



## ENVIRONMENTAL MANAGEMENT

### INTRODUCTION

The effect on the environment of the LTP strategies and programmes is being taken seriously by the Partners. The Strategies and programmes have been developed so that the environmental effect is either beneficial or any negative impact is kept as small as possible.

An SEA has been undertaken and its findings have influenced the LTP as it has been developed.

### STRATEGIC ENVIRONMENTAL ASSESSMENT

The European Directive 2001/42/EC (the 'SEA Directive') was transposed into UK law in July 2004 by means of The Environmental Assessment of Plans and Programmes Regulations.

The aim of the SEA is to assess the likely impact of strategic level plans and programmes on the environment and to inform decision-making throughout the development of the LTP2, ensuring that sustainable development is promoted throughout the process. Basic principles of SEA include:

- To identify and focus on the main environmental constraints for implementation of the Plan;
- To identify and assess the best option for strategic action in terms of environmental performance;
- To minimise the negative effects of the Plan, optimise the positive impacts and compensate for any loss of valuable features/benefits;
- Ensure that actions resulting from the Plan do not incur irreversible damage to the environment, including consideration of cumulative and indirect impacts; and
- SEA is an iterative process that takes place during the development of the Plan, rather than a 'bolt-on' appraisal of the final draft.

Key stages in the SEA process include Scoping and the final Environmental Report.

Table 4.7 summarises the findings of the SEA. The findings indicate that there are further opportunities for environmental improvement. These will need to be investigated during the period of the LTP.

The SEA process and the findings are explained in more detail in Appendix K.

- Promoting stakeholder participation through the consultation process, providing the opportunity for issues of concern beyond the main area of focus in the LTP to be considered throughout development of the Plan;





**TABLE 4.7: SEA SUMMARY**

SEA OBJECTIVE	SIGNIFICANCE OF STRATEGIC EFFECTS	OPPORTUNITIES FOR ENVIRONMENTAL IMPROVEMENT
Reduce transport related impacts on local/regional noise climate	Minor Beneficial	Minor
Improve local/regional air quality and mitigate transport related AQMAs	Minor Beneficial	Major *
Reduce transport-related emissions of greenhouse gases	Minor Beneficial	Major *
Improve the ability of transport systems to adapt to climate change	Moderate Beneficial	Moderate
Protect and enhance landscape and townscape diversity	Minor Beneficial	Minor
Avoid loss or damage to historic buildings, land, structures, Conservation Areas and archeological areas or their setting	Uncertain	Minor
Help protect and enhance habitats and species of local, European or international importance	Minor Beneficial	Minor
Reduce the detrimental impact of transport on water quality	Minor Beneficial	Minor
Secure improvements to health	Moderate Beneficial	Minor
Reduce the number of vehicular, pedestrian, and other transport-user casualties	Major Beneficial	Minor
Reduce the risk and fear of crime for pedestrians and public transport users	Moderate Beneficial	Minor
Reduce community severance and fragmentation to aid community cohesion	Minor Beneficial	Minor
Improve access to education, jobs, leisure (including sustainable tourism), community services and the countryside	Uncertain	Moderate
Support employment, economic competitiveness and the revival of priority regeneration areas.	Uncertain	Minor
Protect and retain soil quality	Minor Adverse	Minor
Maximise the efficient and effective use of materials and minimise the amount of waste generated	Minor Beneficial	Minor

\* Limited influence of Local Authorities over the strategic motorway network



## INFLUENCE OF SEA PROCESS ON LTP2 DEVELOPMENT

### SEA SCOPING REPORT

The SEA Scoping Report played an important role in identifying the best performing environmental option of the alternative LTP2 Strategies (see Part 2 Introduction).

### EFFECTIVE ASSET MANAGEMENT

The process of developing the SEA Scoping and Environmental Report has had some influence on various Asset Management issues:

#### Noise Climate

Encouraged more effective use of “low noise” surfacing.

#### Climate Change Adaptation

A range of measures have been identified to reduce the vulnerability of transport infra-structure to climate change, i.e. changes to rainfall intensity and distribution, effects of thermal and wind stress. Examples include:

- improvements to gully and watercourse cleansing and drainage capacity;
- greater use of sustainable drainage systems to reduce rate of surface run-off;
- more resilient lighting columns and tree species to resist stronger winds;
- more resilient signal controllers to cater for increased temperatures;
- modifications to winter maintenance in wet locations;
- deflective barriers or shelter belts to reduce wind impact on vehicles; and
- alterations to horticulture maintenance to cater for longer/changed growing seasons.

#### Water Quality/ Biodiversity

Broader benefits from sustainable drainage, e.g. use of granular drains, balancing ponds, reeds, fuel interceptors and storm tanks, will all contribute towards improving water quality and some enhancement for biodiversity.

#### Re-Use of Materials/ Environment

Encouraged greater use of re-cycled materials e.g. highway plantings, glass, stone sets/kerbs, etc. These measures reduce the need for quarrying natural resources and reduce transport impacts.

Use of appropriate materials benefits conservation areas e.g. use of stone sets/kerbs, and the rural environment e.g. local stone on ROWs.

### WEST YORKSHIRE TRANSPORT EMISSIONS GROUP (WYTEG)

This group was set up to help conduct the SEA for the LTP2. It has been agreed that this group will continue to meet regularly.

This group has decided to try to develop a noise mapping model for West Yorkshire, this will aid more effective use of Low Noise surfacing.

The next meeting will involve discussions with the HA to help develop more effective actions to reduce transport emissions of air pollutants and CO<sub>2</sub>.

Influence of Assessment and Mitigation/Enhancement Tables

Further influence is expected to improve the environmental performance of the LTP2.

### MONITORING AND REMEDIAL MEASURES

Monitoring of the environmental effects of LTP2 implementation will be undertaken and will include periodically reviewing the SEA.

Targets for air quality and CO<sub>2</sub> have been set and there is an intention to try to model traffic noise.

It is intended that the environmental monitoring will influence the LTP2 programmes as they are refined during the period of the Plan (see the section on 'Managing the Risks')

