


Advice on the Prioritisation of Smaller Transport Schemes

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Executive Summary

This advice has been produced by Atkins Transport Planning, on behalf of the Department for Transport. It focuses on the prioritisation of expenditure on capital-based LTP Integrated Transport schemes. Expenditure on revenue measures and maintenance is considered within the context of an overall integrated transport prioritisation process. The advice is aimed at local authority officers involved in developing and implementing a prioritisation approach.

Prioritisation is a valuable transport planning process which ensures delivery of transport-related objectives in a cost effective and efficient manner. It is about deciding “what to spend, in what areas to achieve the results you want”, or making sure expenditure is prioritised on schemes and interventions that achieve the most. It is also about identifying the impacts of proposed areas of expenditure, and highlighting the trade-offs which need to be made when deciding where to focus resources. Questions which need to be addressed include:

- ◆ which schemes and interventions are most important?
- ◆ which must be done first?
- ◆ which are the most crucial for achieving agreed objectives (including those set out in the Local Transport Plan, Regional Transport Strategy, Community Strategy, Local Area Agreement, etc.)?
- ◆ which will benefit users more?

Prioritisation therefore involves blending technical and political considerations in a process that aids, rather than dictates decision making. It requires identification of schemes and interventions for consideration; appraisal or measurement of the potential impacts (both positive and negative) of these schemes; followed by informed decision-making about the trade-offs which need to be made.

However, effective scheme prioritisation is a challenging process and there is little specific guidance or advice on how authorities should prioritise their smaller integrated transport schemes, typically less than £250,000, which collectively make up a significant proportion of LTP expenditure. Evidence collected in the production of this advice document suggests that, while all transport authorities prioritise their expenditure to some extent, there is a need for authorities to develop and implement more systematic methodologies for option generation and budget allocation.

The advice does not recommend or specify particular prioritisation methodologies to local authorities. Nor does it provide all the answers in what is an evolving area of development within local authorities. Instead it is intended to assist authorities in developing a process which works for them and which reflects their local circumstances. Evidence suggests that there is no one size fits all approach. An approach which works well in a small authority may not be the same as one which works well in a much larger authority.

Chapter 2 describes the purpose of prioritisation, and associated benefits and challenges (Table 1).

A review of existing guidance and advice on appraisal and prioritisation is provided, and examples of approaches used in other areas of transport and other service areas are highlighted. Further information on these approaches is provided in **Appendix A**, along with a discussion of their applicability to the prioritisation of smaller transport schemes. The intention is not to suggest that these methodologies can simply be transplanted into the arena of local transport

planning. Instead, the purpose is to encourage local authority transport officers to think about techniques that could be used to improve their prioritisation approaches.

Table 1 – Potential Benefits and Difficulties of Prioritisation

Potential Benefits of Prioritisation	Difficulties of Prioritisation
<ul style="list-style-type: none"> ◆ Improved service performance, through delivery of transport-related objectives in a cost effective and efficient manner. ◆ Policy driven process, which demonstrates why schemes are and are not implemented. Ensures best use is made of resources. ◆ Encourages stakeholder support. Clearly articulates the decision making process and reduces challenge to sound decisions. ◆ Assists in forward planning and the identification of a clear programme of expenditure. ◆ Provides continuity in approach throughout the LTP process. 	<ul style="list-style-type: none"> ◆ Making one thing a priority implies other things are not. This can generate resistance from stakeholders and require difficult decisions to be made. ◆ The process must be flexible and robust. The technical process may need to be balanced with political and practical requirements. ◆ Requires robust evidence about scheme impacts. ◆ Stakeholder expectations need to be managed. ◆ The process can be time consuming and resource intensive unless well managed.

Chapter 3 describes the current approaches used by local authorities to prioritise integrated transport capital budgets. It provides an overview of the approaches used in terms of:

- ◆ the overall assessment frameworks used (score-based or judgement-based);
- ◆ methods for assessing the impact of schemes, focusing on policy compliance, value for money and deliverability;
- ◆ prioritisation of schemes from different policy areas;
- ◆ prescriptive versus non-prescriptive assessments; and,
- ◆ the involvement of officers, elected Members and stakeholders in assessing schemes.

The methodologies examined all use quantitative and qualitative data to assess scheme impacts and costs, and do not seek to express different impacts in a common monetary unit. Some approaches involve assigning weights to criteria, and then scoring options in terms of how well they perform against those criteria. Other approaches require the decision maker(s) to use judgement over the information provided in reaching a decision.

Two broad approaches have been adopted in terms of prioritising across or within different policy areas.

The first involves prioritising investment from a long list of schemes covering a range of different policy areas. Thus, the merits of an individual cycling scheme are compared against the merits of other types of schemes e.g. walking, public transport, road safety, etc.

The second approach involves allocating the available budget between a number of different policy headings, and then prioritising within each policy heading. In some cases, individual prioritisation approaches are developed for each policy heading; while other approaches identify a generic approach which is then adapted to reflect the nature of specific policy areas.

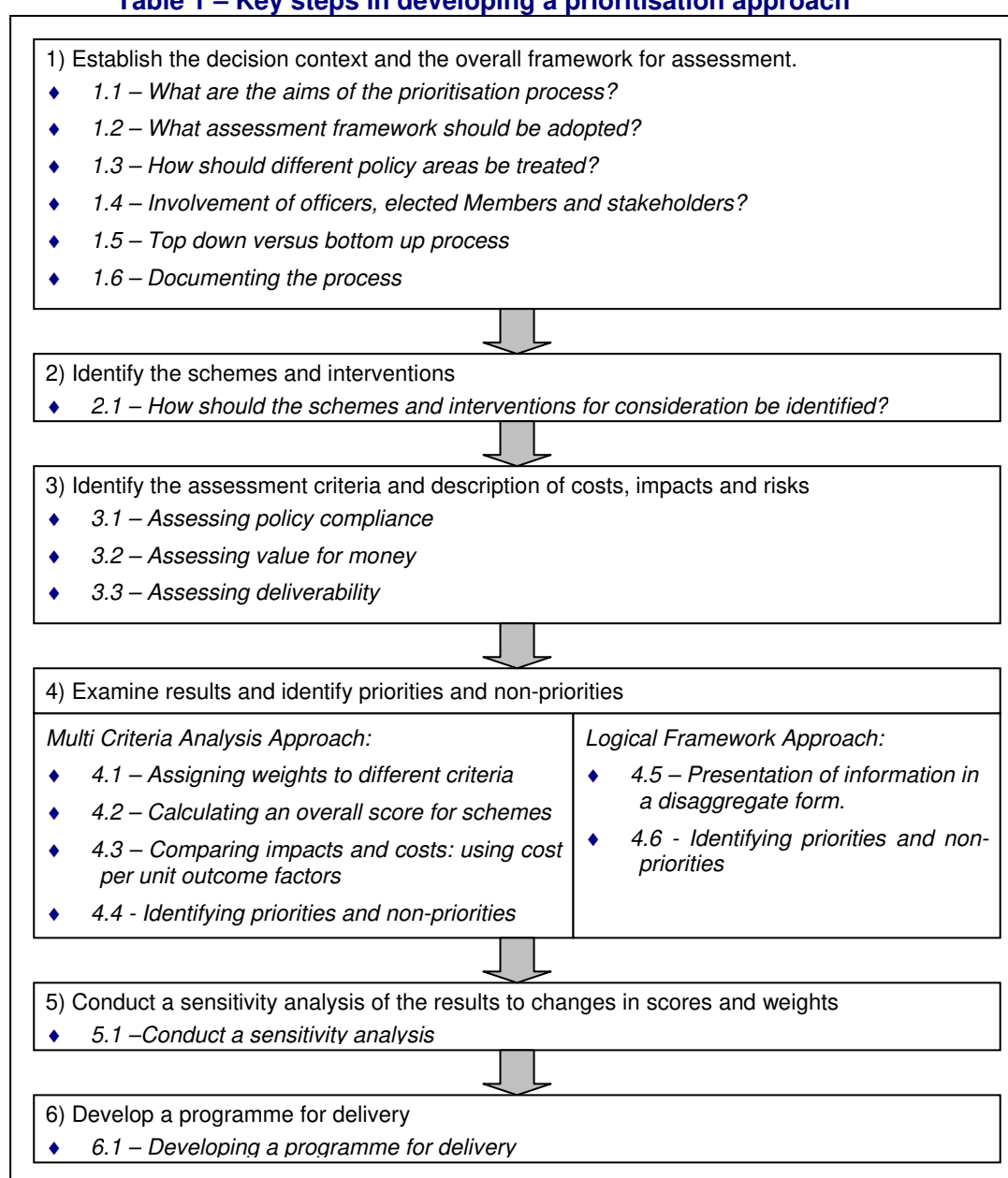
Detailed examples of good practice are included in **Appendix B and C** of this advice. They demonstrate a range of approaches which work well for the authority concerned. However, different approaches will be required for specific local circumstances, and the approaches described are not necessarily transferable.

Chapter 4 sets out some guiding principles for the development of a robust assessment and prioritisation process. Specifically, the process should:

- (i) inform decision makers' choices, not dictate them;
- (ii) be based on a technically robust and defensible process;
- (iii) involve a wide range of officers, Members and stakeholders in the process;
- (iv) produce a realistic and deliverable balanced programme of schemes; and
- (v) allow sufficient time for development of the methodology (involving consultation, testing and modification), and training for those involved in the process.

Chapter 5 provides detailed advice and recommendations, structured around a number of generic stages and steps (Table 1).

Table 1 – Key steps in developing a prioritisation approach



Adapted from Figure 5.1, Multi-Criteria Analysis Manual (DTLR, 2001).

Chapter 6 concludes by identifying common problems experienced and providing recommendations for addressing such problems. The recommendations do not offer a simple solution. However they do provide some important pointers that will enable local authorities to develop an approach that works for them.

Problems	Potential solutions
1) Methodologies are not developed by a broad spectrum of local authority transport officers	Officers from all parts of the Transport service, as well as those covering land-use planning and economic development should be involved in the development of the process.
2) Methodologies are too complex to be used to manage the capital programme	The methodology should focus on being practical, ahead of being academically rigorous.
3) Methodologies result in a bias towards some types of scheme over others	Options include: <ul style="list-style-type: none"> ◆ Develop two stage prioritisation process which first splits the available budget into policy headings. ◆ Consider prioritising schemes in the first instance, based on disaggregated impacts, and challenge evidence. ◆ Re-examine the assessment criteria being used; and issue guidance on the types of schemes sought and how to assess schemes systematically.
4) Prioritisation does not always recognise the contribution that a scheme might make to a wider package of measures	Options include: <ul style="list-style-type: none"> ◆ Combine schemes into larger area- or corridor-based packages. ◆ Score schemes which add benefit to existing schemes or contribute to a future planned programme of measures.
5) There is too much emphasis on trying to get numerical evidence	Subjective assessment of impacts can form the basis of a defensible prioritisation approach, if undertaken in a systematic, transparent and auditable manner; and subject to challenge and review.
6) There is no attempt to collect numerical evidence for future evaluation through before and after scheme monitoring	Authorities should look to establish a clear monitoring and evaluation framework. Targeted (but proportionate) monitoring and evaluation is a vital tool.
7) Prioritisation is not supported by elected members and stakeholders.	Members need to be fully aware of, and preferably involved in, the development of a prioritisation methodology. This opportunity could also be extended to stakeholders – such as transport operators or groups such as the Local Strategic Partnership.
8) Spurious accuracy	The methodology should inform decision-making rather than dictate it. Scores should be treated as indicative and not definitive. This message can re-enforced by presenting scheme scores within bands or tolerances, and limiting the number of response categories available for selection.
9) Schemes are not at the same stage of development	The methodology should be flexible enough to accommodate this. Use of a screening stage, bandings to represent scheme costs and impacts, and development of a rolling programme can help.

1. Introduction

1.1 The need for advice

Prioritisation is a valuable transport planning process which ensures delivery of transport-related objectives in a cost effective and efficient manner. This includes the Government's five broad goals for transport¹, and other transport-related objectives local authorities have adopted.

The *Full Guidance on Local Transport Plans: Second Edition (December 2004)* placed an increased importance on prioritising transport schemes in a systematic and robust way. In addition, prioritisation is one of five themes in the corporate assessment element of the Comprehensive Performance Assessment (CPA) process, and is likely to form an important area of scrutiny in its proposed successor, Comprehensive Area Assessment (CAA).

Second Local Transport Plans (LTP2s) were therefore expected to identify and prioritise the local transport policies and schemes that would deliver the best possible value for a set amount of money. Authorities are also expected to have effective prioritisation approaches in place throughout the implementation of the five year plans. This is becoming an increasingly important requirement in the context of increasing pressures on capital and revenue budgets.

Eddington² also emphasises the importance of ensuring that transport planning at all levels draws on a comprehensive assessment of all the impacts of transport policies – economic, environmental and social. Prioritising those policies which offer the highest returns for each pound of resources is considered essential if the Government is to achieve its goal to maximise the competitiveness and productivity of the economy³.

Under the Local Transport Bill (2007), Passenger Transport Authorities (PTAs) in metropolitan areas will become Integrated Transport Authorities (ITAs) and will take on the sole duty to produce Local Transport Plans. This may include prioritising expenditure across the ITA and the metropolitan Districts to a greater extent than to date. Other new sub-regional structures may also evolve with greater responsibility for determining expenditure of resources across different organisations.

In terms of the wider policy context, the need for prioritisation has relevance beyond the direct realms of transportation. The Local Government White Paper sets out a bold new vision for councils focusing on their role as place shapers, engagement with local citizens and communities, and localism in investment decisions. Authorities need to assess which transport investments most effectively deliver on their Local Area Agreement (and potentially Multi Area Agreement) targets and indicators, together with their associated delivery plans. This may require processes which can consider resource allocation across different service areas, different partners and localities.

¹ Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World (DfT, Oct 2007).

² The Eddington Transport Study: The case for action: Sir Rod Eddington's advice to Government (Dec 2006).

³ Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World (DfT, Oct 2007).

However, effective scheme prioritisation is a challenging process, and there is little specific guidance or advice on how authorities should prioritise their small scheme transport investment. This is especially true for smaller integrated transport schemes, typically less than £250,000, which collectively make up a significant proportion of LTP expenditure.

It is also an area where authorities have struggled to demonstrate strong performance during LTP1, and to a lesser extent in production of their Second LTPs⁴.

In general, the demand for transport improvements outweighs the funding available. All transport authorities therefore prioritise their expenditure, whether explicitly or not. However, some authorities have no formal prioritisation process in place, and others are using ineffective processes. This can contribute to implementation of schemes representing poor value for money, failure to deliver targets, and difficulties in managing stakeholder expectations. There is therefore a need for authorities to develop and implement more systematic methodologies for option generation and budget allocation.

While prioritisation processes are still in their infancy in many local authorities, consultation with authorities in the production of this advice shows that processes are improving in many cases, and there are a number of good practice examples being implemented.

This advice reflects this evolving performance, and is intended to contribute to further improvements in the processes which authorities are developing.

1.2 Scope of advice

This advice has been produced by Atkins Transport Planning, on behalf of the Department for Transport. It focuses primarily on the prioritisation of expenditure on LTP Integrated Transport schemes. Expenditure on revenue measures and maintenance, is considered within the context of an overall integrated transport prioritisation process. Prioritisation of revenue or maintenance budgets, as a stand-alone exercise, is not considered here.

The aim of the advice is to assist local authorities in developing and improving their own methodologies. In particular, it:

- ◆ describes what prioritisation is, its benefits and difficulties;
- ◆ highlights a range of approaches currently used or being developed by local transport authorities to prioritise expenditure on smaller transport schemes;
- ◆ includes some guiding principles for developing a robust prioritisation processes;
- ◆ provides detailed advice on steps to undertake; and,
- ◆ highlights some common problems experienced by authorities.

Detailed examples of good practice are included in Appendix B and C of this advice. They demonstrate a range of approaches which work well for the authority concerned. However, different approaches will be required for specific local circumstances, and the approaches described are not necessarily transferable.

⁴ Long Term Process and Impact Evaluation of Local Transport Plan Policy: Final Report (Atkins, June 2007)

Examples of prioritisation approaches used in other areas of transport are also included in Appendix A of this advice.

The advice is primarily aimed at local authority officers involved in developing and implementing a prioritisation process. It can be used to prioritise individual schemes as well as packages of complementary schemes where interventions reinforce each other⁵.

The advice does not recommend or specify a single prioritisation methodology to local authorities. Evidence from the Regional Funding Allocation process for major schemes shows that most regions developed broadly similar prioritisation methodologies. However, the opportunity to devise techniques to fit their own circumstances and priorities was felt to be an important factor in developing a collective sense of ownership and responsibility⁶. In the same way, it is important that local authorities develop their own methodology for prioritising expenditure on smaller transport schemes, which reflects their specific objectives, strategies, relationships and working arrangements.

Similarly, the advice does not provide all the answers, in what is an evolving area of research and development. However, it provides a useful starting point for authorities wishing to develop or improve their own prioritisation approaches.

1.3 Methodology

Production of this advice document took place during Autumn 2007.

