



Non-Technical Summary

Introduction

This is an Environmental Report of the Draft Local Transport Plan (LTP) for Shropshire 2006-2011. It sets out the results of the Strategic Environmental Assessment (SEA) of the emerging plan, which has been undertaken in compliance with the European Directive (2001/42/EC).

The SEA has looked at how the LTP would impact upon all aspects of the environment, including bio-diversity, population, health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage and landscape.

The SEA has been undertaken as an ongoing process throughout the development of the LTP. The SEA process has informed the development of a plan which has aimed to minimise negative environmental impacts and maximise environmental benefits.

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 final LTP. The final statement, and this full Environmental Report will be published as part of the Final LTP on 31 March 2006.

SEA Objectives

The environmental assessment of the LTP has been undertaken in relation to a set of SEA objectives which reflect the desired evolution of each aspect of the environment. The SEA objectives are set out in Table 1

Table 1 SEA Objectives and links to SEA topics

SEA Topic (SEA Directive Annex 1f)	Shropshire SEA Topic	Shropshire SEA Objective
Air	Local air quality	To reduce air pollution in line with National Air Quality Objectives
Climatic factors	Greenhouse gases	To reduce greenhouse gas emissions
Landscape	Landscape (visual and cultural impacts)	To protect and enhance the character of the landscape and minimise adverse development in particularly sensitive areas
Cultural heritage including architectural and archaeological heritage	Townscape and heritage	To protect, conserve and enhance the region's diverse historic environment and manage change in such a way that respects local character and distinctiveness and improves the public realm
Biodiversity (flora and fauna) and soil	Biodiversity (flora and fauna)	To maintain and enhance the populations and natural ranges of species and the quality and extent of wildlife habitats and ecosystems in Shropshire
	Soil & geology	To protect and improve soil quality and soil retention

SEA Topic (SEA Directive Annex 1f)	Shropshire SEA Topic	Shropshire SEA Objective
Water	Water quality, resources and flooding	To mitigate potentially adverse effects from new or extended development on water quality and water resources, and minimise the susceptibility of land use activities to flooding
<i>Not specifically mentioned but relates to</i> Human health/ biodiversity	Human health and population - noise	To minimise noise levels
Human health and population	Human health and population - physical fitness	To protect and enhance human health
Human health and population	Human health and population - accidents	To reduce death and serious injury from accidents
Human health and population	Human health and population - security	To reduce the fear of crime
Human health and population	Human health and population - accessibility	To enhance access to essential services
Material assets (including material/ natural resources)	Material assets	To maximise efficient use of materials and greater use of recycled and waste materials

Environmental Baseline

For each aspect of the environment the current environmental baseline has been established and an assessment has been made of the likely evolution against the objectives set out above in the absence of a Local Transport Plan. A summary of this baseline information is presented in Table 2.

Table 2 Summary of likely evolution of baseline without LTP

SEA Topic	Likely events without a LTP	Likely effects on environmental baseline	Baseline evolution assessment
Local air quality	<ul style="list-style-type: none"> Increased traffic volumes Increasing congestion Cleaner vehicles Reducing background concentrations of NO₂ 	<ul style="list-style-type: none"> Slight reduction in NO₂ levels Un declaring of AQMAs Still some poor air quality hotspots where congestion increases in "canyon" type streets 	Slightly beneficial
Greenhouse gases	<ul style="list-style-type: none"> Increased traffic volumes Increased use of larger & faster vehicles Faster average speeds 	<ul style="list-style-type: none"> Increased carbon dioxide levels 	Moderately adverse



SEA Topic	Likely events without a LTP	Likely effects on environmental baseline	Baseline evolution assessment
Landscape	<ul style="list-style-type: none"> Increasing traffic levels More indiscriminate parking 	<ul style="list-style-type: none"> Visual intrusion Loss of tranquillity Light pollution Loss of characteristics Shropshire's landscape is recognised for 	Slightly adverse
Townscape and heritage	<ul style="list-style-type: none"> Increasing traffic levels More indiscriminate parking More air pollution, vibration and noise 	<ul style="list-style-type: none"> Visual intrusion (street furniture) Light pollution Damage to historic buildings Negative change in ambience of conservation areas 	Slightly adverse
Biodiversity (flora and fauna, and soil)	<ul style="list-style-type: none"> Increasing traffic levels and increased use of larger & faster vehicles increasing severance Negative changes to air quality, water quality, noise, vibrations & light emissions 	<ul style="list-style-type: none"> Road mortality Barriers to movement leading to habitat fragmentation Increased health problems and disturbance Reduction in both numbers and in species of wildlife 	Slightly adverse
Water quality	<ul style="list-style-type: none"> Increasing traffic levels and additional pollution in run-off 	<ul style="list-style-type: none"> Reduction in water quality Limited availability Poor quality of water for drinking and bathing, leisure activities and health implications for wildlife Floods (damage and / or loss to persons, wildlife, infrastructure) 	Slightly adverse

