

STRATEGIC ENVIRONMENTAL ASSESSMENT

**of the North Nottinghamshire Local Transport Plan
2006-2011**

Non-technical summary
November 2005

Acknowledgement

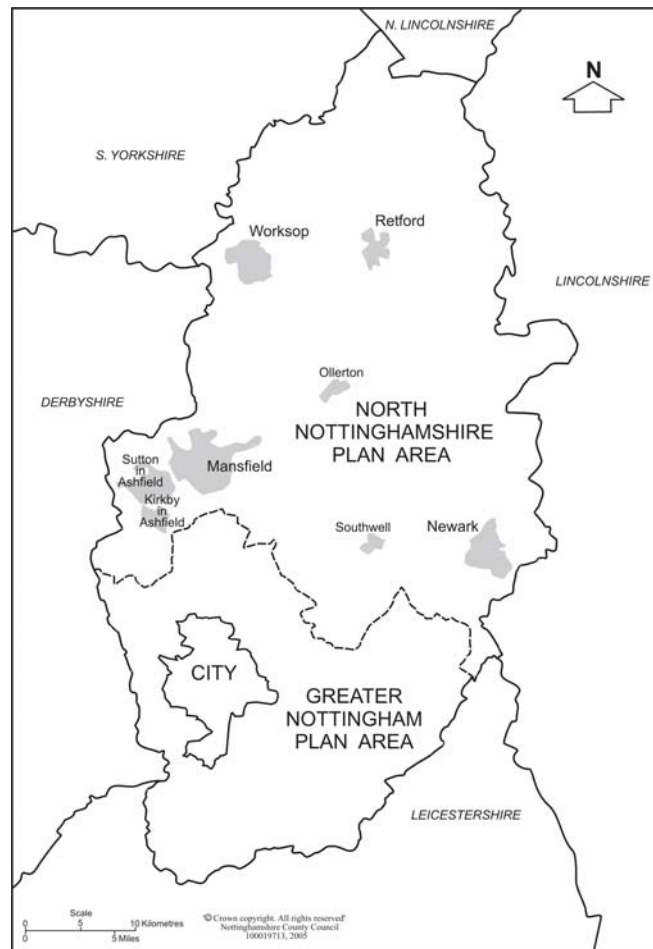
This Environmental Report has been produced for consultation by officers from Nottinghamshire County Council. However it has drawn significantly on the equivalent SEA of the Greater Nottingham LTP, which was developed as a partnership between Nottingham City Council and Nottinghamshire County Council. Nottingham City Council officers led the development of the Greater Nottingham Environmental Report, and significant sections of this report draw on their work. This contribution is gratefully acknowledged.

1 NON-TECHNICAL SUMMARY

1.1 The Local Transport Plan for North Nottinghamshire

- 1.1.1 The Local Transport Plan (LTP) for North Nottinghamshire is Nottinghamshire County Council's 5-year blueprint for transport in the north of the County. It covers the Districts of Bassetlaw, Newark and Sherwood, Mansfield, and all of Ashfield except Hucknall.

Figure 1: North Nottinghamshire Local Transport Plan Area



A separate LTP is produced for Greater Nottingham in the south of the County.

- 1.1.2 The LTP identifies the main transport problems in the area, and sets out the policies and proposals which the County Council wishes to implement in order to improve transport. The document is important as it is used to bid to government for money for transport projects such as road maintenance, bus service improvements, safety schemes, cycling and walking proposals, and major new developments such as a proposed replacement for Mansfield bus station.

1.1.3 The Government has told Local Authorities that their Local Transport Plans must address the following 4 problems:

- tackling road congestion and traffic jams
- improving safety and reducing accidents
- improving “accessibility” - the ease with which people can get to jobs, schools, health facilities and shops (for example by improving public transport)
- reducing the pollution caused by vehicles on the road.