An initial desktop review was undertaken in order to identify the range of prioritisation processes adopted by local transport authorities. This included:

- ◆ authorities whose Second Local Transport Plans were assessed as 'excellent' overall and 'excellent' for the DfT's criteria relating to 'maximising value from resources';
- ◆ authorities recommended for review by each of the Government Offices, and by colleagues within Atkins; and,
- ◆ authorities responding to a news item in Local Transport Today (*Issue 476, 30 August 2007*) and posted on the Local Transport Plan Network website (www.ltpnetwork.gov.uk).

In total, 33 authorities were contacted for information and their approaches to prioritising expenditure were reviewed.

Follow-up interviews were undertaken with 13 authorities to obtain a greater understanding of the strengths and weaknesses of the methodologies used, the key challenges and issues faced, and the main lessons learned.

In addition, prioritisation methodologies used by other organisations, both within and outside the transport sector, were reviewed.

⁵ For example, bus priority measures supported by parking enforcement.

⁶ Regions' Advice on Transport Regional Funding Allocations – The First Round (Michael Faulkner, July 2006).

1.4 Acknowledgements

The authors of the advice would like to thank the local authorities and other organisations that contributed to this document and provided case study examples.

The recommendations provided here represent the views of the authors (based on consultation with a range of authorities and organisations), and not those of the Department for Transport or any particular local authority.

2. Overview of prioritisation

2.1 What is prioritisation?

The Improvement and Development Agency (I&DeA)⁷ define ‘prioritisation’ as “a Council’s ability to identify and stay focused on what is most important and to allocate resources and direct activities to reflect these priorities”⁸.

A ‘priority’ is defined as “something that is considered more important than other things”⁹: Priorities can be viewed in a number of dimensions, for example:

- ◆ which priority should be delivered first?
- ◆ what are the most important priorities to achieve over the longer term?
- ◆ what are the most important priorities for users?
- ◆ what activities should no longer be funded?

Identifying priorities is seen as making informed choices about the relative merits of different investment options and potential trade-offs. It is about recognising that it is not possible to deliver everything, and decisions need to be made about “what to ‘spend’ in what areas to achieve the results you want”. Decisions also need to take into account practical considerations about timescales, staff resources, political commitment and objectives, and delivery capacity.

2.2 Benefits of prioritisation

The benefits of effective prioritisation are significant and wide ranging. In particular:

- ◆ An effective prioritisation process can **improve service performance**. Analysis of the 2003/04 Comprehensive Performance Assessment reports for district councils in England found that prioritisation is an important lever for service improvement¹⁰.

Other benefits are summarised below:

- ◆ **Best use of resources:** Provides an objective, transparent and defensible process for allocating budgets, which ensures best use is made of resources. Enables better management of capital and revenue budgets.
- ◆ **Policy driven:** Provides a clear policy driven process that directs expenditure, and demonstrates why schemes and interventions are and are not implemented. Provides a robust method for rejecting ‘**pet**’ or ‘**historic**’ schemes which are not well aligned with the overall strategy.

Encourages those developing and proposing schemes to consider the full range of benefits, and focuses attention on demonstrating expected scheme impacts.

⁷ PMMI (performance management, measurement and information) Guidance on Priorities and Prioritisation (I&DeA).

⁸ Corporate Peer Review Benchmark (I&DeA, July 2005).

⁹ PMMI (performance management, measurement and information) Guidance on Priorities and Prioritisation (I&DeA).

¹⁰ Comprehensive Performance Assessment: Scores and analysis of performance in district councils in England, 2003/04 (Audit Commission 2005).

- ◆ **Stakeholder support:** Clearly articulates the decision-making process for officers, Members, and wider stakeholders. This encourages support for the overall programme and a reduction in challenge to sound decisions. Provides certainty to officers, Members and wider stakeholders about which schemes and interventions will receive funding.
- ◆ **Effective planning:** Assists in forward planning and the identification of a clear programme of expenditure at an early stage. This can:
 - prevent redundant scheme development work;
 - enable scheme design to be completed at an early stage, limiting the potential for delay in programme implementation;
 - assist in the management of contractor and consultant future requirements; and,
 - enable clusters or packages of schemes to be implemented, resulting in potential cost savings or added benefits.
- ◆ **Provides continuity in approach** from year to year.

2.3 Difficulties of prioritisation

However, developing a robust and effective prioritisation methodology is a challenging process, in technical, administrative and political terms:

- ◆ **Priorities vs. non-priorities:** Making one thing a priority implies other things are not. This can generate resistance from stakeholders, and require difficult decisions to be made.
- ◆ **Flexible and robust process:** The methodology must be sufficiently flexible to accommodate a range of scheme sizes and types, while being objective, transparent, technically rigorous and proportionate in terms of resources required to the scale of investment being considered. The technical process may need to be balanced with political and practical requirements to allocate budgets across a range of geographical and policy areas.
- ◆ **Availability of robust data:** Prioritisation requires robust data about potential scheme impacts and linkages between interventions and outcomes, which may not be readily available (see Box 2.1). Judging what impacts a project will have is necessarily based on past experience, analysis and/or evidence-based professional judgement. However, the evidence base for some small projects, especially the newer smarter choices and home zone type of schemes, is limited.
- ◆ **Stakeholder engagement:** The prioritisation methodology must involve and achieve the support of all stakeholders concerned, and expectations must be managed. Where specific schemes are not prioritised highly, the methodology may be challenged by interested parties. Achieving the support of all stakeholders can be very difficult to obtain.
- ◆ **Resources:** Developing the methodology can be time consuming and resource intensive, and may require extensive consultation and several iterations. There is a trade off to be made between the cost of undertaking an effective prioritisation process, and the benefits of undertaking the prioritisation.

Box 2.1: Potential barriers associated with LTP monitoring practices

Evidence from Atkins' report on *Monitoring and Reporting of LTP Outcomes (February 2006)* highlights a number of barriers in terms of the role of monitoring data in strategy development and scheme prioritisation, particularly within weaker performing authorities:

- ◆ a poor understanding of the links between interventions and outcomes, particularly for public transport, walking, cycling and smarter choices, where external factors and public attitudes can have a strong impact on the success of a scheme in bringing about a change in travel behaviour;
 - ◆ insufficient before and after survey evidence to fully understand the advantages and disadvantages of particular scheme types, and insufficient analysis of the trends behind APR data and monitored impacts of LTP investment;
 - ◆ poor sharing of data and decision making processes between LTP strategy, monitoring and delivery teams; and
 - ◆ lack of resources to undertake wider research, and learn from others.
- ◆ **Top-down versus bottom-up process:** For large strategic bodies the drive for more strategic decision making to achieve service improvements, efficiency savings, and economic growth¹¹ needs to be balanced with the drive for more local responsiveness and local engagement¹². This is a particular challenge for two tier Counties, emerging new Unitary authorities, and local authority partnerships in the conurbations and large urban areas.

2.4 Existing guidance and advice on appraisal and prioritisation

Guidance on prioritisation

The Improvement and Development Agency (I&DeA) has produced draft guidance on priorities and the process of prioritisation within Councils¹³. It is structured around four topics:

- ◆ what are priorities and prioritisation?;
- ◆ how good are councils in this area?;
- ◆ what have some Councils done to improve?; and,
- ◆ what can others do to improve?

It includes examples and links to a range of tools. There is also an accompanying checklist to help with the prioritisation process, and an online, interactive prioritisation tool¹⁴.

The guidance identifies a number of key processes which must be undertaken, including:

- ◆ analysis of information to determine potential priorities;
- ◆ clarity about all possible options that could be priorities, and the implications of choosing or not choosing these;

¹¹ The Eddington Transport Study: The case for action: Sir Rod Eddington's advice to Government (Dec 2006).

¹² Local Government White Paper: Strong and Prosperous Communities (October 2006).

¹³ Priorities and Prioritisation (I&DeA) (<http://www.idea.gov.uk/idk/core/page.do?pagelId=4446257>)

¹⁴ This is based on a pair-wise comparison methodology, and involves comparing pairs of options against a set of questions.

- ◆ analysis of information in a number of ways to “flush out the issues”, and;
- ◆ choosing the priorities.

Specific guidance on appraisal

The Green Book (HM Treasury)¹⁵

The Green Book, *Appraisal and Evaluation in Central Government*, is a best practice guide to carrying out appraisal and evaluation of policies and capital projects. It is used by all central Government departments and executive agencies, and aims to make the appraisal process throughout government more consistent and transparent.

Chapter 5 of the Book provides guidance on appraising costs and benefits that can not be easily valued. The different approaches covered are summarised in Box 2.2.

Box 2.2: CBA, MCA and Logical Frameworks

Cost Benefit Analysis (CBA) - The Green Book defines CBA as a framework which “quantifies in monetary terms as many of the costs and benefits of a proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value”.

Multi-Criteria Analysis (MCA) is a technique (or collection of techniques) for assessing decisions where the impacts are not expressed in the same units. It involves assigning weights to criteria, and then scoring options in terms of how well they perform against those criteria. The weighted scores are then summed, and these sums can be used to rank options. The Green Book acknowledges that the weights used in MCA can not be decided by experts, but must take account of the views of stakeholders and decision takers, and are therefore subjective.

MCA techniques can be used to identify a single most preferred option, to rank options, to shortlist a limited number of options for subsequent detailed appraisal, or simply to distinguish acceptable from non-acceptable possibilities.

Logical Frameworks require the decision maker to use judgement over the information provided in reaching a decision. It does not require weights to be provided for each impact.

Further guidance on using a Multi Criteria Analysis or Logical Framework approach for the appraisal of options for policy and other decisions is provided in the *Multi-criteria Analysis Manual (DTLR, 1999)*.

Full Guidance on Local Transport Plans: Second Edition¹⁶

The Government provided guidance to local authorities on the approaches and methods they should adopt when drawing up their second round Local Transport Plans (LTPs).

Local authorities are free to use their own procedures for assessing smaller schemes (<£5 million), although the guidance does suggest that local authorities should identify “benefits and costs of LTP proposals in LTPs, including all non-monetarised benefits (such as environmental impacts) specified by the NATA framework and indicating their likely magnitude”.

¹⁵ The Green Book, *Appraisal and Evaluation in Central Government* (HM Treasury, 2003).

¹⁶ Full Guidance on Local Transport Plans: Second Edition (DfT, 2004).

DISTILLATE¹⁷

The DISTILLATE project is exploring the issues involved in overcoming the barriers to the effective development and delivery of sustainable urban transport and land use strategies. One aspect of this is the issue of appraisal.

The research has focused on three areas:

- ◆ development of a simple assessment method for small schemes;
- ◆ tools for representing and appraising the distributional impacts of policies (i.e. who or which groups are affected by the project); and
- ◆ a review of ways of overcoming the inconsistencies between targets and appraisal.

2.5 Prioritisation examples from elsewhere

It is not only in the local authority transport planning sector where prioritisation of investment is a significant challenge.

Examples of prioritisation approaches used in other areas of transport are provided in **Appendix A**. The intention is not to suggest that these approaches can simply be transplanted into the arena of local transport planning. Instead the idea is to provide some food for thought which can get local authority transport officers thinking about techniques that could be used to address the prioritisation problem. Their applicability to the prioritisation of smaller transport schemes is also discussed.

The examples include:

- ◆ DfT's New Approach to Appraisal (NATA);
- ◆ DfT's Guidance on the Appraisal of Walking and Cycling Schemes;
- ◆ the Scottish Transport Appraisal Guidance (STAG);
- ◆ the Regional Funding Allocation (RFA) process;
- ◆ the Highway Agency's process for smaller maintenance or enhancement schemes;
- ◆ Thames Gateway Strategic Partnership's approach for identifying smaller and more local transport schemes for funding;
- ◆ Transport for London's Local Implementation Plan (LIP) and Area-based Scheme approach; and
- ◆ a range of other approaches.

¹⁷ DISTILLATE (Design and Implementation Support Tools for Integrated Local Land use, Transport and the Environment) is an EPSRC funded project, co-ordinated by the Institute for Transport Studies at the University of Leeds (www.distillate.ac.uk).

3. Current approaches used to prioritise integrated transport budgets

3.1 Introduction

A range of different approaches have been developed by local transport authorities for prioritising expenditure on integrated transport schemes. Scheme prioritisation is an evolving process in many authorities, and significant progress has been made since submission of the Second Local Transport Plans.

Appendix B provides detailed descriptions of good practice examples currently used by local transport authorities. They demonstrate a range of approaches which work well for the authorities concerned.

The remainder of this chapter provides an overview of the approaches used in terms of:

- ◆ the overall assessment frameworks adopted (score-based or judgement-based);
- ◆ methods for assessing the impact of schemes;
- ◆ prioritisation of schemes from different policy areas;
- ◆ prescriptive versus non-prescriptive assessments; and,
- ◆ the involvement of officers, elected Members and stakeholders.

3.2 Assessment Framework used – using scores or using judgement?

The methodologies examined as part of this study all use quantitative and qualitative data to assess scheme impacts and costs. They do not seek to express different impacts in a common unit.

Some approaches involve assigning weights to criteria, and then scoring options in terms of how well they perform against these criteria. This represents a **Multi-Criteria Analysis** approach. There is some element of evidence-based professional judgement and political decision-making in the process, and indeed, this is an important part of the approach. However, weighted scores identify priorities in the first instance. *See Case Study examples for Kent, Durham, and Somerset, for example (Appendix B).*

Other approaches do not involve the use of weights, but require the decision maker(s) to use judgement over the information provided in reaching a decision. This represents a **Logical Framework** approach. *See Case Study examples for East Sussex and Reading, for example (Appendix B).*

None of the approaches reviewed sought to quantify the impacts of schemes and interventions in a traditional cost benefit analysis approach, although some approaches do seek to combine costs and benefits in a single factor which represents cost per unit benefit. *See Case Study examples for Kent, Durham, and Somerset, for example (Appendix B).*

Box 3.1: Example of a Multi-Criteria Analysis approach

Kent assesses schemes against criteria relating to (i) scheme deliverability, (ii) public acceptability, (iii) their contribution to the shared priority objectives, regional transport objectives, and corporate objectives and (iv) their contribution to targets set out in the Community Strategy and LTP.

Schemes are scored as 'high', medium', 'low' or 'zero', against each of the criteria, and a total score for the scheme is produced (for the 2008/09 programme). Supporting guidance is provided to assist assessors in selecting the appropriate score.

Weightings are applied to various assessment categories, to ensure an appropriate balance of schemes and delivery of targets. The weightings broadly reflect those used by DfT in the calculation of guideline funding levels for LTP2. Thus schemes which address congestion are scored more highly, reflecting the importance of tackling congestion within the County. Weightings are adjusted each year to reflect on-going performance against targets.

See Appendix B for more detail.

Box 3.2: Example of a Logical Framework approach

Reading's prioritisation process is based around a detailed Local Scheme Appraisal Form, which enable Council officers and members to make informed decisions about which schemes to deliver. The forms are initially completed by the lead project officer, and refined following a discussion with a more senior manager. The forms are reviewed monthly by the Traffic Management Advisory Panel (TMAP), which is chaired by the lead councillor and also includes three transport managers and the head of service. Schemes are approved or rejected following review and debate of the information presented. There is some scoring of criteria to help summarise the information, but the TMAP decides how much emphasis to give to different criteria as part of the debating process.

This approach is used for all integrated transport schemes costing less than £5 million, except those identified in the walking and cycling strategy. Reading assesses and prioritises packages of measures, rather than individual schemes.

See Appendix B for more detail.

3.3 Methods for assessing impacts of schemes and interventions

The methodologies examined as part of this study focus on three types of impact: policy compliance, value for money and deliverability. However, they vary in terms of how these dimensions are derived and presented; the degree to which methodologies make use of quantitative and qualitative data; and the relative importance attached to each of these three elements.

Policy compliance

Policy compliance analysis typically involves making evidence based judgements as to how and why schemes can contribute to the delivery of local authority objectives.

This analysis sometimes takes the form of a matrix-based approach, with objectives listed on one axis and potential schemes and interventions on the other. It can be used to dismiss schemes which will not make a positive contribution to intended objectives. It can also be used as a means of highlighting the range of objectives which will be addressed and any potential trade offs which may need to be

considered where a scheme is expected to make a positive contribution to some objectives and a negative contribution to others.

Objectives considered in the analysis typically include those objectives set out in an authorities' Local Transport Plan, Sustainable Communities Strategy and other corporate documents. The list can also include objectives set out in the Regional Transport Strategy.

Figure 3.1 - Example of policy compliance analysis

To what extent does the scheme meet the <u>aims</u> of LTP2?				
LTP2 Aim	Fully	Moderately	Slightly	Neutral
1) Build liveable streets and neighbourhoods				
2) Protect the environment				
3) Bring about equality and social inclusion through better accessibility				
4) Instil a culture of safety				
5) Fulfil the transport role in the delivery and support of a vibrant and efficient economy				
6) Contribute to the improvement of peoples' health and access to health services				

Indicate only those that are directly applicable. Further information on the aims as set out above is in Chapter 3 of LTP2, pages 61& 62

Source: Durham County Council.

Value for money

This refers to the cost and benefits (both positive and negative) of a scheme.

A value for money assessment involves:

- ◆ estimating the nature and magnitude of a scheme's contribution to objectives identified in the policy compliance analysis;
- ◆ identifying the costs of the scheme; and,
- ◆ valuing schemes and interventions based on relative costs and benefits.

