Local Transport Plan For Greater Nottingham 2006/07-2010/11

Strategic Environmental Assessment

Environmental Report

Version 11
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1 NON-TECHNICAL SUMMARY

Background

This Environmental Report ("the Report") contains the outcomes of the Strategic Environmental Assessment (SEA) of the Local Transport Plan 2006/7-2010/11 (LTP2) for Greater Nottingham and has been prepared jointly by Nottingham City Council and Nottinghamshire County Council.

The SEA is a process for appraising the environmental impacts of the plan and the resulting Environmental Report must be taken into consideration before the plan is approved. A Scoping Report was produced for consultation and approval by key statutory consultees and the Department for Transport (DfT), alongside the provisional LTP2 in July 2005. The resulting comments were taken into consideration when producing the Draft Environmental Report, which was submitted with the provisional LTP2 for 6 weeks public consultation in October 2005. This final version of the Environmental Report takes on board the opinions expressed during that second round of consultation on the SEA.

Approach

The approach to the SEA has been, with reference to the SEA European directive, the national regulations and DfT guidance, to categorise potential environmental impacts of the Local Transport Plan under the following headings, or SEA topics:

- Population (social cohesion and mix, accessibility, economy)
- Human health
- Climatic factors, including CO2 emissions
- Air quality
- Biodiversity, flora and fauna
- Landscape and townscape
- Soil, including contaminated and derelict land
- Water, including quality, resources, and flooding
- Cultural heritage
- Material assets, including fossil fuels, minerals and waste

The Report sets out:

- Details of relevant International, European or member state environmental protection objectives and how these will be taken into account in LTP2 (Section 5).
- Baseline data describing the relevant aspect of the current state of the environment (Appendix A), and an analysis of the problems and opportunities offered to improve the environment (Section 8)
- SEA objectives and indicators (Section 7)
- Identification of strategic alternatives and the potential significant effects of the alternative strategies of the LTP2 (Section 9)

- A detailed assessment of the significant environmental impacts arising from the measures and schemes of the selected strategic option, for each SEA objective (Section 10)
- The monitoring framework and the mechanisms to trigger the proposed mitigation measures, as part of the recommendations to ensure the conclusions of the Report are an integral part of the LTP process (Section 11).

Baseline data

This section of the Report describes the environmental baseline of each SEA topic (drawing upon the baseline data tables in Appendix 1) and provides an indication of future trends where possible. Section 8 of the Report uses this data to identify the environmental problems and opportunities in the LTP2 area.

The baseline data provides a basis for forecasting and monitoring environmental effects and will help in the identification of any environmental problems during the LTP2 implementation.

SEA objectives and indicators

The SEA objectives have been developed to encompass the SEA topics (as set out in the Directive), the Integrated Regional Strategy[1], the DfT strategic transport planning objectives, and the New Approach To Appraisal (NATA) objectives. Above all, the overall LTP2 objectives should be compatible with the SEA objectives. The SEA objectives are as follows:

- To reduce levels of transport related noise in particular in areas of high sensitivity to noise
- To maintain and improve air quality in the Air Quality Management Areas and then across all areas
- Reduce greenhouse gas emissions from transport and the use of fossil fuels
- Support enjoyment of the countryside and improvements to landscape quality
- Maintain and enhance the character and appearance of townscape (with particular regard to Conservation Areas)
- To conserve and enhance biodiversity
- To maintain the network of inland waterways and promote their positive use and enhancement
- Minimise water run-off and contamination from transport infrastructure
- Improve health and reduce health inequality
- Promote social inclusion
- Casualty reduction and reduce crime and fear of crime associated with transport

[1] East Midlands Regional Assembly 'England's East Midlands Integrated Regional Strategy – Our Sustainable Development Framework' January 2005

- Reduce the need to travel through the promotion of sustainable development locations
- Promote accessibility by public transport, cycling and walking
- Reduce reliance on travel by car
- Minimise use of non-renewable resources and increasing recycling
- To support employment and business competitiveness

For each objective, a set of indicators and targets has been identified, which will provide a means for monitoring the performance of LTP2 against the SEA objectives.

It became apparent, whilst assessing the SEA and LTP2 objectives that there were some areas where the two sets of objectives may be in conflict. These have been taken into consideration when assessing the environmental impacts of the strategic alternatives and when proposing measures to mitigate the potential negative effect of the LTP2.

Strategic alternatives

The SEA Directive requires that, '….reasonable alternatives, taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated.' This means that the SEA should consider alternative scenarios for the overall management of transport in Greater Nottingham to ensure that the range of likely environmental effects arising from LTP2 are addressed during the preparation of the plan. It also assists in explaining to decision makers and consultees why these strategies, and no others, are being put forward.

The following options were put forward:

- Option 1 – Continuation of existing situation ('without plan scenario')
- Option 2 – Base LTP2
- Option 3 – Enhanced LTP2 (Base LTP2 programme plus NET Phase 2
  plus Workplace Parking Levy and associated measures to represent a high quality public transport improvement linked to pricing restraint)
- Option 4 – Emphasis on bus, walking & cycling measures

Nottingham City Council and Nottinghamshire County Council have compared the likely outcome of each of these options with respect to the key areas of LTP2 (congestion, accessibility, safety, environment, regeneration, maintenance and quality of life). This exercise demonstrated that Option 3 would perform the best in relation to the LTP2 and the environmental objectives, but would however it is recognised that this options is the most expensive and has a high level of implementation risk associated with it.

It is important to note that the aim of this exercise was to consider the significant effects or changes to the existing environment due to the

implementation of the LTP2 strategy, not existing problems caused by the current transport system to the environment, which were identified in Section 8 of the Report.

Significant impacts assessment and mitigation measures

Section 10 of the Environmental Report further details and defines the significant effects on the SEA topics. In accordance with European and national guidance, this stage of the SEA process identifies in detail the packages of measures proposed in the retained strategic option of the LTP2 and the significance of their impact on the environment, taking into account any area of uncertainty and the possible secondary, cumulative and synergistic effects.

Overall, it was found that the provisional Plan would have a significant positive impact on the environment of the LTP2 area. The authorities have also been able to identify the mitigation measures which should accompany the LTP2 implementation, through the SEA process. The mitigation measures will minimise or eliminate potential negative impacts of the Plan on the environment. No significant negative impacts have been identified as a result of the proposed LTP2. However, a number of areas of uncertainty were acknowledged, leading to possible negative effects, which in turn might together lead to cumulative and or synergistic impacts.

The authorities have therefore recommended a series of measures to prevent or immediately respond to any detrimental secondary effects. They are:

Key mitigation measures	Trigger for implementation
Avoid night-time construction in residential areas	Project Mandate
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport) to ensure high quality public realm	Design stage
Minimise use of new material and maximise use of recycled ones	Project Mandate
Monitor alternative routes when risk of traffic displacement which could affect other receptors (residential areas)	Traffic flows monitoring before and after implementation
Consider access restrictions for alternatives routes to avoid traffic displacement	Design stage
Consultation with public and user groups to ensure safety, security and optimisation of use	Design stage
Winter maintenance practices to be kept under review to minimise negative impacts	Maintenance
Use of Sustainable Urban Drainage Systems should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife	Design stage

Implementation and monitoring

It is proposed that monitoring of the SEA objectives and indicators, of the mitigation measures proposed during the impact assessment process, and the forecasted effects of the implementation of the Plan, will be reported on in the Progress Reports of the LTP2 as per DfT guidance.

1.1.1 Any discrepancies, anomalies, uncertainty or trend against the targets will be reported and will trigger a review of the mitigation measures or of the implementation programme, as appropriate.

1.1.2 The monitoring of the SEA will focus on the LTP2 as a whole, to ensure that cumulative effects are taken into account. This is especially relevant since:

- Many of the identified mitigation measures recommend ensuring synergies between packages of measures are maximised
- The overall positive impact assessment of LTP2 depends on successful implementation of the transport measures as integrated measures

Major and regeneration projects will be subject to detailed Environmental Impact Assessments, the conclusions of which will be reported on in the LTP2 Progress Reports.

Outcomes: Environmental Statement

The SEA process as well as the opinions expressed during the consultation periods on the provisional LTP2 and Environmental report informed, ensured and confirmed the chosen Strategic Option chosen for the LTP2, (i.e. Base LTP programme plus NET Phase 2 plus Workplace Parking Levy and associated measures to represent implementation of high quality public transport improvement linked to pricing restraint)

2 OUTCOMES: ENVIRONMENTAL STATEMENT

2.1 Introduction

2.1.1 The SEA Directive states that 'When a plan … is adopted, the [environmental] authorities [and] the public …are informed and the following items [shall be] made available to those so informed: (a) the plan … as adopted, (b) a statement summarising how environmental considerations have been integrated into the plan … and (c) the measures decided concerning monitoring' (Article 9(1)).

2.1.2 DfT guidance indicates that, to satisfy the Directive, authorities should state how they have taken the findings of the SEA into account. This SEA Statement should be made available to stakeholders. It will cover:

2.1.3 • Any changes to or deletions from the plan in response to the information in the Environmental Report.

2.1.4 • Ways in which responses to consultation have been taken into account. The summary should be sufficiently detailed to show how the plan was changed to take account of issues raised, or why no changes were made.

2.1.5 • Reasons for choosing the plan as adopted, and why other reasonable alternatives were rejected.

2.1.6 • Monitoring measures. The Environmental Report will already have documented proposed measures concerning monitoring; these can now be confirmed or modified in the light of consultation responses.

2.1.7 The detailed presentation of the opinions expressed during the consultation of the Scoping Report and of the Draft Environmental Report, and how they have been taken on board, can be found in Appendix B and D respectively.

2.2 How consultation responses were taken on board

2.2.1 Changes to LTP2 after consultation: No significant changes were brought to the Plan in response to the consultation on the SEA Scoping Report and the Draft Environmental Report.

2.2.2 Changes to the Environmental Report after consultation: The Final Environmental Report reflects the opinions expressed during the consultation periods. The amendments were not significant and do not affect the initial impact assessment.

2.2.3 Only the key statutory consultees for the SEA, i.e. the environmental agencies, made comments. Their input is acknowledged and has been helpful in informing the SEA process and in shaping the Plan. Most opinions expressed concerned:

- Baseline data
- SEA objectives and indicators

- Ensuring that environmental impacts are considered at the design stage of any scheme
- Ensuring SEA monitoring assists in the maximisation of opportunities by the Plan for environmental improvements

2.3 Proposed LTP2

2.3.1 Alternative strategies for LTP2 were considered through a group exercise involving officers at the City and County Councils, having regard to both the LTP2 and SEA objectives. The following options were put forward:

- Option 1 – Continuation of existing situation ('without plan scenario')
- Option 2 – Base LTP
- Option 3 – Enhanced LTP (Base LTP programme plus NET Phase 2 plus Workplace Parking Levy and associated measures to represent implementation of high quality public transport improvement linked to pricing restraint)
- Option 4 – Emphasis on bus, walking & cycling measures

2.3.2 Overall Option 3 was considered to be the most environmentally beneficial of the strategic alternatives assessed, whilst satisfying the Plan objectives.

2.3.3 Monitoring measures as detailed in section 11 are confirmed by the consultation responses and will be implemented as part of the LTP2 monitoring.

3 BACKGROUND

3.1 Strategic Environmental Assessment (SEA)

3.1.1 EU Directive 2001/42/EC, and the associated UK Regulations, introduce a legal requirement for public bodies to undertake Strategic Environmental Assessments (SEA) of certain statutory plans and programmes. SEA is a process for appraising the environmental impacts of the plan or programme, and the resulting Environmental Report must be taken into consideration before the plan or programme is approved.

3.1.2 Government guidance states that Local Transport Plans (LTPs) are subject to this Directive. Nottinghamshire County Council and Nottingham City Council are together responsible for producing the LTP for Greater Nottingham. A provisional draft of LTP2 was completed on 29th July 2005 and is due to be approved in its final form by March 31 2006.

3.2 The Environmental Report

3.2.1 This document is an Environmental Report which contains the outcomes of the SEA process. The statutory requirement for producing the Environmental Report is that it accompanies the final LTP2 in 2006. Given the interactive nature of the SEA process however, it is important to demonstrate that SEA has been undertaken throughout the development of the plan and as a result the purpose of this report is to document the assessment of the policies and strategies that has been undertaken during the development of the Provisional LTP2.

3.2.2 This report will form the basis for informing all interested parties of the assessment process associated with LTP2. The report will be issued to statutory consultees and other key stakeholders with an interest in the environment. It will also be available to the public on the Internet and on request.

3.3 LTP2 and SEA processes

3.3.1 Guidance prepared by the Department for Transport (DfT) on how to carry out SEA for Transport in England, is contained within TAG (Unit 2.11) Strategic Environmental Assessment for Transport Plans and Programmes, the final version of which was issued in December 2004. The SEA of the LTP2 for Greater Nottingham is being carried out in accordance with this guidance.

3.3.2 The DfT's guidance outlines the main stages of SEA as follows:

Stage A: Setting the context, identifying objectives and problems and establishing the baseline

Stage B: Deciding the scope of SEA and developing alternatives

Stage C: Assessing the effects of the plan

Stage D: Consultation on the draft plan and the Environmental Report

Stage E: Monitor the significant effects of implementing the plan on the environment

3.3.3 The DfT's guidance integrates the SEA with the New Approach to Appraisal (NATA) framework, which is the government's existing transport appraisal process for appraising transport plans, programmes and projects. Appraisal is made in relation to five objectives for transport (environment, safety, economy, accessibility and integration). It is the aim of this SEA to link in with the NATA appraisal requirement for transport schemes. The environmental objectives of NATA are therefore translated into SEA objectives in Table 5

3.4 LTP2 Objectives and study area

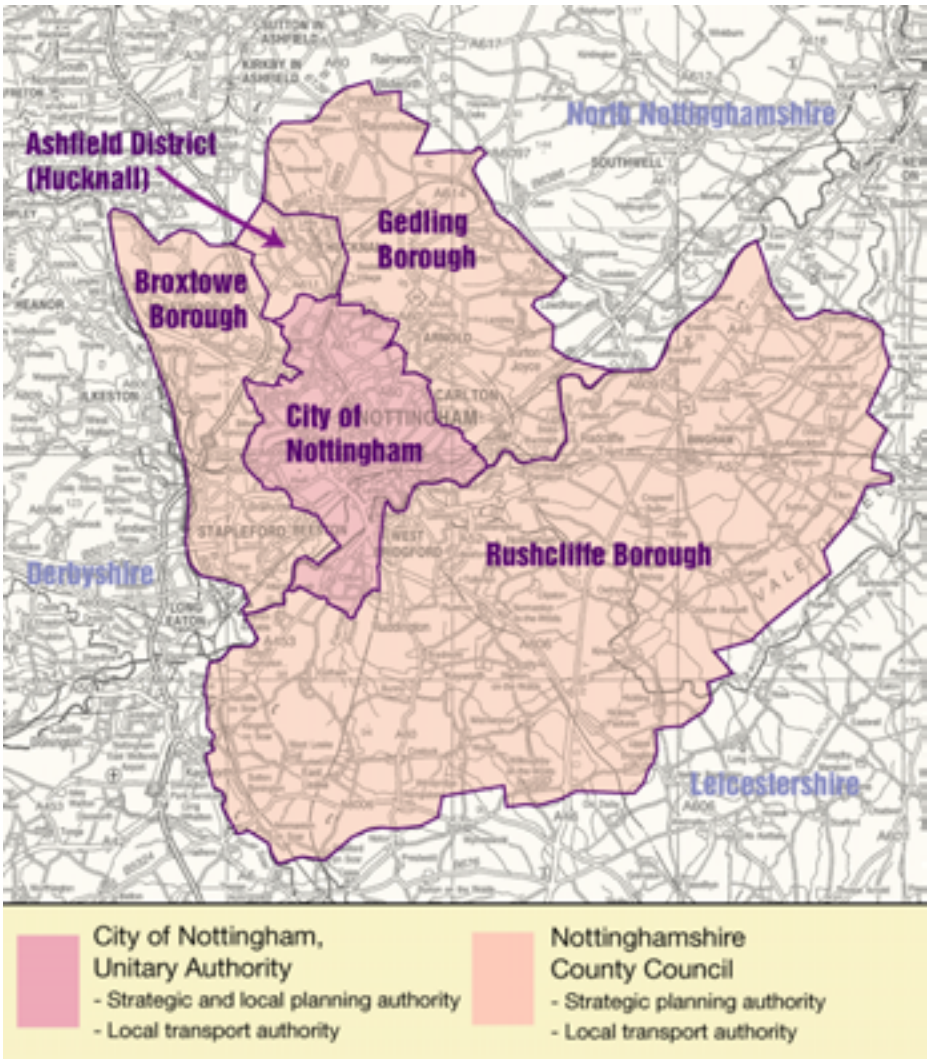
3.4.1 The Local Transport Plan (LTP2) for Greater Nottingham is the second LTP being produced jointly by Nottingham City Council and Nottinghamshire County Council (the Authorities). The Plan will cover the five-year period from April 2006 to March 2011 and replaces the first LTP that was produced in July 2000[2].

3.4.2 LTP2 will build on the success of the first Plan as recognised by the Government in annual performance assessments and Centre of Excellence designation.

3.4.3 The current plan covers the whole of the City of Nottingham, the Boroughs of Broxtowe, Gedling and Rushcliffe and the Hucknall area of Ashfield. This area, commonly thought of as the conurbation of Nottingham, is defined as Greater Nottingham within the Plan. The Plan is also of relevance to the wider 'Travel to Work Area' particularly east of Derby, in North Nottinghamshire and to the south in Leicestershire.

[2] Local Transport Plan for Greater Nottingham, Full Plan 2001/02 – 2005/06, July 2000

Figure 1: Greater Nottingham Local Transport Plan Area



3.4.4 The Plan is based on a set of six key objectives. These are derived from the Government's shared priority for transport and identification of issues of particular local importance. The objectives are detailed below:

Better manage and where possible reduce the problems of **congestion**	This means maximising the efficiency of existing transport networks, reducing traffic growth and encouraging the use of alternatives to the car particularly for journeys to work, school and higher education. Also helping to maintain a strong economy by improving business competitiveness.

Improve **accessibility** and social inclusion	This means achieving sustainable access to work, learning, healthcare, food shops and other essential services with the greatest focus being given to those most in need. Improving access to leisure and tourism is also of growing local economic importance. It also means planning the location and delivery of services to make best use of existing transport provision.
Improve **road safety**	This means improving road safety, particularly for vulnerable road users and children.
Protect and where possible enhance the **environment** (particularly air quality)	Central to this objective is improving air quality through reducing vehicle emissions but also reducing global warming and conserving the environment.
Support **regeneration** and neighbourhood renewal	This means supporting development in identified Regeneration Zones, improving the public realm and rejuvenating run-down neighbourhoods.
Enhance people's **quality of life**	This includes relieving communities of the adverse effects of transport such as noise, severance and visual intrusion. It also includes addressing community safety and reducing the threat of crime.
More efficient and effective **maintenance**	This means maintaining the structural integrity of existing transport networks in a cost effective and efficient manner.

4 APPROACH

In order to contribute towards the development of the Provisional LTP2 and its objectives, strategies and measures, the SEA process has been undertaken by transport, environmental health, planning and sustainability officers at Nottingham City Council and Nottingham County Councils.

4.1 Scoping Phase

4.1.1 The first phase of the SEA was the Scoping Stage, which began in December 2004. The authorities took on board the guidance contained within the SEA regulations, and the DfT's New Approach to Appraisal, to categorise potential environmental impacts of the Local Transport Plan under the following headings:

- Population (social cohesion and mix, accessibility, economy)
- Human health (crime and safety)
- Climatic factors, including CO2 emissions
- Air quality
- Biodiversity, flora and fauna
- Landscape and townscape
- Soil, including contaminated and derelict land
- Water, including quality, resources, and flooding
- Cultural heritage
- Material assets, including fossil fuels, minerals and waste

4.1.2 The first task undertaken by the authorities was to identify relevant international and national legislation, and national, regional and local strategies and policies, which have "environmental" objectives relating to any of the issues identified above, which the Local Transport Plan may influence. These include strategies and plans which are:

- environmental (e.g. Biodiversity Action Plans)
- transport related (e.g. Transport White Paper)
- relating to other areas such as land use planning (e.g. Joint Structure Plan) and economic development (e.g. Regional Economic Strategy)

From these strategies, a series of objectives, which the LTP needs to take account of, was listed. These are contained within Table 2 and Table 3.

4.1.3 Following on from this, the authorities gathered baseline data for each of the issues listed in paragraph 4.1.21. Where possible this has been related to regional and national data, in order to compare the environmental quality of Greater Nottingham with these wider areas.

4.1.4 A Scoping Workshop session was then held (involving officers at the City and County Councils) to draw from both the analysis of relevant legislation, strategies and policy, and the baseline data, in order to identify the following:

- Environmental problems in the LTP area which the LTP may influence
- Strategic Environmental Assessment Objectives
- Strategic alternatives

4.1.5 The authorities then undertook a preliminary analysis of the strategic alternatives. This was in order to gain both an initial impression of the potential environmental effects of LTP2 and to provide the authorities with initial feedback, from the consultees, regarding the chosen strategic alternatives.

4.1.6 The results of these exercises were written up into a Scoping Report and sent out for comments (refer to Section 4.7 for details of consultation). The responses for this stage of consultation have been taken on board in the Draft Environmental Report (refer to Appendix B for details of the comments received and how they have been incorporated into the Draft Environmental Report).

4.2 Impact Assessment

4.2.1 Following the consultation period, the authorities then proceeded to carry out more detailed analysis on the strategic alternatives and then identified the significant effects arising from the chosen alternative's measures through a workshop exercise.

4.2.2 The assessment of the significant effects of the measures contained in LTP2 was undertaken by means of an appraisal table as illustrated below:

Table 1: Appraisal Summary Table

NATA objective	ECONOMY					**Worksheet completed by and date:**	*Workshop 13/09/05*	
NATA sub-objective	Business users and transport providers					**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**		
SEA topic/receptor	**Material assets**							
SEA objective(s)	To support employment and business competitiveness							
LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			

	Positive impact			**Qualitative summary:**				
	Neutral impact			**Quantitative summary:**				
	Negative impact			**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**				
	Impact depends on implementation							

4.2.3 A series of tables was prepared for each SEA objective, which allowed for the consideration of each measure proposed for the chosen alternative. The potential significance of any of the impacts arising from implementation was identified in order to formulate mitigation measures that will be needed to reduce the significance of any predicted adverse effects. A summary of the overall significant effects is provided in Table 11. The full results of this exercise are presented in Appendix C.

4.2.4 The key findings arising from the impact assessment are provided in Section 10 along with the proposed mitigation measures to reduce any of the adverse effects that may have been identified through the assessment process.

4.2.5 The results of these exercises were written up into a Draft Environmental Report and sent out for comments.

4.3 Final Environmental Report

4.3.1 The responses for this stage of consultation have been taken on board in this Final Environmental Report (refer to Appendix D for details of the comments received and how they have been incorporated into this report). They have also helped shaping the final plan.

4.3.2 Following the consultation period on the provisional LTP2, the responses have been taken on board in the final version of the Plan. In turn, these amendments have been assessed as part of the SEA process. No significant changes were made to the proposed measures, and the strategic environmental impact assessment is therefore unchanged.

4.3.3 DfT guidance and the European Directive require that an Environmental Statement be made available to stakeholders, stating how the SEA findings have been taken into account. This statement should cover:

- Any changes to or deletions from the plan in response to the information in the Environmental Report.
- Ways in which responses to consultation have been taken into account. The summary should be sufficiently detailed to show how the plan was changed to take account of issues raised, or why no changes were made.

- Reasons for choosing the plan as adopted, and why other reasonable alternatives were rejected.
- Monitoring measures. The Environmental Report will already have documented proposed measures concerning monitoring; these can now be confirmed or modified in the light of consultation responses.

4.3.4 The Environmental Statement is presented in section 2 of this document

4.4 Dealing with uncertainty

4.4.1 Decision-makers need information that is both correct and precise. However, while the aim should be to be *correct*, ultimate *precision* will almost never be possible and may well not matter. For example decision-makers might decide that not letting one indicator go past a minimum tolerable value (e.g. air pollution), or not moving in the wrong direction at all (e.g. access for disadvantaged groups) should be an absolute constraint. Examples of decisions where certainty is not necessary in the SEA are:

- an impact is clearly significant and a known level of mitigation measures is needed,
- a topic is clearly insignificant compared to other topics,
- the baseline status is clearly positive and the plan would clearly maintain or improve this status under all reasonable scenarios,
- one alternative is clearly better or worse than another alternative under all reasonable scenarios, or
- the significance of the impact would be the same whether mitigation measures are in place or not.

4.4.2 The SEA should be *fit for purpose*: as precise as necessary and feasible to inform the relevant decision. Throughout the SEA process, the officers have applied techniques to reduce and communicate uncertainty by seeking correctness and precision. These techniques have included:

- Early participation of statutory consultees and the public
- Interdisciplinary working
- Use of SEA guidance, checklists etc., to ensure that all likely impacts are considered;
- Collection/analysis of more, better baseline data
- Use of existing forecasting (e,g, AQMA annual report)
- SEA carried out by people who know about the area, the plan, sustainability, and impact prediction;
- Use of the precautionary principle
- Consideration of cumulative, indirect and long-term impacts;
- Reference to other similar examples
- Identification of key areas of uncertainty in the SEA
- Agreement on assumptions used in the SEA,
- Scenarios to help identify the range/scale of possible impacts, including modelling

4.5 Cumulative effects assessment

4.5.1 The SEA Directive requires an analysis of "the likely significant effects on the environment…These effects should include secondary, cumulative, synergistic… effects". The aim of cumulative effects assessment is to identify, describe and evaluate cumulative (including synergistic) effects, and to enable them to be avoided, minimised or enhanced as appropriate. The focus of cumulative effects assessment is on receptors.

4.5.2 Cumulative effects on a given receptor are rarely aligned with political or administrative boundaries. Their assessment must use the relevant receptor boundaries: ecological boundaries for natural systems, socio-cultural boundaries for human communities. Cumulative effects have been considered throughout the plan-making and SEA process by officers, notably when first deciding on the area of intervention for the LTP: the Plan is the result of joint working between the two transport authorities, transcending administrative and political boundaries to better consider its effects on sections of the population, eco-systems and geographical areas.

4.5.3 Particular techniques that have been used in this SEA to identify and predict cumulative effects and propose mitigation measures include:

- Workshops of sustainability and transport planning experts
- Matrices to organise and describe the interactions between actions and receptors
- Modelling (Local Air Quality, LTP strategic options)
- Overlay mapping and GIS (accessibility planning)

4.6 Timetable for SEA of LTP2

4.6.1 The timetable that the plan making authorities have followed for the completion of the SEA is set out below:

	Step	Timescale
1	Scope of SEA prepared • Environmental aspects to be considered • SEA objectives • Choice of main LTP alternatives	February 2005
2	Internal Scoping Workshop with officers from Nottingham City and County Councils	29th April 2005
3	Scoping report issued for consultation	June2005
4	Comments back on Scoping report	July 2005
5	Detailed LTP policy appraisal	May-September 2005
6	Provisional LTP approved by plan-making bodies and submitted to DfT	by July 31 2005

7	Environmental report published, and used for 6 week public consultation alongside the Provisional LTP	October until December 2005
8	LTP revised according to DfT assessment and finalised planning guidelines and the outcome of the public consultation	November 2005-January 2006
9	Environmental impacts of revised LTP reassessed	February 2006
10	Final LTP and Environment Report published and submitted to DfT	by 31 March 2006

4.7 Consultation on the SEA

4.7.1 A SEA Scoping Report was completed in June 2005, which was distributed to four statutory Consultation Bodies:

- English Nature
- English Heritage
- Countryside Agency
- Environment Agency

4.7.2 In addition, the Scoping Report was also sent to East Midlands Transport Activists Round Table (EMTAR) for comment. The responses received from the Scoping Report have been taken into account when undertaking the assessments in the Draft Environmental Report. Summaries of the responses received from the consultation on the Scoping Report, and how we have incorporated them into the Draft Report, are included in Appendix B.

4.7.3 The production of the Draft Environmental Report marked the start of another round of consultation/participation. Over the period from late-October to early December we have been asking for people's views on the Provisional Local Transport Plan and the Draft Environmental Report.

4.7.4 We have assimilated all the comments received and produced a final LTP2 and this Final Environmental Report for March 2006.

5 RELATIONSHIP WITH OTHER RELEVANT PLANS AND PROGRAMMES, AND ENVIRONMENTAL OBJECTIVES

5.1 Introduction

5.1.1 The Directive states that the Environmental Report should provide information on the plan's *'relationship with other relevant plans and programmes' and the environmental objectives established at a [European] Community level, which are relevant to the plan….and the objectives and any environmental considerations have been taken into account during the preparation'* (Annex 1 (a), (e)).

