestion, are used to manage congestion and therefore help maintain air quality. Where assessments identify existing or likely future exceedences additional resources will, however, be prioritised to address such exceedences.

## 3.6 REGENERATION

The County Council is promoting an approach based on the 'Local Futures Audit', a policy tool developed in collaboration with the Audit Commission and the Local Government Association to help shape the County Council's next Strategic Plan. This approach has allowed the Council to look critically and comparably at five key aspects of the local economy, with the detail included within the 'The State of the County – An Economic, Social and Environmental Audit of Nottinghamshire' (The Local Futures Group, March 2005), where the county's position is both ranked in relation to 53 other regions making up the national picture and is compared to national averages. In summary:

- Overall, Nottinghamshire's economy is under-performing, falling below the national average
  in most sub-counts of scale, productivity and change. Of most concern is the lack of
  employment growth in most recent years compared to the buoyant growth
  nationally. Productivity however, is at, or around the average, though this is largely
  attributed to the concentration of economic activity within the City
- The performance of the economy is fundamentally influenced by its **industrial structure**. The county's economy is affected by the localised impact of structural change in the national economy as a whole and this is further compounded by the demise of Nottinghamshire's more traditional industries coal mining, clothing and textiles and associated manufacturing. Structurally, economies are now being assessed in relation to the growth of the knowledge economy across all sectors marked by rising levels of innovation, technology, creativity, entrepreneurship and increasingly skilled workforce. Overall, Nottinghamshire has a moderate (27<sup>th</sup> out of 53) proportion of employment in knowledge-driven sectors but worryingly, appears to be losing ground. Between 1998 and 2002, employment in the knowledge economy in the county decreased by 6.4% while nationally it increased by 12%
- A dynamic local enterprise culture is reflected in an area's competitiveness and overall success. The audit ranks the county's **business and enterprise** score as 25<sup>th</sup> out of 53 other regions. However the proportion of businesses actually operating in the knowledge economy is relatively low. In 2003, just over 24% of businesses were in the knowledge-driven sectors, compared to 31% nationally
- While assessments may usefully be made as to the share of the knowledge economy in terms of structure and formation, the knowledge economy is driven by the **knowledge**, **education**, **skills and attributes** of the county's workforce. In terms of comparability, skills and qualification levels in the county are low, ranking 34<sup>th</sup> out of 53. The proportion of working age people with higher level (NVQ level 4 and above) skills is only slightly lower than the national average of around 25% while the proportion of those with no qualifications or limited to NVQ level 1, is slightly higher than the national average (36.3% in 2003 compared to 34.6% nationally).

This masks considerable sub-county differences. Nearly 44% of people of working age in Ashfield in North Nottinghamshire have no or limited qualifications, compared to just under 22% in Rushcliffe. Furthermore, only 12.5% of those of working age in Ashfield and 13.2% of those in Mansfield have qualifications of NVQ level 4 or above, compared to nearly 40% in Rushcliffe in the Greater Nottingham area

• The final consideration is the county's **labour market** characteristics. The rate of unemployment is the traditional measure. The county's rate is on a par with the national average, but there is evidence (Sheffield Hallam University 2005) that the official unemployment count masks the real count. In this study, the county's official count is quoted at 3.1%, with a 'real' count of over 3 times this at 9.9% - a feature in common with other former coalfield areas (see Figure 3.7). At a local level there are 'pockets' of unemployment that are at least twice the county average – again, mainly but not exclusively within former coalfield areas in North Nottinghamshire. A further assessment may be made by consideration of employment rates. At 70.5%, Nottinghamshire falls below the national employment rate of 74.3%. Again, there are marked sub-county differences, with Mansfield

recording an employment rate as low as 64.9%. Self-employment rates are relatively low at 7.1% compared to 8.4% nationally. In Ashfield, Bassetlaw and Mansfield they are as low as 5.4%, 6% and 6.4% respectively (2003/04).

