

Oxfordshire Local Transport Plan
2006-2011

Strategic Environmental Assessment
(Stage B - Strategy Selection)



November 2005

Overview of Process

The WebTag guidance (*Unit 2.11 Strategic Environmental Assessment for Transport Plans and Programmes*) identifies five key stages in the preparation of a Strategic Environmental Assessment. These are as follows:

- > Stage A - Setting the context, identifying objectives and problems and establishing the baseline
- > Stage B - Deciding the scope of the 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 - Monitoring the significant effects of implementing the plan on the environment

The Pre-Scheme Environmental Report (published in July 2005, drawing upon the Scoping Report prepared and consulted upon in November 2004) fulfils the requirement of Stage A. The purpose of this report is to extend this analysis to fulfil the requirements of Stage B.

Developing Alternative Strategies

The identification and comparison of alternative strategies is a key aspect of the Strategic Environmental Assessment process. This is seen as being essential to ensure that likely significant environmental effects are addressed during the preparation of the Plan and also to explain why particular strategies and measures are included and not others. The SEA Directive ((2001/42/EC) states that *“an Environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated”* (Article 5.1). It also notes that one of the issues that must be covered in the Environmental Report is *“an outline of the reasons for selecting the alternatives dealt with.”* (Annex 1b).

The Provisional LTP sets out five objectives for the Local Transport Plan:

- > Tackling Congestion
- > Delivering Accessibility
- > Safer Roads
- > Better Air Quality
- > Improving the Street Environment

The quality of the Local Transport Plan will, to a large extent, be judged against its ability to deliver these objectives.

The pre-scheme environmental report sets out a series of 14 SEA Objectives which should be taken into account in the development of the SEA:

- > To improve the health and well-being of the population and reduce inequalities in health.
- > To reduce poverty and social exclusion and close the gap between the most disadvantaged communities and the rest.
- > To reduce crime and the fear of crime.
- > To increase the vitality of town centres.
- > To improve efficiency in land use through the re-use of previously developed land and existing buildings, and encourage urban renaissance.
- > To reduce air pollution, ensure air quality continues to improve, and address the causes of climate change.
- > To maintain and improve river quality, and achieve sustainable water resources management.
- > To conserve and enhance biodiversity.
- > To protect, enhance and encourage enjoyment of the countryside.
- > To reduce road traffic and congestion through reducing the need to travel by car and improving travel choice.
- > To maintain, enhance and make accessible the historic environment and assets.
- > To reduce the risk of flooding that would be detrimental to public well-being, the economy and the environment.

- > To reduce waste generation and increase the use of recycled materials.
- > To support employment, economic competitiveness, and revival of priority regeneration areas, and sustainable tourism.

Four strategy options have been developed:

- > Option 1 - Continuation of LTP1 approach
- > Option 2 - Focus on resolving highest priority problems
- > Option 3 - Focus on resolving issues with regard to the efficiency of the transport system
- > Option 4 - Focus on resolving problems relating to the impact on quality of life

These will be described in turn. The problems which would be likely to be dealt with in each strategy are given in the Appendix.

Option 1

The programme adopted in the first Local Transport Plan sought to fulfil a series of 8 specific objectives. Individual and separate strategies were developed for a number of areas or subjects and the priorities for spending were developed independently for each of these. The overall programme funding was divided at a high level between a number of sub-programmes and priorities for expenditure developed within each so that all the relevant areas made progress. This gave rise to 5 sub-programmes:

Integrated Transport Strategies - programmes of schemes tailored to meet the specific identified objectives and needs of the towns. For each of the towns a detailed study was carried out which identified a series of locally relevant objectives and recommended short/medium/long term programmes of measures. The nature of the studies, and therefore the strategies which resulted from them, varied according to the situation within the individual towns. Strategies have been, or are in the process of being, developed for Oxford, Banbury, Abingdon, Witney, Henley, Didcot and Wantage/Grove.

Sustainable Transport Schemes - programmes of schemes to promote mode shift through the improvement of alternatives to private motorised travel. This would include public transport proposals, cycling and walking schemes, travel plans schemes and measures to assist travel on the rights of way network.

Casualty Reduction Schemes - programmes of schemes justified solely on the basis of the potential for accident reduction at identified accident locations. This would include site specific measures, speed reduction measures and route action treatments.

Community Safety Schemes - schemes which aim to contribute to the overall safety of transport in the county but which are not targeted at specific accident locations. This would include traffic calming schemes, home zones

rural traffic management schemes, hgv control measures and pedestrian facilities.