5.2 Analysis of the environmental protection objectives

5.2.1 Table 2 provides an analysis of the main international, national, regional and local legislation and policy documents which have environmental objectives and which are:

- relevant to Greater Nottingham
- may be impacted by Local Transport Plan policy

5.2.2 The table highlights in the final column how the LTP should respond to this legislation and policy framework.

Table 2: Analysis of plans containing environmental protection objectives

International legislation, plan or policy	Objectives or requirements of other plans or programmes	How objectives and requirements may be taken on board
CLIMATE - CO2 EMISSIONS		
International/EU		• LTP should demonstrate how CO2 emissions are being reduced from local transport in line with national targets to achieve 20% reduction in CO2 by 2010 based on a 1990 baseline. • LTP should also seek reductions in NOx emissions, which are part of the basket of greenhouse gases covered by the Kyoto Agreement on Climate Change. • Although vehicle emission standards are improving, in effect this requires LTPs to demonstrate how they are seeking to reduce traffic levels. • LTP will need to include adaptation policies to take account of
Kyoto Agreement on Climate Change	Sets international, legally binding targets for greenhouse gas emissions	
National		
UK Climate Change Programme	Sets out the actions required in order that the UK meets its Kyoto and domestic targets for reducing greenhouse gases	
Energy White Paper	Sets out policies for reducing CO2 from the use of energy, including transport	
Road Traffic Reduction Act 1997 and Targets (1998)	Require Local transport Authorities to set targets for reducing road traffic, or reducing the rate of traffic growth. LTP2s must include a target for the same measure	
Local		
Consultation Draft Climate Change Framework for Action in Nottinghamshire 2005.	Seeks 20% reduction in CO2 emissions from all sectors by 2010. Also sets out need to implement measures to adapt to a changing climate	
AIR QUALITY		
International/EU		• Local Transport Plans must

Directive 1966/62/EC on ambient air quality and management	Introduced new air quality standards for previously unregulated air pollutants, setting the timetable for the development of daughter directives on a range of pollutants.	
National		
Air Quality Strategy for England, Scotland, Wales and Northern Ireland: Working Together for Clean Air	Sets health-based targets for eight main air pollutants. The predominant source for most of these pollutants is road traffic.	
Local		
The Nottinghamshire Air Quality Strategy	Outlines how the local authorities of Nottinghamshire intend to collectively tackle problems highlighted in their review and assessments.	
BIODIVERSITY		
EC Directive on the Conservation of Wild Birds 79/409/EEC 1979	Requires members states to sustain populations of wild birds by maintaining appropriate habitat	• LTPs should avoid any damage to internationally protected sites and species, and to those of national importance. LTPs should also seek to avoid damage to locally designated and non-designated sites, and to the wider biodiversity resource. • Where damage is inevitable, LTPs should seek to secure appropriate mitigation to offset the damage. • Moreover, LTPs should seek opportunities to enhance the biodiversity resource, particularly those sites and species identified in the Nottinghamshire Biodiversity Action Plan.
EC Directive on the Conservation of Natural Habitats of Wild Flora and Fauna 92/43/EEC 1992	Requires Member States to maintain and restore natural habitats and wild species	
International Convention on Biological Diversity, 1992	Signatory states must develop national strategies and plans for the conservation of biological diversity	
National		
Wildlife and Countryside Act 1981	Sets out protection afforded to wild plants and animals in the UK, including SSSIs	
Conservation (Habitats etc) Regulations 1994	Enacts the Habitats Directive in the UK	
Countryside and Rights of Way Act 2000 (CRoW)	Promotes conservation of habitats and species, and applies further protection to SSSIs	
PPG9 – Nature Conservation	Advises on how international and nation policy on protecting and enhancing biodiversity should be applied in the land use planning system	
UK Biodiversity Action Plan	Fulfils Convention on Biological Diversity requirements by setting out action plans for a series of habitats and species	
Local		
Nottinghamshire Local Biodiversity Action Plan, and associated species and habitat action plans	Identifies those habitats and species within the Nottinghamshire context which are particularly under threat, and develops action plans for their conservation and enhancement	
LANDSCAPE & TOWNSCAPE		
National		• There are no National Parks or Areas of Outstanding Natural Beauty in Nottinghamshire. The LTP should however seek to minimise damage to Mature Landscape Areas. • Moreover the LTP should avoid damaging the character and quality of the countryside. Key issues are likely to be increasing the "suburbanisation" of rural areas by kerbing, signage, formal footways etc. The LTP should exploit opportunities to enhance landscape character and quality. • The LTP should not compromise the open character of green belt • In urban areas the LTP should seek to avoid damage to the character to
PPS7 - The Countryside – Environmental Quality and Economic and Social Development	Sets out policy to protect areas of national landscape importance from adverse development. Local landscape designations are not encouraged, though there are strong policies to conserve and enhance landscape character and quality more widely.	
PPS2 – Green Belts	Although not strictly a landscape policy document, PPS2 seeks to protect the open character of designated green belt areas	
PPG15 – Planning and the Historic Environment	Sets out the levels of protection that should be afforded to Conservation Areas, historic buildings, and other elements of the historic environment. Provides guidance on the greater integration of transport with other aspects of land-use planning	
Local		

Nottinghamshire Countryside Appraisal	A landscape appraisal of the Nottinghamshire countryside, which has been used as a basis for defining Mature Landscape Areas.	
SOIL AND CONTAMINATED/DERELICT LAND		
International/EU		• The LTP must seek to reduce waste by minimising the waste arising from transport projects. Such projects should be designed so that waste is recycled on site wherever possible (see also material assets section below) • Opportunities to use transport projects as a mechanism for cleaning contaminated land, and bringing derelict land into use, should be pursued where possible. In particular LTPs may help achieve targets to locate new development on brownfield sites by providing access • Transport projects should seek to avoid damage to Best and Most Versatile land where possible
Council Directive 1999/31/EC the Landfill Directive.	Requires stricter controls on landfill sites and reductions in the amount being disposed.	
National		
PPC regulation 2000 as amended	Landfills will be regulated under one single regime with a permit that complies with both the Landfill Directive and the Integrated Pollution Prevention and Control (IPPC) Directive.	
Local		
Part2A of the EPA 1990	Part IIA of the Environmental Protection Act 1990 became Provided a legal definition of Contaminated Land and a new regulatory regime for its identification and remediation. It places a duty on Local Authorities to inspect land within their area for evidence of ground contamination.	
WATER (QUALITY, RESOURCES AND FLOODING)		
Water Framework Directive 2000/60/EC	A non-prescriptive framework Directive requiring Member States to achieve 'good ecological status' in inland water bodies by 2015. Environment agency to hold some planning powers as a River Basin Authority.	• LTP to ensure that run off from existing and new roads and paths is managed to reduce flooding risks. • New and existing developments to take into account opportunities to improve run off water quality.
National		
DEFRA Water policy. Directing the Flow - priorities for future water policy.	Defines the Government's strategic vision for the direction of water policy. Includes an aim for further improvements in water quality standards.	
Local		
Environment Agency Fluvial Trent Strategy.	Considers options to reduce flooding risks in the Trent Catchment area.	
CULTURAL HERITAGE		
National		• LTPs should not damage internationally and nationally designated sites and monuments, including their settings. • • LTPs should also avoid any damage to regionally and locally designated sites and monuments, including their settings. • • LTPs should also where possible avoid damage to other sites of cultural heritage interest. • • Where damage is inevitable, LTPs should seek to secure appropriate mitigation (in line with advice set out in PPGs 15 and 16) to offset the damage. This should include archaeological investigation and recording where appropriate. • The LTP should exploit opportunities to enhance townscape character and quality
Historic Buildings and Ancient Monuments Act 1953	Sets out the statutory protection that should be afforded to buildings of outstanding or historic interest, and makes other provisions for their preservation and management.	
Planning (Listed Buildings and Conservation Areas) Act 1990	Sets out protection that must be afforded under town and country planning to listed buildings and conservation areas	
PPG15 – Planning and the Historic Environment	Sets out the levels of protection that should be afforded to Listed Buildings, World Heritage Sites, Historic Parks and Gardens, Historic Battlefields, and the wider historic environment. Also provides guidance on Conservation Areas. Provides specific guidance on how transport schemes should be dealt with which impact the historic environment.	
PPG16 – Archaeology and Planning	Provides specific guidance on the protection that should be afforded to archaeological sites and monuments, in particular Scheduled Ancient Monuments	
Local		
Nottinghamshire Historic Landscape Characterisation	A detailed analysis of the historic landscape character of Nottinghamshire	
Sites and Monuments Record, Historic Buildings Record	Databases of sites, monuments and buildings of historic and archaeological interest	

MATERIAL ASSETS		
International/EU		• The LTP should seek to reduce the use of fossil fuels, which in practice must be achieved mainly by reducing vehicle use. Vehicle efficiency and the use alternatively fuelled vehicles are only marginally influenced by LTP policy • The LTP must seek to reduce waste by minimising the waste arising from transport projects. Such projects should be designed so that waste is recycled on site wherever possible. • Equally the LTP should minimise use of primary aggregates, and promote the use of recycled aggregates wherever possible. • Wherever possible the LTP should promote the use of street furniture and other products which use recycled materials
Waste Framework Directive (75/442/EEC)	Established the waste hierarchy (reduce, reuse, recycle, energy recovery, disposal) and seeks waste minimisation within Member states.	
Landfill Directive (99/31/EC)	Aims to prevent the negative impacts of landfill, primarily by reducing the proportion of biodegradable waste going to landfill. Also bans vehicle tyres from being landfilled.	
National		
Energy White Paper	Establishes reduction in reliance on fossil fuels as an objective of energy policy, not just because of the CO2 impacts, but also because of the finite nature of fossil fuels (particularly indigenous) and the need for energy security	
Landfill (England and Wales) Regulations 2002	Implements the Landfill Directive in the UK	
National Waste Strategy	Confirms the waste hierarchy, and sets out the major challenge to reduce waste going to landfill. Highlights construction and demolition (C&D) waste (which includes waste from transport projects) as a major component of the waste stream.	
PPG10	Responds the National Waste Strategy by providing guidance o how this should be translated into planning policy	
Minerals Planning Guidance notes 1-15	Provide guidance on how mineral extraction should be dealt with in planning policy	
Regional		
Consultation Draft Regional Waste Strategy	Identifies the acute shortage of waste treatment and disposal facilities within the East Midlands in the medium term, and the major progress in reducing, reusing and recycling waste required to meet national targets. C&D waste makes up 38% of the Region's waste and is highlighted as a particular priority issue.	
Local		
Waste Local Plan	Promotes the waste hierarchy, whilst at the same time seeking to allocate sufficient land for waste treatment and disposal in order to meet future requirements	
Minerals Local Plan	Allocates land for minerals extraction, whilst clearly establishing that minerals are a finite resource which should be conserved wherever possible.	

5.3 Relationship with other relevant plans and programmes

5.3.1 Table 3 identifies all other relevant international, national, regional, sub-regional and local plans, programmes and polices which influence LTP2. The table is split into transport documents and other documents. The table also provides a summary of the overall objectives of these plans and how these objectives will be taken account of within the SEA.

Table 3: List of other plans and their implications for the SEA of LTP2

Plan	Objectives or requirements	How objectives will be taken on board in SEA and LTP2
Transport documents		
National		
The Future of Transport: A Network For 2030	The document promotes: 1. Sustained investment in the long term 2. Improvements in transport management 3. Planning ahead 4. Balancing the need to travel with the need to improve the quality of life i.e. through developing environmentally friendly vehicles Transport is one of seven shared priority areas in which central and local Government have agreed they need to work together to achieve tangible improvements. The transport shared priority covers the four main themes of: • Tackling congestion, • Delivering accessibility, • Safer roads, and • Improving air quality. These issues are to be considered in the light of a need to provide additional capacity in the transport network, off-set against the need to ensure existing transport provision works more efficiently through locally and regionally derived solutions.	The Government's White Paper on the future of transport sets out a national response to transport pressures and the LTP is produced as a tool to deliver the at a local level the priorities it promotes. The objectives in the SEA reflect the vision of provision for sustainable transport the document highlights.
PPG13: Transport	By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, planning can help to reduce the length of journeys and make it safer and easier for people to access jobs, shopping, leisure facilities and services by public transport, walking and cycling. The main objectives of PPG 13 are: 1. Promote more sustainable transport choices for both people and moving freight 2. Promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling 3. Reduce the need to travel especially by car	The principle guidance on transport planning. The SEA objectives will seek to reflect those in PPG13.
Walking and Cycling: an action plan (DfT, June 2004)	The Action plan forms a guide to the increasing levels of walking and cycling in highlighting best practice and successful initiatives. The basis for the Action Plan is that through increasing levels of walking and cycling the level of public health will be raised, it will benefit the transport network and increase the vibrancy and liveability and neighbourhoods. The different areas in which increasing walking and cycling can be achieved are: **1)** Improving the environment (through land use planning, the design of streets etc.) **2)** Proving better facilities (cycle lanes, pedestrian crossings etc.) **3)** Influencing travel behaviour (by changing perceptions, education etc.) **4)** Building skills and capacity (through training in areas such as streetscape design)	The LTP incorporates walking and cycling strategies that reflect the basis of the Action Plan. Targets contained in the LTP and indicators in the accompanying walking and cycling strategies reflect the desire to increase walking and cycling as a means of improving health, improving accessibility and contributing to the vitality of areas. SEA objectives will focus on health.

Regional		
East Midlands Regional Transport Strategy (RTS)	The Regional Transport Strategy sets out region's transport objectives until 2021 together with the priority areas for investment. It incorporates the recommendations put forward by Multi-Modal Studies impacting upon the Greater Nottingham area and a timescale for implementation. The core strategy of the RTS involves: (1) reducing the need to travel and traffic growth (2) promoting a 'step' change in the level of public transport, and (3) only developing additional highway capacity when all other measures have been exhausted. The objectives of the RTS include supporting sustainable development and regeneration, promoting accessibility and improvements to inter-regional and international linkages, better safety, reduced congestion, particularly within the principal urban areas and on major inter-urban corridors, and encouraging opportunities for modal shift. The priority transport schemes for the region highlighted by the RTS and for which the authorities are highlighted as being the lead authorities are: • The Workplace parking levy • NET extensions • Development of an inland port at Colwick? • Development of the South Notts Rail network • Gedling Integrated Transport Scheme • Station masterplan • City Centre Major • Ring Road Major • A6096 Ilkeston/Awsworth link • New crossing of the River Trent • A6211 Gedling Bypass The LTP will be a key delivery mechanism for the meeting these objectives through the funding of priority schemes highlighted in the RTS such as the Workplace Parking Levy, Nottingham Express Transit extensions and Major schemes.	The RTS provides the regional context and solutions to transport issues that cut across Local Transport Authorities boundaries. The SEA considers the effects of these measures at a local level.
Regional Freight Strategy	The Regional Freight Strategy for the East Midlands has been developed based on a two-part report commissioned by the East Midlands Regional Assembly. The vision for the strategy is to create a framework within the East Midlands that helps industry to develop more efficient and sustainable use of distribution. The movement of freight in the region, particularly by rail, is an area in which transport provision can influence the economic success of the region. This LTP sets out a basis for increasing the capacity of Nottingham Midland Station, and such works would increase the ability of Greater Nottingham as a whole to deliver an increase in the movement of freight by rail.	The link between the movement of freight and the economy will be recognised in the SEA appraisal process.

Other documents		
International/EU		
European Spatial Development Perspective (ESDP)	EU Ministers for Spatial Planning adopted the European Spatial Development Perspective (ESDP)at the Potsdam Council on 10 and 11 May 1999. The ESDP represents agreement on common objectives and concepts for the future development of the EU and emphasises that the aim of spatial development policies is to work towards a balanced and sustainable development of EU territory. The ESDP emphasises the importance of achieving, equally in all regions of the EU, the three fundamental goals of European policy: • economic and social cohesion; • conservation and management of natural resources and the cultural heritage; and • more balanced competitiveness of the European territory. The ESDP states that to achieve more spatially balanced development, these goals must be pursued simultaneously in all regions of the EU and their interactions taken into account.	LTP 2 and SEA will encompass the overarching objectives of the European Spatial Development Perspective by ensuring by seeking to deliver sustainable develop through the delivery of transport measures which link up and ensure accessibility to developments.
National		
PPS6 Planning for Town Centres	Statement of Government's National policy and principles. Specifically requires LPAs to actively promote growth and manage change in town centres, define a network and a hierarchy of centres each performing an appropriate role, adopt a pro-active plan led approach to planning for town centres. No specific targets but general criteria are required to be developed	LTP2 and SEA to provide for sustainable transport in order to promote vital and viable town centres.
PPG 24 Planning and Noise	PPG 24 states that planning authorities should give consideration to noise in planning development so as to ensure that sensitive developments are separated from noise sources (Para 5). Plans should contain policies designed to ensure, as far as is practicable, that potentially noisy developments are located in areas where noise will not be such an important consideration or where its impacts can be minimised. It may also be appropriate for local planning authorities to adopt policies to avoid potentially noisy developments in areas which have remained relatively undisturbed by noise nuisance and are prized for their recreational and amenity value for this reason. In particular, guidance is given on the use of planning powers to minimise the adverse impact of noise. PPG 24: • Outlines the considerations to be taken into account in determining planning applications both for noise-sensitive developments and for those activities which will generate noise; • introduces the concept of noise exposure categories for residential development, encourages their use recommends appropriate levels for exposure to different sources of noise; and • advises on the use of conditions to minimise the impact of noise.	The SEA will need to take into account the noise implications of transport infrastructure. LTP2 has the opportunity to separate noise generating and noise sensitive land-uses. Policies should aim to promote high quality design that will mitigate against noisy land uses. Special consideration is required where transport infrastructure is proposed in or near designated landscapes.

PPG 17: Planning for Open Space, Sport and Recreation	• Supporting an urban renaissance • Supporting a rural renewal • Promotion of social inclusion and community cohesion • Health and well being • Promoting more sustainable development	LTP2 will provide for sustainable transport in order to promote urban renaissance, rural renewal, social inclusion and community cohesion, Health and well being. This includes the need for green spaces and corridors and their associated benefits for health and well-being. These objectives are reflected in the Plan objectives and the SEA objectives.
Sustainable Communities In The East Midlands: Building For The Future (ODPM, 2003)	Forms an Action plan to build sustainable communities. It sets out the challenges for the region in terms of planning, housing, transport, economic growth, deprivation and liveability. In terms of transport it highlights the key challenges as being: • To improve infrastructure to relieve congestion • To reduce car use and increase the capacity and use of public transport The subsequent actions it sets out are: • A multi-modal approach to the problems associated with the M1 motorway • Upgrading of the A453 • Consideration of extensions to NET • The provision of Urban Bus Challenge funding.	Tackling the problems of congestion, and increasing the accessibility of services via sustainable modes of transport are key priorities for LTP2, and the measures set out to address these are taken forward in the Plan. SEA objectives will seek to promote accessibility.
Comprehensive Performance Assessment (CPA)	Transport comprises part of the environmental block of the Comprehensive Performance Assessment, the process by which Local Authorities services are compared nationally. Nottingham City Council's delivery of services is rated as 'fair' overall and Nottinghamshire County Council's as 'excellent'. However both Authorities perform strongly in the transport aspect of the scoring criteria. Transport is assessed through a series of Best Value Performance Indicators (BVPIs) based on the condition of roads, the number of bus passenger journeys, satisfaction with information and bus service, and the number of new pedestrian crossings. The scoring of the Progress Reports of the LTP is also taken into consideration.	Work on the City Council's LTP is nationally recognised. The LTP2 will continue to deliver on the Government's shared priorities and contribute to the City Council's performance. SA will ensure that the LTP2 is addressing important environmental issues.
Delivering our Priorities: A National Public Service Agreement for Local Government (Central – Local Government Partnerships Committee, July 2002)	Forms a joint statement of shared public service delivery priorities between the Government and Local Authorities, which will improve people's quality of Life. These key priorities are: • Raising standards across our schools • Improving the quality of life • Promoting healthier communities and narrowing health inequalities • Creating safer and stronger communities • Transforming our local environment • Meeting local transport needs more effectively • Promoting the economic vitality of localities.	The LTP forms the basis for the Authorities addressing the Government's shared priority for meeting local transport needs. The LTP also has a complimentary role to play in achieving a number of the other Shared Priorities, notably: • Promoting healthier communities (through encouraging more walking and cycling), • Creating safer and stronger communities (through reducing traffic dominance and encouraging more walking and as a consequence social interaction), • Transforming the local environment (through improving the public realm), and • Promoting economic vitality (through improving access to markets and reducing the threats posed to business by congestion). SEA objectives will seek to incorporate these objectives.

Regional/Sub-regional		
Integrated Regional Strategy (January 2005)	Five agreed priorities for the Region: 1. Reduce inequalities in the region 2. Conserve and enhance the natural environment 3. Create sustainable and healthy communities throughout the region 4. Improve economic performance and competitiveness 5. Use natural resources more efficiently and reduce the impacts on climate change Also 17 objectives arranged into 4 themes- summary given below as follows: Social 1. Housing stock to meet needs of all communities 2. Improve health and reduce health inequalities 3. Provide opportunities to value and enjoy heritage and culture 4. Improve community safety, reduce fear of crime 5. Promote and support growth of social capital Environmental 6. Protect, enhance and manage diversity of natural, cultural and built environment 7. Enhance and conserve environmental quality 8. Manage prudently natural resources 9. Minimise energy useage 10. Involve people in minimising and preventing adverse environmental impacts Economic 11. Create high quality employment opportunities 12. Develop a strong culture of enterprise and innovation 13. Provide physical conditions for a modern economic structure Spatial 14. Ensure location of development makes efficient use of existing physical infrastructure 15. Promote and ensure high standards of sustainable design and construction 16. Minimise waste and increase recycling and reuse Improve accessibility by increasing use of public transport, cycling and walking	LTP2 should reflect the five agreed priorities and as far as possible the 17 objectives. The SEA objectives will be based on these objectives to ensure the sustainable development of the plan area.
Regional Spatial Strategy for the East Midlands (RSS8) (ODPM; March 2005)	The Regional Spatial Strategy for the East Midlands (RSS8) was published in March 2005. It takes a sequential approach to the location of development to provide a spatial framework for the development of the regional until 2021. The RSS contains priorities for Greater Nottingham within the 'Three-Cities Sub-area' of the region, and promotes the integration of transport and land use planning within the conurbation and between the neighbouring cities of Derby and Leicester. The location of major new retail developments have been centred around established centres in Greater Nottingham further emphasising the sustainable pattern of development in the conurbation. This has contributed to reducing the need to travel and the levelling off of traffic growth within the LTP area. The spatial strategy is based on the 'sequential approach to development' to provide a framework to meeting the regions development needs in a sustainable way. It contains the sub-regional spatial strategy for the Three Cities area and highlights the potential to support sustainable transport linkages within and between the cities to reduce commuter car journeys.	The LTP looks to build closer transport links within the Three Cities area through looking at developing further bus priority along the Nottingham to Derby corridor and increasing capacity at Nottingham Station. The SA objectives should include objectives relating to sustainable economic development and, in undertaking the SA, the importance of reducing the need to travel and leveling off traffic growth should be recognised.

East Midlands Regional Economic Strategy (RES) – Destination 2010	High-level strategic framework to establish the region as one of the top 20 in Europe. Transport is one of 12 strands through which this will be achieved. Key activities: 1. Deliver the recommendations of the multi-modal and road based studies; 2. Secure the necessary surface access improvements to serve the forecast growth at Nottingham East Midlands Airport; 3. Improve the movement of freight in the region; 4. Increase investment in regional rail infrastructure improvements; 5. Secure public transport improvements. The RES also highlights the need to reduce transport poverty through public transport improvements and new interchanges. The LTP addresses this through the Accessibility Planning Strategy that identifies areas with poor public transport provision, and promotes remedial measures. The movement of freight in the region, particularly by rail is the third area in which transport provision can influence the economic success of the region.	The RES sets out the criteria for developing the region economically. The SEA takes this forward by ensuring that when creating a climate for investment, it is done so in a sustainable way. • The SkyLink bus service between the City Centre and NEMA is an important element of the 'Link' bus network (with funding secured until 2008/9) and is addressed in the LTP2. • The 'Link' bus network also addresses the issues of accessibility to employment opportunities highlighted by the RES. The development of the 'Link' network is set out in LTP2. • LTP2 highlights improvements in capacity at Nottingham Station as a tool to enable the transfer of more freight to rail through the region.
East Midlands Urban Action Plan (UAP) – consultation document	1. Focuses on the key themes of: (a) land supply, (b) public realm, (c) skills and business development, (d) transport, and (e) tourism, culture and sport as areas in which to improve the economic success of the regions priority urban areas. 2. The transport priorities highlighted are: (a) ensuring the recognition of the importance of transport infrastructure on the economy in the Regional Transport Strategy, (b) supporting the delivery of the recommendations put forward by the Multi Modal Studies, (c) securing surface access improvements at Nottingham East Midlands Airport, (d) securing public transport improvements, and (e) improving connectivity between the region and key cities in the UK.	The improvement of facilities and capacity at Nottingham Station is a priority area identified in the UAP and this will be taken forward in LTP2. The development of a transport hub at the Station together with the expansion of the NET system to the south of the City is supported by the UAP and is a key element of LTP2.
'Our Cities Are Back': Third Report of the Core Cities Working Group (ODPM, November 2004)	The Three Cities of Derby, Leicester and Nottingham compose the principal urban areas of the East Midlands and are responsible for driving regional economic growth. They generate 24.8% of the regions Gross Value Added although with only 18.4% of the population and form the urban core of the Three Cities sub-region. The Three Cities believe it essential to work together to maximise the potential for sustainable economic and population growth in the region. This joint working takes place at member and chief executive level via the Three Cities Collaborative Group and in transport terms via the Transport and Planning Group. A full time Three Cities co-ordinator has recently been appointed to enhance the effectiveness of the joint working. This enables transport to support the delivery of this planned growth and also to influence the development of spatial planning and economic development strategies produced at the regional level, as a common three cities approach is agreed. Uniquely, all three cities also work closely with the three County Councils in the sub-region on joint LTPs, so that all the longer-term strategies are effectively co-ordinated and coherent transport strategies for the sub-region are developed in partnership. Particular areas of effective cross-boundary co-ordination and sub-regional planning. The report focuses on increasing the competitiveness of the English core cities, of which Nottingham is one. It sets out an action plan in terms of: transport connectivity, innovation, skills, governance and leadership, public realm investment, strategic spatial frameworks, city-region relationships, and economic linkages with London.	The LTP has been developed with high regard to the economic and spatial objectives of the City region, and as such forms an important tool these objectives being met. The LTP looks to build upon sustainable transport links developed to NEMA as a means of improving connections to international markets. The delivery of Phase One of NET has been recognised as a leading example of successful implementation, and LTP2 seeks to build upon this in the development of extensions to the network, and as such provide the infrastructure for encouraging further economic investment.

	With regard transport and connectivity, the action plan highlights an integrated transport agenda which meets the needs of major cities at three levels: • Air links to international business and inbound tourist locations • Road and rail links between major cities and to international airports and ports • Multi modal links with major cities and their regions These needs are to be met through a series of actions focused upon: • Strategic transport policy and regional economic performance (achieving an alignment between economic, spatial and transport strategies) • International connectivity (support the provision of direct flights from regional airports) • Inter-regional connectivity (address surface access issues to airports, and the focus of rail investment) • Intra-regional connectivity (look at increasing bus patronage and control over services, together with the potential for tram projects) • Decision making (the devolution of decision making to city-regions).	
Smart Growth: the Midlands Way	1. The delivery of economic and population growth across the Midlands is the basis of the strategy. 2. The action proposals of the strategy are around the themes of (a) productivity, (b) connectivity (including transport), and (c) renaissance. 3. The basis of transport improvements of a Midlands wide approach to economic growth are: (a) complementary development of Birmingham and Nottingham East Midlands Airports, (b) access to the east coast seaports, and (c) more sustainable freight movements.	Measures in the LTP will support the West to East Midlands Multi Modal Study and improve connections to NEMA.
Nottinghamshire and Nottingham Join Structure Plan (end date 2021)	1. Further social inclusion through the regeneration of disadvantaged areas by ensuring that all members of the community have improved access to a wide range of employment, housing, services, education, training, cultural and leisure opportunities 2. Promote health and social well being through the provision of sufficient suitable good quality housing, designing safer and more attractive environments and improving accessibility to leisure and recreational facilities 3. Produce good quality environments in urban and rural areas so that the unique character and distinctiveness of the County is protected and enhanced 4. Improve economic prosperity and employment opportunities by encouraging economic diversification and providing a wide range of suitable sites for business 5. Further integrate land use and transport so that the need to travel is reduced while accessibility to employment, homes, services, facilities and other resources is improved by enhanced sustainable transport choices 6. Protect the environment by avoiding significant harm and securing appropriate mitigation with particular regard to protecting and enhancing diversity 7. Ensure that finite natural resources are managed prudently and encourage efficient patterns of development, including maximum use of urban and previously developed land.	The Structure plan incorporates the Countywide response to the transport and development issues identified at the regional level, and provides further strategic context for addressing these pressures. The SEA reflects the broad transport, social and environmental themes it promotes.