SEA Topic	Likely events without a LTP	Likely effects on environmental baseline	Baseline evolution assessment
Noise	<ul style="list-style-type: none"> Increased traffic volumes Larger & faster vehicles 	<ul style="list-style-type: none"> Loss of tranquillity Poor quality of health Reduced quality of life 	Slightly adverse
Physical fitness	<ul style="list-style-type: none"> Increased car use and reduced walking and cycling 	<ul style="list-style-type: none"> Reduced fitness Poor quality of health Reduced quality of life 	Moderately adverse
Accidents	<ul style="list-style-type: none"> Increasing traffic Better safety features in more modern cars 	<ul style="list-style-type: none"> More slight casualty accidents but fewer serious and fatal accidents <p>Accidents could lead to:</p> <ul style="list-style-type: none"> Loss of life Reduced quality of life 	Neutral
Security	<ul style="list-style-type: none"> Fewer people walking and cycling More traffic 	<ul style="list-style-type: none"> Increased fear of crime 	Slightly adverse
Accessibility	<ul style="list-style-type: none"> Increased car ownership Reduced quality of public transport services 	<ul style="list-style-type: none"> More people with access to a car and good accessibility Poorer accessibility for those without a car 	Neutral
Material assets	<ul style="list-style-type: none"> Deteriorating road condition 	<ul style="list-style-type: none"> Increased fuel consumption for vehicles operating on poor quality roads Increased resource consumption in long term to fully replace highways 	Slightly adverse



Option Identification and Assessment

In the early stages of the development of the LTP three alternative strategic options were developed.

Option 1: Safety and accessibility - focused on those priorities which stakeholder consultation highlighted were of most importance to the people of Shropshire.

Option 2: Safety, accessibility, congestion and air quality - focused on addressing all four of the Government's key priorities,

Option 3: Safety, accessibility, congestion and air quality & quality of life issues - in addition to those issues addressed in option 2 this option also aimed to address a range of other quality of life issues.

The environmental effect of the three strategic LTP options was assessed and compared to a do-nothing option. A summary of the results of this assessment is provided in table Table 4.1

Table 3 Summary of the predicted significant environmental effects of LTP strategy options

SEA topic	Shropshire SEA Objective	Without LTP	Option 1	Option 2	Option 3
Local air quality	To reduce air pollution in line with National Air Quality Objectives	Slightly beneficial	Neutral	Moderately beneficial	Moderately beneficial
Greenhouse gases	To reduce greenhouse gas emissions	Moderately adverse	Strongly adverse	Strongly adverse	Slightly adverse
Landscape	To protect and enhance the character of the landscape and minimise adverse development in particularly sensitive areas	Slightly adverse	Moderately adverse	Moderately adverse	Moderately beneficial
Townscape and heritage	To protect, conserve and enhance the region's diverse historic environment and manage change in such a way that respects local character and distinctiveness and improves the public realm	Slightly adverse	Moderately adverse	Neutral	Moderately beneficial
Biodiversity (flora & fauna)	To maintain and enhance the populations and natural ranges of species and the quality and extent of wildlife habitats and ecosystems in Shropshire	Slightly adverse	Moderately adverse	Moderately adverse	Slightly beneficial
Soil and geology	To protect and improve soil quality and soil retention	No significant impacts	No significant impacts	No significant impacts	No significant impacts
Water resources, quality and flooding	To mitigate potentially adverse effects from new or extended development on	Slightly adverse	Moderately adverse	Moderately adverse	Slightly adverse