Major schemes - larger schemes which would need to be individually justified and which would usually require specific funding.

The major schemes programme would need to be separately assessed in SEA terms. Consequently only the first four of these programmes are considered in this report.

The total programme would be likely to be divided between these sub-programmes in the following proportions:

<i>Integrated Transport Strategies</i>	40%
<i>Sustainable Transport Schemes</i>	30%
<i>Casualty Reduction Schemes</i>	15%
<i>Community Safety Schemes</i>	15%

Options 2-4

The Provisional Local Transport Plan sets out a process whereby the main problems in the county with regard to the LTP objectives given above are identified and assessed. This process would form the basis for each of the other three strategic options. The split between expenditure given to each area would be the product of the schemes to be delivered, rather than the starting point of the programme building process as it is in Option1.

The programme would be delivered through 6 programme areas:

Public Transport - Schemes to improve accessibility and reduce congestion through the provision of better facilities for public transport, particularly buses

Smarter Choices - includes the promotion of measures to re-enforce travel plans and schemes to improve conditions for walking and cycling outside Oxford and the main towns

Oxford - the focus would be to improve accessibility and reduce congestion, particularly for buses, and tackle air quality problems

Towns - schemes to reduce identified problems in the larger towns in the county with particular reference to identified congestion and air quality problems but also taking the opportunity to improve the street environment as part of integrated schemes

Network Development - schemes to reduce congestion, improve congestion and reduce the impact of transport outside of Oxford and the main towns

Road Safety Programmes - continuing to focus on identifying and implementing schemes to resolve problems at locations with high levels of casualties.

The proportion of the total funding available which would be allocated to each of these programmes would be dependant upon the sums required to implement the selected schemes in each of the strategic options.

Option 2 - in this option problems would be considered for remedial action within the programme solely on the basis of the score given to it. A scheme would be developed for that problem provided that it is practical and cost effective.

A split between the programmes in this option would be likely to be approximately:

<i>Public Transport</i>	10%
<i>Smarter Choices</i>	15%
<i>Oxford</i>	25%
<i>Towns</i>	25%
<i>Network Development</i>	10%
<i>Road Safety Programmes</i>	15%

Option 3 - In this option only those problems which relate to congestion and accessibility problems would be considered a priority for action. Schemes which seek to remedy other problems would only be considered if they form part of an integrated programme or scheme for an area which would also resolve a congestion or accessibility problem.

A split between the programmes in this option would be likely to be approximately:

<i>Public Transport</i>	10%
<i>Smarter Choices</i>	15%
<i>Oxford</i>	25%
<i>Towns</i>	30%
<i>Network Development</i>	15%
<i>Road Safety Programmes</i>	5%

Option 4 - In this option only those problems which relate to road safety and air quality problems would be considered a priority for action. Schemes which seek to remedy other problems would only be considered if they form part of an integrated programme or scheme for an area which would also resolve a road safety or air quality problem. Public transport schemes which are aimed at reducing congestion are not included within this programme, although it is accepted that these would schemes may give indirect air quality improvements.

A split between the programmes in this option would be likely to be approximately:

<i>Public Transport</i>	5%
<i>Smarter Choices</i>	15%
<i>Oxford</i>	20%
<i>Towns</i>	25%
<i>Network Development</i>	10%
<i>Road Safety Programmes</i>	25%

It should be noted that many of the same schemes would be developed for inclusion in the programme regardless of the option chosen because these would meet both the objectives set for LTP1 and LTP2, both improve the technical efficiency of the network and reduce the impact of transport, and would resolve one of the highest ranked problems. In addition there are a number of schemes, usually in the first year of the five year programme under consideration, which have been identified as “committed” and as such are included in all the programmes. These are usually schemes where the scheme has started its implementation in the first LTP period.

Comparison of Alternative Strategies

It is not possible, or necessary, at this stage of the assessment process to carry out a detailed quantitative comparison of the impacts of the different strategies. This is because the details of many of the schemes are not known at this stage in the overall programme development process. Instead a qualitative assessment has been carried out.

This assessment takes the form of assessing each of the strategies in terms of its overall likely impact on the SEA objectives against the following criteria:

Green - strategy would lead to improvement toward the objective

Orange - strategy would lead to improvement toward the objective if additional measures considered or if satisfactory mitigation measures were implemented

Blue - strategy would have a neutral or uncertain effect

Red - strategy would have a detrimental impact on objective (any strategy which scores red against any objective would be considered unacceptable)

The assessment is summarised in Table 1. For each of the SEA objectives the types of scheme which are likely to contribute to the attainment of the objective (or alternatively to act against it) is listed. For those areas where additional or mitigating impacts are required then the types of scheme which should be considered is listed.