Measurement of scheme impacts reflects:

- ◆ the strength of potential benefits (i.e. the intensity of changes in service delivery, perceptions and travel behaviour on the ground);
- ◆ need for improvement and severity of existing problems;
- ◆ geographical extent of impact or number of individuals/vehicles affected; and,
- ◆ other distributional impacts (i.e. who or which groups are affected by the project).

The majority of authorities consulted as part of this study estimate scheme costs based on an initial design. Costs are usually the present day capital, and in the more comprehensive examples, also the revenue cost of implementing a scheme.

However, some authorities use a Whole Life Costing approach. This considers both revenue and capital commitments over a defined number of years¹⁸.

A detailed example of Whole Life Costing is presented in the Case Study example for Buckinghamshire (Appendix B).

Deliverability

This considers the likelihood of a scheme being delivered on time and budget, without significant stakeholder opposition (Figure 3.2).

Figure 3.2 – Example of deliverability criteria covering funding opportunities and implementation

Funding Opportunities				
i. Is the proposed scheme likely to get funding from the following sources?				
	<u>Guaranteed</u>	<u>Possible</u>	<u>Unlikely</u>	<u>None</u>
Integrated Transport Block				
Local Authority (incl S106 funding)				
Local Transport Operators				
Home Zone Funding				
Sustrans				
Business Sponsorship				
ii. Does the funding available cover the cost of the scheme?				
iii. Is there likely to be a regeneration impact from the scheme?				
General Comments (Funding): _____				

Implementation Programme				
Has a civils phasing plan been created?				
Are there proposals for the scheme to have a phased construction?				
Are phases of the scheme complementary?				
Have lead in times been considered?				
Have planning procedures been considered?				
Is detailed design completed?				
Have holidays been considered within civils programme?				
Have funding time scales been considered within civils programme?				
General Comments: _____				

Prioritisation approaches need to take into account potential barriers¹⁹ so that timescales for implementation can be properly planned, mitigation measures can be

¹⁸ A Whole Life Cost approach ensures that all costs associated with achieving the intended objectives over the life of the option are considered, rather than just those costs incurred at the outset. For example, a scheme to introduce real time passenger information will involve a capital investment to purchase and install the necessary equipment, and a revenue investment in future years to maintain and operate the system. Future year costs typically include running costs (including energy costs), equipment maintenance costs, staff training, and disposal costs of both the old and new equipment at the end of its working life.

undertaken, and reserve schemes can be prepared for implementation in case of delays.

Some methodologies involve assigning lower priority to schemes with high risks in terms of deliverability. Such schemes are less likely to be prioritised in their current state, but could be re-considered at a later date if risks are mitigated or overcome. Other methodologies involve identifying potential risks and realistic timescales for various stages of scheme development²⁰. Thus, the deliverability analysis does not affect the overall priority assigned to the scheme, merely the timescale for implementation. This methodology encourages a more proactive approach to be taken in terms of potential risks.

3.4 Prioritisation of schemes and interventions from different policy areas

Two broad approaches have been adopted in terms of prioritising across or within different policy areas.

Prioritisation from a long list of schemes and interventions

The first involves prioritising investment from a long list of schemes and interventions covering a range of different policy areas. Thus, the merits of an individual cycling scheme are compared against the merits of other types of schemes e.g. walking, public transport, road safety, etc.

Box 3.3: Prioritising investment from a long list of schemes

Buckinghamshire uses a Scheme Assessment Matrix to assess and prioritise all capital expenditure on maintenance and integrated transport schemes. Schemes are initially assessed by the officer proposing the scheme.

All schemes are assigned a Theme Score and an Impact Score. The Theme Score is based on the number of LTP Action Areas (e.g. bus punctuality, urban bus stops by schools and colleges, etc.) the scheme contributes towards. Scheme proposers are asked to provide supporting evidence-based commentary to justify their selection. The Impact Score is based on the scale and intensity of the impact, relative to the whole life cost of the scheme.

Scale of impact relates to the broad number of people affected by the scheme (e.g. local residents, countywide, etc.) and the intensity of impact is categorised as low, medium or high. Scheme proposers are again asked to justify their responses, and highlight issues for consideration e.g. statutory obligation, scheme partly completed, political request, identified through existing priority scheme, jointly funded, etc. They must also identify what pre-implementation monitoring data has been gathered to justify the scheme. For road safety schemes, information must be provided on the number of collisions over the last three years.

Responses are converted to an overall score by an independent and impartial panel, including the programme manager and performance management officer. This ensures all schemes are scored on a consistent basis.

¹⁹ These might include staff and skills capacity, revenue pressures, contractor capacity, lack of public and political will, time taken to achieve Member approval, lengthy consultation and scheme design, cost inflation, contract issues, lack of commitment and funding from partners, land negotiation issues, and a range of external factors including extreme weather conditions, utility works and industrial action.

²⁰ This information is used to plan timescales for delivery, which ensure sufficient time is provided to address any identified risks.

Prioritisation within policy headings

The second approach involves allocating the available budget between a number of different policy headings (e.g. road safety, accessibility, congestions, etc.), and then prioritising within each policy heading - see *Case Study examples for Somerset and Leicestershire, for example (Appendix B)*. In some cases, individual prioritisation approaches are developed for each policy heading; while other approaches identify a generic approach which is then adapted to reflect the nature of specific policy areas.

This approach requires a robust methodology for allocating expenditure between policy headings, as a first stage. However, it then provides greater flexibility for developing policy specific prioritisation methodologies, tailored to reflect the characteristics of the schemes under consideration and the different types of evidence available about scheme impacts. It can also avoid problems of bias towards specific scheme types.

Appendix C provides examples of policy specific prioritisation methodologies, with examples covering Road Safety, Walking and Cycling, Highway Schemes, Maintenance, Safer Routes to School, Public Transport Schemes, and Congestion Schemes.

Approaches used to allocate resources between policy headings include:

- ◆ modification of historical allocations based on recent performance against targets;
- ◆ an assessment of the potential contribution of each programme/policy area to delivery of the stated objectives;
- ◆ a formulaic needs-based approach, based on factors such as severity of existing problems, and extent of existing infrastructure or mode use;
- ◆ use of public consultation results to allocate the largest budgets to those policy areas seen as being of greatest priority locally; and
- ◆ top slicing the budget to ensure schemes of strategic importance receive funding.

Box 3.4: Allocating resources between policy headings

Example 1

Somerset describes a process by which different areas of expenditure are scored based on their contribution towards delivery of LTP1 targets. Policy areas contributing to a target which was not met during LTP1 receive a lower score than those contributing to a target which was met ahead of schedule. Initial budget allocations are then adjusted, so that programmes which were unsuccessful in delivering the intended targets in LTP1 receive a larger allocation. *See Appendix B for more detail.*

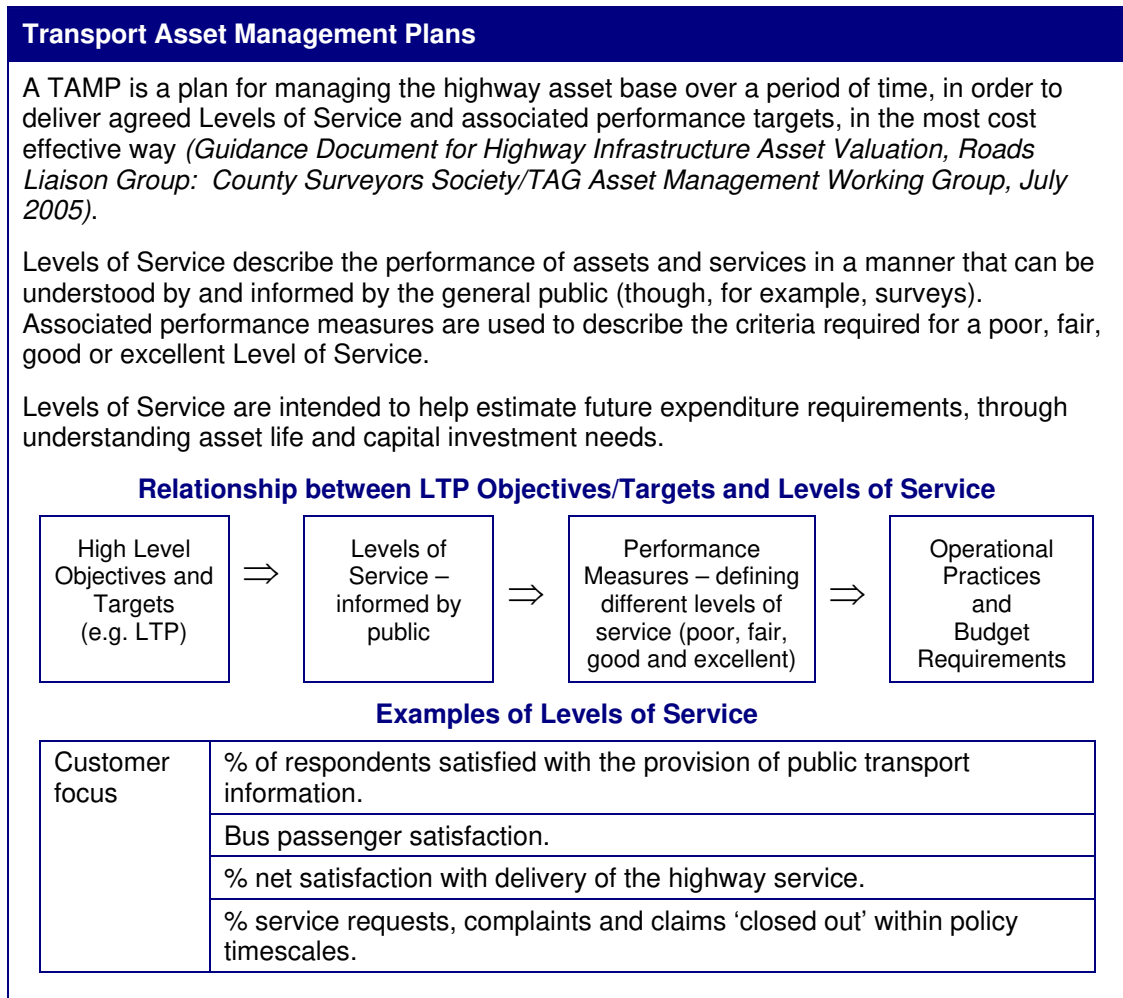
Example 2

Durham allocates funding for Area Programme schemes according to: the Area population; the extent of deprived wards; and the percentage of rural area/population. *See Appendix B for more detail.*

In future, prioritisation of integrated transport expenditure is expected to be integrated more closely with Transport Asset Management Plans (see Figure 3.3), as the latter evolve and become more integrated within Local Transport Plans.

Some authorities have started to integrate Levels of Service and associated performance measures into their prioritisation processes, to help determine budget allocations for different policy areas. This is an area requiring further research and development in the short to medium term.

Figure 3.3 – Transport Asset Management Plans



Combined approach

Finally, some authorities adopt a **combination** of the above approaches (*See Case Study examples for East Sussex and Durham, for example, in Appendix B*).

Part of the budget is allocated to individual policy headings. These might cover strategic or authority-wide priorities such as quality bus corridors, real time passenger information, network management initiatives; programmes of improvement which are being phased over several years; political priorities; and policy areas with established data-led prioritisation approaches (e.g. road safety and maintenance). Similarly, separate allocations might be identified for medium-sized schemes, where the scale of expenditure warrants and enables a more in-depth appraisal and prioritisation process.

The remainder of the budget is then allocated to a broad range of integrated transport (and maintenance) schemes which are assessed and valued through a single prioritisation approach.

3.5 Prescriptive and non-prescriptive assessments (including the role of professional judgement)

Most prioritisation approaches involve the use of proforma to collect and consider information about scheme impacts.

(i) *Prescriptive proforma-led approach* – Some approaches involve the use of detailed proforma consisting of specific questions and criteria in order to identify scheme impacts and deliverability risks. This approach ensures consistency in scheme assessment. Supporting guidance limits the level of checking and validation of scheme assessments which might otherwise be required. See *Case Study examples for Kent, Durham, and Reading in Appendix B*.

(ii) *Non-prescriptive / Flexible guidance approach* – The second approach involves the use of a more flexible proforma or broad guidance on the type of information required. See *Case Study example for East Sussex in Appendix B and Box 3.5*.

This approach offers greater scope for those proposing schemes and interventions to present variable levels of quantitative and qualitative evidence on potential impacts. It also offers greater scope to consider evidence on impacts which might not be covered in a more prescriptive proforma. It provides greater scope for professional judgement and expertise to play a role in the decision making process.

Professional judgement and expertise can be a valuable source of information and a valid means of prioritising a scheme, if based on quantitative and qualitative evidence of what has worked elsewhere, and if part of a formal process which provides opportunity for challenge and debate by other officers, elected members and stakeholders. For some scheme types (such as road crossings, bus laybys, etc) where scheme impacts are difficult to quantify, it may represent the most efficient and reliable method.

Box 3.5: Example of a non-prescriptive/flexible guidance approach, based on professional expertise and independent scrutiny

In East Sussex, all potential Local Area Transport Strategies are assessed at feasibility stage, using a Balanced Scorecard approach.

Schemes are assessed by a panel of officer 'experts' broadly representing each of the shared priorities. Scheme proposers are asked to provide evidence in support of their scheme proposals. Broad guidance is provided on the type of information required (scheme description and rationale, scheme benefits, and overall scheme cost), but the guidance is flexible in terms of the precise evidence required. The panel of officer 'experts' then agree on a score (from -5 to 5) representing the contribution of the scheme benefits to each of the LTP objectives, and calculate an overall score. There is no weighting of individual objectives in this process. The information presented is challenged if necessary and the decision is deferred if there is insufficient evidence available to make a valid judgement.

A draft programme is then presented to a Cross Party Panel of members, and scheme proposers present each of the prioritised schemes. Schemes are then subject to further scrutiny and scores are amended if necessary. The amended programme then goes to the Lead member for Transport and the Environment for final approval.

3.6 Involvement of officers, elected members and stakeholders

Approaches vary in terms of the extent to which they involve officers, elected Members and stakeholders in the assessment of schemes and interventions.

(i) Most approaches rely on **scheme proposers** to collate and present scheme evidence for consideration. Many approaches also rely on scheme proposers to undertake the initial scheme assessment.

Scheme proposers might be the local authority officer responsible for generating, designing or delivering the scheme (*see Case Study examples for Kent, Buckinghamshire, Somerset, and Leicestershire in Appendix B*); or a third party scheme promoter such as a district officer, parish councillor, or a representative of the Local Strategic Partnership (*Box 3.6*).

(ii) Some approaches make use of an **independent panel or jury** to assess (and score) scheme evidence presented by scheme proposers (*see Box 3.5*). The panel could consist of officers, Members, and stakeholders; and typically involves several individuals representing a range of policy areas.

Where an approach involves producing an overall score for each scheme, this is generated by:

- ◆ the scheme proposer;
- ◆ the process administrator(s) such as the programme manager, performance management officer, or LTP manager – either alone or in partnership with the scheme proposer;
- ◆ an independent panel; or,
- ◆ a combination of the above, where by the independent panel determine the relative importance or weightings to be applied to the different criteria, and scheme proposers assess how the scheme performs against each of the criteria.

Box 3.6: Delegation of decision making

LTP2 guidance encourages Local Authorities to engage with local communities, particularly Local Strategic Partnerships (LSPs), with regard to accessibility and wider transport planning issues. Durham responded to this challenge, by establishing a methodology to involve the 7 LSPs across the County in the creation of a programme of local transport schemes for LTP2.

The Local Strategic Partnership and corresponding Council Member Area Panel (MAPs) in each District put forward schemes / initiatives for inclusion in the Area Programme. To ensure alignment with the LTP2 and the Community Strategy, a proforma is completed for each scheme. This assesses the scheme's contribution to a series of aims, objectives and targets (using a four point scale); and produces an overall score.

Detailed guidance has been produced to assist the LSPs and MAPs in completing the proformas and drawing up their programmes. The LTP Core Team check the submitted proforma and have the authority to reject any ineligible or poor performing proposals.

The process has delivered a range of benefits, described below:

- ◆ Delegating funds to Area Programmes achieves local “buy in” from the local community (via LSPs), since the process encourages locally developed schemes.
- ◆ Access to more detailed local knowledge for smaller schemes, in particular those for walking and cycling.
- ◆ Additional funding from outside sources was secured to supplement LTP Integrated Transport funding. The main schemes to benefit, were accessibility schemes, such as community transport, where revenue funding is often difficult to secure.
- ◆ The methodology allows the closer alignment of non-LTP funds to schemes that will achieve LTP targets.

A number of difficulties were also identified:

- ◆ additional requirements from members of the LSP, in terms of time, can discourage involvement amongst some members (although this was not the general experience);
- ◆ additional work for the local authority (LA) officers - The LTP team has to assess all the scheme pro-formas, to ensure consistency of approach.

See Case Study summary for Durham in Appendix B, for further information.

(iii) A third approach involves **assessment of schemes centrally** by the LTP manager, programme manager, performance management officer, or similar. Scheme proposers are not involved in the process. This approach has not been used by any of the authorities covered in Appendix B of this advice document.

4. Guiding principles for developing a robust prioritisation process

4.1 Guiding principles

Evidence from existing approaches used by local authorities and other transport organisations suggest a number of guiding principles for the development of a robust assessment and prioritisation process.