Experience Nottinghamshire Tourism Strategy	Experience Nottinghamshire is the lead organisation for the development of the tourism industry in Greater Nottingham and the rest of the County. Following its formation in May 2004 a business plan[3] was produced to set out the future of tourism in the conurbation and rest of the county up until 2008/09. The key aims of this tourism strategy are to develop the area as a premier league conference destination and establish the City as a primary European short break destination. This approach will see an increase in the number of visitors to the City and as such a need to cater for more trips from further afield and provide information for localised trips for those unfamiliar with the area. Links from Nottingham East Midlands Airport are important to developing the attraction of the conurbation for visitors together with the provision of improved facilities at Nottingham Station. As part of developing the attractiveness of Nottingham as a tourist destination, it is envisaged that a 'Nottinghamshire Card' will be introduced in 2005 allowing visitors to access tourist destinations and benefit from various discounts. The card will have the potential to embrace public transport and car parking options following its implementation, to allow for an integrated approach between tourism and sustainable transport provision in the conurbation.	LTP2 should take account of the Tourism Strategy to ensure an integrated approach between tourism and sustainable transport provision in the conurbation. Tourist attractions should include transport links do not compromise objectives to decrease in traffic volumes
Streets for All – East Midlands; English Heritage, 2005	1. Content • Provides guidance and good practice on management of streets and public spaces • Offers solutions to common problems • Highlights the elements that make the East Midlands distinctive 2. Purpose • Distinctive character encourages tourism and investment • The quality of the environment influences the quality of life 3. Good Practice • Ground surfaces, street furniture, traffic management and environmental improvements are the basis for good design of the public realm • Need to promote co-operation between conservation / traffic management / planning requirements	The City Council has produced a 'Streetscape Design Manual' (2004), which captures many of the issues raised in the guidance at the more local level. The quality of the streetscape has importance implications for accessibility, road safety, regeneration and quality of life issues, all prevalent in the LTP. SEA, though the SA objectives will ensure that these areas are fed into the appraisal process, so that the detailed schemes (e.g. walking, cycling public realm improvements) which will be included within the LTP programme, will be consistent with the approach set out in the guidance.
The Development Strategy for Greater Nottingham	1. The strategy highlights the need to improve connectivity as one of 7 key elements in improving the competitiveness of the conurbation. 2. Within this need to improve connections to markets, priorities for action are included in a transport investment programme. This sets out the transport priorities for Greater Nottingham as: • Road: implementing the Multi Modal Studies recommendations, particularly the A453; improved gateways to the City; the development of the 'Big Wheel' package; and the need for a 4th Trent crossing. • NET: the development of extensions to NET to Clifton and Chilwell via Beeston. • Rail: the creation of a new transport hub centred around Nottingham Station, creating a demand for improved rail links • Air: improving surface access to NEMA; lobbying to expand the number of destinations served by the airport; and unlocking the potential for the expansion of the airport as a freight hub.	The document sets out how to improve the competitiveness of the conurbation in economic terms. The SEA takes these issues on board to ensure that regeneration is sustainable.

[3] Transitional business plan for a countywide destination management partnership and associated application for East Midlands Tourism start-up funding; Experience Nottinghamshire, 2004.

Local		
Nottingham Local Development Plan	The statutory development plan for the City of Nottingham is the Nottingham Local Plan which is due to be adopted by the authority in autumn 2005. Due to the changes in the planning system however, the City Council is required to produce a Local Development Framework to replace the Local Plan by 2008. This will contain a transport strategy and targets broadly consistent with the LTP objectives and a specific policy (ST4 in the current Local Plan) that seeks to link the policies and proposals in the LDF with the LTP. Policies in the LDF will be complemented where appropriate by supplementary planning documents. Former supplementary planning guidance and interim transport planning statements on maximum car parking levels, and developer contributions to integrated transport measures, will be retained in the transitional period between plans as statements of City Council planning guidance. These will be reviewed and integrated into the LDF as Supplementary Planning Documents. Strategic objectives of the Local Plan Review are: 1. Contribute to the development of a truly inclusive city where all members of the community have access to a wide range of employment, housing, education, health and leisure opportunities. 2. Provide as wide a range of housing as possible, to develop more balanced communities, to retain families with children in the City, and make Nottingham a place where people choose to live. 3. Improve the economic competitiveness of the City of Nottingham, and encouraging development which will provide a range of jobs which are accessible to everyone. 4. Make Nottingham a City of European importance, realising its qualities, strengths and potential and its status as one of the ten largest urban areas in Britain. 5. Revitalise the role, function and appearance of District Centres. 6. Improve the built environment of the City and to ensure that the City's heritage and its local distinctiveness are protected and enhanced. 7. Ensure that Nottingham has an attractive range of public spaces and a network of open spaces which provide a variety of recreational activities for the City's residents, and which maximise nature conservation value. 8. Develop an approach to land use which improves accessibility and provides real transport choices while reducing the need to travel, reducing pollution and helping to improve health. Policy ST4 seeks to link the policies and proposals in the Plan with the LTP	The Local plan provides the framework for development. The allocation of specific sites for development is done in a way that reflects the sustainability and environmental priorities of the Authority that are further developed in the SEA.
Rushcliffe, Ashfield, Broxtowe and Gedling Development Plans	The Government's Planning Policy Statement, 'Local Development Frameworks' (PPS 12) produced in November 2004, emphasises the need for the integration of transport and spatial planning in the development and delivery of Local Development Frameworks (LDF's), which are replacing local plans as the land use/transport planning policy context for local authority areas. The Local Plans produced for the boroughs of Broxtowe, Gedling and Rushcliffe, together with the Ashfield District Local Plan form the basis for the allocation of land for development in the areas surrounding Nottingham. The themes of sustainability and access to jobs and services are central to these plans.	The Local Plans and the LTP are produced to complement one another. As such the LTP will reflect the allocations of land for development in locating new public transport services and investment.
One City Partnership (OCPN) Community Strategy	OCPN is the Local Strategic Partnership (LSP) for the City Council part of the LTP area. It comprises representatives from the public, private and voluntary sectors and focuses on addressing crime, education, health, employment and housing issues, which are identified as being priority areas in readdressing the social inequalities within	The SA should take into account the relevant targets and indicators set out in the Community Strategy and record any changes to the baseline as appropriate.

	the City. The OCPN does not have a transport focus as this has been identified to have a wider remit than the City boundary – hence the production of the LTP at the conurbation level and the transport and community linkages being developed through the GNTP (CHECK with G-SW). However transport provision has an important role to play in terms of meeting the targets set for crime (in terms of providing convivial walking routes, safety at bus stops etc.), education (in terms of access to schools and learning), health (through encouraging people to walk and cycle more frequently), employment (in terms of physically connecting people to jobs), and finally in terms of housing (through the creation of welcoming public spaces and urban environments that are not dominated by traffic).	
Nottingham City Corporate Plan 2002 - 2005	The priorities of the plan are to create: A great city to live in A great city to learn in A great city to work in A great city which everyone can enjoy	The LTP takes forward the 'broad-brush' corporate objectives contained in the Citywide plan.
Changing our City: Changing Ourselves – Nottingham's Local Agenda 21 Plan (2001 – 2006) (Nottingham City Council; July 2001)	Sets out a framework for a more sustainable City with the target of reducing carbon dioxide emissions by 20% by 2010, from 1990 levels. Identifies transport as a priority area through which to achieve this and promotes improvements in public transport provision, more people walking and cycling and reducing the need to travel as areas that need to be addressed.	Sustainability is central to the LTP and reflects the priorities contained within the Local Agenda 21 plan. The LTP not only contributes to the 'getting around' issue but also the healthy living aspect of sustainable communities in terms of encouraging more walking and cycling and creating a better urban environment. The SEA objectives will incorporate issues such as reducing the need to travel.
Building Schools for the Future Nottingham	BSF sets out a programme of investment in secondary school provision totalling £135 million. It includes the potential closure of some school, the development of new academies and the refurbishment of others.	Access to schools is considered in detail in the LTP through the Accessibility planning process and the school travel plan and safer routes to school initiatives.
School Organisation Plan 2003 – 2008 (Nottingham City Council)	Addresses the provision of primary, secondary and special needs education in the City. The Plan highlights a need to reduce surplus places by 2008 in primary schools by over 20%	The LTP provides a tool through which ease of access to education provision can be derived and puts forward initiatives in areas where it is a problem.
Respect for Nottingham strategy (Nottingham City Council)	The Respect for Nottingham strategy is concerned with improving the quality of life for residents in the City and reducing the incidents of anti-social behaviour. A Respect for Transport initiative forms part of this and sets out to make public transport feel safer.	The LTP will contribute to making public transport feel safer through programmes to provide lighting and CCTV at bus stops, the provision of information and security patrols for example. Personal safety will be incorporate in the SEA objectives.
Nottingham Crime and Disorder Reduction Strategy 2002 - 2005 (Nottingham City Council)	Produced in response to the Crime and Disorder Act 1998 which places a duty on local authorities to consider every policy, strategy, plan, activity and budget to see how they can contribute to the reduction of crime and disorder.	The LTP will contribute to the crime reduction priorities within the City. The promotion of walking for example creates natural surveillance and activity on the street, reducing the fear of crime. These key issues will be considered in the development of the SEA objectives.

6 BASELINE DATA

6.1 Approach

6.1.1 The SEA requires that *"the relevant aspects of the current state of the environment and the likely evolution therefof without implementation of the plan*" (SEA Directive, Annex 1b). This section therefore describes the environmental baseline of each SEA topic (drawing upon the baseline data tables in Appendix 1) and their objectives and also provides an indication of future trends where possible.

6.1.2 The baseline data will provide a basis for forecasting and monitoring environmental effects and helps in the identification of environmental problems. Government guidance set out in TAG Unit 2.11[4] states that the development of objectives and indicators and the collection of baseline data should inform each other. The guidance also highlights that data collection is not a one-off process and that further data collection may be needed at later stages of the SEA. It should be pointed out however that data collection could be an indefinite process and so a limit should be set (as stated in the guidance) that is reasonable. The level of baseline data therefore reflects the level of information required to assess LTP2 against the SEA objectives.

6.1.3 Appendix A, which contains all of the baseline data, shows that data has been extracted from a wide range of sources. These have included national government, regional datasets and the 2001 Census, the Nottingham City Local Plan and associated monitoring reports. Use has also been made of existing monitoring data contained within the Annual Progress Reports for the first Greater Nottingham Local Transport Plan. Information and data are summarised in this section and the table containing the data is attached in Appendix A at the end of the Report. The aim of this section therefore is to give an overview of the environment of the LTP2 area and how it compares to the regional and the national level.

6.2 Population

6.2.1 The latest population figure (mid-2003) for the Plan area is 630,100. According to projections produced for the Nottinghamshire and Nottingham Joint Structure Plan (November 2003), the population is likely to rise to 641,000 by 2011 and 651,000 by 2021 – 280,000 and 288,000 respectively in the City. These amount to an increase of 1.7% between 2003 and 2011 and 1.6% between 2011 and 2021.

6.2.2 Changes in the age-structure are also of importance in assessing future travel demand. The number of children of school age is projected to fall by about 7% by 2011, resulting in a decrease in trips to school. Conversely, the number of people aged over retirement age is

[4] DfT *'Strategic Environmental Assessment for Transport Plans and Programmes'* Tag Unit 2.11, December 2004

expected to rise by about 7% over the same period, leading to a greater requirement for public transport to meet their needs.

6.2.3 The Nottinghamshire and Nottingham Joint Structure Plan (Deposit Draft, November 2003) provides for a net increase in dwellings in Greater Nottingham of 36,500 between 2001 and 2021. Reflecting the national sustainable communities agenda and recent house building trends, more emphasis is now being put on development on previously developed land. Consequently, half of the dwellings (18,500) are expected to be within Nottingham City.

6.2.4 There were 288,000 employee jobs in Greater Nottingham in 2002, plus about 30,000 people who are self-employed. The number of employee jobs has risen by 39,400 (15.8%) since 1991. 178,800 (62%) of the employee jobs are in Nottingham City, of which about 58,000 are in the city centre. A number of studies project continued growth in jobs. The rate of increase varies, but a general conclusion is that the number of jobs will increase by between 2% and 5% by 2012.

6.2.5 8,939 people were registered as unemployed in November 2004. This gives an unemployment rate of 2.2%, which is very similar to the rate for England as a whole. In line with national trends, unemployment *has fallen markedly in the last few years - by 63% since November 1996.*Nevertheless, there continue to be wide discrepancies in unemployment rates between areas. The unemployment rate in Nottingham (3.4%), compares with 0.9% in Rushcliffe. The highest ward rates are in St Ann's (6.5%), Bestwood (5.8%) and Aspley (5.7%) – all in Nottingham City.

6.2.6 The Office of the Deputy Prime Minister's 2004 Indices of Deprivation use 37 indicators to produce an overall index of deprivation. The zones they use are "super output areas", areas which the Office for National Statistics has devised for statistical purposes. These have been designed to have similar population sizes, around a mean population of 1,500. In Nottinghamshire's case, they are sub-divisions of wards.

6.2.7 The distribution of deprivation (refer to Figure 3 Appendix A) is similar to that in the 1998 Index of Local Deprivation referred to in LTP1, although the use of super output areas gives a finer breakdown than wards. 81 (20%) of the 414 super output areas in Greater Nottingham are in the worst 10% of areas in England and 125 (30%) are in the worst 20%. Most of these are in Nottingham City, where 79 (45%) of the 176 areas are in the worst 10% nationally and 115 (65%) in the worst 20%. These are concentrated in the inner city (particularly St Ann's, Sneinton, Hyson Green, Radford and The Meadows) and the north-west (Bulwell, Aspley, Broxtowe Estate, Bestwood and Bestwood Park). Outside of the City, two areas in Hucknall are in the worst 10% nationally and parts of Eastwood, Arnold and Netherfield are in the worst 20%.

6.2.8 Car ownership continues to increase. 68% of households living in the area had access to a car in 2001, compared with 63% in 1991.

However, there remains a considerable difference between districts – 83% of households in Rushcliffe have a car, compared with only 55% in Nottingham. The figures for both Broxtowe and Gedling are 77%, with Hucknall's being 73%. These percentages compare with 73% in England as a whole.

6.2.9 Figure 4 (Appendix A) shows that there is a strong relationship between car ownership and deprivation, although it is also related to the perceived need for a car due to the distance from services and the availability of public transport. Ward car ownership rates vary from 96% in Wolds and 95% in Nevile (both in Rushcliffe Borough) to 33% in St Ann's and 43% in Arboretum (both in Nottingham City). Car ownership is much lower amongst some types of household than others. The two groups with the lowest car ownership rates are pensioners living alone (27%) and lone parents with dependent children[5] (45%). 91% of couples with dependent children have a car.

6.2.10 Vehicle kilometres travelled in the Nottingham Local Authority area have increased by 7.6% (1993-2002), this is significantly less than increases in the East Midlands (19.9%) and Great Britain as a whole (17.9%). Total public transport patronage use (bus and NET) across the LTP area has increased by 5.9% since 2000/01. Nationally there has been a significant drop in bus patronage (5.4% since 2000/01). Geographical access to public transport is high, 85% of residential properties in Nottingham City are within 400m of a direct bus service to the City Centre every 30 minutes or less during the daytime (Mon-Sat).

6.3 Human Health

6.3.1 Physical activity is hugely important to good health. Walking and cycling is the most cost effective way of addressing coronary heart disease, which is the biggest cause of premature death in the UK, and contributes significantly to combating other major health conditions, including obesity, stroke, Type B Diabetes, cancer and osteoporosis. Only 12.6% of the Greater Nottingham population obtained their BMA / Department of Health recommended 30 minutes per day exercise through walking or cycling in 2002/03, there has been no significant change since 2000/01.

6.3.2 The average life expectancy for residents in Nottingham is low compared to the national figures. The standardised mortality rate for Nottingham UA is 116 (England and Wales = 100). The number of people killed or seriously injured however, has decreased by 44.4% for the City area and 31.7% for the LTP area from the 1994-98 average. The authorities are on track to meet the National target of decreasing KSI by 40% by 2010 from the 1994-98 average. The number of children KSI has also dramatically reduced by 37.7% since 2000 across Greater Nottingham; this is well above the national reduction of 21.2%.

[5] A dependent child is one aged under 16, or aged under 19 in full-time education living with its parent(s).

6.3.3 In relation to crime and the fear of crime associated with transport, only 2.5% of Nottingham City residents and 3.0% of Nottingham County residents felt unsafe when travelling on a bus (Greater Nottingham Perception Survey, 2004). Nottingham City has significantly higher vehicle crime than other parts of the country however, there were 31.4 thefts from motor vehicles per 1,000 population in 2000/01; in England and Wales the rate was 11.9 thefts per 1,000 population.

6.4 Climatic Factors

6.4.1 National data makes clear that emissions from road transport have increased by 9% since 1990. This compares to a national target to reduce carbon dioxide emissions overall by 20% by 2010 - a rate of roughly 1% per year. Although in Greater Nottingham, overall traffic levels have stabilised in the last five years, carbon dioxide emissions from transport within the sub-region (and those of nitrogen dioxide, another potent greenhouse gas) still represent a major environmental concern. Whilst vehicles can be expected to get more efficient in the future, the impact of technological advances is likely to be small compared to that of increasing vehicle use. The only real solution to reducing carbon dioxide and other greenhouse emissions from transport will be a reduction in vehicle use. However it is also the case that many of the major influences over the levels of car use, particularly the price of fuel and the taxation on vehicles, are outside the influence of the Local Transport Plan.

6.5 Air

6.5.1 Air Quality Management Areas (AQMA) relating to vehicle use have been designated in two locations in the City Council area (City centre north, east and south) and Dunkirk/Clifton Boulevard in the vicinity of Queen's Medical Centre; and at two locations in Rushcliffe (Trent Bridge, Lady Bay Bridge and Wilford Lane/Loughborough Rd junction, the A52 between the A60 and the City boundary). In all cases designation relates to nitrogen dioxide levels, which exceed the threshold of 40µg/m^3 annual mean. Nitrogen dioxide is known to cause respiratory problems, particularly to people who already suffer from breathing difficulties as a result for example of asthma. Modelling of air quality levels in the future in all four cases suggests that as levels are only just above the thresholds, and as vehicles are gradually becoming less polluting, then levels may well drop below the thresholds over the five year period of the LTP. Nevertheless it is strongly recommended that positive action should be taken to resolve the issue without relying on technological improvements to vehicle engines.

6.6 Biodiversity, flora and fauna

6.6.1 Evidence suggests that the trends in biodiversity are almost exclusively negative. With relatively few exceptions, over time there has been both a reduction in the area and quality of habitats of conservation concern, and a decline (or in some cases a loss) of species of conservation concern. There has also been a loss of diversity more generally,

particularly as a result of damage to ecological corridors connecting sites of interest. Further detail is provided in the Local Biodiversity Action Plan for Nottinghamshire. Airborne and waterborne pollution also bear a negative impact on wildlife sites. Most of the decline and loss relates to agricultural practice, physical development, and lack of sensitive management, and transport projects have contributed relatively little to this decline. Conversely the role played by highway verges, lagoons and roadside trees can be significant in providing ecological corridors and habitats of value in their own right.

6.7 Landscape

6.7.1 Although it is hard to quantify, there has been a gradual decline in the character and quality of the countryside over time. Moreover Nottinghamshire may be considered to have started from a relatively low base, with no areas of national importance for landscape. There have been specific instances of damage to Mature Landscape Areas, perhaps the most pervasive impacts have been loss of character due to agricultural intensification, lack of maintenance of key features such as hedgerows, and the erosion of rural character through urban style development, urban treatments such as kerbing, signage, and *Leylandii* hedging, and increased levels of rural traffic. Notwithstanding this, there have been significant positive trends in the recent past, for example through the restoration of former colliery spoils heaps, and in projects such as the Greenwood Community Forest. The trends in rural character are likely to be mixed – with a greater emphasis on environmental management on farms and the benefits of projects such as Greenwood being to an extent counteracted by continued suburbanisation of rural communities and continued increases in rural traffic. Landscape Character Assessments are conducted when appropriate.

6.7.2 Townscape character is equally difficult to quantify, and there are no formal measures of the quality of designated areas such as conservation areas. However townscape quality more generally is positively correlated to economic vitality. The character of some urban centres including the centre of Nottingham is improving through opportunities provided by regeneration and development, through positive town centre management programmes, and through initiatives such as Building Better Communities, which focuses on local environmental quality in the County area. Conversely there are other town and village centres, particularly associated with the former mining communities, where economic decline has led to the closure of local facilities and an atmosphere of decline and degradation and high levels of environmental crime such as litter and graffiti. Equally the character of suburban residential areas is mixed, with some areas improving but others declining due to local deprivation, environmental crime, and/or increases in traffic congestion. Particular ways in which townscape character can be affected by transport schemes are through the design of schemes. This may include the proliferation of street clutter, use of poor quality or inappropriate materials and street furniture.

6.8 Soil and contaminated/derelict land

6.8.1 Registers of contaminated land have only been kept for relatively short periods of time, and there is little or no comparative data with other parts of the country. However it is likely to be the case that whilst the area of contaminated land is high compared to the national average, given the industrial nature of Nottinghamshire's past, the levels are reducing due to the combined effects of a move from manufacturing to service industries, remediation of contaminated land in preparation for development, and tighter pollution control laws. Conversely the increased pressure to find landfill sites, although highly regulated under the Integrated Pollution Prevention and Control (IPPC) regime, is leading to new areas of contamination.

6.8.2 Trends in relation to derelict/previously used land (whether contaminated or not) are also positive. Strong planning policy presumption for using "brownfield" land over and above "greenfield" sites, in accordance with national policy, has led to significant reductions in the levels of derelict land. Other derelict land, particularly former colliery sites, has been brought into positive use not just for development but also for recreation in the form of country parks.

6.9 Water

6.9.1 Water resources present a particular problem. Whereas water quality has improved significantly over recent years due to improvements in pollution control, there has been a steady increase in the demand for water, which has not been matched by increased availability or significant increases in storage capacity. Indeed the trends related to climate change are likely to be negative. Increased seasonality of rainfall will lead to shortages in the summer months. Increased temperatures and a longer growing season will lead to greater evaporation from soils and evapo-transpiration from vegetation, and increases in demand particularly for irrigation within the agricultural and horticultural industries.

6.9.2 Furthermore there is likely to be an increase in the proportion of rainfall falling in storm events which lead to surface run-off rather than absorption. This leads in turn to increased flooding combined with reduced recharge of groundwater, with less availability of water after flooding subsides. There are particular risk to areas within the plan area falling within the Trent Valley.

6.10 Cultural Heritage

6.10.1 Nottinghamshire has a rich heritage of buildings, sites and features of historic and archaeological interest. There are many individual buildings of note, and in areas such as the Trent corridor a concentration of sites of archaeological significance. However trends in cultural heritage tend to be negative as sites and buildings are damaged or lost. There has also been a general and more widespread loss of historic character, for example as a result of the loss of field

patterns caused by the removal of hedges or changes to land management practices.

6.10.2 There has been particular concern in the County relating to the numbers of historic buildings at risk. Damage to such buildings and to sites of archaeological and historic interest more widely, has involved not just the feature itself but also its setting. Some of this damage is caused by development controlled through the planning system, including transport projects, but significant damage has also been caused through a lack of appropriate management.

6.10.3 Positive planning policies, and an emphasis on better information, recording and education may help to slow down rates of damage, but trends are likely to remain negative. In addition, the design of transport schemes can have positive impacts through improving the setting of listed buildings and negative impacts if inappropriately designed through the proliferation of street clutter, use of poor quality or inappropriate materials and street furniture.

6.11 Material Assets

6.11.1 The loss of material assets in the form of landfill capacity, minerals availability and fossil fuels are all significant environmental issues.

6.11.2 Waste treatment capacity in the East Midlands, particularly in the form of available landfill sites, is limited. Currently there is only landfill capacity for around 10 years waste arisings. Creating new sites requires further land, and brings with it a series of further environmental and social problems such as pollution, noise, loss of habitat, and the impacts of waste transport. It is important that transport policy seeks to minimise waste arisings from transport projects (for example by balancing cut and fill requirements) and to use recycled products (particularly aggregates) wherever possible.

6.11.3 Aggregates are a finite resource. Although Nottinghamshire contains nationally important reserves of coal, sand, gravel and gypsum, and others including clay and limestone, these are inevitably limited. Furthermore their extraction, although it can create significant community benefits in the form of employment and wealth, also brings significant environmental and social problems, including the loss of wildlife and archaeological sites, noise, dust and the impact of transport movements. Transport projects can require significant amounts of aggregates and cement, and other materials such as asphalt and stone which come from elsewhere. It is important the demand for such materials is minimised by using recycled products wherever possible.

6.11.4 Finally the use of fossil fuels is a further area where transport has a major impact on global material assets. Although there is no definitive data, demand for oil is growing rapidly and supply is approaching peak. Use of fossil fuels also has significant environmental consequences, particularly relating to climate change, but also as a result of its extraction and transport.

7 SEA OBJECTIVES AND INDICATORS

7.1 Developing the SEA objectives

7.1.1 The SEA Directive does not specifically require the use of objectives or indicators, but they are a recognised way in which environmental effects can be described, analysed and compared. In accordance with the guidance, Table 5 shows how the SEA objectives have been developed to encompass the NATA objectives, the SEA topics (as set out in the Directive) and the Integrated Regional Strategy[6], to ensure that the objectives are very much in line with related plans, policies and programmes, which were summarised in Section 5.

7.1.2 The SEA objectives are meant to be separate from the evolving LTP objectives, although the two can influence each other and may overlap. Above all the overall LTP2 objectives should be compatible with the SEA objectives. Figure 2 assesses the compatibility of the SEA objectives and LTP2 objectives.

Figure 2: SEA/LTP2 Objectives Compatibility Matrix

		LTP2 Objectives						
		Better manage **congestion**	Improve **accessibility**	Improve **road safety**	Protect the **environment** (particularly air quality)	Support **regeneration** and neighbourhood renewal	Enhance **quality of life**	More efficient and effective **maintenance**
SEA Objectives	To reduce levels of transport related noise in particular in areas of high sensitivity to noise	✓	+/-	-	✓	✓	✓	+/-
	To maintain and improve air quality in the Air Quality Management Areas and then across all areas	✓	-	-	✓	✓	✓	-
	Reduce greenhouse gas emissions from transport and the use of fossil fuels	✓	-	-	✓	?	✓	-
	Support enjoyment of the countryside and improvements to landscape quality	?	✓	-	?	✓	✓	-
	Maintain and enhance the character and appearance of townscape (with particular regard to Conservation Areas)	+/-	+/-	-	✓	✓	✓	-
	To conserve and enhance biodiversity	-	x	-	✓	?	✓	✓
	To maintain the network of inland waterways and promote their positive use and enhancement	-	✓	✓	✓	✓	✓	-
	Minimise water run-off and contamination from transport infrastructure	-	-	-	✓	-	✓	✓
	Improve health and reduce health inequality	✓	✓	✓	✓	✓	✓	-
	Promote social inclusion	-	✓	✓	✓	✓	✓	✓
	Casualty reduction and reduce crime and fear of crime associated with transport	-	-	-	x	✓	✓	✓
	Reduce the need to travel through the promotion of sustainable development locations	✓	✓	-	✓	✓	✓	-

[6] East Midlands Regional Assembly 'England's East Midlands Integrated Regional Strategy – Our Sustainable Development Framework' January 2005

	Promote accessibility by public transport, cycling and walking	✓	✓	+/-	✓	✓	✓	✓
	Reduce reliance on travel by car	✓	✓	✓	✓	✓	✓	-
	Minimise use of non-renewable resources and increasing recycling	✓	-	-	✓	-	-	x
	To support employment and business competitiveness	✓	✓	-	-	✓	✓	+/-

✓	Compatible	x	Incompatible
?	Uncertain Link	-	No link
+/-	Potential for positive and negative effect		

7.1.3 Figure 2 was completed during a Scoping Workshop attended by officers at the City and County Councils. It became apparent, whilst assessing the SEA and LTP2 objectives that there were some areas where the two sets of objectives may be in conflict. These are:

- Reducing crime and the fear of crime associated with transport may be in conflict with protecting the environment where additional lighting results in increased levels of light pollution.

- Increasing accessibility through the provision of public transport services and to a lesser extent walking and cycling routes along green corridors may be in conflict with conserving and enhancing biodiversity.

- More efficient and effective maintenance may result in reduced aggregate use in the short term but may result in greater use of non renewable resources in the long term.

- Increasing accessibility through increasing levels of public transport provision may increase exposure to noise within residential areas. This may in part be offset by reduced levels of road traffic noise.

- More regular maintenance may increase exposure to noise whilst road works are in progress but better quality road surfaces will reduce levels of road traffic generated noise.

- Promoting increased levels of cycling and walking must be done in ways which are not detrimental to road safety.

- Although improving the condition of roads will support employment and business competitiveness the road works necessary to carry out the works will cause disruption.

- The implementation of transport infrastructure can have negative impacts on historic buildings but can in some cases provide opportunities for quality enhancement to the settings of buildings and quality of materials used.