We have identified other local problems unique to North Nottinghamshire which also need to be tackled, as follows:

- supporting regeneration – ensuring that transport helps business to create jobs
- improving a range of factors which affect people’s quality of life (the condition of local neighbourhoods and public space, crime, health, noise, access to the countryside, and the emission of gases which contribute to climate change)
- ensuring that roads, bridges and other transport facilities are properly maintained

1.1.4 The LTP sets out what the County Council is proposing to do over the next 5 years to address these problems. The main proposals are as follows:

Table 1 – Main transport proposals within the LTP

Proposal	What we are proposing to do
Improve bus services	Many bus services are run by private companies without financial support by the County Council. However we can help to improve public transport by putting in bus lanes and other measures which favour buses, and by improving bus stops, shelters, stations and other waiting areas.
Pedestrian and cycling schemes	We intend to invest in more cycle lanes and better facilities for pedestrians. In some town centres want to implement pedestrianisation schemes
Awareness and publicity campaigns	Very often people need better information, encouragement or even training to use public transport or to cycle or walk. We will target schools and businesses in particular, encouraging them to start “travel plans” which help pupils and staff in their daily travelling. We also will work with bus operators to provide better public transport information.
Local safety schemes	We propose to implement safety schemes at accident black spots, and will also target areas around schools
Traffic management	We will reduce the delays caused by roadworks and illegal parking, and ensure traffic lights, signs and other measures keep traffic flowing as smoothly as possible.
Improve road crossings	We will improve road crossings, particularly concentrating on introducing drop kerbs for people in wheelchairs
New roads/local roads schemes	We intend to undertake small road improvement schemes at the worst bottlenecks, and may even build short lengths of new road where required for example to connect up new regeneration or employment sites
Maintenance	We will undertake routine maintenance of existing roads and bridges, and try to catch up on a historical backlog in maintenance
Mansfield Public Transport Interchange	This is a major scheme to replace the existing bus station in Mansfield with a new public transport interchange on a new site
A617 Pleasley bypass	We have a long-standing proposal to extend the bypass of Pleasley near Mansfield
A617 Kelham bypass	We have a proposed scheme also to bypass Kelham near Newark

1.2 The “Environmental Report”

- 1.2.1 When preparing important documents such as the LTP, we are required by law to look at the effects such a plan will have on the environment in a process known as “Strategic Environmental Assessment” (SEA). This includes issues such as noise levels, air pollution, wildlife and climate change, but also the effects of transport on people. It therefore also includes issues such as health, crime, and accessibility. The results of this process must be written up in an “Environmental Report”, and this must be used to consult with the public and organisations with a special interest in the environment. This document is the full Environmental Report for the Provisional North Nottinghamshire LTP. A copy of this chapter, the “Non-Technical Summary”, is available as a separate leaflet.
- 1.2.2 We would welcome any comments you may have on this report, and on the Provisional LTP itself. The deadline for comments is Friday 6 January 2006. Please see chapter 10 for further information on how to submit your comments.

1.3 Identifying the important environmental issues in North Nottinghamshire

- 1.3.1 The research we have undertaken in preparing the Environmental Report has identified the following as the main environmental issues the LTP needs to consider – our SEA “aims”.

Table 2 – Strategic Environmental Assessment aims

	What the LTP should try to do to reduce the impact of transport on the environment
1	Ensure that the transport needs of the most needy in society are met
2	Make it easier for people to get to services such as doctors, schools, and shops
3	Tackle the effects of congestion and traffic jams
4	Help people to get to jobs and enable businesses to succeed
5	Reduce crime and the fear of crime, particularly on buses
6	Help people to reach the countryside
7	Reduce road accidents
8	Reduce levels of transport related noise
9	Improve health by promoting exercise (through cycling and walking)
10	Reduce greenhouse gas emissions from transport
11	Reduce air pollution
12	Avoid damage to wildlife, and provide new roadside habitats where possible
13	Avoid damage to the countryside
14	Avoid damage to towns and villages
15	Minimise flooding from roads and stop pollution reaching rivers and streams
16	Avoid damage to historic buildings and archaeological sites
17	Minimise use of raw materials, waste, and the amount of fuel used by vehicles

1.4 The “strategic alternatives”

- 1.4.1 When carrying out an assessment of the environmental impacts of the LTP, we are required to look at possible alternatives to the plan we have chosen, and to compare their environment effects. We have chosen to compare the following options:

Table 3 – Strategic Alternatives

Option 1	Existing situation (what would happen if there was none of the investment set out in the LTP)
Option 2	Preferred LTP option (the option we have finally chosen)
Option 3	“Capacity growth” option (an option which would involve greater emphasis on road schemes to increase capacity as a way to tackle congestion and promote regeneration)
Option 4	“Car-constraint” option (greater emphasis on improving accessibility and tackling carbon dioxide emissions, health issues and local environmental quality by constraining car use and promoting public transport, cycling and walking)

Having assessed these options for their effects on the environment, we found that

- Option 1 will result in a deterioration of environmental conditions primarily due to a general increase in road traffic levels.
- Option 2, the preferred LTP option, is anticipated to tackle congestion hotspots and encourage more sustainable travel. Overall the measures contained are expected to have a positive environmental impact, although traffic levels are still predicted to increase.
- Option 3 provides benefits over and above the preferred LTP option by reducing congestion in the short term, and helping economic regeneration. Conversely it would do little to improve accessibility, particularly for those without a car. It would also lead to a greater increase in traffic levels, and therefore a faster increase in greenhouse gas emissions, air quality and noise, and would do little to promote health and exercise.
- Option 4 by contrast scores highly in relation to social inclusion, tackling accessibility, and promoting exercise. In addition it is also positive in reducing greenhouse emissions, air quality and noise. However it may increase congestion in the short term, and may hold back local regeneration.

Overall, on balance, this has led to option 2 being preferred.

1.5 The main environmental impacts of the Local Transport Plan

1.5.1 Having chosen our preferred option, we have undertaken a more detailed assessment of the environmental effects of the main measures we have proposed. This has identified the following as the main impacts:

Table 4 – Main environmental impacts of the Local Transport Plan

SEA aims		Summary of predicted significant impacts
1	Promote social inclusion	Positive impact – the emphasis within the plan on improving accessibility and public transport will have a particularly beneficial impact on socially excluded groups, who are often more reliant on public transport than others. The improvements in road crossings will specifically assist those in a wheelchair, whilst the new Public Transport Interchange at Mansfield would be a major benefit on those reliant on public transport.

2	Promote accessibility to essential services	The LTP will have a very positive impact on accessibility, particularly by improving bus, cycling and pedestrian facilities, and by improving road crossings for wheelchair users. This is to be expected as accessibility is one of the primary objectives of the plan. Mansfield Public Transport Interchange would be a major benefit. Roadworks associated with maintenance may cause short term problems
3	Reduce the adverse effects of congestion on people	The impact of the LTP on congestion will be mixed. In the short term actions to improve bus priority, safety schemes and roadworks caused by maintenance may have negative impacts. However these will be compensated by the positive impacts of better traffic management, junction improvements, and reduced accidents. In the longer term the improvements to alternatives to the private car will encourage modal shift which will act to reduce congestion.
4	Support employment and business competitiveness	The LTP measures will have a positive impact on business competitiveness and employment. In the short term there will be benefits in the form of improved access to jobs and workforces. There may be some local congestion issues associated with bus priority measures, safety schemes, but in the longer term actions to reduce congestion will help reduce business costs. All three major schemes are predicted to have significant benefits for employment and business competitiveness.
5	Reduce crime and fear of crime associated with transport	There will be a small positive impact on crime levels – the programme includes measures such as better waiting environments, CCTV and lighting. Mansfield public transport interchange will bring particular benefits. Conversely some bus shelters can act as a focal point for anti-social behaviour. There is a conflict between increased lighting for personal security, and reducing energy consumption and conserving rural character/night skies. However on balance personal security is considered in this case to be the key issue.
6	Support access and enjoyment of the countryside	Overall the LTP will play a positive role in improving access to the countryside, by improving public transport, and by investing some resources in rural cycleway schemes.
7	Reduce road accidents	Overall the impact of the LTP on safety is highly positive. This reflects the fact that safety is one of the plan's key objectives. All three major schemes are expected to bring significant safety improvements. The main possible negative impact would be any short term increases in accidents involving cyclist caused by greater levels of cycling, even though the specific cycling measures in the LTP are designed to make cycling easier and safer. The research on the issue of cyclist safety is inconclusive.
8	Reduce levels of transport related noise in particular in areas of high sensitivity	Overall the noise impacts of LTP measures will be localised and small. There will however be significant benefits from the Kelham bypass scheme. The main negative impact is the effect of maintenance and other construction of road-based measures.
9	Improve health by promoting exercise through cycling and walking	The LTP will have positive impacts on health by promoting exercise through cycling and walking
10	Reduce greenhouse gas emissions from transport and the use of fossil fuels	The impact of LTP measures on carbon emissions and climate change will be positive compared to likely trends if there were no LTP investment. However there are still predicted to be increasing levels of traffic, and therefore increasing emissions, within the lifetime of the plan, and to this extent the impact of the plan is negative. Both bypass schemes may lead to increases in CO2 emissions.
11	Maintain and improve air quality across all areas	The overall impact of the LTP is likely to be small but positive in the longer term.
12	Avoid damage to areas of significant biodiversity interest, and exploit opportunities to enhance biodiversity wherever possible	The impact of the LTP on biodiversity is likely to be very limited, except in the case of the Pleasley and Kelham bypasses. For both these schemes there are potential losses. Although these may be compensated in part by new habitat creation, nevertheless this needs to be a matter of close attention at the detailed assessment stage.
13	Avoid damage to areas of significant landscape quality, and exploit opportunities to enhance local distinctiveness wherever possible	Overall the impact of the LTP on landscape character and quality in rural areas is likely to be significant in the impact it can have by making the countryside feel more suburban. Kelham and Pleasley bypasses will both have slightly adverse effects, though these can be mitigated with appropriate landscape schemes and design.