Specifically, the process should:

- (i) inform decision makers' choices, not dictate them;
- (ii) be based on a technically robust and defensible process;
- (iii) involve a wide range of officers, Members and stakeholders in the process;
- (iv) produce a realistic and deliverable balanced programme of schemes and interventions; and
- (v) allow sufficient time for development of the methodology (involving consultation, testing and modification), and training for those involved in the process.

These are discussed in more detail below:

(i) Inform decision makers' choices, not dictate them

It is important that the prioritisation process informs, rather than dictates or determines decisions about which schemes and interventions are delivered, where and when.

All approaches represented in this advice document enable officers, members and stakeholders to inform or intervene in the prioritisation process, based on their professional judgement or political awareness. This is an important part of any methodology.

(ii) Based on a technically robust and defensible process

The process should:

- ◆ be internally consistent, logically sound, transparent, easy to use, and able to provide a clear audit trail of the decision-making process;
- ◆ be clear in terms of its overall aim, whether this be resource allocation of budgets, assessment of the relative merits of schemes and interventions, identification of priorities versus non-priorities, and/or identification of policy compatibility;
- ◆ include each of the following elements: (i) policy compliance (ii) consideration of value for money evidence (iii) risk-based deliverability analysis;

- ◆ assess potential scheme benefits (both positive and negative) based on robust evidence of delivery against targets. This might be based on forecast data, evidence from previous similar schemes, or sound professional judgement by officers or key stakeholders based on quantitative and qualitative evidence on what has worked well in the past and what will work well in the future;
- ◆ consider the full range of potential impacts (both positive and negative), consistent with the objectives being addressed and the type of schemes being considered. This includes need for improvement; geographical extent of impact (e.g. number of individuals or vehicles affected); other distributional impacts; and interactions with other schemes and interventions;
- ◆ consider both capital and revenue requirements over a defined number of years, as part of a Whole Life Cost approach, and identify sources of internal and external funding;
- ◆ be supported by clear guidance and/or clear criteria, to reduce the level of subjectivity and encourage consistency in the assessment process;
- ◆ be consistent (in terms of time, resources and cost) with the scale of investment being considered, and avoid the need for spurious accuracy;
- ◆ be supported by a top-down policy-driven approach to scheme identification (i.e. area-based or policy-based strategies and action plans), which identifies robust schemes for consideration. This might include packages of schemes which are likely to offer added benefits. Where schemes are generated through a bottom-up process (through for example, recommendations for individual schemes from officers, Members and stakeholders) there should be a robust process in place for determining their contribution to policy objectives and deliverability;
- ◆ be integrated with the Transport Asset Management Plan and Levels of Service;
- ◆ be flexible enough to accommodate schemes and interventions at varying stages of development and with variable levels of forecast or quantitative data, including (i) those proposed by Members of the public and based on very preliminary designs, (ii) schemes at outline design stage, where early sifting or prioritisation is desirable to prevent redundant scheme design and development work, and (iii) schemes where considerable development work has already been undertaken;
- ◆ be documented, clearly setting out procedures for assessing different types of schemes, the stage at which schemes are assessed, and identifying the roles of key individuals in the assessment process.

(iii) Involve a wide range of officers, Members and stakeholders in the process

The process should:

- ◆ involve a wide range of individuals in the design of the methodology and implementation of the approach and ensure their buy-in to the process. This includes design, delivery and policy officers, Members and key stakeholders such as Local Strategic Partnerships. The process requires a culture of openness to new ideas and change. It may also require an 'education' role, and a need to manage expectations;
- ◆ involve scrutiny of evidence on scheme impacts by these individuals, and active debate about the overall structure of the final programme.

(iv) Produce a realistic and deliverable balanced programme of schemes and interventions

The process should:

- ◆ identify priorities and non-priorities (or ‘must haves’, ‘should haves’, ‘could haves’ and ‘won’t haves’);
- ◆ identify a spread of schemes and interventions across policy areas to ensure outcomes contribute to the full range of targets set; and,
- ◆ consider timescales for implementation, dependencies and risks, and political pressures. Resources and delivery capacity, including internal staff, consultant and contractor requirements, should also be considered. A spread of schemes at different stages of development may be required to ensure staff resources are used efficiently.

(v) Allow sufficient time for development

The process should allow sufficient time for development of the methodology (involving consultation, testing and modification), and training for those involved in the process:

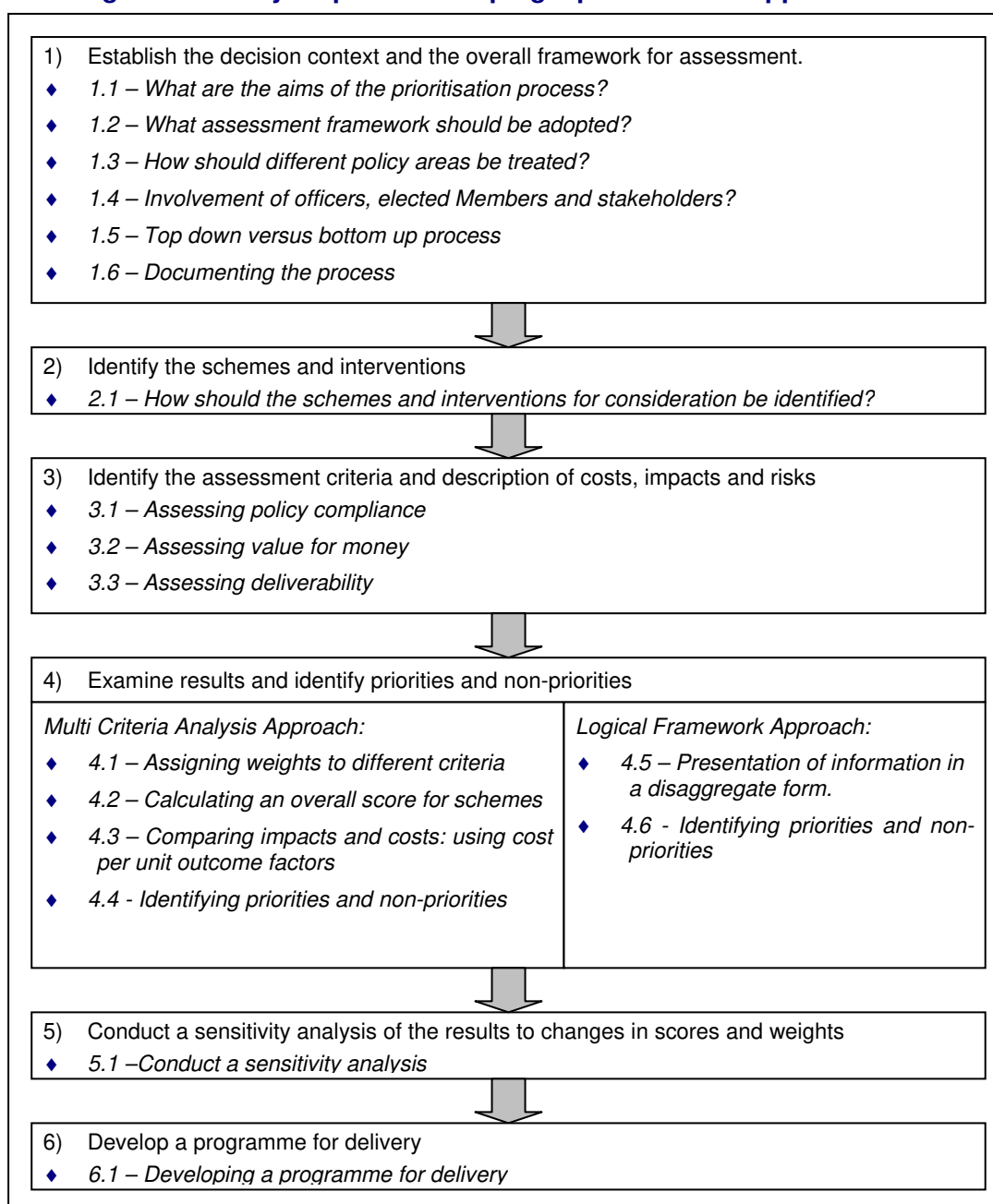
- ◆ approaches covered in this document have typically taken several months to develop and implement, and have evolved over a number of years. It is unlikely that any approach developed will work as intended on its first use;
- ◆ there is no one size fits all approach – an approach which works well in a small authority may not be the same as one which works well in a much larger authority.

5. Detailed advice and recommendations

5.1 Introduction

The process for developing a prioritisation process can be broken down into a number of generic stages, described in Figure 5.1.

Figure 5.1 – Key steps in developing a prioritisation approach



Adapted from Figure 5.1, Multi-Criteria Analysis Manual (DTLR, 2001).

Advice and recommendations in relation to each of these step is set out below.

5.2 Stage 1: Establish the decision context and the overall framework for assessment

Stage 1 of developing a prioritisation approach involves setting out what the prioritisation process is seeking to achieve (Step 1.1); the overall framework for assessment (Step 1.2), determining the treatment of different policy areas (Step 1.3); identifying the role of key individuals (Step 1.4); and documenting the process (Step 1.5).

Step 1.1 - What are the aims of the prioritisation process?

The overall aims of the prioritisation process should be discussed with officers, Members and stakeholders, and clearly documented.

Aims might include:

- ◆ resource allocation of budgets between policy areas;
- ◆ development of a robust process for deciding which local schemes, packages of schemes, or interventions, should be implemented, taking into account strategic objectives and the priorities of the general public and other stakeholders;
- ◆ prioritising timescales for delivery within the LTP programme;
- ◆ reviewing historic schemes, packages or interventions to determine whether they still offer value for money;
- ◆ identifying activities and schemes which should no longer be funded; and
- ◆ informing current and future scheme generation.

The aims of the prioritisation process should be set in the context of the LTP and wider policy strategies.

Step 1.2 - What assessment framework should be adopted

(i) Cost Benefit Analysis, Multi Criteria Analysis or Logical Framework

Authorities are strongly advised to adopt a framework which is based on either a Multi-Criteria Analysis (MCA) or Logical Framework (LF) approach, rather than adopt a traditional Cost Benefit Analysis approach:

- ◆ A **Multi-Criteria Analysis** approach involves assigning weights to criteria and then scoring options in terms of how well they perform against those criteria.
- ◆ A **Logical Framework** approach requires the decision maker to use judgement over the information provided in reaching a decision. The information itself can be presented using either a prescriptive proforma or in a more flexible format. There is no requirement to formally weight evidence provided for different criteria, or different impacts.
- ◆ A **Cost Benefit Analysis** approach attempts to quantify in monetary terms as many of the costs and benefits of a proposal as feasible.

Both Multi-Criteria Analysis and Logical Framework approaches are established techniques²¹ and widely used in Government²². They enable quantitative and

²¹ Multi-Criteria Analysis Manual (DLTR, 2001).

²² All approaches reviewed in Chapter 3 and Appendix C – Examples from Elsewhere, are based on one of these approaches. This includes the NATA and STAG approaches, used for large schemes.

qualitative evidence to be combined, enable a wide range of impacts to be considered, and tend to be cheaper and less data intensive than Cost Benefit Analysis.

The choice of a Multi-Criteria Analysis or Logical Framework Approach is largely a matter of preference²³:

- ◆ A **Multi-Criteria Analysis** approach can provide a more objective method for ranking schemes and identifying initial priorities;
- ◆ A **Logical Framework** approach can offer greater scope for scheme proposers to present variable levels of evidence available on potential scheme impacts; and places greater emphasis on evidence-based professional judgement and debate.

(ii) Prescriptive or flexible proforma-led approach

Options for collecting assessment data for consideration include:

- ◆ use of prescriptive and detailed proforma consisting of specific questions and criteria in order to identify scheme impacts and potential deliverability risks;
- ◆ use of a more flexible proforma or broad guidance on the type of information required.

The strengths and weaknesses of each approach are summarised below (Table 5.1).

Table 5.1 – Prescriptive vs. flexible proforma-led approach

	Strengths	Weaknesses
Prescriptive proforma-led approach (see Section 3.5)	<ul style="list-style-type: none"> ◆ Ensures consistency in scheme assessment. ◆ Reduces scope for subjectivity in process, and variability in the quality of assessment undertaken. ◆ Limits the level of checking and validation required, if clear guidance is provided and training is provided to those involved in the process. 	<ul style="list-style-type: none"> ◆ Can limit the role of professional judgement in identifying the type and strength of impacts associated with a scheme. ◆ Can limit the role for impacts which do not relate to criteria or questions specified in the proforma, to be considered. ◆ May be difficult to assess schemes where there is little quantifiable evidence.
Non-prescriptive / flexible guidance approach (see Section 3.5)	<ul style="list-style-type: none"> ◆ Offers greater scope for scheme proposers to present variable levels of evidence available on potential scheme impacts. ◆ Offers greater scope to consider evidence on impacts which might not be covered in more prescriptive proforma. 	<ul style="list-style-type: none"> ◆ Greater potential for inconsistency in decision-making, unless supported by a formal process which provides opportunity for challenge of evidence and debate.

²³ While considered more appropriate for small schemes, than a traditional CBA approach, both MCA and LF approaches have weaknesses which need to be recognised:

- No clear criteria for selecting impacts.
- Risk of double counting impact categories.
- Potential for scoring of impacts and weighting of impacts to be arbitrary.
- Identifies the best or better options from a defined subset of options, based on relative performance against stated criteria. However, unlike with CBA, there is no explicit necessity for benefits to exceed costs in order to improve welfare. Doing nothing could in principle be preferable.

Step 1.3 - How should different policy areas be treated?

Some methodologies involve prioritising investment from a long list of schemes or packages covering a range of different policy areas (**cross policy prioritisation**); while others involve allocating the available budget between a number of different policy headings, and then prioritising within each policy area (**policy specific prioritisation**). Some authorities use a combination of these methods.

The main strengths and weaknesses of each approach are summarised below (Table 5.2). Both methodologies represent valid approaches, and there are no clear rules which define the optimum approach for different types of authorities²⁴.

Table 5.2 – Treatment of different policy areas

Strengths	Weaknesses
Cross policy approach	
<ul style="list-style-type: none"> ◆ Does not pre-judge which types of schemes are going to deliver best value for money. ◆ Reduces the need for difficult decisions about how expenditure should be allocated between different policy areas – a significant challenge for authorities. ◆ Greater flexibility to accommodate packages of schemes. 	<ul style="list-style-type: none"> ◆ Requires a generic scheme prioritisation process, which is able to accommodate a range of different scheme types. This can result in some impacts being under-represented or overlooked. ◆ A balanced programme which includes a range of different scheme types is needed to ensure efficient use of resources and delivery against a range of targets and priorities.
Policy specific approach	
<ul style="list-style-type: none"> ◆ Provides greater flexibility for developing policy-specific prioritisation methodologies, tailored to reflect the characteristics of the schemes under consideration and the type of evidence available about scheme impacts. 	<ul style="list-style-type: none"> ◆ Requires a robust methodology for allocating expenditure between policy headings – a significant challenge for authorities. ◆ Often limited evidence about the outcomes which will be achieved for a given level of spend. Can result in arbitrary decisions about policy allocations.

It is likely that the approach used will need to be reviewed and modified as the process progresses, and the implications of decision on outcomes are realised. Performance against targets will need to be reviewed on a regular basis, and allocations adjusted accordingly. A variety of approaches may need to be combined to deliver a satisfactory solution.

Approaches used to allocate resources between policy headings are summarised in Table 5.3 along with supporting advice.

²⁴ A single (cross-policy) approach for all scheme types may be easier to apply in smaller authorities, where the number of schemes under consideration is more manageable, and where the strategy relies on implementation of predominantly small, locally focused schemes. Where this approach has been applied in larger authorities it tends to be supported by well-developed policy and/or area-based strategies and action plans. These identify packages of schemes for consideration, provide a clear framework against which to assess interventions, and involve some screening or initial prioritisation of schemes.

Those authorities with a number of schemes of strategic importance, or who already have established data-led prioritisation approaches for particular policy areas (e.g. for road safety and maintenance), may find a two stage process more appropriate. Alternatively, a combination of the two approaches might be preferable. This could allocate specific budgets to strategic or authority-wide priorities; with the remainder of the budget allocated to a broad range of integrated transport (and maintenance) schemes which are assessed and valued through a single prioritisation approach.

Table 5.3 – Methods for allocating resources between policy headings**1) Modification of historical allocations based on performance against targets**

This approach is usually justified on the basis of demonstrated success in delivering against LTP1 targets.

It needs to be supported by an on-going process which:

- ◆ seeks to address failing targets, by redirecting funding to these policy areas; and
- ◆ examines whether the historical split of funding between policy areas is the optimum one.

It also needs to be accompanied by analysis which seeks to confirm whether failure to deliver targets historically, is due to: too little investment; too much investment in poor performing schemes; or the wrong type of investment (including capital rather than revenue investment).

2) An assessment of the potential contribution of each programme/policy area to delivery of the stated objectives (based on analysis, consultation and debate)

(i) This generally involves assessing the potential contribution of each programme/policy area to delivery of stated objectives (i.e. policy compliance analysis), and representing the scale of this contribution on a relative scale.