## Overall therefore, in economic terms:

- The county has a moderate sized economy, but more recently has little evidence of growth
- While rates of business creation have been at the national average, the proportion of employees and businesses in the knowledge-driven sectors is very low
- The legacy of the decline in the traditional industries is strong, with a poorer performance in human capital higher skills in short supply and high basic skills issues
- While new jobs have been found, they are relatively low knowledge based and the county's economy remains vulnerable to global structural changes
- Within the county are significant local variations, reflecting the greater potential of some local areas compared to others.

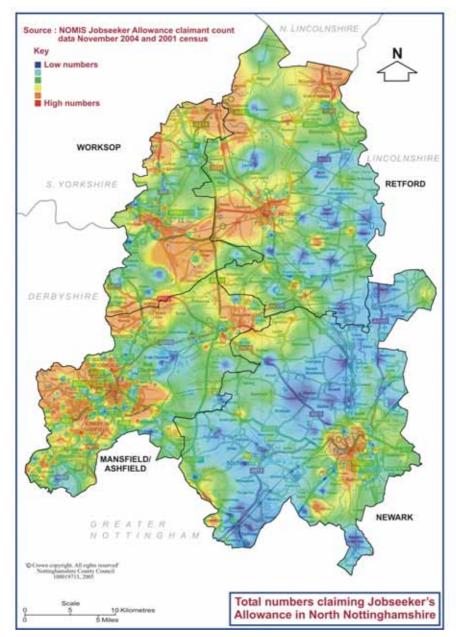


Figure 3.7 Total numbers claiming jobseeker allowance

## 3.6.1 The wider context

The 'State of the County' audit offers a wider but still very much regeneration related perspective to set the above indicators in context. In particular referencing North Nottinghamshire:

- Fundamentally related to economic performance is an assessment of **prosperity**. The audit indicates that Nottinghamshire is ranked 40<sup>th</sup> out of 53 sub-regions. Consideration of matters such as average incomes show that the average income in 2002/03 in the county was £18,606 compared to £21,442 nationally. At a local level, the highest average income in the County was recorded in Rushcliffe (in the Greater Nottingham Plan area), with the lowest in Ashfield at £16,200 by local authority area, ranked as 395<sup>th</sup> out of 408
- The most obvious measure of **deprivation and inequality** is the Index of Multiple Deprivation (IMD). Using the finer level of detail offered by the availability of data on a 'Super Output Area' (SOA) basis, Nottinghamshire ranks as the 12<sup>th</sup> most deprived sub-region in the country. The average SOA score nationally is 18.59, compared to that for the county of 26.4. There are significant local variations. While the City of Nottingham ranks as the 7<sup>th</sup> most deprived local authority area out of 354 in the country, Mansfield is not far behind at 33 and Ashfield at 66. Rushcliffe by contrast is 309<sup>th</sup>
- Figures for a large area like the county, even when broken down further to sub-county district area level may hide the issues facing **local communities**. The County Council's latest assessment of Social Need in Nottinghamshire (2004) reveals particular pressure points in North Nottinghamshire:
  - Mansfield has the most marked need outside of the City. Four local 'zones' in Mansfield Woodhouse have extreme social need, while overall, half of Mansfield's 44 zones have above (county) average social need
  - Ashfield has five zones in serious social need and a marked concentration of need in Sutton-in-Ashfield
  - Manton in Worksop has the highest indicated need of any zone in the county –
    including those within the City area. Wider, Worksop also has a significant
    cluster of zones of serious need.

# 3.6.2 Regeneration and transportation in North Nottinghamshire

In October 1997 the Deputy Prime Minister, the Rt Hon John Prescott MP, established the Coalfields Task Force. The Task Force's report ('Making the Difference – A New Start for England's Coalfield Communities') was published in June 1998 and Chapter 3 of the final report concentrated on the need to enhance the basic infrastructure of coalfield areas.