SEA topic	Shropshire SEA Objective	Without LTP	Option 1	Option 2	Option 3
	water quality and water resources, and minimise the susceptibility of land use activities to flooding				
Human health and population - noise	To minimise noise levels	Slightly adverse	Moderately adverse	Neutral	Slightly beneficial
Human health and population - physical fitness	To protect and enhance human health	Moderately adverse	Moderately adverse	Slightly beneficial	Moderately beneficial
Human health and population - accidents	To reduce death and serious injury from accidents	Neutral	Moderately beneficial	Moderately beneficial	Moderately beneficial
Human health and population - security	To reduce the fear of crime	Moderately adverse	Moderately adverse	Slightly beneficial	Slightly beneficial
Human health and population – accessibility	To enhance access to essential services	Neutral	Moderately beneficial	Moderately beneficial	Moderately beneficial
Material assets	To maximise efficient use of materials and greater use of recycled and waste materials	Slightly adverse	Moderately adverse	Moderately adverse	Slightly beneficial

Significant Environmental Effects of the Preferred Option

The preferred strategic option for the LTP was Option 3. A detailed assessment of what additional environmental mitigation measures could be incorporated into option 3 was made.

Table 4

provides a detailed commentary on the significant environmental effects of the chosen option and the integrated mitigation measures.

Table 4 Predicted environmental effects of preferred LTP strategy and mitigation measures

SEA topic	Description of LTP strategy and environmental effects	Integrated mitigation actions in LTP	Final assessment of impact on environment
Local air quality	Air quality is still a relatively small, but growing problem in Shropshire. The trends towards increased traffic levels and congestion are likely to further exacerbate air pollution particularly in town centres.	<ul style="list-style-type: none"> Enhancing and encouraging use of public transport More park and ride Improving conditions for cycling and walking Smarter choices 	Moderately beneficial



SEA topic	Description of LTP strategy and environmental effects	Integrated mitigation actions in LTP	Final assessment of impact on environment
	<p>The LTP strategy will address this issue through air quality action plans in the designated AQMAs. However, this would not in itself prevent further problems occurring in other areas. The plan therefore also includes a number of further mitigation measures to encourage modal shift, fuel efficiency and alternative fuel use and control the levels of traffic in urban areas</p>	<ul style="list-style-type: none"> • Parking strategies to control car parking supply and charges and DPE • Effective signing and routing of traffic and HGV restrictions • Encouraging fuel efficiency and more fuel efficient fuels 	
Greenhouse gases	<p>Climate change is recognised as one of the greatest, if not, the greatest threat facing the world today. In Shropshire, transport is the biggest single contributor to greenhouse gas emissions.</p> <p>The LTP strategy aims to reduce the rate of growth in car use, as well as encouraging a switch to more efficient driving practices and alternative fuels. This should result in lower levels of emissions of greenhouse gases than would have occurred without the plan.</p>	<ul style="list-style-type: none"> • Enhancing and encouraging use of public transport • More park & ride • Improving conditions for cycling and walking • Smarter choices • Improve emission standards of bus fleet through quality partnerships and SCC contracts; • Raise awareness off the links between car based travel & climate change • Promote fuel efficiency within the authority by promoting greener driving techniques; purchasing more fuel efficient vehicles; using alternative fuels; and seek to increase the proportion of new, more fuel efficient buses in use in the County • Investigate use of solar powered infrastructure 	Slightly adverse
Landscape	<p>Shropshire's landscape plays an important role in the quality of life of local people and is one of the main reasons that Shropshire is an attractive place to visit, so contributes to the local economy.</p>	<ul style="list-style-type: none"> • Enhancing and encouraging use of public transport, cycling and walking • Ensure traffic uses the most appropriate routes; • Effective signing and routing of traffic & HGV restrictions; 	Moderately beneficial