14	Avoid damage to the character and quality of urban areas, and seek opportunities to improve local environmental quality in towns and villages	The impact of LTP schemes on the character and quality of urban areas depends primarily on the detailed design of the proposals. Mansfield Public Transport Interchange will have a particularly positive impact on the centre of Mansfield by replacing a run-down bus station with a new "landmark" structure. Both bypass schemes will benefit the urban areas they bypass.
15	Minimise water run-off and contamination from transport infrastructure	The impact of the LTP on water environment in general is limited. However both Kelham and Pleasley bypasses will slightly improve water quality, but present an increased area of hard surfacing which will decrease infiltration.
16	Avoid damage to areas and features of significant cultural heritage interest, and exploit opportunities for enhancement wherever possible	The impact of LTP measures on the historic and cultural environment is very largely dependent on the specific location of proposals, and on their detailed design. Signage and other roadside infrastructure may in particular damage the settings of historical buildings in certain localities. Mansfield Public Transport Interchange will have a negative impact on the setting of an adjacent Grade II listed viaduct, but it is hoped this impact can be minimised through sensitive design.
17	Minimise use of non-renewable resources and increase recycling	The proposed LTP measures will involve the use of significant amounts of raw materials, including aggregates, cement, sand, stone and bitumen-based products. There will also be significant waste from road planings and other maintenance works. All of the 3 major schemes, and particularly the two bypasses, will involve the generation of waste and the use of raw construction materials. The use of fossil fuels is influenced by the LTP, and is expected to increase rather than decrease in the LTP period. However as stated in the climate change table above, this is influenced primarily by fuel duty levels which are not influenced through the LTP.

1.6 Proposals for improving the effects of the LTP on the environment

1.6.1 In order to reduce these impacts, the following recommendations have been made:

Table 5 – Main proposals for improving the effects of the LTP on the environment

SEA objective		Summary of mitigation proposals
1	Promote social inclusion	The most important issue is to ensure that all facilities are designed with the needs of the disabled in mind. It is also important to consider the needs of those who cannot read or understand English when proving information and publicity
2	Promote accessibility to essential services	All transport schemes should consider accessibility, and should be closely informed by the accessibility planning process. Efforts need to be made to minimise the disruption caused by roadworks.
3	Reduce the adverse effects of congestion on people	Wherever possible improvements for buses, cycling and walking should be made without taking out road capacity for other users. However this will not always be possible. Efforts should be made to minimise the impacts of roadworks by promoting alternative routes. Night working would reduce the effects of roadworks on congestion, but would conflict with noise reduction objectives and would cost more, leading to lower levels of maintenance.
4	Support employment and business competitiveness	Mitigation measures should concentrate on ensuring that the congestion impacts of new public transport measures are minimised, and in reducing the congestion impacts of road maintenance and local safety schemes
5	Reduce crime and fear of crime associated with transport	Ensure that crime and personal safety feature in all bus infrastructure investments. Renewable energy sources (such as solar panels on bus shelters) can be used to reduce carbon emissions.
6	Support access and enjoyment of the countryside	The accessibility planning process should consider the demand for access to rural areas for recreational purpose.
7	Reduce road accidents	All significant transport schemes should be audited for their impacts on safety, particularly cyclists and walkers. Awareness raising should be used to counter any negative impacts caused by increased numbers of cyclists.