The report confirmed the view that the inadequacy of the transportation infrastructure in coalfield areas is as a direct consequence of a previous dependency on coal. The majority of pits were sunk in isolated locations where local employment was secure, with the coal itself leaving primarily by rail - thus necessitating little investment in the road infrastructure. The Coalfields Task Force report reinforced the need for a re-evaluation of transportation and infrastructure to reflect changed - and changing - circumstances. Specifically in Nottinghamshire, this has manifested itself in:

- A lack of opportunity to bring forward quality industrial sites: The North Nottinghamshire coalfield area has not benefited from the significant transport infrastructure investment of other coalfield areas, thus hampering the development of strategic quality industrial sites. The Coalfields Task Force report notes the East Midlands coalfield areas struggled to secure a level of foreign inward investment of only half the national average and stresses that the key driver for location decisions is 'strategic location' ie, quality sites with an excellent communications infrastructure
- **Poor accessibility:** a lack of access creates a barrier to wider opportunities, particularly in the most isolated areas. Again in the Coalfields Task Force report, a survey of job seekers in North Nottinghamshire "... revealed that 46% thought that transport was a key barrier to finding work".

Addressing this legacy of an inadequate infrastructure, a lack of quality serviced sites for new growth opportunities, poor communications to serve them and low numbers of 'leading edge' small and medium sized enterprises to move the economy forward requires an integrated approach.

Studies completed both by local authorities and independent consultants have long illustrated that such fundamental infrastructure weaknesses in the coalfield areas not only impact upon the economic development of the local area but seriously undermine other broader initiatives geared towards benefiting the sub-region as a whole. This is again clearly articulated in the Coalfields Task Force report, where early investment in the road and communications infrastructure in other former coalfield areas has proved to be the catalyst for driving a dramatic up-turn in economic activity. The report concludes that road schemes which "...address the problems of strategic access as one essential element of a wider regeneration package have the potential to deliver substantial benefit to coalfield communities".

Some of the opportunities that will be used to help regenerate depressed areas are:

- Accessibility planning and the emergence of an all-encompassing Accessibility Strategy
  with the use of mapping such as Accession software will also play a role in prioritising areas
  with the most need
- The continued use of partnership working such as working with district councils on issues such as development control, and Local Strategic Partnerships
- Transport improvements can help to revitalise areas and make them more attractive to investment, bringing economic benefits to the region and help lure fresh investment into depressed areas
- Supporting both national schemes, such as Neighbourhood Renewal as well as other County Council initiatives, such as Building Better Communities, with LTP funding and external funding will also provide added value to these schemes.

### 3.7 MAKING BEST USE

A number of survey techniques are used to assess the condition of Nottinghamshire's roads. These include CVI/DVI (coarse and detailed visual inspections), Deflectograph, SCRIM (Sideways-force Coefficient Routine Investigation Machine), and more recently SCANNER (Surface Condition Assessment of the National NEtwork of Roads).

The County Council uses an accredited PMS (Pavement Management System), MarchPMS, to collate, manage and analyse the acquired survey data. At present CVI surveys are used to gain an overall perspective of the non-principal road network condition. DVI surveys are then carried out based on the CVI results and local knowledge to produce a prioritised works programme.

The Deflectograph survey had been Nottinghamshire's chosen survey technique to monitor the Principal Road Network, and since 2001/2002 had been the basis of performance indicator BV96. From 2004/2005 there was no longer an option to use Deflectograph for BV96. Instead it had to be calculated using TRACS type surveys (TTS), which is now known as SCANNER. From 2005/06 BV96 will be changed to BV223 and can only be produced using SCANNER. This survey method will also be used to survey the B & C road network from 2005/06.

It is intended to continue with Deflectograph surveys to assist in identifying pavements that can be classed as a long-life pavement (LLP), or are potentially upgradeable to long-life pavements (ULLP). LLP category pavements will have bituminous material greater than 300mm and for ULLP category pavements the existing bituminous thickness is between 200 and 299mm. Upgrading pavements to long-life in the long-term will generate savings as the maintenance requirement will be reduced. Deflectograph data is also an important parameter that can be used to calculate the structural strength and residual life of a pavement. It can then be used as a design tool for overlay thickness or reconstruction.