7.2 SEA Indicators and Targets

7.2.1 For each objective, a set of indicators and targets have been identified, these are summarised in Table 4 below. The identified indicators will provide a means for monitoring the performance of LTP2 against the SEA objectives. Baseline data for the indicators at a regional and national level have been collected (refer to Section 6 and Appendix A). This data also includes targets which show the direction in which the indicator should progress if sustainability is to be achieved in the longer term. The indicators will show the extent to which progress is being made towards meeting the targets and achieving the overall objectives.

7.2.2 The targets and indicators have been selected for their relevance to LTP2 and also with the aim of making best use of existing data and monitoring programmes where possible. These initial proposals for indicators and targets are for comment. These will need to be developed into a well-defined and cost effective monitoring programme.

Table 4: Links between SEA objectives, indicators and targets

SEA Objective	Indicators	Targets
To reduce levels of transport related noise in particular in areas of high sensitivity to noise	Awaiting Government guidance. No data or indicators at this stage.	
To maintain and improve air quality in the Air Quality Management Areas and then across all areas	• Concentration of local pollutants in designated AQMAs (LTP2 Ref: LTP8)	• Target to be set by March 2006
Reduce greenhouse gas emissions from transport and use of fossil fuels	• Volume of traffic on local authority managed roads (LTP2 Ref: LTP2)	• Target to be set by March 2006
	• Volume of carbon dioxide emitted by vehicles in Greater Nottingham (LTP2 Ref: L7)	• Target to be set by March 2006
	• Volume of oxides nitrogen emitted by vehicles in Greater Nottingham (LTP2 Ref: L8)	• Target to be set by March 2006
Support enjoyment of the countryside and improvements to landscape quality	• Rights of Way Improvement Plan indicator – to be set by March 2006 (LTP2 Ref: L11)	• Target to be set by March 2006
Maintain and enhance the character and appearance of townscape (with particular regard to Conservation Areas)	• Number of designated sites and buildings (including settings and locally listed buildings and features where appropriate) damaged or destroyed by transport related projects	• 0
To conserve and enhance biodiversity	• Number of nationally or locally designated and non-designated sites of importance for nature conservation damaged or destroyed by transport related projects	• 0
To maintain the network of inland waterways and promote their positive use and enhancement	• Proportion of inland waterway with disabled access to towpath	• Baseline and target to be established
Minimise water run-off and contamination from transport infrastructure	• Number of Sustainable Urban Drainage Schemes (SUDS) related to highways	• 10
Improve health and reduce health inequality	• Percentage of population walking/cycling for 30 minutes per day (LTP2 Ref: L6)	• Target to be set by March 2006
	• Cycling trips (LTP2 Ref: LTP3)	• 5% increase by 2010/11 from 2003

SEA Objective	Indicators	Targets
	• Pedestrian flow on the Primary Pedestrian Route network (LTP2 Ref: L9)	• 20% increase by 2010/11 from 2005/6
	• % of journeys to school by non-car modes (LTP2 Ref: LTP4)	• Target to be set by March 2006
Promote social inclusion	• % of households within 30 minutes of a major centre by bus and/or tram (LTP2 Ref: LTP1a)	• Target to be set by March 2006
	• % of working age population within 45 minutes of work by bus and/or tram (LTP2 Ref: LTP1b)	• Target to be set by March 2006
	• % of households within 45 minutes of hospital by bus and/or tram (LTP2 Ref: LTP1c)	• Target to be set by March 2006
	• % crossings with disabled facilities (LTP2 Ref: L17 – BV165)	• 91% by 2010/11 from 82% in 2003/4
Casualty reduction and reduce crime and fear of crime associated with transport	• Number of deaths and serious injuries (LTP2 Ref: BV99x)	• 30% reduction by 2010/11 from 2004 average
	• Number of children killed and seriously injured (LTP2 Ref: BV99y)	• 11% reduction by 2010/11 from 2002/4 average
	• Number of slight casualties (LTP2 Ref: BV99z)	• Target to be set by March 2006
	• Perception of safety when using the bus (journey, waiting and accessing stops) (LTP2 Ref: L3)	• Target to be set by March 2006
	• Percentage of boarding bus stops with CCTV	• 70% of bus stops to have CCTV by 2011
	• Percentage of boarding bus stops with lighting	• 70% of bus stops to be lit by 2011
	• Number of pre-paid journeys on public transport	• 65% of public transport journeys to be pre-paid by 2011.
Reduce the need to travel through the promotion of sustainable development locations	• Percentage of vacant units in city centre	• Keep below the Core City average
Promote accessibility by public transport, cycling and walking	• Public transport passenger journeys (bus and tram) (LTP2 Ref: BV102)	• 82 million by 2010/11 (11% increase). To be confirmed by March 2006.
	• Patronage on supported LINK bus network (LTP2 Ref: L5)	• 6% increase by 2010/11 from 2004/5 base
	• Patronage of Park and Ride (LTP2 Ref: L2)	• To be set by March 2006
	• Number of fully accessible bus routes (LTP2 Ref: L16)	• 5 by 2010/11
Reduce reliance on travel by car	• % of residential development on brownfield land (LTP2 Ref: L10)	• Maintain at above 85%
Reduce use of non-renewable resources and increase recycling	• Proportion of recycled aggregates used in transport projects	• Baseline and target to be established
To support employment and business competitiveness	• % of employees covered by commuter travel plans (LTP2 Ref: L14)	• 33% by 2010/11 from 16% base in 2003/4
	• Take up of employment land	• Target to be set
	• Net number of jobs gained	• Target to be set

Table 5: SEA Objectives

NATA Objectives	NATA sub-objectives	SEA Topic (SEA Directive, Annex f)	Integrated Regional Strategy Sustainable Development Objectives	Other key objectives identified as part of the context review (refer to Section 5)	Proposed SEA Objectives (and comments)
Environment	Noise	Human health, population, inter-relationships		• Planning authorities should give consideration to noise in planning development so as to ensure that sensitive developments are separated from noise sources (PPG 24) • Contribute to the development of a truly inclusive city where all members of the community have access to a wide range of employment, housing, education, health and leisure opportunities (Local Plan Review)	• To reduce levels of transport related noise in particular in areas of high sensitivity to noise • To promote social inclusion
	Local air quality	Air, human health, population	• To manage prudently the natural resources of the region including water, air quality, soil and minerals • To involve people, through changes to lifestyle and at work, in preventing and minimising adverse local, regional and global environmental impacts	• Improving air quality (The Future of transport: a network for 2030) • LTP should demonstrate how CO2 emissions are being reduced from local transport in line with national targets to achieve 20% reduction in CO2 by 2010 based on a 1990 baseline. • LTP should also seek reductions in NOx emissions, which are part of the basket of greenhouse gases covered by the Kyoto Agreement on Climate Change.	• To maintain and improve air quality in the Air Quality Management Areas and then across all areas • Reduce greenhouse gas emissions from transport and the use of fossil fuels
	Greenhouse gases	Climatic factors	• To minimise energy usage and to develop the region's renewable energy resource, reducing dependency on non-renewable resources		
	Landscape	Landscape	• To manage prudently the natural resources of the region including water, air quality, soil and minerals	• There are no National Parks or Areas of Outstanding Natural Beauty in Nottinghamshire. The LTP should however seek to minimise damage to Mature Landscape Areas.	• Support enjoyment of the countryside and improvements to landscape quality
	Townscape			• In urban areas the LTP should seek to avoid damage to the character to Conservation Areas in particular (see also heritage section below). In all urban areas any damage caused by transport measures should be minimised by good design, and mitigated wherever possible.	• Maintain and enhance the character and appearance of townscape (with particular regard to Conservation Areas)

	Heritage	Cultural heritage including architectural and archaeological heritage	• To protect, enhance and manage the rich diversity of natural, cultural and built environmental and archaeological assets of the region • To enhance and conserve the environmental quality of the region by increasing the environmental infrastructure • To provide better opportunities for people to value and enjoy the region's heritage and participate in cultural and recreational activities	• LTPs should where possible avoid damage to other sites of cultural heritage interest.	
	Biodiversity	Biodiversity, fauna, flora, soil	• To manage prudently the natural resources of the region including water, air quality, soil and minerals • To enhance and conserve the environmental quality of the region by increasing the environmental infrastructure	• LTPs should avoid any damage to internationally protected sites and species, and to those of national importance. LTPs should also seek to avoid damage to locally designated and non-designated sites, and to the wider biodiversity resource. • Where damage is inevitable, LTPs should seek to secure appropriate mitigation to offset the damage. • LTPs should seek opportunities to enhance the biodiversity resource, particularly those sites and species identified in the Nottinghamshire Biodiversity Action Plan.	• To conserve and enhance biodiversity
	Water environment	Water	• To manage prudently the natural resources of the region including water, air quality, soil and minerals	• LTP to ensure that run off from existing and new roads and paths is managed to reduce flooding risks. • New and existing developments to take into account opportunities to improve run off water quality.	• To maintain the network of inland waterways and promote their positive use and enhancement • Minimise water run-off and contamination from transport infrastructure
	Physical fitness	Human health, population	• To improve health and reduce health inequalities by promoting healthy lifestyles, protecting health and providing health services	• Promoting healthier communities and narrowing health inequalities (Public Service Agreement for Local Government)	• Improve health and reduce health inequality
Safety	Accidents Security	Human health, population	• To improve community safety, reduce crime and the fear of crime	• Safer roads is listed as one of the shared priorities in the Future of Transport: a network for 2030	• Casualty reduction and reduce crime and fear of crime associated with transport
Accessibility	Community Severance	Population	• To ensure that the location of development makes efficient use of existing physical infrastructure and helps to	• Tackling congestion (The Future of transport: a network for 2030) • Delivering accessibility (The Future of	• Reduce the need to travel through the promotion of sustainable development locations • Promote accessibility by public transport,

	Access to the transport system				
Economy	Public Accounts Business Users and Providers	Material assets		• The LTP should seek to reduce the use of fossil fuels, which in practice must be achieved mainly by reducing vehicle use. Vehicle efficiency and the use alternatively fuelled vehicles are only marginally influenced by LTP policy • The LTP must seek to reduce waste by minimising the waste arising from transport projects. Such projects should be designed so that waste is recycled on site wherever possible. • The LTP should minimise use of primary aggregates, and promote the use of recycled aggregates wherever possible. • Wherever possible the LTP should promote the use of street furniture and other products which use recycled materials	• Reduce use of non-renewable resources and increase recycling
			• To create high quality employment opportunities and to develop a culture of ongoing engagement and excellence in learning and skills, giving the region a competitive edge in how we acquire and exploit knowledge • To develop a strong culture of enterprise and innovation, creating a climate within which entrepreneurs and world-class business can flourish • To provide the physical conditions for a modern economic structure, including infrastructure to support the use of new technologies	• Improve the economic competitiveness of the City of Nottingham, and encouraging development which will provide a range of jobs which are accessible to everyone (Local Plan Review)	
	Consumer Users				

8 KEY ENVIRONMENTAL ISSUES

8.1 Introduction

8.1.1 The SEA Directive states that the Environmental Report should provide information on 'Any existing problems which are relevant to the plan or programme including in particular, those relating to any areas of a particular environmental importance, such as those pursuant to Directives 79/409/EEC and 92/43/EEC' (Annex 1d).

8.2 Identification of environmental problems and opportunities

8.2.1 Table 6 identifies the existing and future environmental problems and opportunities that have been identified as part of the baseline scoping in Section 6 and also the preliminary review of other plans, policies and programmes set out in Section 5. The table also includes recommendations as to how these will be incorporated into LTP2 so that the plan will contribute towards the SEA objectives.

Table 6: Environmental problems and opportunities

Existing problems (can be location specific)	Opportunities provided by the LTP	Evidence	Recommendations Comments
Population			
Outward migration of families from Nottingham City	Support the inward migration of families through improvements in transport infrastructure	Census	Implement integrated transport measures which support the development of family housing particularly Regeneration Zone transport strategies and school travel plan measures.
Accessibility within Greater Nottingham amongst disadvantaged groups	Improve transport availability for disadvantaged groups in Greater Nottingham. Initiatives to improve pricing for disadvantaged groups	County-wide survey showed that only 55.2% of the rural population are within a 10 minute walk of an hourly bus service.	Continue support for tendered bus services and link bus strategy. Develop Smartcard and concessionary fare/discount ticket schemes as advocated by Bus Strategy. This will be addressed through Accessibility Planning.
Human Health			
Noise	Monitor and mitigate against noise problems Improved maintenance practices for road surfaces	Views expressed at SEA Workshop held on 29/04/	Utilise noise reducing road surfaces in maintenance schemes. Ensure construction practices take account of potential noise impacts i.e. night working

Rates of physical activity are low and there are large numbers of people who have coronary heart disease	Increase opportunities for walking and cycling with the aim of raising levels of physical activity and reducing incidences of coronary heart disease	Only 12.6% of the Greater Nottingham population obtained their British Medical Association/Department of Health recommended 30 minutes per day exercise through walking or cycling in 2002/03 Health Service provides data on rates of coronary heart disease	Implement walking and cycling measures and continue to promote school and workplace travel plans.
Large numbers of people who have a respiratory disease	Reduce air pollution in the Greater Nottingham area in order to have an impact on the numbers of people who have a respiratory disease	The level of respiratory disease is provided by the Health Service.	Implement congestion management measures and support the development of clean vehicle technologies e.g. through travel plan and quality partnership initiatives.
The average life expectancy for residents in Nottingham is low compared to the national figures	Improve road safety	Census data	Implement casualty reduction measures and Safer Routes to School Schemes.
Crime (theft of vehicles and personal safety)	Support crime reducing and fear of crime initiatives.	Nottingham (urban area) has a significantly higher vehicle crime rate than other parts of the Country. 57% and 58% of bus stops have lighting and CCTV.	To be addressed through the Respect for Transport initiative CCTV and improved lighting at public transport stops
Climate – CO2 emissions			
CO2 emissions continue to rise from transport rather than fall in line with international commitments and UK targets	Transport is a major and growing contributor to CO2 emissions, and LTP2 policies offer potential to reduce emissions	National Climate Change Programme Local data on traffic flows	LTP2 should include objectives, targets and measures to reduce traffic levels as well as tackle congestion
Air Quality			
Air quality hotspots relating to traffic have been identified in Rushcliffe and the City Council area	Policies and measures in the LTP2 can address these pollution hotspots	Air quality monitoring and Air Quality Management Area designations	LTP2 should include specific proposals to address AQMA's and air pollution hotspots where these relate to traffic
Biodiversity, flora and fauna			
Protection of 25 habitat types of conservation concern in the County, including as lowland heath, oak birch woodland and reedbed	Emphasis on ensuring protection of existing assets, though may be limited potential for enhancement	Local Biodiversity Action Plan	Major transport projects should be assessed for impacts, normally as part of Environmental Impact Assessment

Protection of nearly 1,000 species of conservation concern in County (many associated with the habitats described above); and in particular those species with specific action plans including otter, nightjar and barn owl	Emphasis on ensuring protection of existing assets, though may be limited potential for enhancement	Local Biodiversity Action Plan	Major transport projects should be assessed for impacts, normally as part of Environmental Impact Assessment
Fragmentation and deterioration of areas of wildlife value	Management of verges and highways land to maximise wildlife potential	Local Biodiversity Action Plan	Positive management should be considered. The plan will seek to prevent fragmentation of habitats and promote green corridors to ensure connectivity irrespective of a designation, and to maximise their benefits for human health and well-being
Landscape and townscape			
Damage to Mature Landscape Areas and Conservation Areas	Sensitive design	MLA and Conservation Area designations (including Conservation Area Appraisals). Urban characterisation and historic landscape characterisation studies.	High quality design standards should be applied throughout the County (particular care should be taken in designated areas). Need to consider national designations as well as non-designated features of more local historic interest and value.
Suburbanisation of rural areas	Sensitive design	Nottinghamshire Countryside Appraisal	Care should be taken when applying urban treatments to rural areas. Need to consider national designations as well as non- designated features of more local historic interest and value.
Soil			
Remaining legacy of contaminated and derelict land	New transport projects can bring such land into positive use	Contaminated and derelict land databases Planning policy and targets for use of “brownfield” sites	Bringing derelict land into positive use should be considered benefit in prioritising specific transport projects.
Water			

Water resources may be very limited in the future, particular in the summer. Situation will probably be considerably worse as a result of climate change	Roads must be designed to maximise absorption into the ground	Nottinghamshire Climate Change Plan Environment Agency Catchment data	SUDS should be considered wherever possible in road drainage projects
Flooding is likely to increase dramatically as a result of climate change	None	Nottinghamshire Climate Change Plan Environment Agency Catchment data Evidence from recent flooding events	Care must be taken to avoid new transport projects becoming barriers to the flow of floodwater
Material assets			
Greater Nottingham GVA per person (a measure of productivity) below the national level	Improve efficiency in the transport network through reducing congestion and improving transport links.	Data from Office of National Statistics	Implementation of measures to tackle congestion and improve accessibility
Shortage of waste treatment facilities, particularly landfill	Transport projects should specify recycled products wherever possible	Regional Waste Strategy, Waste Local Plan	Transport schemes must be designed to minimise waste arisings
Minerals are a finite resources	Transport projects should specify recycled products wherever possible	Minerals Local Plan	Transport schemes must be designed to minimise use of primary aggregates
Fossil fuels are a finite resource	Transport policy should seek to reduce vehicle miles and therefore fuel use	Energy White Paper	Reducing vehicle use should feature in LTP policy as well as reducing congestion
Cultural Heritage			
Damage to individual sites, monuments and buildings of historical and archaeological interest and their settings	Transport schemes may be able to contribute positively	Sites and monuments record. Historic buildings record	Careful assessment of the impacts
General loss of historic character of towns and countryside	Transport schemes may be able to contribute positively	Historic landscape characterisations, Nottinghamshire Countryside appraisal English Heritage letter	Careful design of all transport projects

9 STRATEGIC ALTERNATIVES

9.1 Introduction

9.1.1 The SEA Directive requires that, '….reasonable alternatives, taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated.' This means that the SEA should consider alternative scenarios for the overall management of transport in Greater Nottingham to ensure that the range of likely transport effects arising from LTP2 are addressed during the preparation of the plan. It also assists in explaining to decision makers and consultees why these strategies, and no others, are being put forward. DfT guidelines[7] state that alternatives can be different ways of:

- Achieving the objectives of the plan
- Achieving the aspirations of the local community
- Dealing with environmental problems
- Dealing with transport problems

9.1.2 One situation which needs to be considered in all SEAs is the likely expected evolution of the baseline conditions without the plan. For a transport plan, the 'without the plan' scenario should, according to the DfT guidelines, be developed in line with certain principles, such that it:

- Is based on current government policies
- Should assume that other adopted plans and programmes will deliver as planned – establishing what this means for the plan being developed is a significant task, drawing on the need to review other plans and programmes
- Should assume the continued implementation of strategies and measure planned in earlier adopted versions of the plan, unless they were planned to be time limited
- Should not assume any new strategies or measures even if these appear to be essential in the light of current government policies or of other plans and programmes – these should be included in the alternatives to be considered.

9.2 Development of alternative strategies

9.2.1 Alternative strategies for LTP2 were considered through a group exercise involving officers at the City and County Councils, having regard to both the LTP2 and SEA objectives. The following options are being put forward:

- **Option 1 – Continuation of existing situation** ('without plan scenario')
- **Option 2 – Base LTP**

[7] DfT *'Strategic Environmental Assessment for Transport Plans and Programmes'* Tag Unit 2.11, December 2004

- **Option 3 – Enhanced LTP** (Base LTP programme plus NET Phase 2 plus Workplace Parking Levy and associated measures to represent implementation of ahigh quality public transport improvement linked to pricing restraint)
- **Option 4 – Emphasis on bus, walking & cycling measures**

9.2.2 Table 7 provides more detail on the types of measures that each option will comprise. Option 1 should be considered as the likely evolution of the environment 'without the plan' scenario.

Table 7: Strategic Alternatives for LTP2

	LTP2 Strategic Alternatives			
Measures	**Option 1**	**Option 2**	**Option 3**	**Option 4**
Network management	Management of existing network and parking strategy	TCC upgrading Highway direction signing Traffic Management Act measures Intelligent transport system measures Decriminalised parking enforcement extended to whole Plan area Moving traffic enforcement within City	As option 2	Reduced option 2 measures
Public transport	Maintain support for existing network	Bus priority schemes Accessible bus route treatments Development of 'Link' bus network Bus location/electronic information Gamston Park & Ride Interchange Development	NET Phase 2 Clifton/Stapleford park & ride schemes Commuter 'Link' bus service network	Option 2 plus enhanced bus priority corridors
Pedestrian & cycling	Maintain existing networks	Network development schemes Disabled access schemes Small scale traffic management schemes Road crossings ROWIP	As option 2	Option 2 plus enhanced pedestrian and cycling measures
Neighbourhood/ local centre improvements	Small scale minor improvements	Neighbourhood improvement schemes District/local centre improvements	As option 2 plus enhanced neighbourhood improvement schemes	As option 2
Safety schemes	Treatment of priority sites	Speed management Junction/route treatments Develop SRTS network	As option 2	As option 2
Smarter travel choices	Support existing travel information Support existing travel plans	Travel plans (work/school) Personal travel planning Marketing/information Education/awareness	Option 2 plus enhanced travel plans	As option 2

Regeneration projects		New roads and local road schemes Primary pedestrian routes Public realm improvements	As option 2	
Maintenance	Maintenance of roads, footways & structures	As option 1	As option 2	As option 2

9.2.3 The Authorities have compared the likely outcome of each of these options with respect to the key areas of LTP2 (congestion, accessibility, safety, environment, regeneration, maintenance and quality of life).

9.2.4 In order to score each of the options in terms of their performance against LTP2 objectives, a scale which ranged from - - (Major negative, where the option would not perform well against the LTP2 objective) to ++ (Major positive, where the option would perform exceptionally well against the LTP2 objective) was used. A '0' was used where the option would have neither a negative or positive performance against the LTP2 objective.

9.2.5 The outcome of this exercise is summarised in Table 8. This exercise demonstrated that Option 3 would perform the best in relation to the LTP2 objectives, but it is recognised that this option is also the most expensive and any form of pricing restraint has considerable implementation risks.

Table 8: Comparison of the Strategic Alternatives against LTP2 objectives

Key Areas of LTP2	**Alternative strategies**			
	Option 1	Option 2	Option 3	Option 4
Congestion	**-**	**+**	**++**	**0**
Accessibility	**-**	**+**	**++** Revenue from WPL will be used to enhance transport improvements	**++**
Safety	**0**	**+**	**+**	**+**
Environment (Air quality)	**-**	**+**	**+**	**0**
Regeneration	**0**	**+**	**++**	**0**
Quality of life (noise, severance, visual intrusion)	**-**	**+**	**++**	**+**
Maintenance	**-**	**+**	**+**	**+**

Major positive: ++ Minor positive: + Neutral: 0 Minor negative: - Major negative: - - Uncertain: ?

9.3 Significant effects of LTP2 strategies

9.3.1 This Section sets out the likely significant effects on the environment (in terms of each of the SEA topics listed in the SEA Directive) of each of the LTP2 alternative strategies. The SEA Directive requires that ' the likely significant effects on the environment of implementing the plan or programme taking into account the objectives and the geographical scope of the plan or programme are identified, described and evaluated.'

9.3.2 Significance requires the consideration of:

- The characteristics and value of the receiving environment
- The magnitude of the impact (especially factors relating to the reversibility of the effect, its duration and frequency, its cumulative nature and spatial extent).

9.3.3 The results of this exercise are contained within Table 9. The cells within the table are marked according to a range to indicate whether the strategy element would have a major positive (++) or a major negative (--) effect. Where cells are scored with a '0', this indicates that the LTP2 option would have no or a negligible impact on the corresponding SEA topic.

9.3.4 In undertaking this assessment, officers considered the likely effects of the alternative LTP2 strategies in relation to the environmental problems identified in Table 6. It is important to note that the aim of this exercise is to consider the significant effects or changes to the existing environment due to the implementation of the LTP2 strategy, not existing problems caused by the current transport system to the environment, which were identified in Table 6.

Table 9: Testing the strategic alternatives against the SEA objectives and predicting significant effects

SEA Topic	SEA Objectives	Problems	Strategic Alternatives			
			Option 1	Option 2	Option 3	Option 4
Key: Major positive: ++ Minor positive: + Neutral: 0 Minor negative: - Major negative - - Uncertain: ?						
Population	• Reduce the need to travel through the promotion of sustainable development locations		**0**	**+ Supports development in regeneration zones**	**++ Supports development in regeneration zones**	**+ Supports development in regeneration zone**
	• Promote social inclusion		**0**	**+ Accessibility planning to target most in need**	**++ Enhanced accessibility planning incl. NET**	**++ Enhanced accessibility planning package**
	• Promote accessibility by public transport, cycling and walking		**- Potential decline in use**	**+ Alternatives to support modal change**	**++ NET plus restraint to achieve modal change**	**++ Enhanced alternatives to support modal change**
	• Reduce reliance on travel by car		**0**	**+ Smarter Choice to promote alternatives**	**++ Smarter choices plus restraint to discourage car use**	**+ Enhanced smarter choices to promote alternatives**
Human Health	• To reduce levels of transport related noise in particular in areas of high sensitivity to noise		**- Increase in traffic noise nuisance**	**+ Improved maintenance techniques and traffic management**	**+ Improved maintenance techniques and traffic management**	**+ Improved maintenance techniques and traffic management**
	• Improve health and reduce health inequality		**- Increase in accidents & reduced access to health facilities for**	**+ Accident reduction measures & accessibility planning to target most in need**	**+ Accident reduction measures & accessibility planning to target most in need plus NET to QMC**	**+ Accident reduction measures & accessibility planning to target most in need**
	• Reduce crime and fear of crime associated with transport		**- Increase in crime/fear of crime**	**+ Respect for Transport campaign to address safety issues**	**+ Respect for Transport campaign to address safety issues**	**+ Respect for Transport campaign to address safety issues**
Climatic factors	• Reduce greenhouse gas emissions from transport and use of fossil fuels		**- Increase in fuel use & emissions due to increased vehicle use**	**+ Modal change to reduce fuel use & emission levels**	**++ Modal change supported by restraint to reduce fuel use & emission levels**	**+ Modal change to reduce fuel use & emission levels**

Air	• To maintain and improve air quality in the Air Quality Management Areas and then across all areas		**-** **Increase in pollution due to increase in vehicle use**	**+** **Traffic management & modal change to manage congestion**	**++** **Traffic management & modal change incl. NET & restraint to manage congestion**	**+** **Traffic management & modal change to manage congestion**
Biodiversity flora, fauna, soil	• To conserve and enhance biodiversity		**0**	**0**	**-** **NET route goes through a green corridor**	**0**
Landscape	• Support enjoyment of the countryside and improvements to landscape quality		**-** **Increased congestion would make access more difficult**	**+** **Public transport, walk & cycle measures to increase access**	**+** **Public transport, walk & cycle measures to increase access**	**+** **Public transport, walk & cycle measures to increase access**
Water	• Minimise water run-off and contamination from transport infrastructure		**0**	**-** **Potential increase in paved areas increasing flood risk & pollution**	**-** **Potential increase in paved areas increasing flood risk & pollution**	**-** **Potential increase in paved areas increasing flood risk & pollution**
	• To maintain the network of inland waterways and promote their positive use and enhancement		**0**	**+** **Improved walk/cycling infrastructure along waterways**	**+** **Improved walk/cycling infrastructure along waterways**	**+** **Improved walk/ cycling infrastructure along waterways**
Cultural heritage	• To enhance buildings, sites, areas and features of historic, archaeological and architectural interest		**-** **Increase in traffic would damage buildings**	**+** **Opportunities to enhance building settings**	**-** **NET infrastructure can add to street clutter**	**+** **Opportunities to enhance building settings**
Material assets	• Reduce use of non-renewable resources and increase recycling		**0**	**-** **Use of non renewable resources**	**-** **Use of non renewable resources**	**-** **Use of non renewable resources**
	• To support employment and business competitiveness		**-** **Increased congestion worse for economy**	**+** **Congestion reduction supports economy**	**+** **Investment in NET traded off against cost to business of WPL**	**0**

9.4 Assessment of Alternative Strategies

9.4.1 Table 10 summarises the SEA topics potentially affected by the significant effects due to the implementation of the LTP2 options described in Table 9. Ultimately this table gives some comparison of the overall environmental impact of each Strategic Alternative.

Table 10: Summary table of SEA topic potentially affected by the significant effects of the Strategic Alternatives

	Strategic Alternatives			
	Option 1	Option 2	Option 3	Option 4
Population	-	xxxx	xxxxxxxx	xxxxxx
Human Health	---	xxx	xxx	xxx
Climatic factors	-	x	xx	x
Air	-	x	xx	x
Biodiversity, flora fauna, soil	0	0	-	0
Landscape	-	x	x	x
Water	0	-	-	-
Cultural heritage	-	x	-	x
Material assets	-	0	0	-

9.4.2 This assessment shows that Option 1, the continuation of the existing situation, will result in a deterioration of environmental conditions primarily due to a general increase in road traffic levels resulting in a deterioration in human health, increased pollution and green house gas

emissions, reduced business competitiveness and negative impacts on landscape and townscape.