Contributions are typically converted to an overall score, which informs decisions about overall allocation of funding to different policy areas. The process of 'scoring' contributions can be undertaken in consultation with delivery officers, policy-based officers and wider stakeholders in a workshop format, to ensure results are representative. Such decisions need to consider the cost of different types of schemes relative to the benefits which might be delivered, and the scale and intensity of outcomes which might be delivered on the ground.

(ii) An alternative approach could involve reviewing provisional budgets with policy teams and debating the impact of a percentage increase or decrease in the budget, i.e. what additional schemes would be implemented if additional resources were available and what would the benefits be; what trade-offs would need to be made if less budget was available.

3) A formulaic needs-based approach

This can involve factors such as urban and rural population, levels of deprivation, casualty rates, car ownership etc., which reflect 'need' in the context of the overarching objectives.

Some authorities have used the formula developed by the Department for Transport for calculating LTP2 guideline funding levels for authorities, as a basis for structuring their overall programme of expenditure (*Financial Planning Guidelines for Local Transport Plans: Consultation Paper (DfT: July 2005)*). This was structured around the shared priorities for transport, and included elements covering public transport, road safety, pollution, congestion, and accessibility. Various factors were used to represent 'need' and each component was weighted using existing pre-LTP2 spending levels at national level as a guide:

- ◆ Public Transport (Weighting = 30%) – Plans covering areas with more public transport passengers obtained higher allocations.
- ◆ Road Safety (Weighting = 20%) – Plans covering areas with more casualties received higher allocations.
- ◆ Congestion and Pollution (Weighting = 30%, including 5% for air quality) – Plans with a designated air quality management area received higher allocations. Larger urban areas received more per head of population.
- ◆ Accessibility (Weighting = 20%) – Allocations were based on Index of Multiple Deprivation data, number of non-car owners, and the extent of the rural population.

4) Use of public consultation results

This approach involves allocating the largest budgets to those areas seen as being of greatest priority locally.

Public views about the priority which should be allocated to different policy areas can be used to inform budget allocation decisions, particularly if combined with other approaches. Public consultation results are typically used to adjust initial budget allocations, which reflect historic performance, policy compliance or a formula-driven process. However, consideration needs to be given to the reliability of such an approach. In particular, whether those consulted have sufficient knowledge about the cost of different types of schemes relative to the benefits which might be delivered, and how decisions might impact on targets agreed with Central Government. To ensure that the programme is aligned with delivering intended objectives, it is likely that some input from transport experts will be required.

Table 5.3 – Methods for allocating resources between policy headings**5) Top slicing the budget to ensure schemes and interventions of strategic importance receive adequate funding**

This involves building up the programme in phases, through the identification and progressive inclusion of priority schemes based on their strategic importance, their contribution to a package of improvements, and evidence about the scale of their impacts. This might involve giving initial priority to:

- ◆ strategic authority-wide measures with robust evidence of a strong contribution to one or more of the intended (and priority) objectives, e.g. a park and ride scheme, a package of bus priority measures, a casualty reduction programme;
- ◆ schemes which are part of a long term programme (e.g. a real time passenger information system which is being phased in over several years);
- ◆ package-based measures (e.g. a Controlled Parking Zone scheme which needs to be implemented alongside a Park and Ride scheme);
- ◆ road safety schemes, where there is a clearer relationship between spend and output;
- ◆ expenditure linked to legislative requirements (e.g. the Traffic Management Act 2004).

The remainder of the allocation is then allocated to other schemes (typically more locally-focused), which have not already been addressed in the above list.

There are various techniques which can assist in this process, such as MoSCoW and pairwise comparison, which are discussed further in Appendix A.

6) Integration with Transport Asset Management Plans

This is an area requiring further research and development in the short to medium term. However it may be the case that strategic budget priorities could be focussed on the development of a whole route approach to maintenance with more emphasis on particular issues (e.g. safety and accessibility) as opposed to traditional modes of travel. Under this approach the TAMP provides strategic direction on the priorities based on levels of service to a range of stakeholders and the wider public. The individual schemes would then be subsequently prioritised within each route-based strategic budget heading, with the highest priority schemes making most contribution to the identified levels of service.

Step 1.4 - Involvement of officers, elected Members and stakeholders

Prioritisation methodologies should involve officers, elected Members and preferably key stakeholders, and their roles should be clearly identified. Some key issues to be addressed are included below:

Who are the decision makers and key players?

This might include policy, design and delivery officers, elected Members, Local Strategic Partnerships, local parish and district Councils, other service areas, operators, and other stakeholders.

What is the process for officers, Members and stakeholders to put forward scheme proposals for consideration?

This should be clearly set out, and should include the process for considering proposals identified by members of the public.

What is the role of these stakeholders in the process?

- ◆ *Should decision-making for all or part of the budget, be delegated to Local Strategic Partnerships, districts or parishes?* - The Durham Case Study in Appendix B, provides an example of such an approach.
- ◆ *Should schemes and interventions be assessed by scheme proposers, senior officers and managers, or by a panel of Members, officers and stakeholders (see Table 5.4)?* - If schemes are to be assessed by scheme proposers, there should also be some scrutiny of the assessment by senior officers, the LTP core team, or an independent panel.
- ◆ *What is the process for involving Members in the prioritisation of schemes and interventions?* - The inclusion of elected Members, from different political parties, on a panel responsible for assessing and/or scrutinising decisions represents a good practice approach.
- ◆ *Should stakeholders be included on a scrutiny panel?* - Such panels are generally limited to transport officers and members. However, consideration should be given to including officers from other service areas, particularly in the context of Local Area Agreements). Other key stakeholders, such as public transport operators, may also be able to provide a valuable contribution to the *decision making process*.

Who should scrutinise and challenge assessments?

This is an important element of the process, and ensures decision making is consistent, evidence-based, and transparent.

Table 5.4 – Who should assess schemes and interventions?

Good practice approach

Evidence from local authority approaches reviewed for this advice document suggest that **scheme proposers** (typically local authority officers, but possibly a third party) should initially collate and present scheme evidence for consideration.

This ensures the assessment proforma is completed by the individual who knows the scheme best, has direct access to supporting evidence, and has the best knowledge of the potential impacts of the scheme. It also encourages scheme generators and designers to focus on linkages with targets and objectives, and to consider the full range of potential impacts.

Limitations include lack of consistency in the way schemes are assessed against specified criteria; and potential for schemes to be assessed by individuals with limited knowledge of strategic and transport issues. There is also considerable risk of **optimism bias**, particularly if the process allows officers to 'play the game' in order to actively promote their schemes.

It is therefore important that this approach is supported by a comprehensive scrutiny and validation process. This might involve a review of evidence by senior officers, the LTP core team, or ideally an independent panel consisting of officers representing different transport objectives and wider service areas, and a cross-section of elected Members. This latter approach ensures that scrutiny of evidence is integrated into the process, reducing the need for checking and validating of data. The process needs to ensure that both positive and negative impacts are identified and that trade-offs which need to be made are apparent.

Detailed guidance to assist scheme proposers in collating and presenting evidence is also important.

Step 1.5 - Top down versus bottom up process

For large strategic bodies²⁵ the drive for more strategic decision making to achieve service improvements, efficiency savings, and economic growth must be balanced with the steer towards more local responsiveness and local engagement. Both approaches must be integrated within a framework which seeks to maximise delivery of objectives within the funding available.

Possible approaches include:

- ◆ identifying separate budgets for (i) key strategic programmes, to be prioritised centrally, and (ii) local schemes, to be prioritised by local bodies (including districts, area teams, and local strategic partners). This might involve top slicing the budget to ensure schemes of strategic importance receive adequate funding – *see Table 5.3 (Option 5)*;
- ◆ adopting an evidence-based process for allocating budgets between sub-areas, reflecting need and contribution towards authority-wide objectives – *see Table 5.3 (Option 3) and Box 3.4*;
- ◆ inviting local bodies to propose schemes, in accordance with clear guidelines and evidence requirements, and prioritising all schemes centrally - *see Box 3.6, for example*.

Step 1.6 - Documenting the process

The aims of the prioritisation process, the methodology, and the role of officers, elected members and stakeholders in the decision-making process, should be clearly documented.

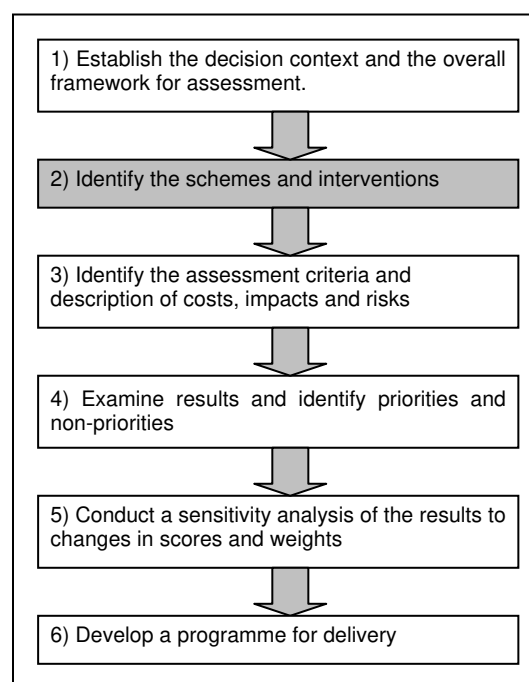
²⁵ Including two tier Counties, emerging new Unitary authorities, and local authority partnerships in the conurbations and large urban areas.

5.3 Stage 2: Identify the schemes and interventions

Step 2.1 - How should schemes and interventions for consideration be identified?

Schemes, packages of measures and interventions for consideration can be identified in a number of ways: (i) through area-based or policy-based strategies and action plans; (ii) by members of the public, Council Members, Local Strategic Partnerships, and other stakeholders; (iii) through brainstorming sessions and workshops; and, (iv) from historic proposals, yet to be implemented.

Area-based or policy-based strategies and action plans, consistent with wider objectives, represent a robust approach for generating schemes which offer good value. They often identify packages of schemes for consideration. They also provide a clear framework against which to assess interventions, and involve some screening or initial prioritisation of schemes.



All authorities included as case studies in Appendix B have a range of policy-based strategies in place which identify schemes for consideration. East Sussex and Reading have or are developing area-based strategies to identify local schemes and packages (typically incorporating walking, cycling, accessibility, and bus stop improvements) for prioritisation.

Further guidance on option identification can be found at www.webtag.org.uk, and www.distillate.ac.uk (Project B).

5.4 Stage 3: Identifying the assessment criteria and description of costs, impacts and risks

The robustness of the overall prioritisation approach relies on the establishment of a soundly based set of criteria, against which to assess the costs, impacts and risks of schemes.

The key stages in this element of the prioritisation approach involve identifying criteria and processes for assessing: policy compliance (Step 3.1); value for money²⁶ (Step 3.2); and, deliverability (Step 3.3).

²⁶ The Department for Transport's definition of 'value for money' is the most rapid progress towards targets per unit of transport spend (Full Guidance on Local Transport Plans: Second Edition, DfT, December 2004).

Step 3.1 - Policy compliance objectives

Identifying assessment criteria

The aim of policy compliance analysis is to ensure that proposed schemes, packages and interventions will deliver outcomes which, in aggregate, are aligned with LTP and wider strategic objectives; and to identify any trade-offs which may need to be considered where a scheme is expected to make a positive contribution to some objectives and a negative contribution to others.

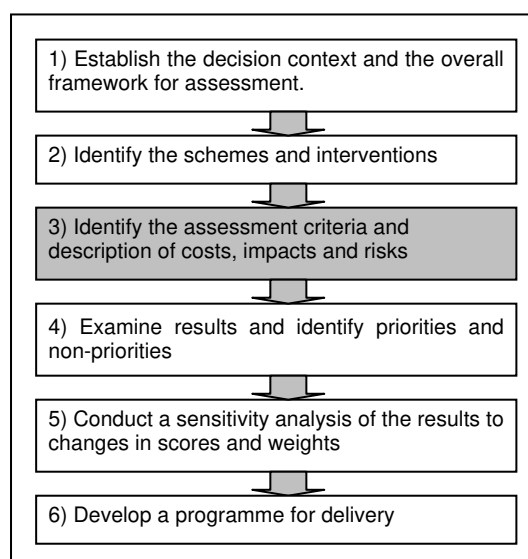
While there is no consensus in terms of the number and type of objectives included in the analysis, the following issues should be considered:

- ◆ Inclusion of a large number of objectives increases the time required to complete the analysis, may result in identification of tenuous linkages alongside more direct ones, and can produce results which are difficult to interpret²⁷.
- ◆ Inclusion of objective sets from different sources and different levels in the policy setting hierarchy (e.g. regional and local objectives, corporate and transport objectives) may lead to duplication and/or tenuous linkages, unless carefully presented.
- ◆ LTP objectives tend to be policy-focused (often reflecting the shared priorities for transport) rather than geographical focused. Use of LTP objectives alone may not fully represent regional priorities which may be more location specific.
- ◆ LTP targets may not fully represent overarching objectives, but can reinforce focus on specific policy areas²⁸.

The precise approach adopted is likely to depend on the robustness of LTP objectives in representing transport and related priorities at local, regional and national level.

Consideration should be given to the extent to which the objectives included in the analysis address the five broad goals for transport defined by the Department for Transport²⁹.

Approaches used by the authorities covered in Appendix B of this document vary from assessing compliance against five LTP objectives only, to consideration of a wide range of objectives reflecting national, regional, local transport and corporate targets.



²⁷ One authority interviewed started with over 100 aims and objectives when it initially developed its methodology, but has since reduced this to 20 LTP action areas.

²⁸ One authority consulted is now assessing schemes in terms of their compliance with LTP2 targets rather than LTP aims and objectives. The latter approach was used in LTP1, but was resulting in high compliance scores for schemes such as rural footway improvements and environmental enhancements, which broadly contributed to overall objectives but were less successful in contributing to targets.

²⁹ Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World (DfT, Oct 2007).

Describing performance

The contribution of a scheme, package or intervention to the specified objectives can be represented using a range of different absolute and relative response scales. Examples include:

- ◆ simple absolute scales, e.g. use of ticks and crosses, or Yes/No responses;
- ◆ a range of scores representing both positive and negative impacts, where larger scores are used to represent larger impacts: e.g. +5 (strong positive contribution) to -5 (strong negative contribution);
- ◆ a categorical scale: e.g. 'low', 'medium', 'high', 'zero';
- ◆ a generic descriptive scale applied to all objectives: e.g. 1 = slight effect, 2 = definite effect on indicator, limited extent of impact, 3 = definite effect on indicator, limited extent of impact, 4 = primary means of affecting indicator, limited extent of impact, 5 = primary means of affecting indicator, wide area of impact; and
- ◆ detailed descriptions specific to individual objectives, based on scheme attributes and potential outcomes. These might be based on quantitative or qualitative criteria (see *Case Study for Somerset*, in Appendix B).

These approaches do not only assess policy compliance but also seek to consider the extent to which the scheme or intervention is expected to contribute to each of the objectives.

Direct and indirect linkages - Many schemes and interventions contribute to a range of different objectives, particularly if part of a package of measures. Linkages with objectives can be described as *direct* (i.e. those relating to the primary, main or most significant outcome of the scheme) and *indirect* (i.e. those relating to other outcomes, including those arising from delivery of the primary outcome)³⁰. The methodologies examined as part of this study vary in terms of their consideration of direct and indirect linkages, and some apply different weightings to direct and indirect contributions.

Specific issues for consideration are summarised below:

- ◆ guidance to clarify consideration and treatment of direct and indirect linkages with objectives may be required;
- ◆ approaches which consider direct and indirect linkages with objectives may favour schemes which make a small contribution to a number of objectives (e.g. some walking and cycling schemes), over those schemes that make a large contribution to fewer objectives (e.g. some road safety schemes) – weightings can be applied to address this issue;
- ◆ focus on direct linkages only can result in insufficient attention being given to certain scheme types and objectives. Air quality objectives are typically addressed through secondary impacts of schemes. Such an approach may result in insufficient priority given to schemes which will deliver air quality improvements³¹.

³⁰ For example, a cycling scheme may make a direct contribution towards an objective which seeks to achieve a mode shift towards non-car modes, and make an indirect contribution towards an air quality objective due to a subsequent reduction in traffic levels in an Air Quality Management Area.

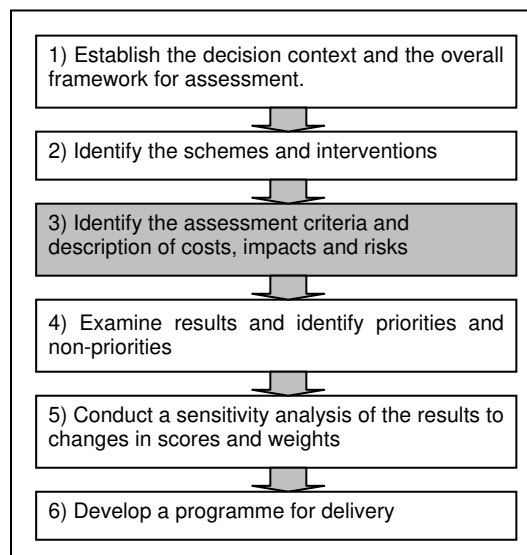
³¹ See Kent Case Study in Appendix B, for example.