The condition of the Principal Road Network has improved considerably over the period of the first LTP with the performance indicator reducing from 43% to 19.4% using deflectograph surveys. The latest TTS results put our BV96 figure at 27%. Unfortunately as the there is no direct correlation between the two surveys no comparison can be made. The SCANNER result of 27% puts the County in the top quartile of authorities, fourth position nationally, which is a considerable improvement.

It is proposed that work on the Principal Road Network will now be scaled back to concentrate on reducing the backlog on non-principal network, which still requires significant investment over several years, particularly the rural network in Nottinghamshire.

The Highway Network Management Plan, as well as the emerging Network Management Duty and Decriminalised Parking Enforcement strategies, along with the other strategies within this Plan set out the measures/work programmes that will be used to address the problems listed below.

## 3.7.1 Transport Asset Management Plan

The development and implementation of a Transport Asset Management Plan (TAMP) for the County's highway network is a key opportunity to deliver a safer, improved network service for all road users. The production of the TAMP is only one aspect of the process and most importantly implementation of the processes outlined within the TAMP should produce major benefits for all road users.

Whilst most of the practices within a TAMP are already undertaken by the County Council, it offers the opportunity to review and improve current practices. Through identifying strengths and weaknesses in these practices (as well as data held on the network and its condition) it offers the opportunity to develop action plans to improve areas of weakness. The TAMP will therefore help identify current and potential future problems that may occur on the network as well as action plans to address these.

The development of a TAMP will also help the County Council to make better use of its transport assets through improved asset management to ensure they meet current and future requirements of the network.

The introduction of the principal of life cycle planning and whole life costing to schemes whether new build or maintenance schemes, should lead to economic improvements, as well as effective and efficient use of the network.

The production of the TAMP and the processes involved in its development should also clearly set out the financial requirements of the network, which in turn will assist in achieving full spend of revenue and capital allocations without overspending as well as the implications for depreciation of the asset if current levels of under-resourcing are maintained.

The development of a TAMP for Nottinghamshire's highway network is reviewed in detail in Chapter 11, Making Best Use.

# 3.7.2 Decriminalised Parking Enforcement

Decriminalised Parking Enforcement (DPE) is the transferral of the powers of the Police for enforcing static parking offences to the Council. The County Council recognises that there are considerable traffic management opportunities offered by DPE. Many of the initiatives detailed within the LTP, such as bus priority schemes cannot be achieved without the effective enforcement of supporting Traffic Regulation Orders (TROs).

Having previously commissioned a detailed financial model to calculate the implications of DPE in Nottinghamshire, the County Council is now working in close partnership with the district councils to deliver an enforcement regime that is acceptable and economically viable to all parties. It is anticipated that enforcement will be managed locally but under a central contract which will give the joint benefits of local knowledge and flexibility together with the consistency

a central contract can offer. A single ticket processing centre is also being proposed which will provide economies of scale and ease of operation. Close liaison and consultation is on-going with Nottinghamshire Police, the Highways Agency, neighbouring authorities and all other interested external parties.

The introduction of DPE is anticipated to alter the existing pattern of parking around town centres, and to counteract this the County Council is actively considering the re-introduction of residents' parking schemes to prevent any displaced parking. The Council is also financing a study to report on the feasibility and implications of introducing on-street 'pay and display' in selective town centres which, if viable, should financially assist DPE and improve the understanding and availability of town centre on-street parking. It is hoped that with effective enforcement of on and off-street parking and protected residential areas there will be the opportunity to encourage modal shift amongst commuters to town centres. In turn, the availability of short-term parking for shoppers will improve, thus assisting the retail trade. The control of new parking attendants can also help ensure that a consistent approach to enforcement can be achieved.

In introducing DPE, the County Council is actively exploring national examples of best practice to ensure that the transition is effectively and sensitively realised. Large-scale public consultation and information will commence in the months prior to the commencement date to ensure the public of Nottinghamshire are fully informed of the change to the enforcement regime.