For comparison purposes a “do nothing” option is also included within the Table. The impacts in this column are compared against the current situation. The impact of the strategies under consideration are compared against the do nothing. It is possible that some impacts shown as green may indicate a deterioration from the current situation where this would be less than if the do nothing strategy was in place.

Note - Given the level of detail in this assessment it is likely that some, more minor, aspects of mitigation may not be considered. Some areas where this is likely to be the case are highlighted in the table below where the design of measures will determine whether schemes have a detrimental impact. This is likely to be the case for all of the strategies and, as such, should not impact upon the overall choice of strategy.

TABLE 1 - Assessment against SEA objectives

SEA Objectives	Do nothing	Option 1 Continuation of LTP1 approach	Option 2 Focus on highest priority problems	Option 3 Focus on congestion and accessibility	Option 4 Focus on road safety and air quality
1 - To improve the health and well-being and reduce inequalities in health.	Increased traffic levels and pollution	Sustainable transport and road safety schemes	Air quality, public transport and road safety schemes	Public transport and road safety schemes	Air quality, public transport and road safety schemes
2 - To reduce poverty and social exclusion and close the gap between the most disadvantaged communities and the rest.	Assumes public transport services remain as at present	Public transport schemes	Public transport schemes	Public transport schemes	Measures within Oxford air quality plan may have some indirect benefits - streetscapes schemes included in programme
3 - To reduce crime and the fear of crime.	Minimal impact	Town centre measures in integrated transport strategies	Streetscapes measures in Oxford and Towns programmes	May have benefits if streetscapes measures included in programme	Measures within Oxford air quality plan may have indirect benefits - streetscapes schemes included in programme

4 - To increase the vitality of town centres.	Increased traffic reduces attractiveness of town centres	Town centre measures in integrated transport strategies	Streetscapes measures in Oxford and Towns programmes	Streetscapes measures could be included in programmes	Measures within Oxford air quality plan may have indirect benefits - streetscapes schemes could be included in programme
5 - To improve efficiency in land use and encourage urban renaissance.	Minimal impact	No specific measures to deal with this - some indirect benefits possible from town centre measures in integrated transport strategies	No specific measures to deal with this - some indirect benefits from streetscapes measures in Oxford and Towns programmes	No specific measures to deal with this - some indirect benefits if streetscapes measures included in programme	No measures to deal with this
6 - To reduce air pollution, ensure air quality continues to improve, and address the causes of climate change.	Increased traffic levels, particularly in sensitive areas	Sustainable transport schemes	Air quality and public transport schemes	No specific measures to deal with this - indirect benefits may arise from public transport measures	Some of the measures within Oxford air quality plan may have some indirect benefits to climate change impact

7 - To maintain and improve river quality, and achieve sustainable water resources management.	Minimal impact	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts
8 - To conserve and enhance biodiversity.	Minimal impact	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts
9 - To protect, enhance and encourage enjoyment of the countryside	Minimal impact	Public Transport, cycling and walking schemes, rural traffic management and hgv controls, rights of way schemes	Public transport measure - additional benefits if include schemes to improve access to rights of way network	Public transport measure - additional benefits if include schemes to improve access to rights of way network	No measures to deal with this
10 - To reduce road traffic and congestion	Increased traffic levels	Integrated transport strategies and sustainable transport schemes	Network development, Oxford, Towns and public transport schemes	Network Development, Oxford, Towns and public transport schemes	No measures to deal with this

11 - To maintain, enhance and make accessible the historic environment and assets.	Increased traffic reduces attractiveness of historic town centres	Town centre measures in integrated transport strategies	Streetscapes measures in Oxford and Towns programmes	Streetscapes measures could be included in programme	No measures to deal with this - streetscapes schemes could be included in programme
12 - To reduce the risk of flooding	Minimal impact	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts.	No measures to deal with this - careful design of measures required to ensure no negative impacts	No measures to deal with this - careful design of measures required to ensure no negative impacts
13 - To reduce waste generation and increase the use of recycled materials	Minimal impact	No measures to deal with this	No measures to deal with this	No measures to deal with this	No measures to deal with this
14 - To support employment, economic competitiveness, and sustainable tourism.	Increased traffic and congestion reduces competitiveness of town centres	No specific measures - public transport and integrated transport schemes may have indirect impacts	Network development measures - public transport measures may have indirect impacts	Network development - public transport measures may have indirect impacts	No measures to deal with this

