



1	Introduction	18
	1.1 Strategic Environmental Assessment	18
	1.2 Shropshire Local Transport Plan	18
	1.3 Links with NATA	19
	1.4 Linking between SEA and LTP Development	19
	1.5 Consultation	21
2	Context and Objectives	24
	2.1 Introduction	24
	2.2 Links to Other Plans	24
	2.3 SEA Objectives	24
	2.4 LTP Objectives	25
	2.5 Compatibility of Objectives	26
3	Environmental Baseline	30
	3.1 Introduction	30
	3.2 Air Quality	30
	3.3 Climatic Factors	34
	3.4 Landscape	36
	3.5 Cultural Heritage	38
	3.6 Biodiversity (Flora and Fauna) and Soil	39
	3.7 Water	42
	3.8 Human Health & Population	46
	3.9 Material Assets	51
	3.10 Evolution of Environment	53
	3.11 Summary of Environmental Problems and Opportunities	59
4	Assessment of Strategic Options	62
	4.1 Introduction	62
	4.2 Strategic Alternatives	62
	4.3 Significant Environmental Effects of Alternatives	63
	4.4 Preferred Option	65
5	Assessment of Preferred Strategy	68
	5.1 Significant Environmental Effects	68
	5.2 Environmental Assessment of Major Schemes	73
6	Monitoring	80
	Appendix 1: Review of Relevant Plans and Policies with Environmental Objectives	86
	Appendix 2: Maps of Environmental Baseline	100
	Appendix 3: Details of Strategic Options	112
	Appendix 4: Detailed Assessment of Environmental Effects of Strategic Alternatives	116
	Appendix 5: Shrewsbury North West Relief Road Route Options	140
	Appendix 6: Shrewsbury North West Relief Road Assessment Summary Tables	142

■	Figures	
	Figure 3.1 - Groundwater Sources in Shropshire (Source: Environment Agency)	43
	Figure 3.2 - High Flow Rivers in Shropshire (Source: Environment Agency)	45
	Figure 3.3 - Current waste management (Shropshire Waste Local Plan 2004)	52
	Figure 3.4 - Existing Landfill Sites in Shropshire (Source: Environment Agency)	52
	Figure 1 - National Environmental Designations	100
	Figure 2 - Local Environmental Designations	101
	Figure 3 - Shropshire Geological Areas	102
	Figure 4 - Shropshire heritage and townscape	103
	Figure 5 - Environmentally Sensitive Areas	104
	Figure 6 - Flood zones in Shropshire	105
	Figure 7 - Outdoors living environment deprivation index	106
	Figure 8 - Health deprivation domain	107
	Figure 9 - 'Indoors' living environment deprivation domain	108
	Figure 10 - Levels of crime	109
	Figure 1 - Shrewsbury North West Relief Road route options	140



■	Tables	
	Table 1 - SEA Objectives and links to SEA topics	1
	Table 2 - Summary of likely evolution of baseline without LTP	2
	Table 3 - Summary of the predicted significant environmental effects of LTP strategy options	5
	Table 4 - Predicted environmental effects of preferred LTP strategy and mitigation measures	6
	Table 1.1 - Links between LTP development and SEA processes	20
	Table 2.1 - SEA Objectives and links to SEA and NATA topics	24
	Table 2.2 - Compatibility of SEA and LTP objectives	27
	Table 3.1 - National Air Quality Objectives (Source: National Air Quality Strategy 2000)	31
	Table 3.2 - Current and predicted annual mean NO2 concentrations at sites in AQMA's	31
	Table 3.3 - Impacts on air quality of traffic reductions	33
	Table 3.4 - Greenhouse gas emissions by sector in Shropshire, 2000 (Source SCC)	35
	Table 3.5 - Greenhouse gas emissions from the transport sector in Shropshire, 2000 (Source: SCC)	35
	Table 3.6 - Key characteristics and pressures on landscape character areas in Shropshire (Source: Countryside Agency/SCC)	36
	Table 3.7 - Numbers of designated historic areas and buildings in Shropshire	38
	Table 3.8 - Key issues for biodiversity in Shropshire	40
	Table 3.9 - Nature Conservation Designations in Shropshire	40
	Table 3.10 - Natura 2000 sites in Shropshire (Source: Joint Nature Conservation Committee)	41
	Table 3.11 - Condition of Shropshire SSSI's (Source: English Nature, 2004)	41
	Table 3.12 - River quality (chemistry) of rivers in Shropshire (2000-2002) (Source: Environment Agency)	44
	Table 3.13 - Accidental deaths in Shropshire 2000-2002 (Source: Death Statistics, National Statistics and Directorate of Public Health, Shropshire PCT)	47
	Table 3.14 - Premature deaths from circulatory diseases in Shropshire 2000-2002 (Source: Death Statistics, National Statistics and Directorate of Public Health, Shropshire PCT)	48
	Table 3.15 - Crime rates in Shropshire 2001-2004 (Source: Crime and Substances Misuse Audit 2004, Shropshire C&D Partnership)	48
	Table 3.16 - 2004 Fear of crime statistics (Source: Crime and Substance Misuse Audit, 2004, Shropshire C&D Partnership)	49
	Table 3.17 - Accessibility data 1	50
	Table 3.18 - Accessibility data 2	50
	Table 3.19 - Accessibility data 3	51
	Table 3.20 - Summary of likely evolution of baseline without LTP	57
	Table 3.21 - SWOT analysis of key environmental problems and opportunities	60
	Table 4.1 - Summary of the predicted significant environmental effects of LTP strategy options	64
	Table 5.1 - Predicted environmental effects of preferred LTP strategy and mitigation measures	68
	Table 6.1 - LTP Indicators for SEA	81
	Table 1 - Environmental protection objectives	87
	Table 1 - Details of the measures included within each strategic LTP option	112