## 3.7.3 Network Management Duty

The introduction of the Network Management Duty through the Traffic Management Act 2004 offers the opportunity for the County Council to give added focus to keeping traffic moving on its highway network, and adds value to the other LTP policies, concentrating on making better use of existing highways rather than simply building more.

The aim is to turn data and information held by the Authority and its partners into positive actions. This could be actions carried out by the Authority and their partners by adjusting traffic signals, amending operations, better co-ordination of street works and highway works etc. as well as by those using the network through altering journey times and routes or using alternative methods of travel.

The County Council is currently producing a strategic plan to develop systems and procedures which will provide both a proactive and reactive response to network management to relieve congestion and minimise disruption. This will include the development, improvement and enhancement of the highway and its use through new works, signing improvements, Traffic Regulation Orders, public transport provision and promoting walking and cycling. A proactive approach will continue to be taken to parking management and the co-ordination of street and road works and other temporary activity on the highway. The plan will also establish the appropriate measures required to respond to unplanned events through incident management, enforcement, media broadcasting, and sharing network information in the region.

## 3.8 LTP1 REVIEW AND ANALYSIS

The County Council developed its first LTP on the sound principles of the package approach adopted during the final years of the former Transport Policies and Programmes (TPP). The five years of the first LTP have enabled the Council to further develop its thinking. The introduction of Mobility Management Action Areas (MMAA) signalled the start of a new, holistic approach to local transport planning, where schemes covering the whole range of transport modes were developed together as a complementary package.

Our experience of the MMAA studies has reinforced our belief that this is the way forward, and has been expanded to influence our thinking on strategy development as well as scheme formulation. The identification of four sub-areas in North Nottinghamshire is the manifestation of this work.

The MMAAs themselves will be taken forward into LTP2 (under the title of Local Accessibility Transport Studies) because they have been the catalyst for much high-quality work (including schemes in Cartergate, Newark and Mansfield town centre) and have achieved success in engaging local stakeholders and members of the public in the transport planning process. Close liaison with Local Strategic Partnerships and district councils has strengthened links between the transport planning and development planning processes. Conversely, the Council has also learned to be careful with its public consultation processes to avoid raising public expectation about what is realistically achievable or acceptable within current transport policies and funding levels.

Over the Plan period the Council has consistently been highly rated for its achievements against its targets (as reported in the APRs) and has been awarded Centre of Excellence and Beacon Status for its work in the fields of Access and Mobility, Integrated Transport Planning and Local Transport Delivery. As a result of its involvement in these initiatives and its exposure to the work of other highly-rated authorities, the Council has been able to take on board best practice advice from other local authorities concerning programme management and Transport Asset Management Planning. Work continues in order to refine and develop our programme management processes in order to achieve ever higher levels of scheme completion and value for money.

The lack of progress in achieving cycling targets has led the Council to reappraise its strategy and the programming of schemes. This will allow better targeting of resources to appropriate projects that will achieve results making sure that lessons learnt from involvement in the cycle benchmarking have been taken on board.

The Council has piloted Quiet Lanes and Home Zones (in the Greater Nottingham Plan area), developing proposals in the light of work undertaken by other authorities. The benefits of these schemes are currently under review and decisions on whether to proceed with further proposals will be taken in the light of the results of these reviews.

During the last five years, the Council also developed a RealTime bus timetable information system. Unfortunately, this system being a pilot and early fore-runner did not prove successful and was discontinued in 2005. The Council has learned from the problems this project suffered from and is confident it can develop an improved version of the system that can be installed during the second LTP period to tie into the systems in neighbouring areas. Bus Quality Partnerships have proved successful in the Greater Nottingham plan area, and this model has now been introduced in North Nottinghamshire.

The increased profile of transport within the community – partly as a result of improved public consultation, but also partly as a result of much national transport debate - has raised expectations, particularly amongst rural parish councils. Our Rural Schemes programme has proved popular with parishes and resulted in an increased demand for transport improvements in the area's villages. As a consequence, the Council has needed to better demonstrate that robust decision-making is being made. A Highway Network Management Plan has been developed, incorporating new policies and criteria to aid the decision-making process. This is continually being refined.

