



# **Strategic Environmental Assessment of Local Implementation Plans: Selecting and Documenting Alternatives**

**by S Simmons**

**UPR SE/126/04**

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**Centre for Sustainability at TRL Limited**



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**STRATEGIC ENVIRONMENTAL ASSESSMENT OF LOCAL  
IMPLEMENTATION PLANS: SELECTING AND DOCUMENTING  
ALTERNATIVES**

Version: Final

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**Client: Association of London Government (Damian Price)**



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## 1 Introduction

The purpose of this working paper is to assist London Boroughs with the Strategic Environmental Assessment (SEA) of their Local Implementation Plans. Stage B of SEA as suggested in Guidance for SEA of Transport Plans (DfT 2004) involves several steps. One of these is the development of alternatives for the LIP which are then assessed as part of the SEA. This document sets out some potential approaches to handling alternatives within the SEA.

Section 2 of this document highlights the need for consideration of alternatives, and the requirements as specified within the SEA Regulations.

Section 3 sets out the implications of the MTS on developing alternative options, and provides examples of a pool of measures.

Section 4 focuses on how to select alternative approaches to achieve the MTS priorities.

Section 5 provides advice on how to move through the assessment of alternatives .

This report should be read together with the Advice Note prepared by C4S/TRL for London Boroughs in September 2004 and used with the following documents:

- Strategic Environmental Assessment of Local Implementation Plans: Sources of baseline data for stage A.
- Strategic Environmental Assessment of Local Implementation Plans: Problems and opportunities of relevance to SEAs for LIPs.
- Strategic Environmental Assessment of Local Implementation Plans: SEA objectives for stage A.
- Strategic Environmental Assessment of Local Implementation Plans: Scoping report template.

The alternatives under consideration within LIPs will vary between Boroughs. Users of this document are therefore advised to use the information as a starting point and develop approaches to best suit local conditions .

## 2 The SEA Regulations and alternatives

The consideration of alternatives is a requirement of the SEA Regulations. It is through examining alternatives that many of the potential negative effects of the plan can be avoided and positive aspects identified and enhanced. It is therefore important that this area is addressed in the SEA of an LIP.

Alternatives are referred to at three points in the SEA Regulations:

- The Environmental Report must “...identify, describe and evaluate the likely significant effects on the environment of...reasonable alternatives taking into account the objectives and scope of the plan or programme”;
- it must also contain “An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know how) encountered in compiling the required information.” Schedule 2(8);
- The SEA Statement must state “the reasons for choosing the plan or programme as adopted; in light of the other reasonable alternatives dealt with...” Article 16(4).

The requirement in SEA is therefore to assess reasonable alternatives – not just a single preferred plan/option. This has an important bearing on the work required in the SEA. From the above points it is also clear that under the Regulations, alternatives need to be considered throughout the SEA process. A practical way of meeting these requirements is to follow these steps:

- At stage B identify reasonable alternatives to achieve the LIP objectives (bearing in mind constraints on the LIP);
- Describe those alternatives;
- Examine, in broad terms, the likely significant environmental effects of each alternative;
- Document the reasons for discounting any alternatives at this stage;
- Take forward 2-5 alternatives and proceed with the detailed assessment - stage C of the SEA;
- Identify mitigation measures for each alternative considered in stage C;
- Document the results in the Environmental Report (stage D) and subsequently state reasons for selecting the chosen alternative option in the final SEA statement.

It is important to remember that alternative options/approaches should not be forced. However, the SEA process may reinforce and extend good transport planning practice in relation to option selection.

In light of the role of LIPs in the hierarchy of plans and strategies, there may be limited scope to develop meaningful alternative strategies. It may also be that the alternative chosen is a hybrid of all the alternatives, identifying positive elements of each.

### 3 The Mayor's Transport Strategy and implications for alternatives

The alternative strategies and options available to London Borough's in the formulation of LIPs are constrained by the hierarchy of plans and responsibilities of other bodies. The Mayor's Transport Strategy (MTS), in particular, sets out key priorities and policies to which a LIP must respond with implementation proposals. In addition, LIP guidance contains targets for implementation of the MTS, several of which apply to Boroughs. As such, a number of broad strategic options have already been addressed by the MTS and targets. Indeed, the next iteration of the MTS will be subject to SEA. In addition Transport for London (TfL) has responsibilities for the Transport for London Road Network (TLRN), bus services, London Underground and elements of the Strategic Road Network, taxi, river and rail services that constrain options and strategies available to Boroughs. Large infrastructure projects, such as Crossrail and CTRL, are often the responsibility of other organisations and are subject to project EIA .