Step 3.2 - Value for Money

Scheme impacts

Measurement of impacts (both positive and negative) should take into account:

- ◆ potential benefits (i.e. changes in service delivery, perceptions and travel behaviour on the ground);
- ◆ need for improvement and severity of existing problems (e.g. casualty rates, availability of existing infrastructure);
- ◆ geographical extent of impact or number of individuals/vehicles affected;
- ◆ interactions with other schemes and existing policies and measures, and the added benefit which can be provided by packages of measures; and,
- ◆ distributional impacts describing the differential impact a scheme or intervention might have on individuals, according to their income, gender, ethnic group, age, geographical location, or disability. Distributional impacts are often overlooked, due to a tendency to focus on theme-based LTP objectives. However, geographical location can be an important factor in terms of delivering regional and sub-regional objectives. In addition, income, gender, ethnic group, age, and disability, can be important considerations in ensuring the delivery of accessibility objectives.



Measuring impacts

Most methodologies use one or more of the following approaches:

- (i) **Focus the assessment around the set of objectives included in the policy compliance analysis** (see *Durham and Kent examples in Appendix B*), and use a relative response scale to score a scheme's contribution. The score is intended to take into account many of the above factors, in aggregate.

Guidance can be provided on the criteria which need to be met in relation to different categories of the scale used (Table 5.5). This avoids mis-representation of scheme benefits, optimism bias, and inconsistency in the way different schemes are assessed. The guidance should clarify whether scheme assessments should reflect the **intensity** of the impact, the **scale** of the impact, or both³².

³² Some approaches fail to do this, resulting in confusion about how to assess a scheme which has a very large impact on a few individuals, relative to a scheme which affects a much larger number of individuals but too a much smaller extent.

Table 5.5 - Example of guidance on scheme requirements for a 'high', 'medium' or 'low' contribution to LTP2 targets

LTP2 Target: Change in area wide road traffic mileage	
High	Demand management or large scale sustainable mode schemes, probably serving large employers, two or more schools or key routes to town centres.
Medium	As above, but serving fewer "key destinations".
Low	Scheme improves non-car options (e.g. cycle route, public transport) in a context/location where this has potential to lead to modal shift.
LTP2 Target: Public Transport Patronage	
High	Scheme on a route of potential high demand (e.g. serving 3 or more "key attractors" e.g. schools, employment areas, hospitals).
Medium	Scheme on a route serving 2 or more "key attractors".
Low	Other schemes.

Source: Somerset County Council

This represents a reasonable approach, providing the identified objectives and targets are representative of the priorities within the Council and the scope for improvement; decisions are based on robust qualitative and/or quantitative evidence; and schemes are scored in a consistent manner.

(ii) **Ask scheme proposers to justify the case for delivering the scheme**, in free flow format, based on the evidence available (*see Case Studies for Buckinghamshire and East Sussex, in Appendix B*). As highlighted elsewhere, professional expertise represents an important and effective way of assessing scheme benefits, if based on quantitative and qualitative evidence of previous scheme success, and if part of a formal process which provides opportunity for challenge and debate.

(iii) **Use a range of detailed criteria and questions to obtain information on potential need, scale, type and intensity of impacts**, in a systematic manner (Table 5.6).

Table 5.6 - Typical questions and responses used to determine scheme impacts

Need	
◆	Number of pedestrian/cycle accidents over proposed length of scheme (for safety schemes).
◆	Traffic volume, % HGVs, % through traffic (for schemes to address community safety and quality of life).
Some approaches deduct points for existing facilities, on the basis that the level of need has already been addressed to some extent.	
Scale or extent of impact	
◆	Number of people potentially benefiting from a scheme? (local residents = 1pt, district-wide, = 2pts, principal economic centre = 3pts, etc.)
◆	Number of properties/businesses fronting the scheme (0 to 10=1pt, 10 to 100=2pts, 100 to 200=3pts, etc.)
◆	Number of pedestrians/cyclists travelling through the area. (0 to 100=1pt, 100 to 200=2pts, 200 to 500=3pts, etc.)

Type and intensity of impact

- ◆ Could the scheme help achieve modal shift and reduce car use? (for environmental schemes)?
- ◆ Are proposals likely to reduce bus travel times?
- ◆ Does the scheme reduce community severance?

Source: Reading Borough Council

This method introduces some quantification of impacts into the approach, but ensures the process remains manageable and consistent with the scale of investment being considered, allows broad estimates of impacts to be made, and avoids the need for detailed evidence from sophisticated forecasting models.

(iv) **Use a range of detailed criteria and questions to confirm the extent of likely impacts** by determining whether the scheme demonstrates characteristics known to be associated with delivery of outcomes or which are likely to deliver added value:

- ◆ *e.g. Would the scheme also offer improved facilities or a safer environment for children walking/cycling to school (accessibility schemes)?*
- ◆ *e.g. Does the scheme incorporate improvements for the mobility/visually impaired (accessibility schemes)?*

This is a useful approach where it is particularly difficult to quantify or estimate the magnitude of likely scheme impacts. Where a scoring system is used, schemes score additional points for each criteria met.

Use of 'Yes'/'No' responses, linked to clear guidance, can encourage greater consistency in the assessment of schemes by different officers.

Questions can also be used to test whether a scheme has been developed using robust transport planning processes³³, whether all potential impacts and requirements have been considered, and whether there is sufficient evidence to justify the scheme; and hence, whether the scheme is likely to offer good value for money (see Case Study for Reading, in Appendix B and Table 5.7).

Table 5.7 - Examples of questions which identify whether a scheme has been developed using robust transport planning processes

Improvement to pedestrian surfaces:

- ◆ Does the scheme reduce community severance? Y/N
- ◆ Length of existing footway requiring improvement (metres)
- ◆ Have any existing poor surfaces caused injury to the public? Y/N.

Additional pedestrian routes pathways:

- ◆ Have pedestrian desire lines been identified? Y/N
- ◆ Additional footpaths required to cater for pedestrian desire lines? Y/N
- ◆ If yes, what length of new footpath required (metres)
- ◆ Are existing footpaths to be realigned to desire lines? Y/N

Source: Reading Borough Council

³³ For example, questions could be included to ensure that a scheme has been designed in accordance with the principles set out in the Manual for Streets (DfT, 2007). This provides technical guidance on the design of lightly trafficked streets, in order to create sustainable and inclusive public spaces. It recommends that the design of a scheme should follow a user hierarchy where pedestrians and cyclists are considered first.

(iv) **Assess schemes and interventions against the sub-objectives specified in the New Approach to Appraisal**, using a simplified version of an Appraisal Summary Table. Note, however, that NATA assesses value for money in the context of national objectives, which may not fully reflect local objectives.

(v) Undertake an **initial screening of schemes** against sustainability³⁴ and distributional criteria, to rule out any schemes with significant adverse impacts, or to highlight issues which need to be addressed.

Other considerations

Identifying suitable criteria

Some questions which might help identify suitable criteria include³⁵:

- ◆ Is it possible in practice to measure or judge how well a scheme performs on these criteria?
- ◆ What would distinguish between a good choice and a bad one in the decision problem?
- ◆ Has any major category of performance been overlooked?
- ◆ With regards to each area of concern, have all criteria necessary to compare options' performance been included?
- ◆ Do the criteria capture all the key aspects of the objectives intended?
- ◆ Are there any criteria which are unnecessary?
- ◆ Are there any impacts which are counted or represented more than once, and if so is there a defensible reason for doing so?
- ◆ Are there too few or too many criteria? An excessive number of criteria makes the process lengthy and the interpretation of results more difficult.

It can be helpful to group together criteria under common themes: (a) to help the process of checking whether the set of criteria selected is appropriate to the problem, (b) to ease the process of calculating weights, and (c) to facilitate the emergence of higher level views of the issues, particularly how the options realise trade-offs between key objectives.

Treatment of individual objectives

The methodologies considered as part of this study typically attempt to measure impacts against each of the individual relevant objectives. However, one methodology (see *Buckinghamshire Case Study in Appendix B*) measures the overall impact of the scheme, rather than the impact in relation to each of the individual LTP themes. This approach is felt to be more reliable, easier to undertake in a robust manner and less time consuming.

³⁴ Appendix K of Well-maintained Highways: Code of Practice for Highway Maintenance Management (Roads Liaison Group, July 2005) contains a Sustainability Checklist to assist maintenance engineers and practitioners in undertaking a sustainability appraisal of maintenance schemes. It considers factors relating to the Local Economy, Community Value, Noise Pollution, Air Pollution, Water Management, Visual Intrusion, Materials Utilisation, Waste Management, Energy Management, and Biodiversity. This checklist could be adapted and applied to a wider range of integrated transport schemes.

³⁵ Adapted from Multi-Criteria Analysis Manual (DfT, 2001).

Assessing the value of packages of schemes

Where packages of schemes are being assessed, the criteria must reflect the full range of impacts associated with the schemes included in the potential packages.

Scheme dis-benefits

The criteria and response scales used should seek to identify dis-benefits as well as benefits. Dis-benefits can often be overlooked, but are an important element of the decision-making process.

Scheme costs

Although not widely used at present, it is recommended that both revenue and capital costs over a defined number of years should be considered as part of a Whole Life Cost approach³⁶³⁷. Whole Life Costing involves focusing on meeting an identified need rather than acquiring a particular asset. When deciding how to meet that need, the options considered should include all practicable options. The quality of the outcome provided should also be considered.

Where there is uncertainty about the final cost of a scheme, use of broad ranges of costs can be helpful (e.g. £10,000 - £15,000, etc).

Alternatively, optimism bias factors³⁸ can be applied to the initial cost estimate to reflect the stage of development the scheme is at, and the fact that the scheme cost may change during project development and implementation (*see Somerset Case Study in Appendix B*).

³⁶ Further information on Whole Life or Lie Cycle Costing, and its potential benefits can be found on the website of the Office of Government Commerce (http://www.ogc.gov.uk/implementing_plans_introduction_life_cycle_costing.asp).

³⁷ Appendix K of Well-maintained Highways: Code of Practice for Highway Maintenance Management (Roads Liaison Group, July 2005) contains a Maintainability Checklist to assist scheme proposers in giving adequate consideration to future maintenance requirements of schemes during the design process. It considers factors relating to Scope and Scale, Design Aspects, Maintenance Operations, Materials and products, and Reuse and recycling. This can help determine future capital and revenue costs of schemes.

³⁸ Further information on optimism bias factors or uplifts can be found at www.webtag.org.uk (The Estimation and Treatment of Scheme Costs, TAG Unit 3.5.9, October 2006), and in Supplementary Green Book Guidance: Optimism Bias (http://www.hm-treasury.gov.uk/economic_data_and_tools/greenbook/data_greenbook_supguidance.cfm#optimism).

Step 3.3 - Deliverability

There are a wide range of factors affecting the likelihood of a proposed scheme, intervention or package of measures being delivered on time and to budget. Such risks need to be identified, and should inform decisions about the relative priority which should be assigned to a scheme, and the likely timescale for delivery.

Some methodologies assign a **low priority to 'risky' schemes** by:

- ◆ undertaking an initial sift of schemes and excluding schemes which do not meet criteria relating to (i) community support, (ii) political support and (iii) affordability;
- ◆ assigning negative scores to schemes with (i) land ownership/legal issues, (ii) partnership support/local objections, and (iii) environmental issues.

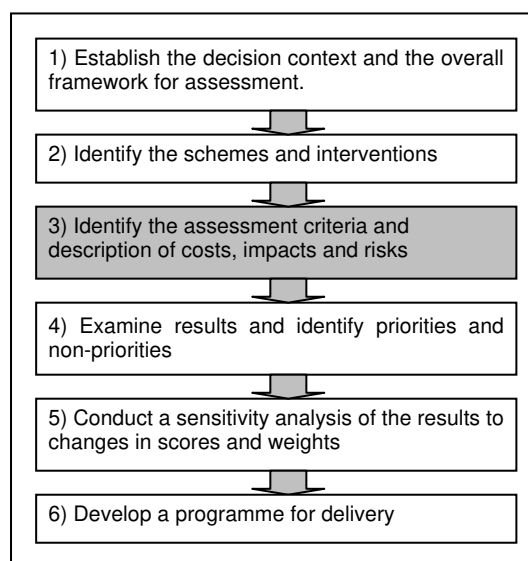
These approaches do not necessarily adopt a proactive approach to addressing risks.

Other methodologies **identify potential risks and use this information to plan timescales for delivery** which ensure sufficient time is provided to address any identified issues. Specific examples include:

- ◆ use of a question-based criteria approach to identify the number of development stages a scheme has already completed, how many are yet to be achieved, and how important it is that the scheme is delivered in a specific year (*see Case Study for Buckinghamshire in Appendix B*);
- ◆ use of detailed questions about public consultation, funding opportunities, and implementation stage. This information is then considered by a panel of officers and informs the prioritisation and programming process (*see Case Study for Reading in B*).

N.B. Where a process focuses on prioritising a programme for a defined period of time (e.g. a year), there is a risk that schemes which take to 2-3 years to deliver, will not be prioritised, unless delivery timescales are reflected in the approach.

In many authorities revenue budgets are severely constrained, limiting the implementation of schemes requiring revenue investment. Some score-based value for money assessments therefore assign a negative score to such schemes, reducing the relative priority given to them (*see East Sussex Case Study*). Other methodologies ask scheme proposers to confirm that a source of revenue funding has been secured for the proposed scheme (*see Durham Case Study*).



5.5 Stage 4: Examine results and identify priorities and non-priorities

The process of identifying priorities and non-priorities should be based on the results of the:

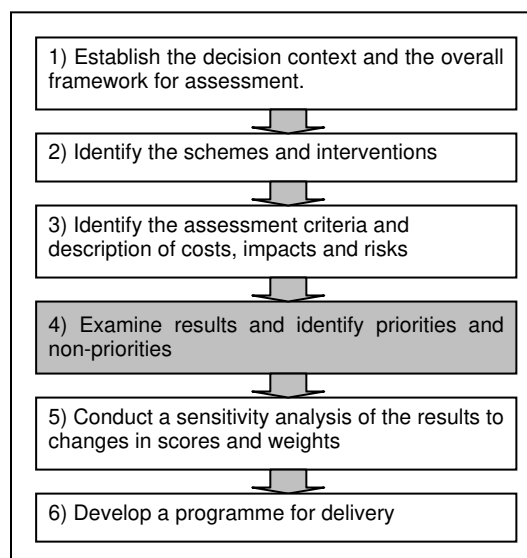
- ◆ policy compliance analysis;
- ◆ scheme impacts and costs (value for money assessment); and
- ◆ risk-based deliverability analysis.

For **Multi Criteria Analysis** approaches, this involves:

- ◆ assigning weights to different criteria (Step 4.1);
- ◆ calculating an overall score for schemes (Step 4.2);
- ◆ comparing impacts and costs (Step 4.3); and
- ◆ identifying priorities and non-priorities (Step 4.4).

For a **Logical Framework** approach this involves:

- ◆ presentation of information in a disaggregate form (Step 4.5); and
- ◆ identifying priorities and non-priorities (Step 4.6).



Multi-Criteria Analysis Approaches

Step 4.1 - Assigning weights to different criteria (Multi-Criteria Analysis)

Some approaches assign weightings to different objectives to reflect the scale of delivery required to meet the objective or target, or the relative importance attached to the objective. This ensures schemes, interventions and packages of measures contributing to higher priority objectives have the potential to achieve a higher score than those contributing to lower priority objectives.

The use of weightings for different objectives in calculation of an overall policy compliance score needs to be considered carefully. An un-weighted score represents how policy compliant the scheme is, i.e. how many and which of the policy objectives the scheme contributes to. Application of weightings can suggest that certain schemes are more policy compliant (because they contribute to an objective given a high weighting), even though they may only make a relatively small contribution to the weighted objective.

Methods of weighting include:

- ◆ feedback from public consultation exercises about which objectives are perceived to be most important or warrant higher levels of expenditure (Box 5.1);

- ◆ use of professional judgement about the relative weightings required to ensure the type of schemes scoring most highly are those which will ensure delivery of targets;
- ◆ consideration of the extent to which associated targets have already been met.

Box 5.1: Use of public consultation results to determine policy weightings

High, medium, low and negative scores for individual sub-objectives are given a weighted numerical value that reflects public concerns. Consultation with the public ranked concerns in the order: safety, accessibility, congestion, and this is reflected in weightings applied. Thus, schemes receiving a high rating against some of the safety and accessibility objectives can score a maximum of 9 points, compared with 6 points for other shared priority objectives, and 3 points for each of the local sub-objectives. A total score is then calculated for each scheme.

The Green Book acknowledges that the weights used in Multi-Criteria Analysis can often not be decided by experts, but must take account of the views of stakeholders and decision takers, and are therefore subjective.

Step 4.2 - Calculating an overall score for schemes and interventions (Multi-Criteria Analysis)

Overall scores are typically calculated by converting the response scale used to describe linkages with objectives, to a numerical scale, and summing the values for each objective. Value for money criteria can also be incorporated into the score, as can deliverability criteria. However, deliverability analysis may best be treated separately, and used to consider appropriate timescales for development and implementation (see Step 3.3).

Some approaches also attempt to reflect the availability and robustness of evidence in the overall scheme score (Box 5.2).