9.4.3 Option 2, the base LTP option, is anticipated to reduce congestion levels and encourage more sustainable travel. Overall the measures contained are expected to have a positive environmental impact across all but one of the categories assessed.

9.4.4 Option 3, the enhanced LTP option includes NET Phase 2 plus Workplace Parking Levy and associated measures and is expected to result in a significant increase in overall public transport use and reduced levels of congestion relative to Option 1. Overall this option is expected to deliver the greatest levels of environmental benefit. Negative impacts associated with the construction of NET phase 2 in relation to biodiversity through construction within existing green corridors and potential impacts on cultural heritage are identified. There are also likely to be localised negative noise impacts offset by an overall reduced traffic noise impact.

9.4.5 Option 4, with an increased emphasis on bus, walking and cycling measures, is expected to result in increased sustainable travel compared to Option 1 but not necessarily any reduction in congestion. Overall the measures contained are expected to have a positive environmental impact.

9.4.6 Overall Option 3 is considered to be the most environmentally beneficial of the strategic alternatives assessed.

10 LTP2 SPECIFIC MEASURES AND MAJOR SCHEMES

10.1 Approach

10.1.1 The packages of measures proposed in the strategic alternative Option 3 were considered through a workshop involving officers of the City and County Councils, and assessed for their impact in relation to the SEA objectives. The results of the workshop are set out in Appendix C

10.1.2 These assessments were conducted in accordance with the European Directive recommendations and the DfT guidance. Subsequently, each of the LTP2 packages of measures was considered in turn against each of the SEA defined environmental objectives. This was done in a systematic manner, considering the value and the vulnerability of the area (the receptors) likely to be affected, the magnitude and the probability of the effect, and took into account any uncertainty and secondary, cumulative, and/or synergistic effects. Decisions were based on professional judgement, drawing upon available data sources, LTP1 experience and existing examples.

10.1.3 Uncertainty has been considered at all stages of the SEA process (refer to paragraph 4.2.5), but this specific stage has permitted a closer identification of the gaps in baseline data and of variables during the implementation of the Plan. These areas of uncertainty are stated within the tables of Appendix C.

10.1.4 Appendix C of this Report details the assessment for each of the SEA topics and objectives. It should be noted that some of the Major Schemes proposed in LTP2 have not been assessed in detail in theses tables. This is because:

- LTP2 financial allocations are not confirmed at this date, and some schemes may or may not be implemented
- These schemes will need to be subject to individual appraisal and accompanying project level environmental impact assessment at a later stage of the Plan period.
- In addition, Major Projects, by their very nature, are likely to bear significant effects on the environment. An extensive and exhaustive assessment is therefore required, which is neither possible at this stage of the LTP2 and SEA process, nor necessary.

10.1.5 When such information from detailed project level environmental impact assessment is available, it will be fed into the progress reports of the LTP2 and the environmental report (see Section 101 on monitoring), and assessed against the SEA objectives and targets.

10.1.6 The major schemes NET phase 2 (lines 2 and 3 of the tram) and Workplace Parking Levy have been taken into account during the assessment of the significant effects of the strategic alternatives however, as they represent the difference between Option 2 and Option 3. The conclusion of the comparative exercise was that these

schemes would provide an additional positive impact on the environment.

10.1.7 When comparing the LTP2 objectives against the SEA objectives during the scoping stage of the SEA, it became apparent that there were some areas where the two sets of objectives may be in conflict (refer to paragraph 7.1.3). This is mainly due to the uncertainty attached to the possibility of secondary or cumulative (rarely synergistic) effects. The following areas of potential conflicting interests have been taken into account during the detailed impact assessment of the LTP2:

- Reducing crime and the fear of crime associated with transport may be in conflict with protecting the environment where additional lighting results in increased levels of light pollution.

- Increasing accessibility through the provision of public transport services and to a lesser extent walking and cycling routes along green corridors may be in conflict with conserving and enhancing biodiversity.

- More efficient and effective maintenance may result in reduced aggregate use in the short term but may result in greater use of non renewable resources in the long term.

- Increasing accessibility through increasing levels of public transport provision may increase exposure to noise within residential areas. This may in part be offset by reduced levels of road traffic noise.

- More regular maintenance may increase exposure to noise whilst road works are in progress but better quality road surfaces will reduce levels of road traffic generated noise.

- Promoting increased levels of cycling and walking must be done in ways that are not detrimental to road safety.

- Although improving the condition of roads will support employment and business competitiveness the road works necessary to carry out the works will cause disruption.

- The implementation of transport infrastructure can have negative impacts on historic buildings but can in some cases provide opportunities for quality enhancement to the settings of buildings and quality of materials used.

10.2 Assessment of significant environmental impacts

10.2.1 Overall, it was found that the chosen LTP2 strategic alternative (option 3) would have a significant positive impact on the environment in the LTP area. Although the assessment was conducted on the model of

the DfT New Approach To Appraisal (NATA), it was felt that an Appraisal Summary Table (AST) was not the best way to present the conclusions in an accessible format. Instead, the conclusions of the assessment of significant effects are presented below.

Table 11: Summary of the significant effects arising from the chosen LTP2 strategic alternative (option 3)

Noise	Despite an anticipated short-term negative impact owing to construction noise, the long-term impact will be **significantly positive** due to reduced car use and traffic flows. Some uncertainty is expected, due to lack of data, but the situation will be reviewed, and a strategy drawn when governmental guidance is available.
Local air quality	As transport is the main contributor to a poor local air quality, and as it is one of the Plan's main objectives to improve it, a **significant positive impact** is expected. The Air Quality Plan sets out monitoring arrangements in more detail.
Greenhouse gases	Although a high level of uncertainty in the data and the effects is inherent to the nature of this particular topic, it is expected that the emphasis on integration of the LTP2 measures will contribute positively to reducing greenhouse gases in the Plan area. The authorities, through their involvement in the Local Authority Management Programme, will monitor closely the state of the environment and, where possible, identify transport contributions.
Landscape	Overall the impact of the LTP is likely to be low, but differentiated between urban and rural areas. In urban areas there are likely to be positive benefits associated with neighbourhood renewal and regeneration schemes, though some measures in conservation areas will need to be designed carefully. In rural areas the impact of safety schemes, cycleways and other measures may increase suburbanisation of the countryside.
Townscape	Opportunities to enhance the townscape are presented with LTP2. Provided that the mitigation measures are applied during implementation, a positive impact is predicted, although moderate.
Biodiversity	A significant area of vulnerability, where the potential impact of the Plan will very much depend on design, implementation and management.
Water	A vulnerable area, but no significant effect is expected from the plan implementation provided that mitigation measures are applied, i.e. use of Sustainable urban Drainage Systems should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife
Physical fitness	Overall a **very significant positive impact** as the LTP provides strong support for cycling and walking which in turn have well-established benefits for health and physical fitness, together with improved accessibility to the transport system and to services and Smarter choices measures.

Safety and security	Overall the measures in the LTP are likely to have a **significant positive impact** on safety, and indeed this is one of the plan's key objectives. One area of uncertainty is whether an increase in cycling, could lead to more accidents involving cyclists. This potential impact requires close monitoring. It is however considered to be a relatively short-term impact. In the longer term greater numbers of cyclists is likely to heighten driver awareness and reduce accidents.
Accessibility and inclusion	Again, improvement of these areas is a main objective of the Plan, and detailed measures and targets are set out in the Plans, Accessibility Strategy and "Smarter Choices" Strategy. Overall, **major positive impacts** are expected.
Accessibility to the transport system	Improving accessibly is a core objective of the plan and the overall impact will be **significantly positive** particularly in the long term. Negative impacts are largely limited to construction.
Non-renewable resources	New construction will increase material use. Modal change will help reduce non-renewable fuel use. No significant impact has been identified for the Plan area.
Employment and business	Overall, reduced congestion and benefits to accessibility should support economic development and business competitiveness. This is reflected in the high level of integration between transport, land use planning, regeneration and also economic development.

10.3 Mitigation measures

10.3.1 As a result of the significant impact assessment workshop, mitigation measures are recommended for the implementation of each of the Plan's packages of measures, to ensure minimal negative impact. Most of these proposed mitigation methods are in any case an integral part of the normal implementation plan of LTP schemes, and would be applied anyhow. It was felt however that an additional emphasis within the SEA would draw attention to their importance in relation to the environmental objectives; would contribute to ensure their application; would help in the monitoring of their effectiveness; and would assist in identifying any problems at an early stage during the Plan implementation.

10.3.2 The recommended mitigation measures are presented in the table below, for each of the LTP2 packages of measures, so as to facilitate referencing and application during the Plan implementation.

Table 12: Mitigation measures

Mitigation measures	Trigger for action	SEA topics												
		Noise	Local air quality	Greenhouse gases	Landscape	Townscape	Biodiversity	Water	Physical fitness	Safety and security	Accessibility and inclusion	Accessibility to transport systems	Non-renewable resources	Employment and business
Network management														
Consider access restrictions for alternatives routes to avoid traffic displacement	Design stage	✓												
Monitor alternative routes when risk of traffic displacement that would affect other receptors (residential areas)	Monitoring shows increased traffic on alternative routes (avoidance)	✓												
Avoid night-time construction in residential areas	Project Mandate	✓												
Ensure liberated capacity is used for sustainable modes of transport	Design stage		✓								✓			
Follow good design guidance for minimising the impact of roadside signage and infrastructure - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)	Design stage				✓	✓								
Minimise use of new material and maximise use of recycled ones	Project Mandate												✓	
Public transport														
Quality agreement with bus operators could introduce quieter vehicles	On-going upgrading of the fleet	✓												
Avoid night-time construction	Project Mandate	✓												
Ensure synergies with "smarter choices" measures	On-going as a key LTP priority		✓											
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)	Design stage				✓	✓								
Sustainable drainage schemes where appropriate	Design stage							✓						
Minimise use of new material and maximise use of recycled ones	Project Mandate												✓	
Effective joint working with operators to maximise benefits of measures	Design stage													✓
Walking and cycling														
Avoid night time construction in residential areas	Project Mandate	✓												
Travel perception surveys to contribute to data collection towards monitoring	After implementation		✓											
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice	Design stage				✓	✓								

(local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)														
Education and awareness	Complementary during implementation						✓	✓						
Ensure measures applied in disadvantaged areas and suitable for users with impaired mobility	Planning and Design stage, embedded in LTP objectives								✓					
Minimise use of new material and maximise use of recycled ones	Project Mandate												✓	
Consultation with public and user groups to ensure safety, security and optimisation of use	Design stage									✓				✓
Neighbourhood/local centres improvements														
Avoid night time construction	Project Mandate	✓												
Monitor alternative routes when risk of traffic displacement that would affect other receptors (residential areas)	Monitoring shows increased traffic on alternative routes (avoidance)	✓												
Personal travel surveys to contribute to relevant data	On-going		✓											
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)	Design stage				✓	✓								
Sustainable drainage schemes where appropriate	Design stage							✓						
Minimise use of new material and maximise use of recycled ones	Project Mandate												✓	
Access for public transport and users with impaired mobility protected	Design stage										✓	✓		
Consultation	Design stage													✓
Safety schemes														
Monitor alternative routes when risk of traffic displacement that would affect other receptors (residential areas)	Monitoring shows increased traffic on alternative routes (avoidance)	✓												
Sensitive location and design	Design stage	✓												
Safer routes to school monitoring	Monitoring shows lack of improvement		✓											
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)	Design stage				✓	✓								
Sustainable drainage schemes where appropriate	Design stage							✓						
Ensure synergies with "smarter choices" measures	On-going as a key LTP priority		✓							✓				
Minimise use of new material and maximise use of recycled ones	Project Mandate												✓	
Consultation	Design stage													✓
Regeneration projects														
Development briefs and area action plans to promote mixed use developments	Development brief	✓	✓	✓		✓			✓	✓	✓			✓

Development briefs and area action plans to include sustainable transport facilities (PPG13, Section 106)	Development brief	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
Air quality monitoring before and after implementation			✓	✓										
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)	Design stage				✓	✓								
Sustainable drainage schemes where appropriate	Design stage							✓						
Control and restrain associated with transport links	Design stage													
Integrated land use and transport planning	LTP2 inherent objective	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Minimise use of new material and maximise use of recycled ones	Project Mandate												✓	
Maintenance														
Avoid night time construction in residential areas	Project Mandate	✓												
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)	Design stage				✓	✓								
Advance warning, positive management and promotion of alternative routes during works	Design stage	✓	✓	✓			✓			✓		✓		✓
Winter maintenance practices to be kept under review to minimise negative impacts	Maintenance						✓							
Minimise use of new material and maximise use of recycled ones	Project Mandate												✓	

10.3.3 The key mitigation measures recommended for addressing areas of particular value and vulnerability (where a significant effect has been predicted), and a trigger for their implementation, are summarised below:

Table 13: Recommended mitigation measures

Key mitigation measures	Trigger for implementation
Avoid night-time construction in residential areas	Project Mandate
Design needs to be sensitive to areas of townscape/landscape value - Application of principles of the Streetscape Manual Code of Practice (local interpretation of the 'Streets for All East Midlands' published by English Heritage and the Department for Transport)to ensure high quality public realm	Design stage
Minimise use of new material and maximise use of recycled ones	Project Mandate
Monitor alternative routes when risk of traffic displacement which could affect other receptors (residential areas)	Traffic flows monitoring before and after implementation
Consider access restrictions for alternatives routes to avoid traffic displacement	Design stage
Consultation with public and user groups to ensure safety, security and optimisation of use	Design stage
Winter maintenance practices to be kept under review to minimise negative impacts	Maintenance
Use of Sustainable urban Drainage Systems should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife	Design stage

11 IMPLEMENTATION AND MONITORING

11.1 Purpose

11.1.1 Monitoring provides the means by which the authorities can measure the performance of the LTP2 against the SEA objectives and targets. Monitoring also provides the opportunity to determine whether the mitigation of significant environmental effects identified during the strategic environmental assessment is being carried out, and allows any further significant effects that may arise during the plan period, to be identified and addressed at an early stage.

11.1.2 In terms of the Greater Nottingham LTP2, effective monitoring can be used to manage and reduce uncertainty, improve knowledge about the plan area environment, and enhance the authorities' accountability through transparent and accurate reporting. The monitoring arrangements have been decided also by considering the cost effectiveness of collecting and analysing the information and the hierarchy with existing sources of data and environmental monitoring.

11.2 Monitoring measures

11.2.1 The following information will be monitored:

- The performance of the SEA objectives through monitoring of the associated SEA indicators proposed for each objective (refer to Table 4) in this report.
- Some of the indicators from the baseline data (refer to Appendix A) will also be updated to indicate the effects of the Plan, as appropriate.
- The measures recommended to mitigate the potential or actual foreseen negative effects of the Plan on the environment will be checked for active implementation alongside the LTP2 measures.
- The identified likely significant environmental impacts of the LTP2 as presented in Section 9 and Appendix C will receive particular attention during the monitoring process.

11.2.2 Any discrepancies, anomalies, uncertainty or trend against the targets will be reported in the Progress Reports of LTP2, and will trigger a review of the mitigation measures or of the implementation programme, as appropriate.

11.2.3 However, the monitoring of the SEA will focus on the LTP2 as a whole, to ensure that cumulative effects are taken into account. This is especially relevant since:

- Many of the identified mitigation measures recommend ensuring synergies between packages of measures are maximised
- The overall positive impact assessment of LTP2 depends on successful implementation of the transport measures as integrated measures.

11.3 Trigger for mitigation measures

11.3.1 The methods for documenting the monitoring process have been set and are presented in Appendix A (baseline data), in Table 4 of this report (indicators and targets), and in (mitigation measures). Officers from both Councils will take responsibility for co-ordinating and leading the monitoring of the environmental effects of the Plan.

11.3.2 The detailed briefs of each project and schemes will ensure that preventive mitigation measures are implemented wherever possible. Monitoring of the SEA indicators will provide the necessary evidence to implement other remedial mitigation.

11.4 Reporting arrangements

11.4.1 The monitoring of the SEA objectives and indicators, the mitigation measures proposed during the impact assessment process, and of the forecasted effects of the implementation of the Plan, will be reported on as part of the Progress Reports of the LTP2, as and when required by the DfT.

11.4.2 Furthermore a number of additional sources of monitoring information across the Plan area will also be used to inform the Progress Reports. They include:

- Major and regeneration projects: These will be subject to detailed Environmental Impact Assessments, the conclusions of which will be reported when available.
- Air Quality Management Plans annual progress reports
- The Council Carbon Management Plans

12 NEXT STEPS

12.1 Work so far

12.1.1 Section 3 provides an outline of the main stages of the SEA as set out in government guidance. In accordance with the guidance, the Environmental Report covers all the stages up to Stage D.

12.2 Monitoring and reporting

Section 11 provides an outline of the measures which will be taken to monitor the environmental effects of the Plan and the mitigation measures which will be implemented and the trigger for their application. It also details the reporting arrangements.

The DfT will provide guidance on the procedures for the publication of the LTP2 Progress Reports. Progress Reports will submitted to DfT approval and made available to the public.

12.3 Useful contacts

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13 APPENDIX A: BASELINE DATA

The baseline data set out below was that available at the time of publication of this draft Environmental Report. Any consultee with data which helps increase the understanding of baseline environmental conditions is encouraged to forward this as part of their response to this consultation.

SEA Topic:	**Population**						
SEA Indicator	**Local data**	**Regional data**	**National data**	**Target**	**Trends**	**Indicator Status and Comments**	**Data Sources**
Population	Greater Nottingham = (mid-2003) 630,100 City of Nottingham 273,900 Surrounding County suburbs 273,800 Surrounding County settlements and rural area 82,400 Nottinghamshire Growth (1991-2003) = 2%	East Midlands= 4,172,174 Growth 1991-2003 = 6%	England = 49,138,831 Growth 1991-2003 = 4%		Population is likely to rise to 641,000 by 2011 and 651,000 by 2021 – 280,000 and 288,000 respectively in the City. These amount to an increase of 1.7% between 2003 and 2011 and 1.6% between 2011 and 2021. Growth is below regional and national average		(Source: Office for National Statistics (ONS) 2003 Mid-Year Estimates for Districts and Nottingham City Council estimates based upon the 2001 Census and the 2003 Mid-Year Estimates.) Source: Projections produced for the Nottinghamshire and Nottingham Joint Structure Plan (November 2003) Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Net migration of children under 15	Nottingham City Loss of 1,200 children 2002-03				Average annual loss since 1997-98 = 1,067 children		National Health Service Central Register, ONS
Dwellings					Net increase in dwellings in Greater Nottingham of 36,500 between 2001 and 2021.		The Nottinghamshire and Nottingham Joint Structure Plan (Deposit Draft, November 2003)
Employment	There were 288,000 employee jobs in Greater Nottingham in 2002, plus about 30,000 people who are self-employed. The number of employee jobs has risen by 39,400 (15.8%) since 1991.				A number of studies project continued growth in jobs. The rate of increase varies, but a general conclusion is that the number of jobs will increase		Nottingham City Council estimates based upon the ONS Annual Business Inquiry and Annual Employment Survey and the 2001 Census Nottingham City Council

	178,800 (62%) of the employee jobs are in Nottingham City, of which about 58,000 are in the city centre.				by between 2% and 5% by 2012.			estimates based upon the ONS Annual Business Inquiry and the Inter-Departmental Business Register
Unemployment	8,939 people were registered as unemployed in November 2004. This gives an unemployment rate of 2.2%, which is very similar to the rate for England as a whole. The unemployment rate in Nottingham (3.4%), compares with 0.9% in Rushcliffe. The highest ward rates are in St Ann's (6.5%), Bestwood (5.8%) and Aspley (5.7%) – all in Nottingham City.		In line with national trends, unemployment has fallen markedly in the last few years - by 63% since November 1996.					Office for National Statistics, via NOMIS
Unemployment rate – working age	GNP (Not Hucknall) = 4.6%	East Midlands= 4.7%	GB= 5.0%					Local Labour force survey, ONS, Mar2003-Feb 2004
Number of bus passenger journeys	GN = 67.4 million (2004/05)	East Midlands = 205 million in 2003/04 (bus and light rail)	Great Britain = 4535 million in 2003/04 (bus)	71.8 million in 2010/11 National target - increase use by 12% from 2000 to 2010	Local = -6.0% since 00/01 Regional = -2.4% since 00/01 National = -5.4% since 00/01			Proforma A, p.11, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_033618.xls Data from bus operators
Bus passenger satisfaction	Overall service City = 83% County = 69%	East Midlands 2003/04 Overall service = 81% Reliability = 65% Value for Money = 73%	England 2003/04 Overall service = 80% Reliability = 65% Value for Money = 76%	City = 83% County = 70% 2010/11				Proforma A, p.11, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_033618.xls , 2.3
Number of bus quality partnership routes	8 routes			14 routes in 2010/11	Local = +50% since 2001/02			Proforma B, p.17, LTP1 progress report 04/05

% of all journeys by public transport	City Bus = 18.6% Rail = 0.7% LTP area Bus = 13.5% Rail = 1%	East Midlands Bus = 5.4%	Great Britain Bus = 5.6% Rail =2.0 %	Bus = 13.5% Rail = 1.0% NET = 0% Overall = 14.5% In 2005/06			New targets will be set in LTP2	Personal Travel Survey , LTP catchment area, 2003, p.24 Personal Travel Survey , Nottingham City, 2003, p.22 http://www.statistics.gov.uk/STATBASE/Expodata/Spreadsheets/D6072.xls (National Travel Survey, DfT)
% of am peak period inbound journeys to the inner Traffic Area by public transport	Bus = 28.9% Tram = 2.9% Rail =4.3% Total = 36.1%			37% (+10%) in 2010/11	Local Bus patronage= +4% since 1991 Estimated bus and rail = +7%			Proforma B, p.17, LTP1 progress report 04/05 and Table 3.2, p.40, LTP1 progress report 03/04
Rail journey times from Nottingham Station	London = 98 minutes Leeds = 160 minutes with 1 change			London = 96 mins Leeds = 110 mins direct In 2005/06			Target will be reviewed in LTP2	Table 3.2, p.40, LTP1 progress report 03/04 National Rail timetable
Growth index in rail patronage 1995/96 = 100		East Midlands=159 2003/04	Great Britain = 134 2003/04					http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_032982.pdf, p.45
Light rail passenger journeys	8.5 million		147 million journeys were made in England, 2003/04.	11.1million in 2010/11	National = + 4% on the previous year		NET opened in 2003/04, patronage now building	Proforma A, p.11, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_032974.pdf
Number of easy access buses	LTP area = 81%		Great Britain = 39% 2003/04	Increase to 80% of total fleet by 2006 National target =50% in 2010/11				Proforma B, p.17, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_032974.pdf, p.3
Bus Availability % of all households within 13mins walk of hourly or better bus service		East Midlands = 86% 2002/03	Great Britain = 90% 2002/03					http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_032982.pdf p.27
Rural Bus Availability % of rural households within 13mins walk of hourly or better bus service	LTP area = 55%		Great Britain = 50% in 1999/2001	56% in 2010 National Target = 50%				Proforma A, p.11, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_508281.pdf
Geographical Access Conventional bus services (within 400m walking distance) a) City Centre : Daytime (Mon - Sat), direct every 30 mins or less	City = 85%							Bus Accessibility Report, Public

								Transport Team, p.13, 2003
b) City Centre : Evenings/Sundays, direct every hour or less	City = 83%							Bus Accessibility Report, Public Transport Team, p.13, 2003
c) District Centres : Daytime (Mon-Sat), direct every 30 mins or less	City = 74%							Bus Accessibility Report, Public Transport Team, p.13, 2003
d) Employment sites (inc education) : Daytime Peak (Mon-Fri), one change or less, 30mins or less	City = 87%							Bus Accessibility Report, Public Transport Team, p.13, 2003
e) Hospitals Daytime (Mon-Sat), one change or less, 30mins or less Dial a Ride	City = 86%							Bus Accessibility Report, Public Transport Team, p.13, 2003
Financial Access a)%take up of elderly persons concessionary fares scheme	City = 65%		London and metropolitan areas = 70% Rural areas = 31%					Bus Accessibility Report, Public Transport Team, p.13, 2003 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_508281.pdf
b) % take up of disabled persons concessionary fares scheme	City = 10%							Bus Accessibility Report, Public Transport Team, p.13, 2003
c) Average fare per kilometre to the City Centre	City = £0.31							Bus Accessibility Report, Public Transport Team, p.13, 2003
d) Average fare to the City Centre	City = £1.01							Bus Accessibility Report, Public Transport Team, p.13, 2003
Information Access a) % of stops with timetables/route planner/information contacts	City = 58%							Bus Accessibility Report, Public Transport Team, p.13, 2003
b) % of boarding stops with timetables	City = 59%							Bus Accessibility Report, Public Transport Team, p.13, 2003
c) public outlets for timetables	City = 52%							Bus Accessibility Report, Public Transport Team, p.13, 2003
Physical Access a) % of stops fully accessible	City = 21%							Bus Accessibility Report, Public Transport Team, p.13, 2003
b) % of boarding stops with shelter/seats	City = 48%							Bus Accessibility Report, Public Transport Team, p.13, 2003
c) % of households within 400m of low floor bus	City = 67%							Bus Accessibility Report, Public Transport Team, p.13, 2003

Estimated traffic flows	Nottingham LA = 1,523 million vehicle kilometres, (2002)	East Midlands = 39,166 million vehicle kilometres, (2002)	Great Britain = 485,981 million vehicle kilometres, (2002)		Local = +7.6% 1993-2002 Regional = +19.9% 1993-2002 National = +17.9%, 1993-2002			http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_027416.xls National Road Traffic Survey, DfT.
Vehicle kilometres travelled per day on RTRA network	Greater Nottingham = 6.86 million			7.08 million (+5%) in 2010/11	Local = +1.8%			Proforma B, p.17, LTP1 progress report 04/05
Traffic increase on major roads 1993-2003		East Midlands = 26.1%	Great Britain = 21.3%					http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_032982.pdf, p.65, National Road Traffic Survey
Peak period car speeds	Am inbound = 16.1mph Pm outbound = 17.7mph	East Midlands Congestion on trunk roads (seconds lost per vehicle km) Am inbound = 3.8 Pm outbound = 4.5	England Congestion on trunk roads (seconds lost per vehicle km) Am inbound = 8.6 Pm outbound = 7.6	Am inbound = 15.3mph Pm outbound = 17.8mph In 2005/06 National target - Reduce congestion to 2000 levels by 2010				Proforma B, p.17, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_021863.pdf
Organisations actively implementing commuter travel plans	City = 40 County = 16 LTP Area = 56			City = 40 County = 21 LTP area = 61 (+118%) in 2005/06	Local = +100%		Met target to increase by 10% by 2006, target stretched to increase of 100% by 2005/06	Proforma B, p.17, LTP1 progress report 04/05
Cost of parking in the City centre	6hrs = £12.00 2hrs = £2.40 On street for 2hrs = £2.00			6hrs = £12.00 2hrs = £2.40 On street for 2hrs = £2.00 In 2005/06			On track to increase in real terms by 2011.	Proforma B, p.17, LTP1 progress report 04/05
School journey time	City, 2003, (Over 16's only) Mean trip duration time for full time students = 16.4 mins.		Primary = 12 minutes Secondary = 23 minutes (2001)					http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_508285.pdf Personal Travel Survey, 2003, Nottingham City, p.30.
Travel to school	City, 2003, journeys for education (16's + over only) Walk = 48.5% Car = 24.1% Bus=22.9% Bicycle = 4.4%	East Midlands, 2003 Primary Walk = 53% Car = 44% Bus = 1% Other = 2% Secondary	Great Britain, 2003 Primary Walk = 54% Car = 39% Bus = 6% Other = 1% Secondary Walk = 43%					http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_508285.pdf Personal Travel Survey, 2003, Nottingham City, P.24

	Other = 0.1%	Walk = 41% Car = 17% Bus = 39% Bicycle = 2% Other = 2%	Car = 18% Bus = 32% Bicycle = 2% Other = 4%					
Educational attainment	City Level 4/5 = 20.9% Level 3 = 16.6% Level 2 = 13.3% Level 1 = 16.0% No qualification = 22.0% Other/Unknown = 11.2% Greater Nottingham Level 4/5 = 26.9% Level 3 = 16.1% Level 2 = 14.6% Level 1 = 14.6% No qualification = 16.3% Other/Unknown = 11.4%		England Level 4/5 = 25.0% Level 3 = 14.7% Level 2 = 15.3% Level 1 = 14.9% No qualification = 14.8% Other/Unknown = 15.2%					2001 Census Nottingham City Profile 2001 Census Greater Nottingham Profile
Household car ownership	Nottingham City (2001) None = 44.9% One = 40.7% Two = 11.9% Three or more = 2.5% (refer to Figure 4)	East Midlands (2002) None =22 % One =45 % Two or more = 33%	England (2001) None = 26.8% One = 43.7% Two = 23.6% Three or more = 5.9%					2001 Census Nottingham City Profile http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_033617.xls
Percentage of residential development on brownfield land	City = 85% County = 93%	East Midlands = 35% 1996-99	England = 46% 1996-99	City = 85% County = 60% (Local Plan targets)				Proforma B, p.17, LTP1 progress report 04/05 http://www.statistics.gov.uk/STATBASE/Expodata/Spreadsheets/D7855.xls
Derelict land	Nottinghamshire = Approx 1,000ha (0.5%)	4,385ha			Slightly above regional average			
Number of Park and Ride spaces	Bus = 1,473 Rail = 227 NET = 3,104 Total = 4,804			Bus = 1,973 Rail = 227 NET = 3,104 Total = 5,308 (+24%) in 2005/06	Local = +12% since 2000/01		Local target = Increase the number of Park and ride spaces by 20% by 2006	Proforma B, p.17, LTP1 progress report 04/05
Am peak period inbound bus journey speeds	10.5mph			11.8mph (+10%) in 2005/06	Local = -1.9% since 00/01			Proforma B, p.17, LTP1 progress report 04/05