During the last five years the continued broad investment in Local Safety Schemes, from area-wide traffic calming schemes to signing and lining improvements, has produced significant casualty savings. Speed management techniques such as traffic calming and rural speed limits have played a major part in casualty reduction as well. It is fair to say that the reduction rate of casualty savings has decreased in recent years but the intended review of speed limit policy and the continued programme of safety camera installation should provide continued reductions in casualties.

It is much more difficult to assess the effectiveness of education, training and publicity programmes. However, the reductions in casualties amongst target groups indicates that partnership, often regional, working has had a significant effect on reducing casualties. For

example, the regional Shiny-Side Up Partnership has seen significant reductions in sports bike rider KSI casualties, whilst the Pedestrian Safety Partnership with the Police, City and County Councils has seen significant reductions in elderly pedestrian casualties.

Although the Council has been extremely successful in encouraging employers to introduce travel plans and has led this process by example, it has reviewed the current process and will be re-launching the initiative ready for the second LTP period. This review has allowed the Authority to apply consistent branding to the process and with help from the local Chamber of Commerce in marketing should provide wider benefits by maximising the opportunities to employees.

The County Council has achieved significant success in the regeneration of the Mansfield area. This was a key strand to the first LTP strategy – but the regeneration to date has come at a price in that the area has seen significant increases in traffic levels (greatly in excess of those across the rest of the plan area). This highlights the care needed to balance regeneration with the desired congestion reduction and air quality measures needed over the second plan period. Some success has already been achieved through sensitive complementary measures to such significant schemes as at Rainworth, detailed below. These will be continued over the course of LTP2.

The Council has been able to secure significant amounts of additional funding from other sources to match fund the LTP to provide wider benefits; for example schemes that improve the environment as well as providing transport benefits. This partnership working has usually also included working with community groups to maximise local 'buy in' to the schemes. External funding has been levered in from the Sub Regional Strategic Partnership (SSP), WREN, developers, local businesses, and emda, and demonstrates the integrated approach developed by this process. It is intended that this work will be extended in LTP2 as part of the LATS programme.

Over the course of the first LTP period the County Council has delivered over two thousand schemes with varying levels of complexity. Each year the Council has managed its budgets with great care and efficiency to deliver the full planned LTP programme to maximise the benefits to the residents of Nottinghamshire and to contribute to Government's transport agenda. This process has been helped by the partnering arrangements within the organisation to ensure adequate resources are available. Through this process the County Council has been able to deliver a substantial number of measures to help travellers using all modes of transport and to help people across all sectors of society. Highlighted below are some examples of the types of schemes that the Council has been able to deliver:

- Mansfield Ashfield Regeneration Route
- Catergate pedestrianisation scheme
- A60 bus lane
- A611 bus priority measures
- Rainworth complementary measures
- Southwell Town Centre improvements
- Improvements to Chesterfield Canal
- Coddington cycle links
- Village Gateway treatments
- Safety camera initiative, and
- Meden Valley environmental improvements.

**Mansfield Ashfield Regeneration Route**: a £32million scheme to regenerate the area delivered on time and to budget has opened up significant amounts of land for development, as well as reducing the volume of traffic passing through the centre of Mansfield.

**Catergate pedestrianisation scheme**: the direct result of one of the Council's MMAA studies, this scheme has been undertaken in partnership with the District Council to improve the vitality of part of Newark town centre. The jointly funded scheme has been well received by the local businesses and the public alike.

**Sheepbridge Lane link**, Mansfield: In addition to the MARR route, key links have been improved to provide better access to existing as well as new developments.

**A60 bus lane**, Mansfield: Buses were experiencing significant delay along this radial into the town centre. By providing a dedicated bus lane journey times on this route were improved.

**A611 bus priority measures**, Ashfield: Operators had identified that one particular junction was causing delays to an important service and thus reliability and punctuality was being compromised. By signalising the junction buses are now able to access the main road without difficulty significantly improving the punctuality of the service.