1 Introduction

1.1 Strategic Environmental Assessment

1.1.1 In July 2004 a new European Directive (2001/42/EC) on the assessment of the effects of certain plans and programmes on the environment, the Strategic Environmental Assessment (SEA) Directive, became law in the UK. The effects on all parts of the environment, including bio-diversity, population, health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and the interrelationship between the different factors must be considered. The Directive requires local authorities to show that the effects on the environment of relevant new strategies and plans have been taken into account before they are finalised.

1.1.2 The stated objectives of the Strategic Environmental Assessment Directive are to:

- Provide for a high level of protection for the environment; and
- Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development

1.1.3 The SEA directive aims to ensure that key plans and programmes contribute to the better delivery of Sustainable Development, helping to balance environmental, social and economic issues at early stages within planning processes.

1.1.4 In accordance with the Directive, the SEA Regulations and Department for Transport (DfT) guidance, a SEA has been undertaken on the Provisional Second Local Transport Plan for Shropshire.

1.1.5 A key requirement under the SEA directive is the preparation of an Environmental Report to be published for consultation with the draft version of the Plan being prepared. This is that report. It demonstrates how Shropshire County Council has fulfilled the requirements of the Strategic Environmental Assessment Directive in preparing its Local Transport Plan (2006-2011).

1.1.6 Following consultation on the final draft LTP, and this Environmental Report, we will produce a statement summarising how the environmental considerations have been integrated into the LTP. The final statement, and this full Environmental Report will be published as part of the Final LTP on 31 March 2006.

1.1.7 Guidance on carrying this SEA was taken from:

- A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, DOE Sept 2005)
- Strategic Environmental Assessment Guidance for Transport Plans and Programmes (TAG) (DfT, April 2004)

1.2 Shropshire Local Transport Plan

The Shropshire Local Transport Plan

1.2.1 The Transport Act 2000 places a duty on local transport authorities to produce a statutory document, known as the Local Transport Plan (LTP), that contains policies for the promotion and encouragement of safe, integrated, efficient and economic transport facilities and services to, from and within their area.

1.2.2 As a result of its statutory duty Shropshire County Council is preparing a second Local Transport Plan (LTP) to cover the period 2006 – 2011. The LTP will set out the County Council's vision, strategy and implementation programme for all forms of local transport over the plan period.



1.2.3 In December 2004, the DfT published guidance on the preparation of second Local Transport Plans for local transport authorities. This guidance stressed that LTPs should contain strategies that would help to deliver the shared priority outcomes of:

- Reducing congestion
- Improving accessibility
- Improving road safety
- Improving air quality, particularly in Air Quality Management Areas

1.2.4 As well as:

- Enhancing other quality of life issues, including noise, the quality of public space and landscapes, conservation of bio-diversity, community safety, public health and climate change.

1.3 Links with NATA

1.3.1 In order to assess the contribution of strategies being developed to the key priorities the Department for Transport recommends the use of the New Approach to Appraisal (NATA). This is the accepted method for appraising transport plans, programmes and projects; appraisal is made in relation to the governments five objectives for Transport

- Environment
- Safety
- Economy
- Accessibility
- Integration

1.3.2 There is considerable overlap between the SEA and NATA appraisal processes. Table X, identified the areas of overlap between the SEA and NATA topics. In undertaking the SEA we have fulfilled much of the NATA requirements. Those NATA topics not covered by the SEA are primarily economic and integration criteria, it has proven very difficult to undertake a meaningful assessment of these at a strategic level.