Am peak period inbound traffic flow - Greater Nottingham	62,000 vehicles			61,3000 in 2010/11 (Same as in 2000/01)	Local = +1.1%		On target to restrict traffic growth to 2% between 2000 and 2006	Proforma B, p.17, LTP1 progress report 04/05
Am peak period inbound traffic flow to the inner traffic area	35,350			35,387 (-5%) in 2010/11	Local = -5.1%		On track to stop traffic growth between 2000/01 and 2005/06	Proforma B, p.17, LTP1 progress report 04/05
Average am peak period inbound car occupancy rate to the Inner Traffic area	1.23 persons per vehicle		1.59 average occupancy 1.2 average occupancy for business/commuting (2003)	1.37 (+10%) in 2010/11	Local = -1.6%		On track to increase car occupancy rate by 10% between 2000/01 and 2005/06	Proforma B, p.17, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_031840.pdf
Mean journey to work time		East Midlands = 22 minutes (2003)	Great Britain = 25 minutes (2003)					http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_032982.pdf p.23
Travel to work	Nottingham City Train = 0.7% Bus, coach = 21.4% Motorcycle = 0.8% Car (driver) = 44.7% Car (passenger)= 6.2% Taxi = 0.7% Bicycle = 3.7% Foot = 14.7% Work at home = 6.7% Other = 0.4% Greater Nottingham Train = 0.9% Bus, coach = 15.4% Motorcycle = 1.0% Car (driver) = 54.4% Car (passenger)= 6.0% Taxi = 0.4% Bicycle = 3.3% Foot = 10.4%	East Midlands (2003) Train = 1% Bus, coach = 7% Motorcycle =1% Car = 77% Bicycle = 3% Foot = 10% Other = 1%	England Train = 7.4% Bus, coach = 7.5% Motorcycle = 1.1% Car (driver) = 54.9% Car (passenger)=6.1% Taxi = 0.5% Bicycle = 2.8% Foot = 10.0% Work at home = 9.2% Other = 0.5%					2001 Census Nottingham City profile 2001 Census Greater Nottingham Profile http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_033617.xls

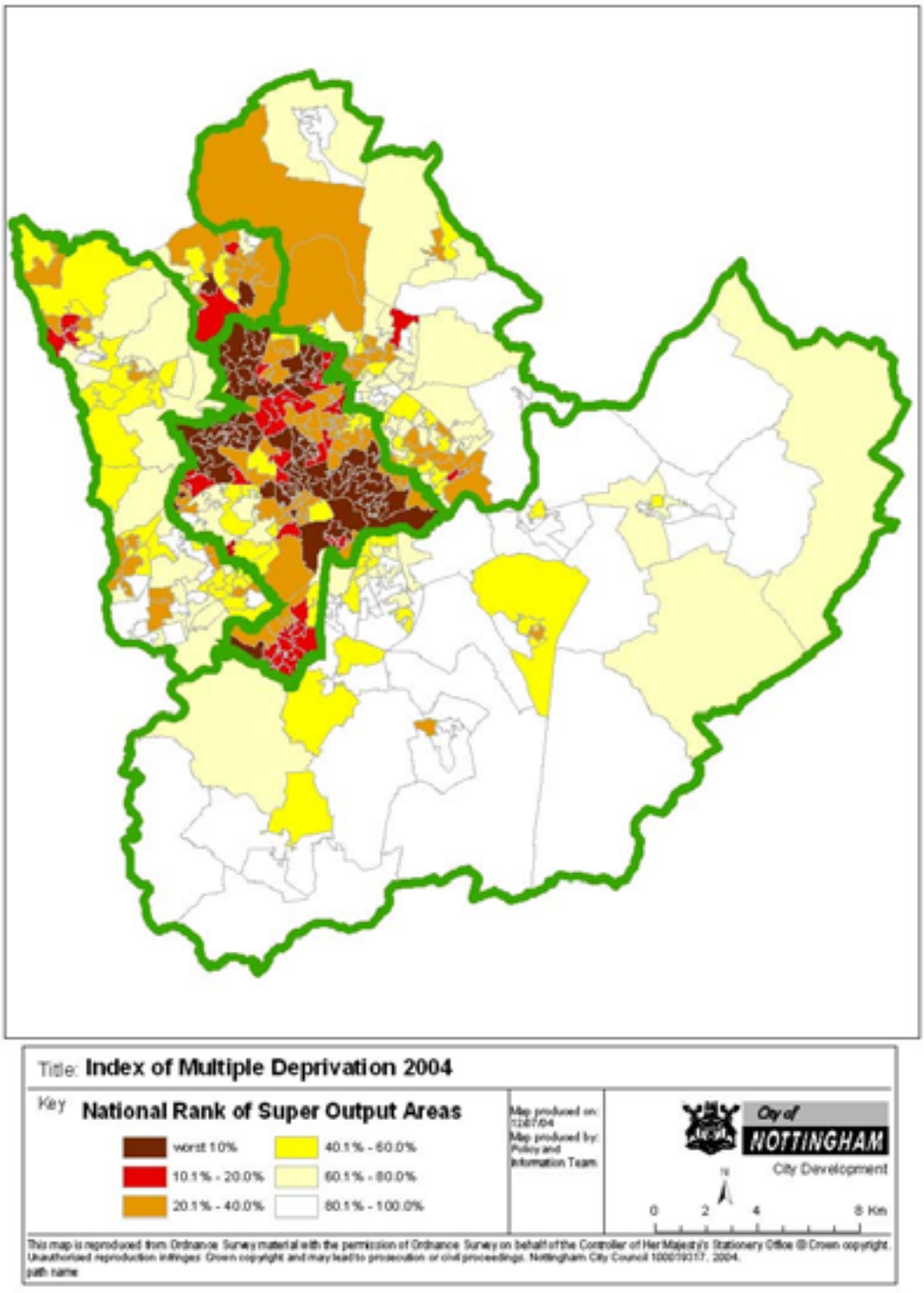
	Work at home = 7.9% Other = 0.3%							
Indices of Deprivation	The distribution of deprivation (refer to Figure 3) is similar to that in the 1998 Index of Local Deprivation referred to in LTP1, although the use of super output areas gives a finer breakdown than wards. 81 (20%) of the 414 super output areas in Greater Nottingham are in the worst 10% of areas in England and 125 (30%) are in the worst 20%. Most of these are in Nottingham City, where 79 (45%) of the 176 areas are in the worst 10% nationally and 115 (65%) in the worst 20%. These are concentrated in the inner city (particularly St Ann's, Sneinton, Hyson Green, Radford and The Meadows) and the north-west (Bulwell, Aspley, Broxtowe Estate, Bestwood and Bestwood Park).							
% of vacant units in city centre	13.5%		Core city average = 15.1%	Target is a relative figure (i.e lower average percentage vacancies than comparable cities)				Proforma B, p.17, LTP1 progress report 04/05
Gross weekly pay includes overtime earnings (Full and Part time)	GNP inc Hucknall (pre 2003) = £355.6	East Midlands = £355.7	GB= £394.8					New Earnings Survey, ONS, 2003.

Mean full time weekly wages (gross)	£419		Core cities = £439 Great Britain = £465	Local = 16.1% Core Cities = 14.1% GB= 15.7% Change 1999-2002	Greater increase than Core Cities although slightly lower			http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_026867-05.hcsp
Gross Value Added	Greater Nottingham (excluding Hucknall) = £8,976 million	£58,048 million	UK= £926,275 million					
GDP per head of population	£15,023 (excluding Hucknall)	£13,746	UK = £15,614					ONS, Headline GVA statistics
Take up of employment land	2004-2005 4.48 ha of potential employment land (as 2.46 b1 employment, and 2.02 for a hotel-non-employment)							Paul Tansey
Net Number of jobs gained	-4,132	+16,207	+126,499					AB1 Employee Jobo, 2002-03, ONS
Number of new VAT registrations	1,520	12,760	126,499					SBS 2003
Net change of new VAT registrations	+115	+1,625	+15,710					SBS 2003
% of people who feel the walking environment in the City Centre is good or excellent	49% for Nottingham City (2004).							Greater Nottingham Perception Survey 2004 p.36
% of people who feel the walking environment in the area where they live is good or excellent	45% for Nottingham City (2004).							Greater Nottingham Perception Survey 2004 p.36
% of people who feel the cycling environment is good or excellent	23% for Nottingham City (2004).							Greater Nottingham Perception Survey 2004 p.36

INDICATOR STATUS

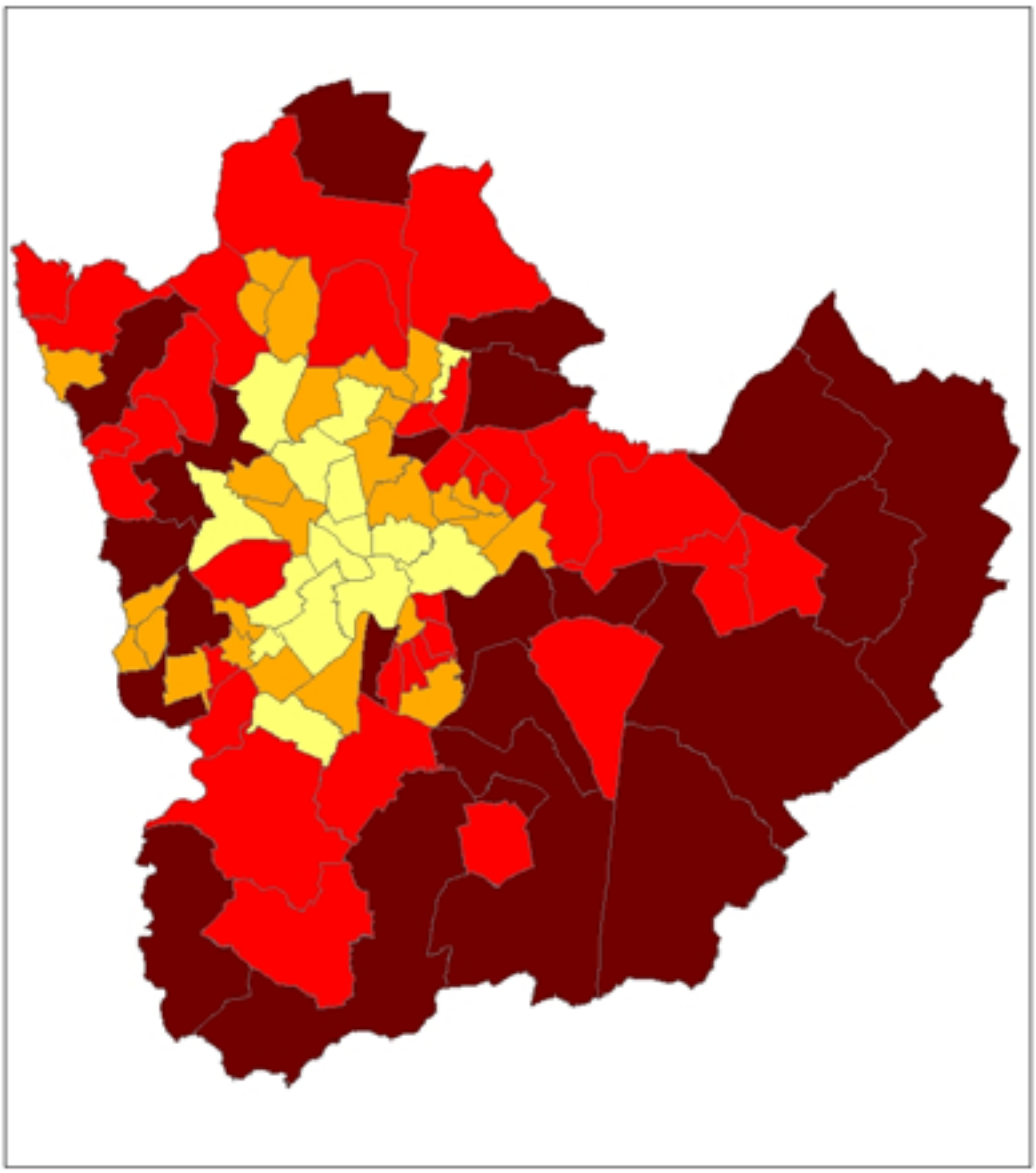
	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national performance		No data available, Indicator cannot be assessed

Figure 3: Index of Multiple Deprivation



Source: The Office of the Deputy Prime Minister's 2004 Indices of Deprivation

Figure 4: Car Ownership



(Source: 2001 Census)

SEA Topic:	Human Health		

Indicator	Local data	Regional data	National data	Target	Trends	Indicator Status and Comments	Data Sources
Theft of a motor vehicle, rate per 1,000 population	Nottingham UA = 12.2 2000/01	East Midlands = 5.1 2000/01	England and Wales = 6.4 2000/01				http://neighbourhood.statistics.gov.uk/dissemination/viewFullDataset.do?viewAction=next&$ph=60_61&step=4&productId=278&instanceSelection=0273&timeId=25&containerAreaId=543317&startColumn=1&numberOfColumns=8
Theft from a motor vehicle, rate per 1,000 population	Nottingham UA = 31.4 2000/01	East Midlands = 12.9 2000/01	England and Wales = 11.9 200/01				http://neighbourhood.statistics.gov.uk/dissemination/viewFullDataset.do?viewAction=next&$ph=60_61&step=4&productId=278&instanceSelection=0273&timeId=25&containerAreaId=543317&startColumn=1&numberOfColumns=8
% of people feeling safe when walking to a bus stop,	City, 2004 Very safe = 38.5% Safe = 32.4% Average = 8.4% Unsafe = 3.3% Very Unsafe =0.9% Don't know = 16.5%						Greater Nottingham Perception Survey, 2004, p.36
% of people feeling safe or very safe when travelling on bus	2.5% of Nottingham City residents felt unsafe when travelling on bus Safe or vey safe = 72%	3.0% of Nottingham County residents felt unsafe when travelling on bus	10% afraid of becoming a victim of crime in daytime on bus 37% at night time				Greater Nottingham Perception Survey, 2004, p.36
% of people feeling safe when waiting at a bus stop	City, 2004 Very safe = 37.0% Safe = 32.5% Average = 10.0% Unsafe = 3.1% Very Unsafe = 0.5% Don't know = 16.9%						Greater Nottingham Perception Survey, 2004, p.36
Number of shelters with anti-vandal panels	City = 25%						Bus Accessibility Report, Public Transport Team, p.13, 2003

% of boarding stops with lighting	City = 57%							Bus Accessibility Report, Public Transport Team, p.13, 2003
% of shelters with CCTV coverage	City = 58%							Bus Accessibility Report, Public Transport Team, p.13, 2003
Number of deaths and seriously injured	City = 180 County = 273 LTP area = 453	East Midlands = 3,169 in 2003	Great Britain = 37,215 in 2003	City 194 County = 203 LTP area = 398 2010 National Target = 40% reduction by 2010 from 1994-98 average	City = -44.4% since 1994/98 County =-19.5% since 1994/98 Greater Nottingham= -31.7% since 1994/98 East Midlands = -9.0 % since 2000 GB= -10.5% since 2000)		Greater Nottingham has a significantly higher reduction than the region and GB	Proforma A, p.11, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_031309.xls http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_031439.xls
Number of children killed and seriously injured	City = 32 County = 34 LTP area = 66	East Midlands 305 in 2003	Great Britain 4100 in 2003	59 in 2010 National Target = 50% reduction by 2010 from 1994-98 average	Local = -44.0% since 1994/98 East Midlands = -28.9% since 2000 GB= -21.2% since 2000		Greater Nottingham has a significantly higher reduction than the region and GB	Proforma A, p.11, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_031390.xls http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/downloadable/dft_transstats_032982.pdf, p.90
Casualty savings per annum from Local Safety Schemes Implemented	City = 1.00 2002							LTP1 progress report 2003/04, Annex C, Table C7.
Reduction in KSI before and after speed cameras	64 in 3years before and 3 years after the introduction of cameras at two fixed sites.							LTP1 progress report 2003/04, Annex C, Figure C4.
% of population walking / cycling for 30 mins per day	12.6% (2002/03)			13.3% in 2010/11				Personal Travel Survey 2003
% of walking journeys to work	City = 14.6% County = 6.1% LTP = 9.4% (2002/03)	East Midlands = 11% (2003	Great Britain = 10% (2003)	LTP area = 10.4% (+20%) in 2005/06			On track to increase walking journeys to work by 20% by 2006	Proforma B, p.17, LTP1 progress report 04/05 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_031623.xls
Number of cycling trips	24789 (+ or – 8%)		Great Britain = 14 trips pre person per year	26,479 in 2009	Local = -12% since 2001			Proforma A, p.11, LTP1 progress report 04/05

% of cycling journeys to work	City = 2.8% County = 3.3% LTP = 3.1% (2002/03)	East Midlands = 3% (2003)	Great Britain = 3% (2003)	City = 6.0% County = 6.0% LTP = 6.0% In 2010/11				Personal Travel Survey 2003 http://www.dft.gov.uk/stellent/groups/dft_transstats/documents/page/dft_transstats_031623.xls
Length of national cycle network in Greater Nottingham	24 km completed (2003/04)			24km completed in 2005/06				Table 3.2, p.40, LTP1 progress report 03/04
School Travel Plans	City = 21 County = 26 LTP = 37 (2003/04)			City = 61 County = 48 LTP area = 109 In 2005/06				Table 3.2, p.40, LTP1 progress report 03/04
General level of health	Nottingham UA Good = 65.0% Fairly good = 24.0% Not good= 11.0% 2001	East Midlands Good = 67.6% Fairly good =23.3% Not good = 9.1% 2001	England and Wales Good = 68.6% Fairly good = 22.2% Not good = 9.2% 2001		Slightly worse than national and regional average			2001 Census, ONS
People with a limiting long term illness	Nottingham UA = 20.1% 2001	East Midlands = 18.4% 2001	England and Wales = 18.2% 2001					2001 Census, ONS
Standardised Mortality rate	Nottingham UA = 116 Nottinghamshire = 102 2003	East Midlands = 102 2003	England and Wales = 100 2003					http://www.statistics.gov.uk/statbase/Expodata/Spreadsheets/D8521.xls
Death rate, age standardised mortality rates per 100,000	Nottingham UA Males = 1033.9 Females = 678.0	East Midlands Males = 816.6 Females =566.1	England Males = 814.5 Females= 553.4					http://www.empho.org.uk/products/khi2004/5_HealthIndicators/5_4_Mortalityallcauses/all_cause_mortality_la_dec04.xls
Life expectancy	Nottingham Local Authority Females = 78.5 years Males = 72.9 years 2001-2003	East Midlands Females =80.5 years Males = 76.3 2001-2003	England Females= 80.7 years Males = 76.3 years 2001-2003		Slightly worse than the regional and national average			http://www.empho.org.uk/products/khi2004/5_HealthIndicators/5_5_LifeExpectancy/Lifeexpectancytrends.xls
Index of multiple Deprivation	Average score = 41.7 Rank of average score = 7/354 L.A.'s 2004						15 of the 27 wards are in the worst 10% nationally	http://www.eastmidlandsobservatory.org.uk/gen.asp?EMOkey=0080102
Prevalence of treated coronary heart disease per 1000 patients		Trent Region Males = 42.2 Females = 32.3 1994-1998	England Males = 39.0 Females = 30.9 1994-1998					http://www.statistics.gov.uk/StatBase/xsdataset.asp?More=Y&vlnk=2503&All=Y&B2.x=39&B2.y=8

Respiratory illnesses	Greater Nottingham = 7,805 2003				+4.8% since 2000			LTP1 progress report 2003/04, Annexes of supporting data, Table C3 (PCT is the original source)

INDICATOR STATUS

	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national performance		No data available, Indicator cannot be assessed

SEA Topic:	Biodiversity, Flora and Fauna						

Indicator	Local data	Regional data	National data	Target	Trend	Indicator Status and Comments		Data Sources
Number and extent of national sites SSSI's NNR LNRs SINC's Special Protection Areas (SPA)	 GN = 17 (374.82 ha) Nottinghamshire = 68 covering 1.6% of area Nottinghamshire = 1 covering less than 1% of area GN= 16 (199ha) Nottinghamshire = 32 (less than 1%) GN = 488 (4417ha) Nottinghamshire = 1,427 (5.5%) GN = 0	 395 SSSI's covering 4.2% of area 14 (12,964 ha) 99 LNRs NA 6 (145,592ha)	England: 4117 SSSI's cover 7% of area 215 (87,900ha) 800+ LNRs NA 77 (609,249ha) UK: 246 (1,482,187ha)	N/A	Although over recent years there has been an increase in the area of sites designated for their national and local importance of nature conservation, this has masked some losses, and particular concerns lie in the quality of these sites (see below)		The proportion of land designated for its natural conservation value is partly dependent on environmental factors such as geology. A straight comparison with the national average is therefore not necessarily useful.	Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft Joint Nature Conservancy Council 2005 Joint Nature Conservancy Council 2005
Number and extent of international sites	GN = 0 Nottinghamshire = 1 SAC covering 271 hectares (less than 1% of area)	13 (179,646ha)	England: 236 (808,976ha) UK: 608 (2,504,359ha)				Nottinghamshire has only 1 internationally important site	Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Condition of sites where known %SSSI's in favourable condition or recovering %SSSI's in favourable condition	 Nottinghamshire = 69% GN = 57.8% Nottinghamshire = 58.87%	 61% 41%	 England = 66% 46%	95% SSSI's favourable or recovering by 2010	Although above the national average, there are still concerns over the high proportion of sites not in favourable condition		Although no specific target has been identified, the objective is clearly to bring all designated sites into positive management and favourable condition	Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft East Midlands Biodiversity Strategy English Nature

Area of Woodland cover	17,298 (8%)	80,000ha (5.1%)	2.8 million ha (8%)	Not identified	The overall level of woodland cover is stable, and in line with the national average		"Ideal" level of woodland cover depends on landscape characterisation (see below)	EMRA RSS Scoping Report Biological records Forestry Commission data (Space for Trees)
Ancient Woodland	Nottinghamshire = 3,388 ha (1.6% area)	25,000 ha (1.6% area)	England = 341,100 ha	N/A	Total coverage is same as regional figure but approx. 300ha (90%) of semi-natural ancient woodland lost between 1930 and 1990		Avoid further losses	Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft Viewpoints on the East Midlands Environment (1999)
Area of semi-natural Woodland	Not identified	Not identified	Not identified	Approx 300ha (90%) lost 1930-1990. Target is to maintain existing levels (LBAP)	Historically there have been high levels of loss of semi-natural woodland, but this has slowed in recent years.		Although relatively stable, the fragmentation of habitats between woodland areas is identified as a problem. So too has lack of appropriate management	Viewpoints on the East Midlands Environment (1999) Forestry Commission data (Space for Trees)
Area of ancient Woodland as a % of total woodland	14%	25,000ha (16% of all woodland) 2,200 ha lost since 1920	537,000ha (2%)	Maintain existing levels	Historically there have been high levels of loss of ancient woodland, but this has slowed in recent years.		Although relatively stable, the fragmentation of habitats between woodland areas is identified as a problem. So too has lack of appropriate management	EMRA RSS Forestry Commission data (Space for Trees)

Area of Lowland Heath	250ha in Nottinghamshire (approximately 0.4% of UK total), though relatively little likely to be in GN area	Not available	c60,000ha	Increase area by 200ha by 2005. 80% under appropriate management	90% of lowland heath has been lost since 1920. However recently there has been significant new heathland creation as a result of LBAP initiative		Although currently on the increase, area of lowland heath is still low.	Notts LBAP
Wild bird indicators (1994-2002) Farmland Birds Woodland Birds All native birds		 -3% 18% 7%	England UK -5% -3% -6% -1% 1.5% 6%		Regional performance significantly better than national data			Wild Bird indicators for the four UK countries and for the English regions: 1994-2002. Defra, 2004.

INDICATOR STATUS

	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national Performance		No data available, Indicator cannot be assessed

SEA Topic:	Landscape						
Indicator	**Local data**	**Regional data**	**National data**	**Target**	**Trend**	**Indicator Status and Comments**	**Data Sources**
% of landscape classified as tranquil	Approximately 50% 23% reduction (1963-93) (Nottinghamshire)	53%	53%	None identified	Nottinghamshire is below the national average, and tranquillity has reduced considerably since 1963	There is no identified framework for monitoring this indicator. Transport is one of the factors which contributes to loss of tranquillity	(Use landscape Character Assessments) CPRE and C'side Commission Tranquil Areas report (1995)
Quality and condition of landscape	No quantitative data	No quantitative data	No quantitative data	None identified	Although no nationally agreed system in place for quantifying landscape quality or condition, qualitative assessment suggests significant loss of character due to development and suburbanisation	Transport can play a significant impact in damaging landscape character, both through volume of traffic and highways infrastructure and signage The Countryside Agency are developing a national indicator Countryside Quality Counts that may provide data in the future on landscape quality and condition.	Nottinghamshire Landscape Character Assessment & Guidelines

Quality and condition of townscape	No quantitative data	No quantitative data	No quantitative data	None identified	No nationally agreed system in place for quantifying townscape quality or condition. Trends are likely to be variable, with some town centre improvements through regeneration projects, and other areas of increased degradation		Transport can play a significant impact in damaging townscape character, both through volume of traffic and highways infrastructure and signage	Streets for All
Historic landscape character (see also cultural heritage)	Historic landscape characterisation of Nottinghamshire	N/A	N/A	N/A	N/A		Provides contextual information on historic landscape character which should be used to assess individual proposals	Notts CC Historic Landscapes Character Project and mapping
Accessibility/condition of rights of way % unusable	44% (Notts.)	N/A	28% average	60% usable (40% unusable) by 2008	Recent trends have been variable, with some years higher and some lower around an average of 56%		Local situation significantly worse than national average.	NCC Condition Survey Autumn 2004 (no. 128)
Area of Local Nature Reserve per head of population	0.000424ha (Notts.)	?	?	None identified	No national/regional comparative data available, nor trend data over time.		Trend data needs to be established	Local biological/planning records Census data
Area	Nottinghamshire = 208,500ha	1,563,000ha	24,087,000 ha		Nottinghamshire is 13% of East Midlands land area			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Roads		31,000km						As Above

Rights of Way	Nottinghamshire = 3209km	18,763 km	England = 224,000 km		Nottinghamshire has 17% of Regions rights of way. There have not been any significant losses		Protect rights of way. Seek mitigation where appropriate	Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Rural Areas	Nottinghamshire = 85%	80%			No specific comparison but regional trend suggests increasing urbanisation		Avoid inappropriate development in rural areas	As Above
Urban Areas	Nottinghamshire = 15%	20%						As above
Agricultural Land	Nottinghamshire = 71%	77%	72%		Below regional average but in line national figure. No figures on loss of agricultural land are currently available.			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Number and extent of local sites	9.5% of area is within a Mature Landscape Area				Nottinghamshire has no nationally important landscapes		Protect the best of our landscape resources	As Above
Green belt	Nottinghamshire = 45,000 ha (21%)	80,000ha (5%)	England = 13%		Nottinghamshire has a considerably higher proportion of greenbelt than regional or national figure		Avoid inappropriate development	AS Above

INDICATOR STATUS

	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national Performance		No data available, Indicator cannot be assessed

SEA Topic:	**Soil**	**:**	

Indicator	Local data	Regional data	National data	Target	Trend	Indicator Status and Comments		Data Sources
Tonnes of recycled soil and aggregate (from Constr.& Demolition waste)		4.88 m.tonnes	45 m.tonnes approx.					EMRA RSS Scoping Report
Percentage best and most versatile classes (grades 1,2 and 3a) of agricultural land	Not identified	47%	39%	No specific target, but planning policy presumption against loss of B&MV	Not identified, though as resource is non-renewable loss will be negative.		Losses caused primarily by loss of greenfield land to urban and other development including transport	EA Soil Strategy Final version due late 2005
Nitrate Vulnerable Zones (Nos declared**)**	The whole of the plan area is a designated NVZ	No quantitative data, though most of the region is designated NVZ	No quantitative data, though most of England is designated NVZ	Not identified	There have recently been major new designations of NVZ after the initial designations from 1996		Designation of NVZ demonstrates sensitivity to pollution rather than loss of soil	EA
Area of contaminated land	Comprehensive data not available	No data available	No data available	Not identified	District Councils have not yet accumulated comprehensive data on contaminated land, or trends		Contamination is likely to be decreasing slowly as land remediation measures are put into place, and with stricter pollution controls. However Nottinghamshire is likely to have historically high levels of contamination due to its mining and industrial history	None available