Box 5.2: Availability and robustness of evidence

Some methodologies seek to represent the robustness of the evidence available to assess scheme impacts, as an integral element of the value for money assessment.

One approach involves assessing the degree of confidence in the information underlying the assessment of the scheme's impact as 'high', 'medium' or 'low'. The overall value for money score is then factored by 100%, 75% or 50% respectively. Scores are reduced for schemes for which available data is limited to counter the likely policy compatibility inflation or 'optimism bias' in the assessment of the impacts in such circumstances. This represents a risk adverse approach to scheme prioritisation.

Another approach involves asking scheme proposers to describe what pre-implementation monitoring data has been gathered to justify the scheme. This information is then used by the process administrator to determine how much confidence they can have in the scheme proposer's high/med/low assessment of the scheme's impact on stated targets and objectives.

Step 4.3 - Comparing impacts and costs (Multi-Criteria Analysis)

Cost per unit outcome factors

Some methodologies seek to combine costs and benefits (including policy compliance benefits) in a single factor which represents cost per unit benefit. Examples of different 'cost per unit outcome factors' include:

- ◆ [Scheme Benefit Score] / [Initial Cost Estimate];
- ◆ [Scheme Benefit Score] / [Required LTP funding] – designed to promote those schemes which can secure funding from non-LTP sources;
- ◆ [Scheme Benefit Score] / [Cost Band] – the use of a cost band or category removes the requirement for a detailed cost estimate, and removes the “spurious accuracy” that an exact cost and benefit score can sometimes convey;
- ◆ [(Effect on Target) * (Number of users)] / [Initial Cost Estimate].

These approaches produce an overall score or factor for each scheme which can then be used to rank schemes in terms of value for money, in an objective manner.

The above approach can have a number of limitations associated with it:

- ◆ schemes are often assessed at outline design stage and costs are initial estimates only;
- ◆ these type of factors often provide a crude estimate of value for money only, and the results can be difficult to interpret;
- ◆ the factor can result in a bias towards low cost schemes, which may not be desirable in terms of the practicalities of delivering such schemes and the range of outcomes delivered.

Cost per unit benefit (or outcome) factors, should therefore be used with care.

Presenting costs and impacts side by side

Other approaches present costs and impacts side by side³⁹, rather than combining them into a single factor. While a number of methodologies involve calculation of a 'cost per unit outcome factor', the results are often used to inform decision making rather than as a basis for ranking schemes. Greater priority is given to the scheme benefit score.

Step 4.4 - Identifying priorities and non-priorities (Multi-Criteria Analysis)

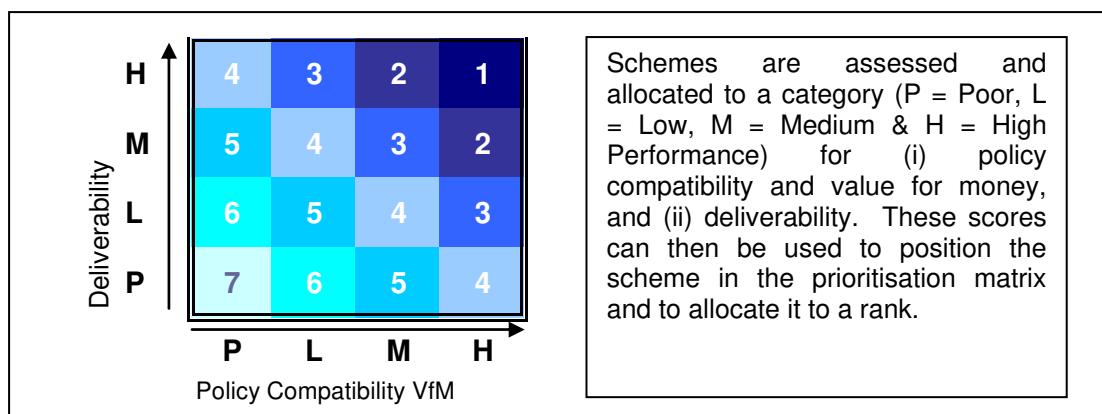
Overall scores can be used to produce a ranked list of schemes, or to allocate schemes to priority bands. Use of a scoring system can be an effective ranking tool as long as there is clear and credible evidence as to how and why a particular score has been derived.

Some approaches retain the data in a partially disaggregated format to identify specific strengths and weaknesses and to identify any trade offs which will need to

³⁹ As in a NATA approach, whereby the monetised Benefit Cost Ratio is presented alongside the qualitative and quantitative results using a Multi Criteria Analysis approach.

be made (Figure 5.2). Appendix A identifies other matrix based approaches which could be used to compare different scheme attributes, such as scheme impacts versus cost.

Figure 5.2 - Prioritisation matrix for ranking schemes



Source: Developed by Atkins for prioritisation of regional funding allocations in the South East, and for prioritisation of integrated transport schemes in Essex.

Other approaches present overall scores alongside the disaggregated data which contributes to the score, in order to determine how the score has been achieved (see below).

Most approaches enable officers, members and stakeholders to intervene in the prioritisation process based on their professional judgement or political awareness, and indeed this is an important part of any methodology.

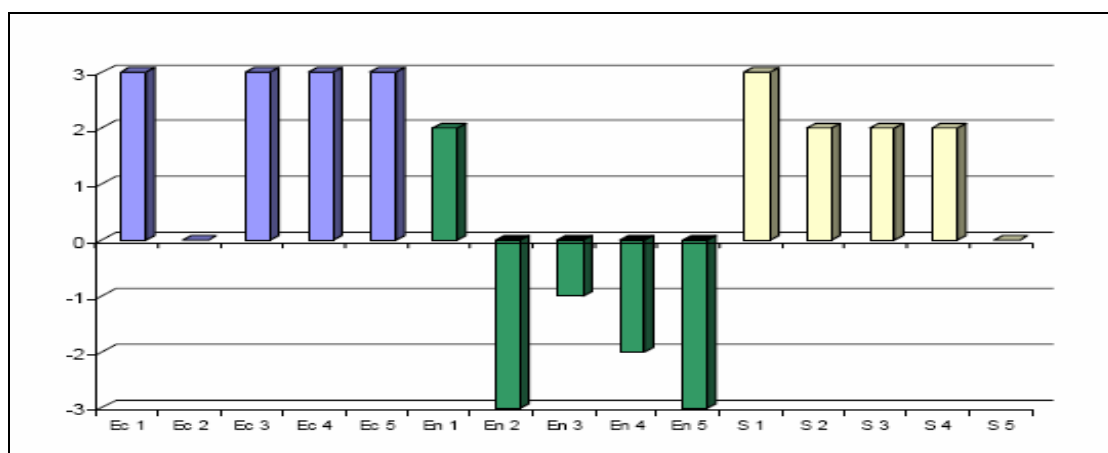
Logical Framework Approaches

Step 4.5 - Presentation of information in a disaggregate form (Logical Framework)

Other approaches retain scheme information in a disaggregate form for assessment of the relative strengths and weaknesses of each intervention. One limitation of scoring approaches is that the same total score can be achieved in a number of different ways, e.g. through low scores for heavily weighted criteria, or high scores for light weighted criteria, etc.

Figure 5.3 illustrates the benefits of a disaggregated approach. It illustrates a scheme which contributes substantially to a number of key policy objectives. However in two areas the scheme is considered to be seriously at odds with stated policy. Illustrating the information in a bar chart provides a balanced picture of the scheme's strengths and the factors that might prevent the scheme from being prioritised. If the scores had been combined, the highs and lows of the project could have made the scheme appear merely average, and hide the strengths, weaknesses and potential areas that might require further mitigation to ensure the benefits are captured.⁴⁰

⁴⁰ Beswick and Denton (2006) - The Regional Funding Allocation Process – Practical Lessons and Implications for the Future (JMP Consulting).

Figure 5.3 – Bar chart approach to presenting policy compliance results**Step 4.6 - Identifying priorities and non-priorities (Logical Framework)**

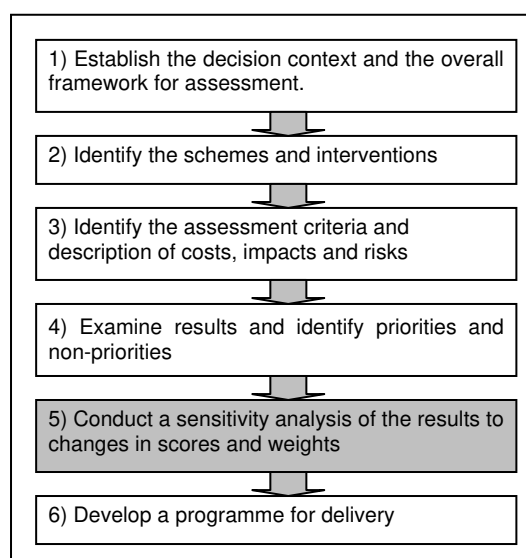
The Logical Framework approach, does not involve the use of weights, but requires the decision maker(s) to use judgement over the information provided in reaching a decision.

In reality, there is generally some scoring of schemes to assist the prioritisation approach, but greater emphasis is placed on agreeing priorities through active debate. This requires information to be considered by an independent panel or jury, as part of a formal process which allows challenge and scrutiny of evidence. See *Case Study examples for Reading and East Sussex, in Appendix B*.

5.6 Stage 5: Conduct a sensitivity analysis of the results to changes in scores and weights**Step 5.1 – Conduct a sensitivity analysis**

This is an important aspect of developing the prioritisation process. It could involve:

- ◆ testing the effects of different weighting options for the policy criteria;
- ◆ looking at how priorities might change due to the inclusion of different assessment criteria⁴¹;
- ◆ identifying the impact of different scoring systems;
- ◆ testing the effects of prioritising from different lists of schemes, consisting of different mixes of scheme types and sizes; and,



⁴¹ Sensitivity testing should consider whether the approach is based on a balanced set of indicators. Guidance presented in *Step 3.2 (Identifying suitable criteria)* should be re-examined in light of the results produced by the prioritisation approach.

- ◆ examining the impact of potential extremes of impacts and costs, to determine whether schemes and interventions would still be prioritised in the same order if future costs changed or impacts were greater or less than anticipated.

Different schemes should be tested to ensure the process provides sensible, meaningful and realistic results.

5.7 Stage 6: Developing a programme for delivery

The final step of the process involves developing a programme of schemes, packages and interventions, from the priority list, for delivery.

This can simply involve selecting schemes in priority order, until the budget has been fully allocated. However, in practice this process also needs to consider practical decisions about timescales, staff resources, political considerations and delivery capacity.

All approaches examined as part of this study include scope for programme managers to make adjustments to the programme to reflect these type of issues. A number of approaches also involve examining performance against targets at regular intervals throughout the year, and adjusting the programme to address areas of over- and under-performance.

Some approaches identify an annual programme for implementation in the following year, while others focus on continuously updating a rolling programme covering several years.

Authorities typically allow 4 to 6 months to undertake the prioritisation process. This allows time for schemes to be assessed, results to be validated and scrutinised, a draft programme to be produced and scrutinised by Members, and a final programme to be agreed.

Issues for consideration

- ◆ There may be political requirements to ensure a geographical spread of schemes across the authority. These pressures need to be balanced with the need to implement those schemes offering best value for money.
- ◆ A spread of schemes across policy areas may be required to ensure outcomes contribute to the full range of targets which the authority is required to report on.
A number of approaches ask proposers to estimate the percentage share of benefits across the four shared priorities for transport (congestion, accessibility, air quality, and safety), to enable the impact of the overall programme on specific targets and objectives to be determined (*see Case Study example for Buckinghamshire, for example*). Alternatively, individual assessment criteria or questions can be allocated a weighting for each of the over-arching objectives.
- ◆ A spread of schemes across policy areas, and at different stages of development, may also be required to ensure staff resources are used efficiently.
- ◆ Similarly, the programme may need to be aligned with contractor and consultant resources. Requesting information from scheme proposers about consultant and contractor requirements can help in the management of these resources throughout the year.

- ◆ The results of the deliverability analysis can play an important role in planning timescales for delivery which ensures sufficient time is provided to address any outstanding requirements and to address any identified issues.
- ◆ Identification of a reserve list of schemes for delivery represents good practice, and ensures efficient use of resources if other schemes are delayed.
- ◆ Performance against targets should be reviewed at regular intervals throughout the year, and adjustments made to the programme to address areas of over- and under-performance.

Professional judgement can play a valuable role in terms of considering the overall structure of the final programme alongside the key LTP objectives and priorities, to ensure the process has produced a sensible and realistic programme.

6. Common problems experienced and recommendations

The following problems and issues have been encountered either during the research for this project or through work with local authorities who have been developing prioritisation methodologies. The recommendations do not offer a simple solution, as in most cases there isn't one. However they do provide some important pointers that will enable local authorities to develop an approach that works for them, whilst avoiding some of the most common pitfalls previously encountered.

1. Methodologies are not developed by a broad spectrum of local authority transport officers

Problem: A common occurrence has been for a prioritisation methodology to be commissioned and developed by one section of a local authority Transport Department, without reference to other sections. Most commonly, strategic transport planners have developed a theoretically excellent methodology without involving staff on the scheme design and delivery sides. The result has been that the methodology is not used for capital programme management and scheme delivery.

There have also been cases where officers on the delivery side have developed methodologies for the purpose of deciding how to split the available budget, without getting enough information and advice from the strategy side about the need to deliver against the LTP targets and objectives. This has led to a risk of the wrong schemes being prioritised.

Recommendation: When commissioning prioritisation work, officers from all parts of the Transport Department should be involved from the start. A suitable approach would be to establish a broadly based project board made up of transport strategy, capital programme, scheme delivery and highway maintenance / asset management officers. As strategy planning and scheme delivery moves towards a broader agenda (for example through the Local Area Agreement and the Eddington agenda) there could also be representation from a small number of officers from outside the Transport Department – in particular land use planning and economic development.

2. Methodologies are too complex to be used to manage the capital programme

Problem: Usually as a consequence of the first problem highlighted above, some local authorities have developed theoretically excellent methodologies for their LTPs, and these have been recognised as such in the assessment and scoring process. However these methodologies have sometimes been too complex and unwieldy to be used to regularly review and update the capital programme in response to the inevitable change in circumstances and priorities.

Recommendation: When developing a methodology, local authorities need to remember that it will need to be used on a regular (at least annual) basis. Furthermore at the outset, officers should take a view on how much time they can realistically afford to spend putting the various schemes through the prioritisation and programme development process. This will provide an essential reality check for

officers charged with developing the methodology, by ensuring that practicality remains a key objective.

Rather than focusing on the production of an academically superior approach, the methodology should aim to deliver value for money by ensuring that capital and revenue investment is targeted at, and remains focused on, delivery of the desired outcomes. A methodology that cannot be easily used to update the capital and revenue programme has limited use and will not provide the necessary practical focus on using the schemes to achieve LTP targets and objectives.

3. Methodologies result in a bias towards some types of scheme over others

Problem: One of the key reasons for prioritisation is to enable local authorities to make tough choices about where to spend limited resources. Some authorities who have attempted to develop a methodology have found that the first use of the approach has resulted in very small localised schemes getting a higher priority because, proportionally, they cost very little and therefore have a very high benefit to cost assessment (or ratio where figures are used). Therefore the issue of cost becomes an overwhelming factor in favour of a scheme and becomes a reason for bias.

While a strong representation of smaller schemes in the final prioritised list might be a fair reflection of relative benefits, it may also be a symptom of weaknesses in the methodology, or a reflection of the type and number of different scheme options being identified for consideration.

Solution: One solution to this problem is to develop a two stage prioritisation methodology, which first splits the available budget into various headline pots – typically public transport, walking / cycling, road safety, traffic management, junction capacity improvements etc., and then prioritises schemes within each policy area. This ensures an equitable representation of schemes within the capital programme.

Various approaches for splitting the budget are discussed in Step 1.3 of Chapter 5. However, developing a defensible and evidence-based methodology to undertake this process is challenging.

Another solution might involve prioritising schemes in the first instance, based on identified (and disaggregated) impacts alone rather than combining the overall benefit score and scheme cost into a single 'cost per unit outcome' factor. The rationale behind this approach is that the absolute level of benefit delivered by a scheme is important, in its own right, and that 'cost per unit outcome' factors provide a very crude representation of the true benefit:cost ratio. While such factors can be of use, their role in the process might be as secondary, rather than primary consideration. *See Case Studies for Kent and East Sussex, in Appendix B.*

Other solutions might involve re-examining the assessment criteria being used to check for any biases, and issuing of guidance to officers on the types of schemes sought and how to assess schemes systematically and fairly. *See Case Study for Kent in Appendix B.*

4. Prioritisation does not always recognise the contribution that a scheme might make to a wider package of measures

Problem: This issue primarily relates to how the full potential impacts of a scheme can be assessed. Many smaller schemes in particular are individually assessed for their benefits at a specific geographical location – provision of road crossing points being a good example. The drawback with this approach is that such an assessment might not consider the wider and aggregated impacts of delivering a package of smaller schemes in close proximity. When people travel within an area or along a route, they may encounter a number of barriers to a convenient and safe journey at different points. For this reason it makes sense to consider an area or whole route approach to scheme prioritisation, rather than constrain an assessment of benefits to one location.