**Improvements to Service 60**, Worksop: Through negotiation with local businesses an important bus service from a deprived area has been safeguarded and adjusted to better meet the requirements and shift patterns for a significant number of employees with no other mode of transport available for their work journey.

**Improvements to Service 33**, Newark: By re-banding and upgrading a complete route this rural service saw a 26% increase in patronage.

**Rainworth complementary measures**, Ashfield: To complement the major bypass scheme opened in 2000, significant traffic calming measures and improved pedestrian and cycle links have been introduced into the village. These measures have reduced both traffic speeds and traffic volumes since their introduction.

**Southwell Town Centre improvements**, Newark: This historic town benefited from high quality speed reduction measures to improve the pedestrian environment within the town centre.

**Closure of St Peters Way subway**, Mansfield: The subway under the ring road had been a major barrier to pedestrian access to the town. There were significant fear of crime issues as well as general anti-social behaviour problems in the subway. It was filled in and a high specification fully disabled compliant surface level pedestrian/cycle crossing installed.

**Improvements to Chesterfield Canal**, Retford: In partnership with the British Water Board a substantial length of the canal footpath has been upgraded linking into the town centre.

**Coddington cycle links**, Newark: A high specification off-road cycleway has been installed in an area with historically good levels of cycling. The track was built to support a school travel plan at the local primary school and is extremely well used by both school children and the local community.

**Gateway treatments**, various: Parish councils have been very keen to see gateway treatments on the entrances to their villages to reinforce the change of speed limit. Interactive speed signs have proved particularly popular and have seen some significant speed reductions.

**Improvements for the Disabled**, various: The County Council has been particularly proactive in upgrading its crossing facilities to be fully disabled compliant. Numerous schemes have been undertaken and the Council has completed all fully signalised crossings before the end of the first plan period.

**A631 Safety camera initiative**: The County Council is fully signed up the speed camera partnership and is keen to replicate the excellent results seen by these measures elsewhere within the country.

**Wheels to Work initiative**: The Council has supported a local 'Wheels to Work' initiative to help individuals access work opportunities. The scheme has now been running for four years and has grown year on year.

**Meden Valley environmental improvements**: The County Council has project managed a number of wider environmental / regeneration initiatives utilising external grant funding and has complemented these schemes by providing the necessary transport improvements.

#### **Outcomes**

Although it is impossible to measure the precise individual benefits of all of these schemes, they form part of an integrated package of measures, which has led to the following benefits across the Plan area.

Nottinghamshire County Council is pleased to be able to report that the funding gained during the first Plan period has enabled the Council to make significant moves towards achieving the national road safety targets. Although the last couple of years have seen a levelling off rather than a continued fall in levels of killed and seriously injured, as discussed above, the Council considers it is now in a position to start to re-invigorate this key priority. The County Council has also reviewed the supported bus services and as such the already high levels of access to bus services across the county should be continued with over three quarters of the population in rural villages within ten minutes of an hourly or better bus service.

The County Council has also had significant success in encouraging both employers and schools to introduce travel plans. This process can only assist in changing travel behaviour on these key peak hour trips to work and school – and this has been shown with a fall in car use to school during 2004/05 for the first time during the Plan period. The Council's restraint policy measures have also enabled traffic growth across the plan area to be limited whilst the number of public transport journeys have continued to rise. This has also contributed to no worsening of air quality with no Air Quality Management Areas declared in North Nottinghamshire.

Whilst improving transport choice, the Council has placed significant emphasis on improving the condition, and thus the efficiency, of the existing road network. Due to constantly changing methodologies, it has not been easy to accurately assess progress made in this area, but where there has been a level of consistency (deflectograph on the principal road network) good progress has been made with more than a 50% reduction in the backlog of network needing repair.

### **Best Practice**

The use of best practice, developed jointly with other local authorities or taken from elsewhere, has played a vital role in delivering the first LTP and will undoubtedly help deliver the objectives of LTP2.

County Council documents, such as the Cycling Design Guide and the Highway Network Management Plan have been drawn up and are regularly reviewed taking into account national, and where appropriate international, best practice.