SEA topic	Description of LTP strategy and environmental effects	Integrated mitigation actions in LTP	Final assessment of impact on environment
	<p>The LTP aims to reduce rates of growth in traffic levels, and implement traffic management measures to encourage HGV's and other vehicles to avoid the most sensitive landscape areas of Shropshire.</p> <p>The LTP also includes polices to reduce inappropriate design of road improvements and use of inappropriate materials which can "urbanise" rural roads and lanes, impacting on local character and distinctiveness.</p>	<ul style="list-style-type: none"> • Quiet lanes • Parking restrictions and provisions to reduce visual intrusion from parked vehicles • Guidance for management of roads in the AONB to ensure that our transport activities and practices minimise the impact on the Shropshire Hills AONB • Decriminalised parking enforcement 	
Townscape and heritage	<p>Shropshire's historic environment is one of the county's greatest assets with features ranging from: prehistoric monuments; structures of the industrial revolution; historic townscapes to fields and gardens; castles to mansions.</p> <p>The Local Transport Plan, aims to improve the historic and built environment, through specific town centre enhancement schemes as well as ensuring that all schemes incorporate good design, sensitivity to historic styles, the use of quality materials and the reduction of unnecessary clutter.</p> <p>The plan also aims to manage levels of traffic including HGV's in or historic urban centres, reducing levels of noise, fumes and vibrations.</p>	<ul style="list-style-type: none"> • Enhancing and encouraging use of public transport, park and ride, cycling and walking • Parking strategies and other measures to manage traffic levels in urban areas • Consideration of congestion charging in Shrewsbury • HGV routing and restrictions • Public realm enhancements including improved paving; better co-ordinated street furniture; more trees and planting • Use of appropriate materials when implementing traffic & transport schemes in rural are historic areas • Decriminalised parking enforcement 	Moderately beneficial
Biodiversity (flora & fauna)	<p>The most significant impacts on biodiversity from transport include wildlife casualties from collisions with cars; severance of populations by new roads or increased traffic; disturbance from noise and light and road maintenance cutting; spraying and planting practices that can have significant impacts on habitats and biodiversity.</p>	<ul style="list-style-type: none"> • Enhancing and encouraging use of public transport, park and ride, cycling and walking; • Roadside verge & hedgerow cutting practices which enhance habitats and minimise wildlife impacts; • Take opportunities to create new habitats as part of 	Slightly beneficial



SEA topic	Description of LTP strategy and environmental effects	Integrated mitigation actions in LTP	Final assessment of impact on environment
	<p>The plan aims to reduce rates of traffic growth therefore minimising impacts on biodiversity. It has specific policies to engage highway maintenance practices which support biodiversity. Furthermore, it will seek to reduce visual impacts and noise and to enhance biodiversity when undertaking new highway schemes and maintenance.</p>	<p>improvement schemes e.g. habitat for bats and sand martins in replacement bridge structures;</p> <ul style="list-style-type: none"> ● Reducing severance and possibilities of road collisions through crossing provisions such as badger tunnels in upgraded or new highway infrastructure; ● Minimising winter salt to reduce impacts from salt run-off on habitats; ● Guidance for management of roads in the AONB to ensure that our transport activities and practices minimise the impact on the Shropshire Hills AONB. 	
<p>Soil and geology</p>	<p>Shropshire County Council currently has a shortage of data concerning soil and geology. This is an area where detailed information is likely to improve with the use of a soil map, which the Council is currently preparing.</p> <p>It is considered unlikely that the LTP will have any significant effects on soil and geology</p>	<p>No direct mitigation actions</p>	<p>No Significant impacts</p>
<p>Water resources, quality and flooding</p>	<p>Both the construction and use of transport infrastructure can affect the quality of water. Roads with flows of between 15,000 and 30,000 vehicles per day have a moderate impact on water quality while roads with flows of below 15,000 vehicles per day have a minor impact.</p> <p>The LTP aims to reduce the rate of traffic growth on roads in Shropshire, thereby keeping the traffic levels on many roads below the threshold where significant impacts on water quality could be expected.</p>	<ul style="list-style-type: none"> ● Enhancing and encouraging use of public transport, park and ride, cycling and walking ● Using appropriate construction methods and materials in highway enhancements and new schemes to prevent excessive run-off ● Minimising winter salt to reduce impacts from salt run-off 	<p>Slightly adverse</p>

SEA topic	Description of LTP strategy and environmental effects	Integrated mitigation actions in LTP	Final assessment of impact on environment
	<p>It has specific policies to engage highway maintenance practices which minimise environmental impacts. and any implications to nearby water ways would be considered when undertaking new highway schemes and maintenance.</p>		
<p>Human health and population - noise</p>	<p>The impact of noise on quality of life is increasing. Noise is a less obvious form of pollution because people learn to live with gradual change. Noise does not just cause annoyance; it can affect people's health.</p> <p>The main generator of background noise in Shropshire is traffic. The majority of Shropshire is rural and it should be noted that smaller volumes and changes to volumes of traffic are more noticeable in tranquil areas.</p> <p>The plan will seek to reduce rates of growth of traffic levels and encourage appropriate routing HGVs and traffic to reduce impacts of noise from road traffic.</p> <p>In addition where appropriate the use of low noise road surfaces will be used when road maintenance is undertaken</p>	<ul style="list-style-type: none"> • Enhancing and encouraging use of public transport, park and ride, cycling and walking • Effective signing and routing of traffic & HGV restrictions; • Quiet lanes • Utilise low surfacing materials where appropriate when undertaking road maintenance 	<p>Slightly beneficial</p>
<p>Human health and population – Physical Fitness</p>	<p>Physical fitness levels have a major impact on the occurrence of obesity and circulatory diseases (coronary heart disease, stroke and other related conditions). The trend towards increasing car dependency is a significant factor in reduced levels of physical activity</p> <p>The Local Transport Plan will seek to improve provision for and promotion of walking and cycling, and will also ensure that active modes of transport are made as safe and attractive as possible. This should help to increase levels of physical activity as part of everyday lifestyles.</p>	<ul style="list-style-type: none"> • Better conditions for and promotion of cycling; • Better conditions for and promotion of walking; • Smarter travel choices • School travel plans • Workplace travel plans • Trial vulnerable road user audits for new schemes • Quiet lanes 	<p>Moderately beneficial</p>