Table 1 sets out the Mayor's Transport Strategy Priorities for individual Borough LIPs. A set of example measures have been provided to illustrate potential ways of achieving the priorities.

**Table 1: MTS Priorities and Potential LIP Measures**

<b>MTS Priorities for LIPs</b>	<b>Example pool of measures for achieving MTS priorities</b>
Improving road safety	<ul style="list-style-type: none"> <li>• Pedestrian barriers</li> <li>• Pedestrian/cycle crossings</li> <li>• 20mph zones</li> <li>• Speed enforcement measures</li> <li>• Parking controls/restrictions to improve visibility</li> <li>• Off road cycle paths</li> </ul>
Improve bus journey times and reliability	<ul style="list-style-type: none"> <li>• Real time information</li> <li>• Bus priority measures</li> </ul>
Relieving traffic congestion and improving journey time reliability including through use of travel demand measures	<ul style="list-style-type: none"> <li>• School travel awareness programmes</li> <li>• Company green travel plans</li> <li>• Commuter parking charges</li> <li>• Enforcement of driving restrictions (e.g. no stopping, yellow boxes, no right/left turn)</li> <li>• Control of parking supply</li> <li>• Peak hour contra flows</li> <li>• Improve reliability, accessibility and frequency of alternatives to car e.g. buses (see above)</li> <li>• Improve sequencing of lights at junctions</li> <li>• Road junction improvements</li> </ul>
Improving the working of parking and loading arrangements to provide fair,	<ul style="list-style-type: none"> <li>• Improve reliability, accessibility and frequency of</li> </ul>

reasonable and effective enforcement of regulations...contributing to easing congestion and improving access to town centres and regeneration areas	<p>alternatives to car e.g. buses (see above)</p> <ul style="list-style-type: none"> <li>• Control of parking supply</li> <li>• Company/school green travel plans</li> <li>• Information provision to local businesses regarding loading arrangements</li> <li>• Commuter parking charges</li> <li>• Enforcement of parking /loading regulations</li> </ul>
Improve access and social inclusion on the transport network	<ul style="list-style-type: none"> <li>• Improve security at transport interchanges / on public transport (CCTV, wardens, security staff etc)</li> <li>• Improve community bus facilities (accessibility and affordability)</li> <li>• Information provision to target groups on availability / accessibility of transport</li> </ul>
Encourage walking by improving the street environment, conditions for pedestrians and through the use of travel demand measures	<ul style="list-style-type: none"> <li>• Control of parking supply</li> <li>• Improve reliability, accessibility and frequency of alternatives to car e.g. buses (see above)</li> <li>• Improve routes for pedestrians e.g. priority crossings, removal of rubbish/ obstructions, lighting etc.</li> <li>• Health/environmental awareness campaigns highlighting benefits of walking all or part of journey</li> <li>• Provision of personal alarms and high visibility arm bands</li> </ul>
Encourage cycling by improving conditions for cyclists and through the use of travel demand measures	<ul style="list-style-type: none"> <li>• Loan schemes for purchase /hire of bicycles</li> <li>• Company green travel plans</li> <li>• Provision of high visibility clothing</li> <li>• Control of parking supply</li> <li>• Cycle priority crossings</li> <li>• Off road cycle paths / cycle lanes separated from traffic</li> <li>• Commuter parking charges</li> <li>• Enforcement of cycle lane priorities (no parking /encroaching across / driving in cycle lane)</li> </ul>
Bring transport infrastructure to a state of good repair	<ul style="list-style-type: none"> <li>• Regular maintenance schedule</li> <li>• Place weight/size limits on stretches of road to limit damage</li> </ul>

## 4 Identifying alternatives

It is likely that each Borough LIP will use a mix of the measures listed in Table 1, plus additional measures as required. The pool of measures can be viewed as a list of alternative options for achieving the LIP and MTS objectives.

Other approaches to selecting alternatives also exist to help to focus the assessment at the strategic level. These approaches examine alternatives in terms of the different ways individual measures can be grouped and implemented. Which ever approach is used alternative options must meet the MTS priorities and at the pace of delivery specified within the LIPs guidance.

Illustrative examples of other approaches to considering alternatives for LIPs are set out in Table 2. These approaches and alternative options should not be viewed as definitive but should help spark discussion and thought as to appropriate alternatives for individual Borough situations and needs. Further useful alternative options can be developed for each approach.