8	Reduce levels of transport related noise in particular in areas of high sensitivity	The noise impacts of roadworks can be reduced by a ban on night-time working. However this conflicts with reducing the congestion impacts of roadworks, safety considerations, and the cost of implementation which increase at night. The current policy is to consider each scheme on a case by case basis to get the best balance between these competing objectives, and this is likely to continue.
9	Improve health by promoting exercise through cycling and walking	Physical activity should be emphasised in smarter choices programmes
10	Reduce greenhouse gas emissions from transport and the use of fossil fuels	Reducing the level of car use is considered to be influenced primarily by national policy on fuel duty, and therefore to a considerable extent outside the scope of the LTP.
11	Maintain and improve air quality across all areas	Where possible influence should be applied on bus operators to adopt low emission vehicles.
12	Avoid damage to areas of significant biodiversity interest, and exploit opportunities to enhance biodiversity wherever possible	In all cases detailed design can be used to minimise impacts. There are also opportunities to enhance biodiversity through the positive management of roadside verges.
13	Avoid damage to areas of significant landscape quality, and exploit opportunities to enhance local distinctiveness wherever possible	The main mitigation is to ensure that design standards are sensitive to the rural location, and through landscaping and appropriate design of the two bypass schemes.
14	Avoid damage to the character and quality of urban areas, and seek opportunities to improve local environmental quality in towns and villages	Design standards should reflect local character, particularly in areas of high value such as conservation areas.
15	Minimise water run-off and contamination from transport infrastructure	Sustainable urban drainage schemes (SUDS) can alleviate water pollution and run-of problems, but are likely to be feasible only in major new developments.
16	Avoid damage to areas and features of significant cultural heritage interest, and exploit opportunities for enhancement wherever possible	Careful design and location of highways measures.
17	Minimise use of non-renewable resources and increase recycling	The use of recycled materials should be maximised to reduce waste and the quantity of raw materials required.

1.7 Conclusion

1.7.1 In conclusion, we have assessed the likely environmental impacts of the North Nottinghamshire Local Transport Plan, and have identified that:

- The plan has a broadly positive impact on people and the environment, through helping to reduce pollution, road accidents, and transport related crime, and in particular by increasing people's ability to get to essential destinations such as health facilities, schools and shops.
- There are some negative impacts, such as the effects of winter gritting on water pollution, and the impact of features such as signs, kerbing and rural cycleways in making rural areas feel more suburban. Actual impacts cannot be known until specific schemes are actually designed. However many of the potentially negative impacts can be reduced by good design or other measures.
- The most important negative impact is the fact that road traffic levels are still expected to increase by 8% over the five years within the plan area. This increase is lesser than that which would occur without the plan, and there are proposals to help reduce the worst congestion hotspots. However congestion may increase elsewhere, and overall the contribution of transport to global warming and climate change will increase over the plan period – compared to a national target to reduce emissions by around 1% a year. This is a significant concern, it is the case that road traffic levels are more influenced by national policies on fuel duty and vehicle tax than by local factors, and therefore remain largely outside the control of the County Council through the Local Transport Plan.
- The environmental impact of the three major schemes has been assessed in more detail. This shows that:
 - Mansfield bus station has a broadly positive impact, particularly on issues such as accessibility, although careful design will be required to ensure the setting of the nearby Grade II listed viaduct is not adversely affected
 - Pleasley bypass has mixed impacts. It has clear economic benefits, and also will reduce accidents, pollution and noise along the existing route. However these are balanced by adverse effects along the new route, such as possible impact on wildlife and also a nearby primary school.
 - Kelham bypass has been studied in less detail. It has similar benefits to Pleasley in relation to accidents, noise and pollution, and also will improve the setting of the Grade II listed Kelham Hall. Conversely it too may have adverse impacts on wildlife along the new route.