SEA topic	Description of LTP strategy and environmental effects	Integrated mitigation actions in LTP	Final assessment of impact on environment
Human health and population – accidents	<p>Road accidents are the largest cause of accidental death in Shropshire. The LTP aims to improve the safety of existing roads in Shropshire based on accident records and other risk factors.</p> <p>The LTP also includes extensive provisions for enhanced enforcement, publicity, education and training to enhance road safety.</p> <p>These measures should work to reduce the number of accident casualties on Shropshire roads</p>	<ul style="list-style-type: none"> Local safety schemes More road crossings for pedestrians Provision of safer cycle routes Addressing motorcycle accidents Addressing young driver accidents Safer routes to schools Road safety education, publicity and training Speed limit enforcement Decriminalised parking enforcement 	Moderately beneficial
Human health and population - security	<p>Fear of crime is an important aspect of quality of life and is linked to the quality of the environment. Despite the crime statistics which show that although Shropshire is a relatively low crime area, there appears to be a high fear of crime amongst the public which impacts on the way that people live.</p> <p>To tackle issues of security the plan contains programmes which see the undertaking of measures to improve surveillance and to provide secure vehicle parking facilities.</p>	<ul style="list-style-type: none"> Enhanced provision for walking and cycling Town centre enhancement schemes Quality walking routes Real time information More CCTV on buses CCTV at rail stations Improve walking routes to key stops & stations Improved lighting & security for pedestrians 	Slightly beneficial
Human health and population – accessibility	<p>In rural areas of Shropshire those people without access to a car can have poor accessibility to essential services.</p> <p>Through the plan, our aim is to work with a range of partners to narrow the ‘accessibility gap’ and improve opportunities for those most in need. This will be both through enhancing transport services and encouraging greater provision of electronic access, mobile services and local provision.</p>	<ul style="list-style-type: none"> Making public transport a more attractive travel option Further development of demand responsive transport services Passenger transport services which better meet travel needs Better quality & more accessible services and infrastructure Better integration of services Effective partnerships Better conditions for cycling 	Moderately beneficial

SEA topic	Description of LTP strategy and environmental effects	Integrated mitigation actions in LTP	Final assessment of impact on environment
		<ul style="list-style-type: none"> Better conditions for walking Mobility enhancements 	
Material assets	<p>The Local Transport plan through the detailed Asset Management Plan aims to ensure effective maintenance of Shropshire’s highway and transport infrastructure in a way which minimising the use of natural materials.</p> <p>Particularly important will be the use of recycled materials in highways maintenance schemes.</p>	<ul style="list-style-type: none"> Seek to use appropriate construction materials to reduce whole life material asset use; Use of recycled materials in highway maintenance Through quality partnerships and SCC contracts, improve emission standards of bus fleet; Promote fuel efficiency within the authority by promoting greener driving techniques; purchasing more fuel efficient vehicles; using alternative fuels; and seek to increase the proportion of new, more fuel efficient buses in use in the County. 	Slightly beneficial

Environmental Impacts of Major Schemes

In accordance with the DfT’s Full Guidance on Local Transport Plans Second Edition (2004), new major scheme proposals have been developed and presented separately from the LTP. As such, specific potential major schemes such as the Shrewsbury North West Relief Road were not assessed in the strategic options assessment. Results of a Stage 2 Environmental Assessment of this scheme are provided in 5.2

Monitoring

A set of indicators has been established to monitor the actual environmental impacts at the LTP is implemented. Reporting on these SEA indicators will be integral to the LTP reporting process.