INDICATOR STATUS

	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national Performance		No data available, Indicator cannot be assessed

SEA Topic:	Water						
Indicator	**Local data**	**Regional data**	**National data**	**Target**	**Trend**	**Indicator Status and Comments**	**Data Sources**
% of Public Water supply from aquifer	80% (Notts.)	Not available	Not available	Not identified	Not identified	Notts is heavily reliant on aquifer water supply, and therefore long term problems of contamination and water supply deficiency, particularly in light of climate change impacts	EA Notts Climate Change Study
Planning permissions granted contrary to EA advice	Not available	132 (2004)	317	0	Worst regional performance of English Regions. Next worst =SW at 86).	Development in floodplain presents a significant future threat of flooding	EA Notts Climate Change Study
Catchments closed to further abstraction	Not available	58% of region	Not available	Not defined	Catchments are being closed to future abstraction over time as demand increases. Trends identified in Notts Climate Change study indicate water supplies will be increasingly limited in future	Closing of catchments to further abstraction is an indicator of supply problems	EA
Nos of Groundwater Protection Zones	Much of the urban area of Nottingham and the land up to Mansfield and beyond is a Groundwater Source Protection Zone	Quantitative data unavailable	Quantitative data unavailable	Not defined	N/A	Extent of protection zone reflects reliance on groundwater for local water supplies	Environment Agency Website

Chemical river quality	Not available to local level	95% meet good or fair	Average 94% meet good or fair	Not defined locally	Getting better		IPPC and other controls are improving surface water quality	Environment Agency Website
Biological river quality	Not available to local level	97% meet good or fair	Average 95% meet good or fair	Not defined locally	Getting better		IPPC and other controls are improving surface water quality	Environment Agency Website
Flood risk – properties at risk	14,519 (Fluvial Trent Strategy – includes properties north of river)	143,000 properties* 357,000 people* 2774 km² (15% of area) *	N/A	None identified	* all these lie within the 1% AEP of flooding		Flood risk is managed by EA primarily through flood defence management	AEP = Annual Event probability

INDICATOR STATUS

	No problem, indicator is in line or better Than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national Performance		No data available, Indicator cannot be assessed

SEA Topic:	**Cultural Heritage**						
Indicator	**Local data**	**Regional data**	**National data**	**Target**	**Trend**	**Indicator Status and Comments**	**Data Sources**
% of listed sites at risk Grade I or II* Grade II buildings	 Nottingham: 56 (3.9%) Greater Nottingham: 7 Notts: 16 (2005)	 5.4% 1 205 (5.5%)	 3.7%	Not defined	Notts figures worse than regional average	Reducing loss and damage to listed buildings is a priority	Historic buildings at risk in Notts 2005 (EH)
Number of scheduled ancient monuments	167 (Notts.)	1 508	19 594	Not defined	Trend data not available	Protect SAMs and their settings from harmful impacts	Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Number of conservation areas	156 (Notts. including City)	1006	Not identified	None identified	Little change over time	Quality of conservation areas is more an issue than number	As above.
Historic landscape character (see also landscape)	Historic landscape characterisation of Nottinghamshire	N/A	N/A	N/A	N/A	Contextual information on historic landscape character which should be used to assess individual proposals	Notts CC Historic Landscapes Character Project and mapping
Conservation Character Appraisals	Assessment of character of specific conservation areas	N/A	N/A	N/A	N/A	Contextual information on conservation areas which should be used to assess individual proposals A new Best Value Performance Indicator is being introduced (BVPI 219) that will measure local authority progress on producing CAAs and management proposals.	County Council, English Heritage

INDICATOR STATUS

	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national performance		No data available, Indicator cannot be assessed

SEA Topic:	**Material assets**							
Indicator	**Local data**	**Regional data**	**National data**	**Target**	**Trend**	**Indicator Status and Comments**		**Data Sources**
Annual waste arising (tonnes) MSW Industrial& Commercial Construction	Nottinghamshire 632,000 1 million 2.2 million	 2.4million 7.7million 9.9million	25 million		Municipal waste growth is above national average			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Recycling and composition (tonnes) MSW Industrial& Commercial Construction	Nottinghamshire 175,000 (28%)	 650,000 (27%) 2.6million (33%) 8.7million (88%)	23%	50% recycling of municipal waste by 2016	Recycling rates significantly improved and above national and regional average. Expect to meet 2016 target			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Incineration (tonnes) Municipal	Nottinghamshire 151,000	 151,000			Rates have remained relatively constant			As above
Landfill (tonnes) Municipal Industrial& Commercial Construction & demolition	Nottinghamshire 314,000 (50%) 1million 358,000 (16%)	 1.9million (77%) 3.9million (50%) 1.2million (12%)			Landfill of municipal waste is lower than regional/national average &has declined compared to previous 5 years.		Disposal of commercial& industrial waste has increased 35% since 2000/01	As above
Waste disposed of to landfill - type in tonnes:- Power Station ash Construction and Demolition waste Household / Commercial / Industrial	Notts: 554,000 477,000 1,452,000	 6.1 million tonnes 9.6 million tonnes	No identified	The regional waste strategy identifies a target to achieve zero growth in waste by 2016.	Current trends are continued growth in waste arisings including C&D (which accounts for most waste from transport projects)		No specific data on the waste arisings from transport projects exists	Regional Waste Strategy
Energy recovered from incineration	Nottinghamshire 19 megawatts per annum	19 megawatts per annum			No meaningful comparison available but offsets fossil fuel uses			As above

Mineral reserves (sand, gravel, stone)	No specific data	No specific data	No specific data	None identified	Although no specific target exists, minerals are a finite resource and rates of consumption should be minimised		Transport projects can create a significant demand for minerals, especially sand, gravel and stone	Minerals Local Plan
Fossil fuel consumption	No specific data available	No specific data available	No specific data available	None identified, though a target for reducing emissions from transport of 1% a year has direct equivalence in relation to use of fossil fuels	Current trends are increasing use of fossil fuels due to increased used of vehicles Conversely known reserves of fossil fuels are expected to peak later this decade		Vehicle mileage is likely to be used as a proxy for fuel use, although fuel use per mile is slowly reducing due greater vehicle efficiency	UK Climate Impacts Programme

INDICATOR STATUS

	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national performance		No data available, Indicator cannot be assessed

SEA Topic:	**Climatic factors & Air quality**						
Indicator	**Local data**	**Regional data**	**National data**	**Target**	**Trend**	**Indicator Status and Comments**	**Data Sources**
Use CO_2 emissions modelling data	Greater Notts 2002 data.9.9 m. tonnes	Not available	152.7 m. tonnes 9% increase since 1990	60% reduction on 1990 by 2050 – equivalent to 1% per year	Current trend data suggests emissions from road transport are rising both at the national and local level	Although emissions locally from transport are increasing at a slower rate than the national average, the area is still below the national target. Transport emissions are rising, despite improvements in vehicle technology, due to increased vehicle mileage	National atmospheric emissions inventory
Total CO_2 emissions from the area	North Notts 2002 data 18.2 m. tonnes Nottinghamshire =28.09 million	Not available	152.7 m. tonnes	60% reduction 2050 on 1990	Reduction. Nottinghamshire accounts for almost 20% of national CO_2	Overall slight reduction over time.	National atmospheric emissions inventory **http://www.naei.org.uk/mapping/mapping_2002.php** Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Total CO_2 emissions from road transport	North Notts 2002 data 7.6 m. tonnes	Not available	N/A	60% reduction 2050 on 1990	Reduction.	Transport emissions still rising.	National atmospheric emissions inventory **http://www.naei.org.uk/mapping/mapping_2002.php**

NO_X/NO_2 levels $\mu g/m_3$	40 –44 (Hot spots)	46.6	N/A	40 $\mu g/m^3$ annual mean average.	NO_X/NO_2 levels exceed targets thresholds in designated AQMAs only		4 AQMA areas designated for NO_X/NO_2 exceedences.	Local authority air quality monitoring
PM_{10} levels	Predicted 2005 level of 4061 tonnes per year	N/A	N/A	40 $\mu g/m^3$ annual mean average.	No trend data exists, although local levels are less than national threshold for AQMA designation		None of the local AQMA areas are designated for particulate exceedences	Local authority air quality monitoring
Number of days moderate or poor air quality	24 (Nottingham City Centre)				No comparable data at present			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Number of Air Quality Management Areas	6				No comparable data at present			AS Above
Greenhouse gas emissions	To follow	To follow	To follow	12.5% reduction below 1990 levels by 2018	Nationally there was a 6% reduction (1990-96) and further reductions expected			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Average temperature	To follow	To follow	To follow		No local figure but regional increase suggests a general rise 0.5^oC increase in			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft

					last 100 years			
Average rainfall par annum	Nottinghamshire = 600mm	700mm	823m		East Midlands is one of the driest regions of UK and parts of Nottinghamshire fall well below average levels		Protect surface and groundwater resources	Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft
Flood risk (number of properties at risk)		169,000 (18% land area)			Unable to assess			As above
Light pollution (increase since 1998)	25%	30%	24%		Increase is less than regional figure but Nottinghamshire has highest percentage within the worst affected category			Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft

INDICATOR STATUS

	No problem, indicator is in line or better than the target		Indicator is significantly below target and is a priority for attention
	Indicator is below target or regional/national performance		No data available, Indicator cannot be assessed

14 APPENDIX B: RESULTS OF SCOPING REPORT CONSULTATION

English Heritage	
Accept approach to link together 'landscape and townscape' in terms of historic environment and consideration of Nottinghamshire's Historic Landscape Characterisation (HLC) under 'Cultural Heritage.'	Support noted
Would like to see the reference to 'conserving the environment' in 1.6.4 (4th objective) to include 'conserving and enhancing the landscape and townscape (or built environment)'.	These aspects are included within the Quality of Life objective as specified in DfT guidance on Local Transport Plans.
(Figure 2 SEA/LTP2 Objectives Compatibility Matrix). There could be negative impacts between the historic environment and townscape character on one hand and managing congestion/improving accessibility on the other, e.g. the negative impacts of tram infrastructure. Similarly, there could be negative impacts on landscape quality if new roads are to be built.	The Matrix and following explanatory text in the Environmental Report have been amended to reflect this.
Tables 3 and 4 – While 'townscape' is identified as a NATA sub-objective in Table 4, the protection and enhancement of townscape has not been identified as a proposed SEA objective in Tables 3 and 4 or Figure 2. The SEA objective for 'townscape' in Table 4 seems to relate to NATA sub-objective Cultural Heritage. A distinct objective is required for 'townscape' relating to maintaining and enhancing the character and quality of townscape, particularly in conservation areas. Would welcome the reference to setting in the indicator in Table 3. It should be noted that 'designated sites and buildings' should include locally listed buildings and features where appropriate.	SA objectives and indicators have been amended accordingly
Townscape character can be directly affected by the design of a scheme, such as the proliferation of street clutter, use of poor quality or inappropriate materials and street furniture etc.	Environmental Report reflects this comment.
Need to check Conservation Character Appraisals/historic landscape characterisation and also any non-designated features of more local historic interest and feed into baseline data	Environmental Report reflects this comment.
The prediction of problems and significant effects set out in Table 8 will need to be evaluated in more detail in the Environmental Report on the options.	This has been undertaken in the Environmental Report.
Should be noted that Buildings at Risk based on the at risk registers only covers a small proportion of the number of listed buildings.	Noted.
East Midlands Transport Activists Round Table	
Suggestions to improve the SA indicators	All suggestions taken into account in the Environmental Report.
Environment Agency	
Use of SuDs should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife.	Noted. These aspects will be considered at detailed design phase of specific schemes. Mitigation measures will address this.

In relation to the floodplain, appropriate mitigation measures must be included to avoid new transport projects becoming barriers to the flow of floodwater	Noted. These aspects will be considered at detailed design phase of specific schemes. Mitigation measures will address this.
Scoping Report has included most biodiversity concerns in relation to protected species and habitats. Would like to see opportunities explored that promote wildlife corridors and roadside verges. Consideration to be given also to mammal passes (under roads and culverts). Strategic corridors for wildlife movement should be maximised.	Noted. These aspects will be considered at detailed design phase of specific schemes. Mitigation measures will address this.
English Nature	
Support the approach to monitor site extent, condition, creation and restoration.	Noted
Confirm that the figure for the percentage area of SSSI in favourable condition is 58.87%.	Noted

15 APPENDIX C: EFFECTS PREDICTION ASSESSMENT

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Noise	**Short term = 0-3 years** **Medium Term = 3 years – end of the plan period** **Long term = Beyond the plan period**	
SEA topic/receptor	**Noise, human health**		
SEA objective(s)	To reduce levels of transport related noise in particular in areas of high sensitivity to noise		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Area is predominantly urban and therefore vulnerable to noise impacts	Long term	Permanent	Positive but localised Positive to lower income groups as live closer to main transport routes. Beneficial effect on pedestrians	Potential for encouraging more efficient use of main routes but also threat of displacement of traffic	High level of uncertainty. No data to demonstrate particularly vulnerable areas	Consider route/access restrictions for inappropriate routes in addition to ones that are being treated by the network management measures.	Generic assessment in absence of data for vulnerable areas.
Public transport		Long term	Permanent	Short term negative effect due to construction and medium term benefits as a result of measures Local noise impact along main public transport corridors Positive effect of most measures	Potential negative impact on noise owing to efficiency of public transport system.	Low level	Quality Agreements could introduce quieter vehicles. Avoid night time construction	Generic assessment in absence of data for vulnerable areas.
Pedestrian & cycling		Long term	Permanent	Positive effect Short-term negative effect due to construction on those living near to schemes.	Encourages reduction in car use.	Low level	Avoid night time construction	Generic assessment in absence of data for vulnerable areas.
Neighbourhood and/or local centre improvements		Long term	Permanent	Some speed reduction measures may increase localised noise (e.g. road humps). Short term negative effect due to construction and medium term benefits as a result of measures	Vehicle drivers would avoid using traffic calmed areas	Medium level as driver behaviour is unpredictable	Avoid night time construction Sensitive location and design of physical measures	Generic assessment in absence of data for vulnerable areas.

Safety schemes		Long term	Permanent	Localised negative effects. Physical measures may increase noise levels. Short term negative effect due to construction and medium term benefits as a result of measures	Vehicle drivers would avoid using routes with implemented safety measures. Secondary effect would occur where drivers re-route	Medium level as driver behaviour is unpredictable	Sensitive location and design of physical measures Avoid night time construction	Generic assessment in absence of data for vulnerable areas.
Smarter travel choices		Short term	Temporary/ Reversible	No direct impact	Encourages reduction in car use.	Low level due to uncertainty of the effectiveness of schemes	None necessary	Generic assessment in absence of data for vulnerable areas
Regeneration projects		Long term	Permanent	Negative impact locally but overall positive impact as policies encourage sustainable development patterns. Short-term negative effect due to construction.	Increased localised traffic movements	Low level of level	Development Briefs/Area Acton Plans to promote mixed-use developments. Design in sustainable transport faculties Avoid night time construction	Supported through EIA
Maintenance		Medium term	Permanent	Positive effect in terms of repairing damaged surfaces and replacing with low noise materials. Short term negative effect due to construction	None identified	Low level	Avoid night time construction	Generic assessment in absence of data for vulnerable areas

	Positive impact	**Qualitative summary:**	Short-term localised negative impact owing to construction noise and long-term positive effect due to impact on car use and vehicle traffic across the whole plan area.
	Neutral impact	**Quantitative summary:**	-
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Significant issue but no significant impacts as a result of LTP. To be reviewed in light of emerging national guidance.
	Impact depends on implementation		

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Local air quality	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Air, human health**		
SEA objective(s)	To maintain and improve air quality in the AQMAs and then across all areas		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	The whole LTP area population and network users, with special attention due to AQMAs and district centres, where measures are applied	Long term	Permanent/temporary	Positive due to freer flowing traffic	Possible negative impact as increased network capacity could induce more traffic	Medium	Ensure liberated capacity is used for sustainable modes of transport	Transport planning professional judgement
Public transport	The whole LTP area population and network users, with special attention due to AQMAs and along bus corridors	Long term	Permanent/temporary	Positive, as improves modal shift towards better sustainability	Dedicated bus lanes may create congestion and less free flowing traffic	High for assessment of secondary negative impact	Ensure synergies with "smarter choices" measures	Transport planning professional judgement
Pedestrian & cycling	The whole LTP area, with special attention due to AQMAs and areas where measures are applied	Long term	Permanent/temporary	positive for pedestrians and cyclists' environment	Positive by encouraging sustainable modal shift	Medium due to difficulty in collecting sufficient data on cyclists and pedestrians' usage	Travel perception surveys every 2 years contribute to relevant data	Transport planning professional judgement
Neighbourhood and/or local centre improvements	The whole LTP area, with special attention due to AQMAs and district centres, where measures are applied (residents, employees, visitors)	Long term	Permanent/temporary	positive	Positive as encourages sustainable modal shift for short trips, and improves access to local facilities	Medium due to lack of data on local trips	Personal travel surveys every 2 years contribute to collect relevant data	Transport planning professional judgement
Safety schemes	The whole LTP area, with special attention due to AQMAs, areas where measures are applied and routes to schools (children)	Long term	Permanent/temporary	Possible negative impact due to road humps	Positive as encourages sustainable modal shift, especially for travel to school which occurs during peak congestion hours	Medium due to lack of data	Safer routes to school monitoring	Transport planning professional judgement
Smarter travel choices	The whole LTP area population and network users, with special attention due to AQMAs and areas where measures are applied	Short term	temporary	Positive as contributes importantly to marketing, education and awareness of the population to sustainability, including air quality	Positive as information strategy encourages shift in modal behaviour, encouraging sustainability	Medium. These measures need permanent and on-going implementation. Evidence exists, but is not included in the Plan modelling		Transport planning professional judgement

Regeneration projects	The whole LTP area, with special attention due to AQMAs and regeneration areas	Long term	Permanent/ temporary	Mixed developments with parking restraints consistent with economic and environmental objectives	Positive as encourages sustainable modal shift for short trips, and improves access to local facilities	Medium due to lack of data	Full integration of land use and transport planning, allowing for Control and Restraint and ensuring control of implementation. Also monitoring of effects during and after completion	Transport planning professional judgement
Maintenance	The whole LTP area, with special attention due to AQMAs and works areas	Long term	Permanent/temporary		Increased congestion during works, but positive impact on walking and cycling			Transport planning professional judgement

	Positive impact	**Qualitative summary:**	positive
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Transport is the main source of air quality pollution in urban areas
	Impact depends on implementation		

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Greenhouse gases	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Climatic factors**		
SEA objective(s)	Reduce greenhouse gas emissions from transport and the use of fossil fuels		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	All LTP area population and networks users	Long term	Permanent/temporary	Although in Greater Nottingham, overall traffic levels have stabilised in the last five years, CO2 emissions from transport within the sub-region (and those of nitrogen dioxide, another potent greenhouse gas) still represent a major environmental concern. Whilst vehicles are expected to be more efficient in the future, the impact of technological advances is likely to be small compared to that of increasing vehicle use. The only real solution to reducing carbon dioxide and other greenhouse emissions from transport will be a reduction in vehicle use. However it is also the case that many of the major influences over the levels of car use, particularly the price of fuel and the taxation on vehicles, are outside the influence of the Local Transport Plan. Overall, LTP2 aims to reduce car use and		High - Road transport is a major and growing contributor to UK CO2 emissions, making up around one quarter of total emissions. Nitrogen dioxide, which is also results from vehicle use, is another potent greenhouse gas. To reduce these emissions to levels sufficient to meet the stated national targets a combination of making vehicles more fuel efficient, development of alternative fuel technology and reducing congestion reducing overall traffic volumes will all be required.	The authorities will contribute to achieving the target through the policies and strategies contained in this LTP. The measures set out to tackle congestion, Bus Strategy elements, walking, cycling and Rights of Way measures that reduce car use along with complimentary education and awareness measure through the Big Wheel will allcontribute to reducing road traffic and consequently reducing CO2 emissions within the Plan area. In addition both authorities participate in the Local Authority Carbon Management Programme, run by the Carbon Trust. The programme requires the Councils to set meaningful targets for CO2 emission reduction from both internal activities, plus those where it can influence emissions from the wider community.	Pollution control and transport planning professionals
Public transport	All LTP area population and networks users	Long term	Permanent/temporary					
Pedestrian & cycling	All LTP area population and networks users	Long term	Permanent/temporary					
Neighbourhood and/or local centre improvements	All LTP area population and networks users	Long term	Permanent/temporary					
Safety schemes	All LTP area population and networks users	Long term	Permanent/temporary					
Smarter travel choices	All LTP area population and networks users							

Regeneration projects	All LTP area population and networks users	Long term	Permanent/temporary					
Maintenance	All LTP area population and networks users	Long term	Permanent/temporary					

	Positive impact	**Qualitative summary:**	Positive
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	As assessment of impacts on Air Quality, but with much less significance due to other factors affecting climatic factors
	Impact depends on implementation		

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Landscape	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Landscape**		
SEA objective(s)	Support enjoyment of the countryside and improvements to landscape quality		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	There are a number of Mature Landscape Areas in rural parts of the plan area, and also a number of conservation areas within some of the village/urban areas. However with these exceptions the plan area is not considered particularly vulnerable to landscape damage.	Permanent	Long term	Minor – some network management measures such as signing and lighting may have an impact, but this may be positive or negative depending on what it replaces.	None identified	Medium – depends on nature of measure	Follow good design guidance for minimising the impact of roadside signage and infrastructure	Professional judgement
Public transport		Permanent	Long term	Major projects such as NET Phase 2 may have a significant impact on townscape, though it is subjective as to whether this is positive or negative	None identified	Medium – depends on design and baseline conditions	Design needs to be sensitive to areas of townscape value	Professional judgement
Pedestrian & cycling		Permanent	Long term	Minor – some cycling treatments such as red surfacing may impact adversely on the character of conservation areas. Rural cycling schemes can increase suburbanisation, Conversely urban pedestrianisation schemes may have a positive impact	Impact of more schemes may be cumulative	Low	Cycling measures in sensitive areas need to be considered carefully and designed appropriately	Professional judgement
Neighbourhood and/or local centre improvements		Permanent	Long term	Positive impact – local improvement schemes can improve the character of neglected areas	Impact can be cumulative with more than one scheme lifting the character of the whole conurbation	Low – depends however on design	Ensure high standards of design, seek to prevent fragmentation of habitats and promote green corridors to ensure connectivity irrespective of a designation	Professional judgement

Safety schemes		Permanent	Long term	Small negative impact – safety schemes in rural areas can add to a feeling of suburbanisation	Cumulative impact – the more schemes the more the sense of surburbanisation	Low – impacts of this nature are well understood	Careful design can reduce but not eliminate impact	Professional judgement
Smarter travel choices		Not applicable	Not applicable	None identified	None identified	Not applicable	Not applicable	Professional judgement
Regeneration projects		Permanent	Long term	Positive impact – regeneration schemes can improve the character of neglected urban areas	Impact can be cumulative with more than one regeneration schemes lifting the character of the whole conurbation	Low – depends however on design	Ensure high standards of design, seek to prevent fragmentation of habitats and promote green corridors to ensure connectivity irrespective of a designation	Professional judgement
Maintenance		Permanent	Long term	None identified	None identified	Not applicable	Not applicable	Professional judgement

	Positive impact	**Qualitative summary:**	Overall the impact of the LTP is likely to be low, but differentiated between urban and rural areas. In urban areas there are likely to be positive benefits associated with neighbourhood renewal and regeneration schemes, though some measures in conservation areas will need to be designed carefully. In rural areas the impact of safety schemes, cycleways and other measures may increase suburbanisation of the countryside.
	Neutral impact	**Quantitative summary:**	None
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Overall the weighting of landscape impacts is considered to be moderately significant, but variable both in terms of location and whether the impact is positive or negative..
	Impact depends on implementation		

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Townscape, heritage of historic resources	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Population, material assets**		
SEA objective(s)	Maintain and enhance the character and appearance of townscape (with particular regard to Conservation Areas)		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	City, District and Local Centres	Short term	Permanent	Opportunity to rationalise signalling equipment and signage to reduce clutter. Minor improvements to views of buildings through the removal of stationary traffic.	Very minor – reduced vehicle emissions mean cleaner building facades	High	Application of the principles of the Streetscape Manual Code of Practice and of the 'Streets for All East Midlands' (English Heritage and the Department for Transport) will ensure high quality public realm	Expert Judgement
Public transport	Bus Routes/Corridors	Short term	Permanent	Opportunities to upgrade facilities	Modal transfer to buses should result in overall reduced vehicle emissions (see above)	High		Expert Judgement
Pedestrian & cycling	Location Specific/Area Wide	Short term	Permanent	In urban areas, these measures may contribute to creating a sense of place and identity by encouraging local access	See above	High		Expert Judgement
Neighbourhood and/or local centre improvements	District and Local Centres	Short term	Permanent	Possible opportunity to refurbish/clean building facades within the scheme In urban areas, these measures may contribute to creating a sense of place and identity by encouraging local access		High		Expert Judgement
Safety schemes	Location Specific/Area Wide	Short term	Permanent	In urban areas, these measures may contribute to creating a sense of place and identity by encouraging local access	None			Expert Judgement

Smarter travel choices	Area Wide	Short term	N/A	Probably Not Measurable	Very Minor – as Public Transport	High		Expert Judgement
Regeneration projects	Regeneration Areas	Medium term	Permanent	Possible opportunity to include improvements, refurbishment or cleaning of buildings	Public Realm Improvements may enhance building context	Medium	Application of the principles of the Streetscape Manual Code of Practice and of the 'Streets for All East Midlands' (English Heritage and the Department for Transport) will ensure high quality public realm	Expert Judgement
Maintenance	Area Wide	Short term	Temporary	Positive	None			Expert Judgement

	Positive impact	**Qualitative summary:**	Positive but probably too low to measure
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Neutral
	Impact depends on implementation		

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Biodiversity	**Short term = 0-3 years** **Medium Term = 3 years – end of the plan period** **Long term = Beyond the plan period**	
SEA topic/receptor	**Biodiversity, fauna, flora, soil**		
SEA objective(s)	To conserve and enhance biodiversity		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Biodiversity of high value within urban area	N/a	N/a	None	None	Medium level. Ability of species to survive relocation and new climate impacts	None required	Informed judgement with cross reference to baseline data
Public transport		Long Term	Permanent	Negative	Potential to increase biodiversity through design and management	Medium level. Ability of species to survive relocation and new climate impacts	Landscaping and other measures incorporated to encourage diversity. Seek to prevent fragmentation of habitats and promote green corridors to ensure connectivity irrespective of a designation	Informed judgement with cross reference to baseline data
Pedestrian & cycling		Long Term	Permanent	Negative	Potential to promote awareness and countryside issues	Medium level. Ability of species to survive relocation and new climate impacts	Education measures	Informed judgement with cross reference to baseline data
Neighbourhood and/or local centre improvements		Long Term	Permanent	Negative	Potential to increase biodiversity through design and management	Medium level. Ability of species to survive relocation and new climate impacts	Landscaping and other measures incorporated to encourage diversity and to prevent fragmentation of habitats and promote green corridors to ensure connectivity irrespective of a designation	Informed judgement with cross reference to baseline data
Safety schemes		Long Term	Permanent	Negative	Potential to increase biodiversity through design and management	Medium level. Ability of species to survive relocation and new climate impacts	Landscaping and other measures incorporated to encourage diversity	Informed judgement with cross reference to baseline data

Smarter travel choices		N/a	N/a	None	None	Medium level. Ability of species to survive relocation and new climate impacts	None required	Informed judgement with cross reference to baseline data
Regeneration projects		Long Term	Permanent	Negative	Potential to increase biodiversity through design and management	Medium level. Ability of species to survive relocation and new climate impacts	Landscaping and other measures incorporated to encourage diversity Opportunities to be explored that promote wildlife corridors and roadside verges. Consideration to be given also to mammal passes (under roads and culverts). In order to maximise strategic corridors for wildlife movement.	Informed judgement with cross reference to baseline data
Maintenance		Long Term	Permanent	Negative	Maintenance practices may impact on biodiversity in transport corridors	Medium level. Ability of species to survive relocation and new climate impacts	Adoption of best practice	Informed judgement with cross reference to baseline data

	Positive impact	**Qualitative summary:**	Input dependent on design, implementation and management. Biodiversity is a critical issue within the Plan Area
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Opportunities should be taken to maximise biodiversity enhancement
	Impact depends on implementation		