If it assumed that each of the SEA objectives is of equal value then this assessment can be summarised as :

	Do nothing	Option 1	Option 2	Option 3	Option 4
Green	0	7	9	6	2
Orange	0	4	3	5	7
Blue	8	3	2	3	5
Red	6	0	0	0	0

It can be seen that the do nothing option is unacceptable. Of the remaining 4, Option 4 clearly gives the lowest benefits against these objectives although it is likely that it would give the greatest benefits against some of the objectives, particularly Objectives 1 and 6. Options 1, 2 and 3 give roughly equivalent scores, particularly if mitigation measures can be developed and/or schemes can be designed to minimise their impacts. It is likely that Option 3 would give the highest level of benefits for Objectives 10 and 14. Options 1 and 2 will give benefits across the widest range of objectives.

Schemes designed to improve the streetscape in locations where this is seen as being a problem have not been included in Options 3 and 4. If these are included then Option 4 is still the least effective strategy for meeting the objectives; Option 3 would however contribute to meeting 8 of the objectives.

In addition the strategies have also been assessed on the same scale against their likely impact on meeting the objectives set for LTP2. This is summarised in Table 2. Looking at this it is clear that Options 2 and 3 are less effective at meeting the whole range of objectives. Options 1 and 2 are both likely to deliver improvements to all the objectives; Option 2, however, is likely to deliver higher levels of improvement to three of the objectives through its more targeted approach to problem and scheme identification.

TABLE 2 - Assessment against LTP2 objectives

LTP Objectives	Do Nothing	Option 1 Continuation of LTP1 approach	Option 2 Focus on highest priority problems	Option 3 Focus on congestion and accessibility	Option 4 Focus on road safety and air quality
Tackling Congestion	Increased road traffic	Resolves some congestion problems	Resolves worst congestion problems	Resolves worst congestion problems - would deal with more problems than Option 2	Deals with some indirectly through measures to reduce traffic levels
Delivering Accessibility	Assumes bus services remain constant - although may be less effective with increased congestion	Promotes better and more efficient public transport	Promotes better and more efficient public transport	Promotes better and more efficient public transport	Deals with some indirectly through measures to reduce traffic levels
Safer Roads	Accident numbers generally increase with traffic levels	Targets worst accident locations	Targets worst accident locations	Deals with some indirectly through measures to reduce traffic levels by improved public transport	Targets worst accident locations - would deal with more problems than Options 1 and 2

Better Air Quality	Air quality problems increase with traffic levels, particularly in sensitive areas	Deal with some locations through public transport and town centre measures	Targets all declared AQMAs	Deals with some indirectly through measures to reduce traffic levels and congestion by improved public transport	Targets all declared AQMAs - plus may deal with other problem areas
Improving the Street Environment	May be adverse impact in some areas where traffic levels increase	Town centre measures	Streetscape improvements	Streetscapes measures could be included in programmes	Streetscapes measures could be included in programmes

Conclusions

It is clear from the assessment above that all of the four strategy Options considered would deliver significant improvements over the do nothing option.

In terms of their performance against the SEA objectives Options 1, 2 and 3 would seem to be most effective, assuming that all the objectives have equal importance. In terms of their delivery of the objectives set for the second LTP Options 1 and 2 offer clear advantages over the other Options.

These conclusions would be less clear if the SEA objectives were to be weighted differentially. Options 3 and 4 are likely to give the greatest level of benefits against particular objectives and so, if these were weighted more highly, the advantages of Options 1 and 2 would be less. However, the objectives where Options 3 and 4 are likely to give the greatest benefits are also ones where Options 1 and 2 score well, even if less so, and so the overall difference is likely to be marginal.

In comparing Options 1 and 2 this assessment would appear that Option 2 is marginally more effective in meeting the SEA objectives, although it would have to be admitted that the differences between them may not be significant given the limits on the assessment undertaken. Both Options would be likely to deliver progress toward meeting all of the LTP2 objectives; Option 2 would, however, be likely to achieve better results for three of the objectives (congestion, air quality, street environment). This better performance is unsurprising given that this programme has been developed to target the worst problem locations.

It is concluded, therefore, that Option 2 should form the basis of further development for the Oxfordshire Local Transport Plan 2006-2011.