1.4 Linking between SEA and LTP Development

1.4.1 Key aims in undertaking the SEA have been to:

- identify alternative strategy options for the LTP
- evaluate the cumulative significant environmental effects of the strategy options
- provide decision makers with a holistic understanding of the environmental implications of the LTP strategy options
- mitigate environmental impacts arising from the implementation of the preferred LTP strategy as much as possible

1.4.2 Shropshire County Council has undertaken the Strategic Environmental Assessment of its LTP as an integral part of the process of LTP development. In order to ensure a clear link between the SEA and LTP the SEA has been carried internally, by transport planning professionals, with specialist information and advice provided by environmental specialists from within the organisation.

1.4.3 Table 1.1 shows how the development of the LTP and the SEA have been linked, and identifies the key stages and consultation processes.

Table 1.1 Links between LTP development and SEA processes

Dates	LTP actions	SEA actions	Consultation / publications
• Early autumn 2004	<ul style="list-style-type: none"> • Establish context - relationship to other plans and programmes • Development of priorities and objectives • Identification of key problems and opportunities 	<ul style="list-style-type: none"> • Context setting • Development of SEA objectives • Establish environmental baseline 	<ul style="list-style-type: none"> • Stakeholder consultation on LTP priorities, objectives and transport problems and opportunities (Sept 04)
• Winter 2004/05	<ul style="list-style-type: none"> • Develop strategic options 	<ul style="list-style-type: none"> • Scope the significant effects of the strategic alternatives • Identification of preferred strategy 	<ul style="list-style-type: none"> • SEA Scoping Report consultation with SEBs and other stakeholders (Dec 04/Jan 05)
• Spring/summer 2005	<ul style="list-style-type: none"> • Development of provisional LTP • Incorporation of measures to reduce and offset adverse environmental impacts 	<ul style="list-style-type: none"> • Detailed assessment of preferred strategy • Identification of mitigation measures 	<ul style="list-style-type: none"> • Provisional LTP published in full and summary format (July 05)
• Autumn/winter 2005/06	<ul style="list-style-type: none"> • Development of Draft Final LTP, including accessibility strategy and performance management plan 	<ul style="list-style-type: none"> • Assessment of new element of LTP particularly in relation to accessibility • Development of SEA monitoring plan • Prepare Environmental Report 	<ul style="list-style-type: none"> • Draft final LTP and Full environmental report (Jan 06)
• Spring 2006	<ul style="list-style-type: none"> • Development of final LTP 	<ul style="list-style-type: none"> • Incorporation of feedback from environmental report • Preparation of environmental statement 	<ul style="list-style-type: none"> • Publication of Final LTP (March 06)



1.5 Consultation

1.5.1 As part of the process of undertaking the Local Transport Plan SEA an initial scoping stage was completed. The results of this stage of process were set out in a Scoping Report which:

- set out the context for the SEA
- established the Environmental (SEA) Objectives for Shropshire
- set out the environmental baseline
- identified problems and opportunities
- outlined a number of alternative Local Transport Plan strategies
- set out reasons for selecting the alternative strategies
- scoped the potential significant impacts on the environment of the strategic options
- set out how the remaining stages of the SEA will be carried out

1.5.2 Consultation on the Scoping Report was undertaken in December 2004. The Report was issued as a consultation document to the Statutory Environmental Bodies (SEBs) - English Nature, the Countryside Agency, English Heritage and the Environment Agency - as well as local environmental organisations and other interested parties. The consultees were asked to comment specifically on the:

- scope of the assessment
- baseline data
- identified objectives
- initial assessment of the strategic options

1.5.3 We were disappointed with the response from the SEBs to this scoping stage consultation. The only SEB to provide a response was English Heritage, who were generally happy with the approach set out in the Scoping Report. They did make a number of minor comments and suggestions in relation to the scope, baseline data, proposed SEA objectives and option assessment, these changes have been incorporated into the LTP development process and this Environmental Report.

1.5.4 We also received responses from five local stakeholder organisations, including the Shropshire Wildlife Trust and the local branch of the Council for Protection of Rural England. In general comments received were supportive of the scoping work. Specific comments and suggestions have been considered and incorporated where appropriate in the LTP and the work presented in this Environmental Report.

1.5.5 We also received in January 2006 a research report commissioned by the Countryside Agency and English Nature on the treatment of landscape, biodiversity, access and recreation in 16 provisional LTPs, including Shropshire's. The issues highlighted in this report have proven useful in identifying further mitigation measures for the final LTP.

1.5.6 Building on the Scoping Report this Environmental Report includes the results of a more detailed assessment of the likely significant environmental effects of the proposed Transport Plan and alternative options and sets out mitigation and monitoring measures.

1.5.7 The Environmental Report is being published in February 2006 with the final draft final version of the LTP for consultation purposes, including consultation with the SEBs. Comments received will be considered for incorporation into the final LTP to be published 31 March 2006. The changes made to the final LTP as a result of this final round of consultation will be reflected in an environmental statement setting out how the SEA process has influenced the final plan.