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Water environment	**Short term = 0-3 years** **Medium Term = 3 years – end of the plan period** **Long term = Beyond the plan period**	
SEA topic/receptor	**Water**		
SEA objective(s)	To maintain the network of inland waterways and promote their positive use and enhancement Minimise water run-off and contamination from transport infrastructure		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	All water courses within Plan area vulnerable to contamination/flooding	N/a	N/a	None	None	High certainty of land use change and uncertainty of future climatic conditions	None required	Cross referenced to baseline data
Public transport		Long Term	Permanent	Potentially some negative effects due to run off affecting neighbouring land uses	Potential cumulative effect on watercourses	High certainty of land use change and uncertainty of future climatic conditions	Use of Sustainable urban Drainage Systems should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife	Cross referenced to baseline data
Pedestrian & cycling		Long Term	Permanent	Positive impact on promotion of waterways	More positive management and care of waterways. Some adverse input on water quality through increased activity	High certainty of land use change and uncertainty of future climatic conditions	Education measures	Cross referenced to baseline data
Neighbourhood and/or local centre improvements		Long Term	Permanent	Localised negative inputs due to increased run off	Potential cumulative effect on watercourses	High certainty of land use change and uncertainty of future climatic conditions	Use of Sustainable urban Drainage Systems should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife	Cross referenced to baseline data
Safety schemes		Long Term	Permanent	Localised negative inputs due to increased run off	Potential cumulative effect on watercourses	High certainty of land use change and uncertainty of future climatic conditions	Sustainable drainage schemes implemented where appropriate	Cross referenced to baseline data

Smarter travel choices		N/a	N/a	None	None	High certainty of land use change and uncertainty of future climatic conditions	None required	Cross referenced to baseline data
Regeneration projects		Long Term	Permanent	Localised negative inputs due to increased run off	Potential cumulative effect on watercourses	High certainty of land use change and uncertainty of future climatic conditions	Water risks condition of planning approvals Use of Sustainable urban Drainage Systems should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife. In relation to the floodplain, appropriate mitigation measures must be included to avoid new transport projects becoming barriers to the flow of floodwater	Cross referenced to baseline data
Maintenance		Short Term	Temporary	Risks during construction	Potential to upgrade drainage	High certainty of land use change and uncertainty of future climatic conditions	Adoption of construction best practice Use of Sustainable urban Drainage Systems should be considered whenever possible in road drainage projects. This is in order to improve water quality of road run off in addition to increase areas for wildlife.	Cross referenced to baseline data

	Positive impact	**Qualitative summary:**	Increase in impermeable surfaces increase contamination and flooding risks to be mitigated through design of drainage systems
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Medium level of significance for Plan measures, Gamston P&R may require particular attention
	Impact depends on implementation		

NATA objective	ENVIRONMENT	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Physical fitness	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Human health**		
SEA objective(s)	Improve health and reduce health inequality		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Lack of physical fitness and associated health problems is acknowledged as a problem generally in the Plan Area and particularly in socially deprived areas	N/a	N/a	None identified	None identified	N/a	N/a	Professional judgement
Public transport		Long term	Permanent	Minor increase in walking to and from bus stops	None identified	Low level	None	Medical research on benefits of walking
Pedestrian & cycling		Long term	Permanent	Major positive benefit by promoting cycling and walking	None identified	None	Ensure that cycling and walking faculties are located in socially deprived areas as well as elsewhere and that pedestrian faculties are suitable for the disabled	Medical research on benefits of cycling and walking
Neighbourhood and/or local centre improvements		Long term	Permanent	Minor positive impact by promoting walking in and to urban centres and cycle access	None identified	Low level	Ensure cycle storage faculties are designed into schemes	Medical research on benefits of cycling and walking
Safety schemes		Long term	Permanent	Positive impact by making cycling in particular a safer mode of transport	Walkers more likely to walk given safer road conditions	Low level	Ensure needs of cyclists and walkers are built into scheme design	Medical research on benefits of cycling and walking Analysis of accident data

Smarter travel choices		Short term	Temporary	Positive impact by promoting the health benefits of cycling and walking and providing faculties for cyclists and walkers	Encouraging cycling and walking for commuting (e.g. travel plans) also promotes recreational cycling and walking	Low level	Ensure smart choice programmes emphasise the health benefits of cycling and walking alongside other benefits	Medical research on benefits of cycling and walking Survey data on existing smart choice programmes
Regeneration projects		Long term	Permanent	Positive impacts though co-location of employment and residential areas which encourage cycling and walking		Depends on design of development	Ensure provision for cycling and walking are designed into development	Medical research on benefits of cycling and walking
Maintenance		Long term	Permanent	Positive impacts through the maintenance of cycling and walking faculties	None identified	None	Use road maintenance schemes as an opportunity to maximise cyclist and pedestrian safety	Medical research on benefits of cycling and walking

	Positive impact	**Qualitative summary:**	Overall a major benefit as the LTP provides strong support for cycling and walking which in turn have well-established benefits for health and physical fitness.
	Neutral impact	**Quantitative summary:**	Data exists on levels of cycling and walking and on the health benefits of these activates. However no directs data on the measurable health benefits of the LTP
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Significant positive impact
	Impact depends on implementation		

NATA objective	SAFETY	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Security	**Short term = 0-3 years** **Medium Term = 3 years – end of the plan period** **Long term = Beyond the plan period**	
SEA topic/receptor	**Human health, population**		
SEA objective(s)	Casualty reduction and reduce crime and fear of crime associated with transport		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Road accidents are more concentrated in areas of deprivation and amongst young people and motor cyclists Transport-related crime levels are higher in Greater Nottingham than the national average and again are higher in areas of deprivation	Long term	Permanent	Minor positive – well managed network has slight benefit in reducing accident levels	None identified	Low level	None identified	Professional judgement
Public transport		Long term	Permanent	Minor positive – public transport is statistically safer than car use. Positive impact from specific security improvement measures Minor negative – fear of crime on public transport is greater than for use of car though statistics do not support this	None identified	Medium – true impacts are not known for certain	Provision of safety provision such as CCTV lighting and Respect for transport campaign	Survey data Accident statistics
Pedestrian & cycling		Long term/ short term	Permanent/ temporary	Sort term possible increase in casualties to cyclists as a result of cycle promotion. Benefits where off-road cycling and pedestrian facilities are improved	Longer term benefits as cycling becomes more widely practised and road users take more	Medium – the research is not conclusive over the short term impact of increased cycling	Ensuring that cyclist and pedestrian schemes consider safety. Wider campaigns to promote road safety	Professional judgement
Neighbourhood and/or local centre improvements		Long term	Permanent	Improvements which slow traffic and create more space for pedestrians will have net positive impact, particularly where accompanied by improved lighting/CCTV	None identified	Low level	Ensuring that road safety and personal security issues are considered in scheme designs	Professional judgement

Safety schemes		Long term	Permanent	Positive impact, as schemes are designed to improve road safety	None identified	None identified	None	Professional judgement and empirical evidence
Smarter travel choices		Short term	Temporary	Positive – road safety and personal security are explicit parts of most smarter travel campaigns, and certain focus entirely on safety (e.g. motorcyclists, Respect for Transport, schoolchildren)	None identified	None identified	None	Professional judgement and empirical evidence
Regeneration projects		Long term	Permanent	Small positive where schemes improve lighting and provide CCTV	None identified	None identified	Ensure design of new regeneration projects maximise opportunity to design out crime	Professional judgement
Maintenance		Long term	Permanent	Small positive – poorly maintained roads can cause accidents	None identified	None identified	None	Professional judgement

	Positive impact	**Qualitative summary:**	Overall the measures in the LTP are likely to have a significant positive impact on safety, and indeed this is one of the plan's key objectives. The main potentially negative impact will be if the measures in the plan lead to an increase in cycling, which leads in turn to more accidents involving cyclists. This potential impact is subject to some uncertainty and requires further research. It is however considered to be a relatively short term impact. In the longer term greater numbers of cyclists is likely to heighten driver awareness and reduce accidents, though this is also subject to uncertainty and requires further research.
	Neutral impact	**Quantitative summary:**	Data on the numbers of people Killed and Seriously Injured as a result of road accidents is closely monitored in the LTP. There are also statistics on crimes associated with transport.
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	High positive overall, though with potentially moderate negative impact in relation to cyclists (which should be mitigated by other measures such as safety campaigns wherever possible).
	Impact depends on implementation		

NATA objective	ACCESSIBILITY	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Community severance	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Population – social, cultural, modal, mobility and geographical inclusion**		
SEA objective(s)	Reduce the need to travel through the promotion of sustainable development locations		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Population and all network users	Long term	Permanent	Positive, especially to address social and geographical inclusion	Increased efficiency of movement in treated areas (e.g. enforcement of parking in bus lanes)	Medium because of synergistic effects with other measures		Transport planning experts and accessibility planning document
Public transport	Population and all network users	Long term	Permanent	Positive, especially to address social inclusion of low income groups, different age groups, activity groups (workers), and geographical inclusion	Disbenefit for car users due to re-allocation of road space	low		Transport planning experts, accessibility planning document and previous LTP APR
Pedestrian & cycling	Population and all network users	Long term	Permanent	Positive for pedestrians and cyclists, residents and users of areas where measures are implemented, low income groups accessibility (no car access), impaired mobility groups, women, and young and elderly people	Positive Better access to bus corridors	Medium (low baseline data)		Transport and land use planning experts
Neighbourhood and/or local centre improvements	Population and users of treated areas	Long term	Permanent	Positive for local residents		low		Transport and land use planning experts, accessibility planning document

Safety schemes	Population and all network users	Long term	Permanent	Positive for school pupils, low income groups, extreme age groups, mobility impaired groups, local residents	Positive as lowers traffic, congestion and community severance	Low, but synergistic effect with "smarter choices" measures as affects travel behaviour	Ensure synergy with "smarter choices"	Transport and land use planning experts, accessibility planning document
Smarter travel choices	Population and all network users	Short term	temporary	Positive for all target groups, especially cultural target groups (ethnic, age, gender) as declining traffic		Low, but depends on availability of sustainable transport	Ensure sustainable transport options are available	
Regeneration projects	Local population	Long term	Permanent	Positive, with new opportunities for residents in employment, housing, services, leisure. Also positive for pedestrians all target groups	Possible increased traffic due to increased attraction of the local area	Low	Control and restraints associated transport links, integrated land use and transport planning	
Maintenance	Population and all network users	Long term	Permanent					

	Positive impact	**Qualitative summary:**	Positive
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Transport planning, when considering synergies between areas of intervention, plays a vital role for accessibility and inclusion of all population groups
	Impact depends on implementation		

NATA objective	ACCESSIBILITY	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Access to transport system	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Population – social, cultural, geographical inclusion**		
SEA objective(s)	Reduce the need to travel through the promotion of sustainable development locations		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Being established through the accessibility planning process but problems likely to be primarily in rural areas and with certain groups e.g. elderly disabled and low income	N/a	N/a	No significant impact	None identified	N/a	None	Professional judgement
Public transport		Long term	Permanent	High positive impact as public transport provides main solution to accessibly problems Emphasis on BQP schemes on low floor vehicles will improve situation for disabled Impact in rural areas of LTP measures limited and will be addressed through revenue funding	None identified	Low level though more certainty will follow completion of the accessibility planning process	None required	Detailed work on accessibility mapping through Notts Accessibility Partnership
Pedestrian & cycling		Long term	Permanent	High positive impact but limited to active members of the community	None identified	Low level	None required	Detailed work on accessibility mapping through Notts Accessibility Partnership
Neighbourhood and/or local centre improvements		Long term	Permanent	High positive impact for local residents where urban centres are made more pedestrian friendly. May be negative impact for vehicle users where these are routed away from urban centre	May increase traffic in peripheral areas	Impacts need to be assessed on a scheme by scheme bass	Ensure access for public transport users and disabled car drivers is protected in design of schemes	Professional judgement

Safety schemes		Long term	Permanent	Moderate impact by increasing safety of access for pedestrians and other road users	None identified	Low level	Take opportunity to design pedestrian access improvements into local safety schemes	Professional judgement
Smarter travel choices		Sort term	Temporary	Positive impact as a result of information on the availability of transport and schemes such as car sharing	Reduced traffic levels may locally increase accessibility	Impacts of smarter choices measures are not guaranteed	Ensure smart choices programmes maximise availability of information on transport availability	Professional judgement
Regeneration projects		Long/short term	Permanent/temporary	Overall positive impact in co-locating residential and employment faculties. In the short term may be problems in public transport availability until demand builds (though depends on locality)	More choice on potential employment sites – better accessibility	Depends on location of regeneration project	Early provision of public transport measures to new developments. Design in faculties into new developments for cycling and walking	Professional judgement
Maintenance		Long/short term	Permanent/temporary	Overall minor positive impact due to well-maintained transport infrastructure. May be short term decreases in accessibility during construction	During construction traffic may divert and cause temporary accessibility problems elsewhere	Low level	Positive promotion and management of alternative routes during major construction works	Professional judgement

	Positive impact	**Qualitative summary:**	Improving accessibly is a core objective of the plan and the overall impact will be positive particularly in the long term. Negative impacts are largely limited to construction.
	Neutral impact	**Quantitative summary:**	Not possible though may be able to predict benefits following completion of Accessibility Planning strategy and use of Accession software
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Significantly positive
	Impact depends on implementation		

NATA objective	ECONOMY	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Public accounts	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Material assets**		
SEA objective(s)	Reduce use of non-renewable resources and increase recycling		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Limited landfill capacity for waste e.g. construction materials. Finite resources including aggregates and fossil fuels	Long Term	Reversible	Positive through efficient traffic flow for car owners	Negative if results in indirect traffic	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement
Public transport		Long Term	Permanent	Negative for construction materials	Positive when modal change takes place for fuel use	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement
Pedestrian & cycling		Long Term	Permanent	Negative for construction materials	Positive when modal change takes place for fuel use	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement
Neighbourhood and/or local centre improvements		Long Term	Permanent	Negative for construction materials	Positive when modal change takes place for fuel use	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement
Safety schemes		Long Term	Permanent	Negative for construction materials	Positive when modal change takes place for fuel use	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement

Smarter travel choices		Short Term	Reversible	Positive through encouraging sustainable travel	Reduced fuel use	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement
Regeneration projects		Long Term	Permanent	Negative for construction materials	Supports sustainable development patterns	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement
Maintenance		Medium Term	Permanent	Negative for construction materials	Negative for expired material disposal	Low uncertainty achieved through scheme planning	Minimise use of new material and maximise use of recycled material	Informed judgement

	Positive impact	**Qualitative summary:**	New construction will increase material use. Modal change will help reduce non renewable fuel use
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Medium impact in terms of use of scarce resources
	Impact depends on implementation		

NATA objective	ECONOMY	**Worksheet completed by and date:**	*Workshop 13/09/05*
NATA sub-objective	Business users and transport providers	**Short term = 0-3 years Medium Term = 3 years – end of the plan period Long term = Beyond the plan period**	
SEA topic/receptor	**Material assets**		
SEA objective(s)	To support employment and business competitiveness		

LTP measures	**Value and vulnerability of the area likely to be affected**	**Magnitude of the effect**				**Level of uncertainty and associated comments**	**Mitigation and its implementation**	**How the judgement was reached**
		Time	Duration	Impact	Secondary/Cumulative/ Synergistic effects			
Network management	Economic performance of regional importance. Restructuring from manufacturing to service industries taking place	Long Term	Reversible	Positive in terms of congestion reduction reducing business costs	Potential to increase access to markets	Medium level as induced traffic may negate some benefits	Consider demand management measures also	Informed judgement
Public transport		Long Term	Reversible	Positive in terms of increasing access to labour supply	Modal change may also result in congestion relief reducing business costs	Medium level as variety of factors influence actual PT use	Effective partnership working with operators to maximise benefits of new infrastructure	Informed judgement
Pedestrian & cycling		Long Term	Permanent	Positive in terms of increasing access to labour supply	Modal change may also result in congestion relief reducing business costs	Medium level as variety of factors influence actual PT use	Consultation to ensure good design	Informed judgement
Neighbourhood and/or local centre improvements		Long Term	Reversible	Positive particularly for small/ local businesses	May result in localised loss of parking which could be detrimental to individual businesses	Medium level	Consultation and modification of designs if necessary	Informed judgement
Safety schemes		Long Term	Reversible	Negative as may be perceived to discourage access	Could result in business relocation in extreme instances	Low level due to negative impacts only in extreme cases.	Consultation and promotion of suitable alternative routes	Informed judgement
Smarter travel choices		Short term	Temporary	Positive in terms of increasing access for labour supply	Modal change may also result in congestion relief reducing business costs	Low level	None required	Informed judgement

Regeneration projects		Long Term	Permanent	Positive in increasing movement and economic activity	Will support positive land use changes and development	High level due to instability of development market	Co-ordination of land use and transport provision	Informed judgement
Maintenance		Medium Term	Permanent	Negative during construction. Positive when works are complete	High quality infrastructure supports business confidence	Low level due to predictable impacts	Advertisement of advance information on roadworks	Informed judgement

	Positive impact	**Qualitative summary:**	Overall measures to be supplemented to support employment and business competitiveness
	Neutral impact	**Quantitative summary:**	
	Negative impact	**Assessment of significance (weighting of LTP impact on SEA objective in relation to other objectives)**	Measures likely to have positive impact
	Impact depends on implementation		

16 APPENDIX D: RESULTS OF DRAFT ENVIRONMENTAL REPORT CONSULTATION

COMMENTS RECEIVED	***RESPONSE AND ACTION***
English Heritage	
Table 4, page 45 – We welcome the proposed indicator for the historic environment.	Noted
Streetscape Manual Code of Practice – Reference is made to this Manual several times, particularly with reference to mitigation (page 8; Table 12, pages 68-70 and Appendix C, page 118). In our previous letter I mentioned the new guidance document 'Streets for All East Midlands' published by English Heritage and the Department for Transport; I note a reference to it in the report (page 95). You should have received a copy and it can also be downloaded from www.helm.org.uk . We hope that this document can also be used to guide the design of schemes, particularly in historic areas and we recommend that reference to it is added to the sections on mitigation.	Noted. The final Environmental Report reflects these comments and makes reference to the guidance. The City Council has produced a 'Streetscape Design Manual' for the City Centre (2004), which captures many of the issues raised in the guidance, at the more local level. Generally speaking, the Councils' codes of practice and procurement specifications already include consideration of the environmental protection objectives. A new manual is currently being produced, that expends on the 2004 publication to apply it to the whole of Nottingham. The quality of the streetscape has importance implications for accessibility, road safety, regeneration and quality of life issues, all prevalent in the LTP. SEA, through the SA objectives, will ensure that these areas are fed into the appraisal process, so that the detailed schemes will be consistent with the approach set out in the guidance.
Table 2, page 21 Landscape and Townscape – It should be noted that PPG 15 also includes a section on Transport and Traffic Management (section 5). There is no reference to townscape issues in the third column.	Noted. The Final Environmental Report reflects these comments
Table 9, page 61 Cultural Heritage – Initial consultations on the Phase 2 proposals for the NET suggested that the effects on the historic environment could be greater than just the visual impact of the infrastructure. These included the impact on the University Park, registered park, the loss of unlisted buildings in a conservation area and possible impact on archaeology. If this is the case, then these matters should be highlighted and identified as matters to be resolved or mitigated as part of the development of the scheme.	Noted. These aspects will be considered at detailed design phase of the NET scheme, and fully assessed and addressed as part of the Environmental Impact Assessment for phase 2.
Page 95, SEA Topic: Landscape – The Countryside Agency are developing a national indicator Countryside Quality Counts that may provide data in the future on landscape quality and condition. The reference to 'Streets for All *East Midlands*' should include the source, i.e. English Heritage and DfT.	Noted. The Final Environmental Report reflects these comments
Page 102, SEA Topic: Cultural Heritage It is not true to say that there has been no update of the register of Grade I and II* (and structural scheduled monuments) since 1992. The national register has been published annually since 1999. This includes the BARs for each of the local authority areas. The 2005 register includes the following data: Nottinghamshire: 16; Greater Nottingham area: 7 (Broxtowe 1; Gedling 3 ; Nottingham 3). Information on the historic environment of the region can also be obtained from 'Heritage Counts', the annual state of the historic environment report (www.heritagecounts.org.uk). Conservation Area Appraisals (CAAs) and management – A new Best Value Performance Indicator is being introduced (BVPI 219) that will measure local authority progress on producing CAAs and management proposals.	Noted. Baseline data table amended in the Final Environmental Report Noted. The Final Environmental Report reflects these comments

Asset Management Plan Although not specifically mentioned under Maintenance in the package of measures, we recommend that your Asset Management Plan should include reference to historic structures. Roadsides may include structures of historic interest such as milestones, crosses and traditional fingerposts that should be preserved, as they contribute to local character. English Heritage and the DfT have recently published 'A Future for Fingerposts' highlighting this issue. A copy can be obtained from the following website link: http://www.helm.org.uk/server/show/ConWebDoc.5460 Other assets that should be considered as part of the Transport Asset Management Plan review are historic bridges, if they have not already been identified. These include both listed and unlisted structures. They will be recorded on the Historic Environment Record (SMR). We recommend therefore, that monitoring is extended to include such features.	Although the City and County Councils already undertake many of the practices outlined by guidance to management of the highway asset, they have secured the services of consultants (OPUS International) to assist in developing their respective Transport Asset Management Plans (TAMP). The structure and content of the TAMPs have been based upon a number of sources including the County Surveyors Society's "Framework for Highway Asset Management" with reference to Hertfordshire County Council's first Highway Asset Management Plan as well as learning from the experience gained by numerous other bodies such as the Highways Agency and other highway authorities around the world, principally in North America and New Zealand. The City and the County's AMPs take into account historic structures and the EH and DfT publication 'A Future for Fingerposts'. They are currently developed as separate documents to the LTP2, and should be finalised in Spring 2006. Objectives and indicators will be consistent with those set in the LTP2. Progress monitoring will be reported as part of the LTP Progress Report. The particular aspect commented on by English Heritage will be considered at the detailed design phase of specific schemes.
Finally, the Derbyshire County Council Heritage team has suggested a number of positive and negative attributes that could be identified when assessing the impact of a scheme on landscape, townscape and heritage and when addressing the issue of urban design in relation to conserving special character, urbanisation and street clutter. This could be used as a monitoring tool. You may find this of interest. As indicated previously, Conservation Area Appraisals should also be used to inform design within conservation areas. SUGGESTED CHECK LIST /POSITIVE ATTRIBUTES; (50 metre band width—per 100 metre linear measure?) Number of listed buildings Number of unlisted buildings within a conservation area Number of sites on the SMR (this will pick up historic street furniture like milestones, bollards and Victorian lighting columns) Linear quantities of traditional boundary features e.g. stone walls, brick walls, railings Linear quantities of traditional kerbing/paving materials e.g. stone, blue brick, cobbles. SUGGESTED CHECKLIST /NEGATIVE ATTRIBUTES Concrete kerbs (particularly significant for measuring urbanisation of the countryside) Modern lighting columns(ditto) CCTV columns/ telecommunications masts Traffic direction signs Traffic warning signs Posts without signs and other redundant street furniture Traffic lights Road markings Guard rails and barriers Flyovers and subways.	Noted. These aspects will be considered at detailed design phase of specific schemes
East Midlands Transport Activists Round Table	
	No comments received

Environment Agency	
Biodiversity team comments: Consideration should be given to the promotion of non-designated sites to ensure promotion of the environment as a whole. LTPs should seek to prevent fragmentation of habitats and promote green corridors to ensure connectivity irrespective of a designation	Noted. The Final Environmental Report reflects these comments
Scientific support team When there are projects to reuse brownfield sites and to implement Sustainable Urban Drainage, the Agency should be consulted during the planning stages, to ensure that any redevelopment is protective of groundwater	Noted. These aspects will be considered at detailed design phase of specific schemes. Mitigation measures will address this.
Environment management team comments The team would be pleased to comment upon specific SUDs from a pollution control viewpoint. Their long-term maintenance also needs agreeing	Noted. These aspects will be considered at detailed design phase of specific schemes. Mitigation measures will address this.
Development Control team comments Where there is the intent for development to occupy areas of floodplain or to obstruct flood flows, Flood Risk assessments should accompany planning proposals. These should identify measures to minimise and mitigate against flood risk. Where there are plans for the implementation of culverting or other obstruction to watercourses, detailed proposals are to be sent to the Agency as part of the consenting process under the Land Drainage Act 1991. The agency would normally guide away from culverting where possible If any works are to take place within 8 m of Agency flood protection works, flood defence consent will be required under the Midlands Region Land Drainage Byelaws Where there may be uncertainty about subsequent development in the future in accordance with the transport plan, efforts to have discussions with the Agency should be made at the earliest pble time	Noted. These aspects will be considered at detailed design phase of specific schemes. Mitigation measures will address this.
English Nature	
The threat of airborne and waterborne pollution on wildlife sites should be incorporated into chapter 5 Baseline Data (5.6.1)	Noted. The Final Environmental Report reflects this comment
The Countryside Agency	
Relevant plans: PPG 17 Sport, open space and recreation not mentioned	Noted. The Final Environmental Report reflects this comment
Baseline data **5.3.1** We commend the links draw between human health and the benefits of cycling and walking there on. **5.7.1** Details landscape change; the driving factors and the recent strives to reverse the trend. We also note the mention of landscape character assessment within Appendix A, however we fell this section would benefit from referencing LCA within **5.7.1**, together with a description of style and character of the plans area. A distinction between rural and urban areas would also be helpful	Noted Noted. The Final Environmental Report reflects this comment Section 6.7.1 now describes the character of the rural area of the Plan, and section 6.7.2 describes the character of the urban area of the Plan.
Objectives and indicators Table 4 – We commend the landscape, biodiversity, noise, and recycling objectives within Table 4 and are pleased to see the ROWIP utilised as an indicator, and cycling within human health, however the accessibility objective has no indicators on walking or cycling	Accessibility objectives and indicators are considered more fully as part of the Accessibility Strategy, due March 2006. The final Strategy will include indicators related to walking and cycling, which will be incorporated in the Plan's and its Progress Reports. The Plan already proposes to monitor the following relevant indicators:

	Indicator LTP3 - Number of Cycling trips (annualized index at selected sites), from counts at specified locations Indicator LTP 4 - % journeys to school by non-car modes, from Councils' surveys Indicator L 9 - Pedestrian flow on primary pedestrian network (annualized index at selected sites)
Key environmental issues No mention is made to light/visual intrusion upon the landscape and local area for residents, quality of life issues such as tranquillity are also absent.	**Light pollution**: The draft Environmental Report identified a potential conflict of objectives (s. 7.1.3) between safety and pollution issues associated with street lighting. Please refer to row below for a fuller response on light intrusion and how it is taken on board in the Plan and the SEA **Tranquillity/quality of life** Baseline data work for the SEA (Annex A of the Environmental Report) reports that "there is no identified framework for monitoring this indicator. Transport is one of the factors which contributes to loss of tranquillity" However, the Plan takes in consideration and includes objectives and indicators for the Quality of Life issues. "There are a number of areas through which transport impacts upon the Quality of Life of communities, which the LTP will address, notably: **a.** Noise Levels (awaiting noise mapping modeling results) **b.** Flow of Heavy Goods Vehicles (HGVs) in residential areas, and **c.** Severance of Communities" These areas will be monitored and reported on as part of the LTP and its progress reports
Assessment of significant environmental impacts Table 11- with relation to landscape we would wish to see that any new infrastructure is designed sympathetically to fit within its surroundings and that local material, quiet surfacing and less light polluting lamps are utilised. See *The countryside in and around towns'* & *'Transport in Tomorrows Countryside'* may prove a useful reference tool and are downloadable at http://www.countryside.gov.uk/LAR/Landscape/CIAT/Index.asp and http://www.countryside.gov.uk/Images/CA%20143%20-%20Transport%20in%20tomorrows%20countryside_tcm2-12075.pdf. Village design statements http://www.countryside.gov.uk/LAR/Landscape/CC/landscape/index.asp.	The City Council has produced a 'Streetscape Design Manual' for the City Centre (2004), which captures many of the issues raised in the guidance document 'Streets for All East Midlands' published by English Heritage and the Department for Transport, at the more local level. A new manual is currently being produced, that expends on the 2004 publication to apply it to the whole of Nottingham City. **Street lighting**: The manual and the Councils' codes of practice include a number of criteria when dealing with street lighting, taking on board framework documents such as the DEFRA guidance on the Clean Neighbourhoods and Environment Act 2005 and the Nottinghamshire and Nottingham Waste Core Strategy and Development Control Policies Sustainability Appraisal Scoping Report. Sept 05. Draft. These criteria include light pollution, along with other factors such as Best Value. The government plans to revise Planning Policy Statement 23 on Planning and Pollution Control to add a new Annex on lighting, and this will be also integrated in Councils' policies. The Authorities for the Plan area are currently developing a PFI bid for street lighting. Specifications including the criteria of light intrusion reduction will be drawn as part of the detailed proposals. **Quiet surfacing**: the City Council's code of practice for highway design and maintenance requires standard surfacing and resurfacing that is quieter than the existing one. The criterion of quietness is fully integrated in the resulting

	specifications, along with other factors such as Best Value. **Local material:** The Councils' codes of practice concerned with transport schemes recommend that local suppliers will be sought and used when available. A current example is the recycled paving and local granite curbs as part of the Turning Point scheme.
Further detail on local and nationally written character areas describing the unique style of the local landscapes would be beneficial.	Noted. The Final Environmental Report refers to relevant reports on local and nationally written character areas describing the unique style of the local landscapes
Further detail on the need for greenspace/corridors both within urban and rural fringe areas, together with their benefits for health and well-being would be advantageous.	Noted. The Final Environmental Report reflects this comment (tables 3 and 6)