Best practice taken from elsewhere is acknowledged throughout this Plan and particularly within each of the strategy chapters, but the table below gives examples of just a few of the ideas that have been taken, and/or developed from elsewhere.

Initiative	Source	Actions undertaken				
Accessibility	Accessibility					
Local Accessibility Action Plans	Nottingham City Council	The County's Local Accessibility Action Plans have been developed using the template that Nottingham City Council developed				
Real time bus information provision	Nottingham, Derby and Leicester City Councils and Derbyshire and Leicestershire County Councils	A core system - StarTrack - (rather than a stand alone) similar to that being developed in the "three cities" area will be developed to link services with systems operating in other areas, such as Greater Nottingham and South Yorkshire PTE, if the opportunity arises				
Road safety						
Summer Drink/Drive campaign	Derbyshire County Council	Based on a Derbyshire idea, a joint Drink/Drive campaign is to be held				

Initiative	Source	Actions undertaken			
Inter-active speed signs	Warwickshire County Council	The development of specific signs with messages unique to a location			
Congestion					
Online car-sharing scheme	Derbyshire, Leicestershire and Lincolnshire County Councils	The same provider has been adopted as these authorities (which will also aid effective cross-boundary working) based on the lessons they learned			
Bus Quality Partnerships	Greater Nottingham Plan area	Bus Quality Partnerships have been developed on routes across the North Nottinghamshire Plan area based on the format developed jointly with the City in the Greater Nottingham Plan area			
Air Quality					
Use of cleaner vehicles	Powershift and Seven Oaks District Council	The County Council purchased dual-fuel and electric vehicles for the Council fleet			
Strategic Environmental Assessment (SEA)	West Midlands and Somerset Councils	The SEA was developed based on the best practice which these authorities produced as part of the DfT pilot studies			
Quality of life					
Rights of Way Improvement Plan (ROWIP)	York City Council	The ROWIP has been developed using York City Council's 'whole network' approach			
Environmental improvements to canal towpaths	British Water Board	Canal towpaths have been upgraded, such as the Chesterfield Canal in Retford as walking and cycle routes			
Regeneration					
Newark Town Centre Improvements	Lincoln City Council	The scheme was developed using practices Lincoln have developed to take account of the heritage and conservation concerns of such schemes in a historic conservation area			
Mansfield Public Transport Interchange	Greater Manchester and South Yorkshire PTEs	The station has been designed having looked at similar sized stations in Hyde, Middleton and Chorley			
Making best use					
Decriminalised Parking Enforcement (DPE)	Lancashire County Council	DPE strategy has been developed based on Lancashire's two-tier template			
On-road cycling facilities (such as advanced cycle stop lines and cycle lanes)	York City Council and CTC benchmarking group	Design standards and actual facilities developed based on standards of these organisations			

Table 3.8 Examples of best practice taken from elsewhere

The County Council has also been involved in a range of regional and national groups to develop wider best practice amongst the group members, taking all of the group members experiences into account. Examples of such groups are detailed throughout this Plan, but some of the groups are included in Table 3.9 below.

Group	Best practice developed
Accessibility Fora	Sharing our knowledge and learning from others through understanding other authorities perspectives/experiences (also assisting effective cross-boundary working)
East Midlands Safety Audit Forum	Part of the group's role is to exchange views on how to deal with problematic casualty sites (also assisting cross-boundary working)
Midlands Service Improvements Group	A regional group developing a Transport Asset Management Plan (also ensuring effective cross-boundary working)
Regional Best Value Groups	Several ideas have been gleaned from these groups, such as engineering measures (flicker boards at roundabouts) as well as procedures (four year bulk clean and change of street lights)
Shiny Side Up Partnership	A regional road safety group developing education and publicity programmes for motorcyclists
Cycle benchmarking group	Part of the group's role is to exchange views on cycling best practice

Table 3.9 Regional and national groups

The County Council also intend to continue to use best practice whenever appropriate. For example, the County Council are currently identifying best practice on developing car clubs and teleworking as part of the development of its smarter choices programme.