The identified approach and developed alternatives should ideally be documented in the Scoping Report, and as a minimum must be included in the Environmental Report.

**Table 2: Possible approaches to grouping and considering alternatives**

Approach	Alternative options for implementing pool of measures
A Timing of funding	<ol style="list-style-type: none"> <li>1. Low cost measures first</li> <li>2. High cost measures first</li> <li>3. Even split of funding</li> </ol>
B Type of measure	<ol style="list-style-type: none"> <li>1. Soft measures (information and advice)</li> <li>2. Demand management (physical and fiscal)</li> <li>3. Physical improvements to existing network</li> <li>4. Expand network</li> </ol>
C Geographic Split	<ol style="list-style-type: none"> <li>1. Apportionment of funding based on planned population growth</li> <li>2. Apportionment of funding based on most deprived wards</li> <li>3. Apportionment of funding based on accessibility to transport network</li> </ol>
D LIPs relationship with strategic transport network	<ol style="list-style-type: none"> <li>1. Prioritise measures to complement TfL (and other authorities) investments in strategic transport network e.g. roads, rail, ports and harbours</li> <li>2. Prioritise measures on basis of local needs</li> </ol>
E Population growth	<ol style="list-style-type: none"> <li>1. Delivery of measures based on a static population</li> <li>2. Delivery of measures based on “Low range” population forecast</li> <li>3. Delivery of measures based on “High range” population forecast</li> </ol>

### 4.1 Approach A

Approach A involves dividing the LIP measures into those that are low cost (e.g. soft measures such as information and advice, green travel plans, enforcement of parking, charging etc) and those that are high cost (infrastructure improvements, expanding networks etc). The assessment can then focus on the different effects on the environment of implementing the measures at different times.

## **4.2 Approach B**

Approach B examines the effects of implementing different types of measures at different times during the lifetime of the plan. By dividing the measures into types e.g. soft measures, demand management, physical improvements on existing network and expanding the network, it is possible to assess these alternative options against the SEA objectives to see which has the best overall effect, or most significant negative effect.

## **4.3 Approach C**

Approach C provides alternative options for focusing spending on measures in particular geographic areas. For example Boroughs may wish to focus transport measures and majority of funding where planned population growth is anticipated, or where access to the transport network is limited. These alternative options will have different effects on the SEA topics, and outcomes for the LIP and SEA objectives.

## **4.4 Approach D**

Approach D examines the relationship of the LIP with major projects in the context of the strategic transport network. One alternative focuses on implementing measures to complement and support new infrastructure developments, therefore having a combined effect. The second alternative implements measures independent of the projects, based on local needs only.

## **4.5 Approach E**

Approach E looks at alternatives for linking the implementation of measures with different forecasts for population. It may be that different measures would be implemented or at different times depending on anticipated demand/effects of population changes.

## 5 Initial assessment of alternatives

Once an overall approach to dealing with alternatives has been identified, an initial assessment needs to be conducted on the alternative options. This helps refine and eliminate the least helpful alternatives before taking the remaining options forward to stage C and detailed assessment. In practice this will involve a basic assessment of the options against the SEA objectives set previously. An example is provided below of how the initial assessment of alternatives could be conducted and presented (Table 3) in the Environmental Report.

Approach B has been identified from the possible approaches in Table 2, providing 4 alternative options based on grouping of different types of measures. Table 1 in Section 3 provides a pool of measures. The measures from this table can then be grouped according to the alternative options:

- Option 1: Improving existing network through provision of information, help and advice
- Option 2: Use financial measures to achieve demand management
- Option 3: Improving capacity of existing network through physical measures
- Option 4: Expanding network through engineering solutions

By thinking about the grouped measures against the SEA objectives it is possible to identify where a positive or negative effect may occur. It is recommended that a short justification is provided to support decisions.

Remaining alternative options are taken forward for detailed assessment in stage C of the SEA. Please refer to the main advice note<sup>1</sup> for further details on stage C.

**Table 3: Example of how to present the initial assessment of alternative options**

LIP Measures Grouped by Approach		SEA Objectives							
<b>Option 1</b>									
<b>Option 2</b>									
<b>Option 3</b>									
<b>Option 4</b>									

<sup>1</sup> Treleven, Simmons & Fry (Sept 2004) *Advice on Strategic Environmental Assessment for Local Implementation Plans* C4S at TRL

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