Recommendation: One solution would be to combine a number of small schemes into a larger package of area- or corridor-based schemes, for the purposes of prioritisation. Development of area-based strategies and action plans is a common theme among authorities (e.g. Reading, and East Sussex), and supports a package-based approach to prioritisation. Combining schemes can also have other spin off benefits – more efficient delivery and procurement for example. There may also be a synergy with asset management plans which may also be looking at a whole route.

Another potential approach is to assess smaller schemes separately, but to apply a weighting factor to the benefits for those schemes that could contribute to a wider strategy of future planned programme of measures.

The advantage of either approach is that it gets local authorities thinking more strategically about the real purpose and impacts of schemes, rather than adopting a rather narrow approach based on individual locations.

5. There is too much emphasis on trying to get quantitative evidence

Problem: This issue is often raised because of expectations among some individuals, that prioritisation should be a purely scientific and numerical exercise that provides “objective” evidence for the schemes that are to be prioritised.

However, in general it is simply not either technically possible or cost effective to provide a purely numerical basis for scheme prioritisation. Few, if any transport models, for example, can cost effectively provide predictive data which would robustly establish the additional number of pedestrians and cyclists resulting from delivery of particular scheme. However, the alternative of using experience, professional judgement and engagement with end users is often not adequately explored. This is sometimes because there is a fear that such methods will not provide a suitably scientific answer which is seen as being needed as a justification for investing money.

Recommendation: Techniques which combine quantitative and qualitative impacts in an appraisal and prioritisation process are well researched, and discussed elsewhere in this document (see Sections 2.4, 3.1, and 5.1).

Subjective assessment of impacts can form the basis of a defensible prioritisation approach, if undertaken in a structured, systematic, transparent and auditable manner.

A useful technique is to use a challenge and review process, where the evidence for the contribution of a scheme to LTP targets and objectives is tested by an individual or group who are not directly involved in promoting the scheme. This evidence, and the results of the challenge and review process, should be documented (perhaps in the form of an assessment summary table) so that it can be used to provide justification for the decision and guidance for the future.

6. There is no attempt to collect quantitative evidence for future evaluation through before and after scheme monitoring

Problem: In contrast to the above issue, there is often a shortage of quantified evidence to support the prioritisation process. Previous research⁴² has shown that authorities often lack an identified budget for monitoring and have no clear idea about the strategic purpose of monitoring activity. During LTP1, schemes were often implemented without any attempt to undertake before and after monitoring in order to evaluate the impact of investment on travel outcomes. When it came to LTP2, the investment in LTP1 schemes could not, therefore, be relied upon to provide evidence of benefit for future schemes.

It is fully recognised that a before and after monitoring / evaluation approach can potentially be expensive. However the lack of basic evaluation evidence from schemes previously implemented could, in future, result in the prioritisation of investment which will have significantly less chance of delivering outcomes. In the longer term, therefore, there is a serious danger that significant sums of money could be wasted on schemes that just do not deliver what people assume (without evidence) that they will.

Recommendation: Local authorities need to recognise that targeted (but proportionate) monitoring and evaluation is a vital tool that will save them money in the longer term. It is recommended that authorities establish a dedicated monitoring budget for the LTP programme, and that this is prioritised to reflect the value of capital investment in particular scheme types or against particular objectives. Authorities should look to establish a clear monitoring and evaluation framework so that everyone – scheme proposers, elected members and stakeholders – are aware of the potential for monitoring to be used as evidence for future prioritisation⁴³.

7. Prioritisation is not supported by elected members and stakeholders.

Problem: One of the major benefits of prioritisation is that it challenges the rationale of “pet schemes”, which are often based on perceived needs or problems, being implemented ahead of schemes where there is more evidence of a real benefit. Local authority elected Members are often under pressure from their communities and stakeholders to actively support such schemes. While it is important that

⁴² Monitoring and Reporting of LTP Outcomes (Atkins, 2006)

⁴³ Further information on monitoring practices within authorities and associated recommendations is provided in *Monitoring and Reporting of LTP Outcomes* (Atkins, 2006).

Members represent the wishes of their communities, such schemes can be at odds with the investment required to address the real problems.

Recommendation: An effective and transparent prioritisation process can provide a means of securing support for schemes from Members, and a robust approach for demonstrating to Members why certain schemes should not be implemented. However, Members need to be fully aware of, and preferably involved in, the development of a prioritisation methodology. This opportunity could also be extended to stakeholders – such as transport operators or groups such as the Local Strategic Partnership. However, there is a risk that the prioritisation process could become too focussed on parochial local issues at the expense of the wider strategic issues that should be the main focus of LTP investment.

The most successful local authorities will be the ones who ensure that their prioritisation methodology remains firmly focussed on delivery of LTP objectives and targets. There will always be a need for local schemes to address local issues, and the challenge for the local authority will be to use prioritisation and strategic planning to ensure that these can also address the real transport problems and issues faced by residents and businesses. Schemes that only address very local needs might most appropriately, be delivered with the local authority's own resources or through other funding streams.

8. Spurious accuracy

Problem: There can often be a tendency for scoring mechanisms, which award points (positive or negative) for benefits and costs, to be treated as a scientific and definitive assessment of a benefit that will inevitably be delivered. The problem of spurious accuracy could, in some circumstances, result in the prioritisation process being discredited especially if subsequent monitoring and evaluation activity provides different evidence to the original scoring assessment.

Recommendation: In part this problem should be managed from the start by making it clear that prioritisation is not a magic solution or a panacea for all transport investment dilemmas. It should inform decision-making rather than dictate it. Scores should be treated as indicative and not definitive.

This message can re-enforced by presenting scheme scores within bands or tolerances, and limiting the number of response categories available for selection.

9. Schemes are not at the same stage of development

Problem: It is unlikely that every scheme put through a prioritisation process will be at the same stage of development. Therefore when assessing costs and impacts, the prioritisation process will have to consistently and fairly reflect the fact that some schemes will have much better information than others. If this does not happen there is a danger of bias.

Such a situation is most likely to occur where schemes at an early stage of development under estimate the costs and over estimate the benefits. This would make these newer schemes appear to be better value for money in a prioritisation process, and could result in the decision to abandon or defer schemes that have already been worked up to a considerable level of detail.

Recommendation: In reality this problem may not be as intractable as it seems. Schemes at an earlier stage of development cannot always replace well-developed schemes because the implementation timescales are so different. There will always be a point where a well-developed scheme has to be implemented in order to ensure that money is spent in a particular year. Hopefully the development process is robust enough to have established the costs and benefits, to the extent that delivery becomes evidently the right thing to do.

There are a number of other approaches which help address this issue.

- ◆ Use of a two stage process which involves an initial screening exercise to rule out any proposals which have a negative contribution towards any objectives, or any adverse distributional or sustainability issues; and a second stage involving a more detailed assessment of impacts once those schemes passing the first stage have been further worked up, is one such approach. However, this process can be resource intensive, and for very small schemes, there may be little additional evidence about impacts which can be identified at the second stage.

Leicestershire County Council (Appendix B) identifies a 'conveyor belt' of schemes - a five year programme of approved schemes that have approval in principle from both the Officer Jury and lead member for Highways and Transportation for implementation during LTP2. Once schemes are on the 'conveyor belt' further scheme design work can be undertaken to take the scheme forward to entry into the 'provisional' programme (for the following year) or 'firm' programme (for the current year). The only design work that is done before a proposed scheme reaches the conveyor belt is that which is necessary to make an informed decision on whether it should be approved onto the conveyor belt, including a preliminary cost estimate, to determine its relative priority.

- ◆ Use of bandings or ranges to represent scheme costs. Application of an optimism bias factor to the costs and the benefits is an alternative approach. The exact value of this factor will be a matter of judgement, but if it is based on evidence from previously implemented schemes, it will result in more of a level playing field.
- ◆ A primary focus on scheme impacts in the prioritisation process.
- ◆ Development of a rolling programme of schemes, encompassing several years.

Appendix A – Examples of prioritisation approaches from elsewhere

A.1 New Approach to Appraisal (NATA)⁴⁴

The New Approach to Appraisal (NATA) was introduced in 1998 in order to provide assistance in choosing between different options for solving the same problem, prioritising between proposals, and assessing value for money. It has evolved since its introduction and is now the basis for appraisal of multi modal studies, Highway Agency road schemes, major road and public transport schemes (>£5 million) developed as part of Local Transport Plans, and Government decisions about seaports, airports, and rail.

The approach is consistent with The Green Book, Appraisal and Evaluation in Central Government (2003). It is based on a Multi Criteria Analysis approach and provides an improved way of presenting monetised and non-monetised impacts of transport projects to decision makers. It can be considered as a hybrid MCA technique in that some of the impacts are converted to common units (travel time savings, accident costs and some environmental impacts are converted to money values), while others are not (e.g. landscape effects).

The appraisal framework in NATA is made up of four distinct parts:

- ◆ Appraisal Summary Table - Consisting of detailed quantitative and qualitative evidence about scheme impacts and achievement of Government objectives (and sub-objectives) relating to Environment, Safety, Economy, Accessibility and Integration;
- ◆ Achievement of regional and local objectives;
- ◆ Effectiveness of problem solving; and
- ◆ Supporting analyses.

These four strands when considered together provide the decision-maker with the information needed to reach a considered judgement on the worth of a project.

However, the level of detail represents a relatively prescriptive approach to appraising the impacts of interventions, and may not lend itself well to the appraisal of smaller schemes. The cost of undertaking a full scale appraisal tends to be proportionally high, resulting in a more sketchy outline assessment being undertaken which has been subject to less research and development, and can therefore be biased against smaller schemes.

The Department for Transport is consulting on how its approach to appraisal might be revised to ensure that it reflects the conclusions of the Eddington and Stern Reports, as well as the needs and priorities of passengers and users, and other people who are affected by transport impacts – both positive and negative⁴⁵.

⁴⁴ For further information see Transport Analysis Guidance, Introduction to Transport Analysis, TAG Unit 1.1 (June 2005).

⁴⁵ Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World (DfT, 2007).

Applicability to small scheme prioritisation

Biases and weaknesses in the use of NATA-based appraisal techniques for smaller schemes have been well documented in recent years⁴⁶⁴⁷. Issues tend to focus on:

- ◆ a lack of knowledge and coverage of certain impacts, which can be important for smaller schemes. For example, public health impacts are poorly understood; reliability, perceptions of safety and quality of life impacts are not given monetary values; integration, distributional impacts (i.e. who or which groups are affected by the project) and wider economic impacts of transport schemes are not easy to represent in appraisal; and environmental benefits can be costly to demonstrate;
- ◆ the dominance of aggregated time savings in the quantified benefits. Schemes which generate significant savings for a small number of people (particularly bus users, cyclists and pedestrians), or which seek to slow traffic down to improve safety, perceptions of safety and quality of life, do not perform well;
- ◆ the consideration of long term benefits and the use of discount rates, which can reduce the relative advantage the smaller schemes offer of being able to produce benefits more swiftly.

In addition, value for money (within the NATA framework) is narrowly defined in terms of the benefit to cost ratio of the monetised elements of the appraisal, where benefits focus on delivery of national objectives. This can create conflicts between transport strategies designed to address a range of indicators and the results of appraisal applied to the projects making up these strategies. The proposals that authorities might develop to deliver their Local Transport Plan objectives and targets, might not (and in general, will not) be the optimum set of proposals in terms of 'value for money' as defined by the output of the NATA process.

The Department for Transport has advised that it would be inefficient to carry out extensive appraisal work for small schemes. *A New Deal for Trunk Roads in England: Guidance on the New Approach to Appraisal (DfT, 1998, Chapter 5)* therefore provides advice on circumstances in which the appraisal work can be curtailed on the basis of some simple indicators for the following objectives and sub-objectives:

- ◆ Environment (Noise, Local Air Quality, Landscape, Biodiversity, and Heritage);
- ◆ Economy (Journey Times, Vehicle Operating Costs, Reliability, and Regeneration);
- ◆ Accessibility (Pedestrians and others, Access to Public Transport, and Community Severance).

It however recommends that analysts should not use these guidelines mechanically and wherever it is evident that an impact would be significant, it should be assessed.

A.2 Guidance on the Appraisal of Walking and Cycling Schemes⁴⁸

The Department has published *Guidance on the Appraisal of Walking and Cycling Schemes (TAG Unit 3.14.1, March 2007)*, but highlights significant uncertainty around the use of the techniques suggested in the document, and advises that valuations should be used with

⁴⁶ Valuing the Small - Counting the Benefits (Phil Goodwin, 2004) - A paper presented by Professor Phil Goodwin (UCL) for CPRE, CTC, Living Streets, Slower Speeds Initiative, Sustrans and Transport 2000.

⁴⁷ Project G: Enhanced Appraisal Tools, Deliverable G1: Background (DISTILLATE, 2007).

⁴⁸ Guidance on the Appraisal of Walking and Cycling Schemes (TAG Unit 3.14.1, March 2007).

care and only for the purposes of sensitivity testing. The Guidance is primarily for use in major scheme (>£5 million) appraisal, and requires significant amounts of forecast data about likely scheme impacts.

A.3 Scottish Transport Appraisal Guidance (STAG)⁴⁹

The Scottish Transport Appraisal Guidance sets out a two stage process for appraising schemes and interventions:

- ◆ Part 1: this is an initial appraisal and broad assessment of impacts designed to decide whether a proposal meets the planning objectives, fits with relevant transport, land use and other policies and hence should proceed to Part 2;
- ◆ Part 2: the detailed appraisal against the Government's objectives: Environment, Safety, Economy, Integration, and Accessibility & Social Inclusion.

Applicability to small scheme prioritisation

The two stage process is intended to minimise wasted effort by testing at an early stage whether a proposal meets certain key objectives before detailed analysis of impacts is undertaken. The process allows adjustments to be made to the proposal at an early stage if there are problems in performance that could be overcome.

The initial stage could involve using a simple checklist, to screen for any proposals which have a negative contribution towards any objectives, or any adverse distributional or sustainability issues.

It could provide a useful approach in prioritising medium-sized schemes, and in determining which schemes are taken forward for further development, in order to allow a more robust appraisal of the benefits.

A.4 Regional Funding Allocation (RFA) Process

The Regional Funding Allocation process was launched in July 2005 as part of the Government's efforts to integrate transport, economic and spatial development strategies in each region. Advice was sought from regional bodies (principally through the Regional Assemblies), on priorities in these three areas in order to enhance regional input into Government policy development.

The Government's guidance to regions did not prescribe the process regions should adopt for priority setting and preparation of advice. Instead, the guidance sought advice which was evidence-based; agreed within the region; realistic, with robust costings and proposals tested for deliverability; and consistent with wider national policy objectives and regional and local strategies, except where robust evidence was presented for different priorities.

Advice was requested on priorities for decisions on the split of roads funding between Highways Agency regional schemes, local authority major schemes, and other expenditure.

⁴⁹ Scottish Transport Appraisal Guidance (STAG) (Transport Scotland, 2006)

The regions' methodologies differed from each other on many points of detail, but bore a very strong family resemblance. There were three basic elements common to all methodologies⁵⁰:

- ◆ **policy compliance** - identification of relevant objectives and policies, and detailed tests to devise the relevance of each scheme to, or its contribution towards, each objective;
- ◆ **value for money** - most regions also assessed schemes for 'value for money', on the basis of their estimated benefit:cost ratio (BCR). Assessments were sometimes expressed as scores and sometimes in narrative terms; and
- ◆ **a deliverability assessment** to rate schemes by their degree of preparedness and risk, sometimes also incorporating affordability and other considerations. Results were expressed either as scores or in a narrative.

In addition, prioritisation processes were consciously designed to inform decision-makers' choices, not to dictate them.

Scoring systems, of varying degrees of complexity, were used to calculate the schemes' 'policy fit'. Two broad approaches were adopted in terms of presenting the results⁵¹:

- ◆ **Quantitative Approach** - Some approaches produced an overall score for each scheme, and ranked schemes accordingly. The advantage of this approach relates to its 'objectivity', affording decision-makers no opportunity to tamper with the outcomes for individual schemes once an overall score has been derived.
- ◆ **Disaggregate Approach** – Other approaches showed scores side-by-side for different blocks of objectives. Decision-makers were offered the opportunity to apply differential weightings to different tests, or objectives, or block of objectives. There are a number of advantages of this approach, as follows:
 - transparency – all the evidence is made available to decision makers;
 - there was no danger of an overall score masking significant dis-benefits or gaps in information. Gaps in knowledge were specifically recognised and accounted for in the process;
 - simplicity and ease of understanding – especially for stakeholders and the scheme proposers themselves.

Applicability to small scheme prioritisation

The relative size of LTP integrated transport budgets and schemes would make an exact replication of the RFA prioritisation process inappropriate. However, there are a number of similarities between the RFA methodologies and those adopted by local authorities, in terms of:

- ◆ the use of a policy compliance – value for money – deliverability model (although with smaller schemes it is often more difficult, and disproportionately expensive, to gain quantitative data on value for money); and,
- ◆ scoring of schemes, and presentation of results in an aggregate or disaggregate format.

There were also a number of key issues which the regions needed to address, which are also of relevance to local authorities⁵²:

⁵⁰ Regions' Advice on Transport Regional Funding Allocations - The First Round (Michael Faulkner, July 2006).

⁵¹ Beswick and Denton (200?) "The Regional Funding Allocation Process – Practical Lessons and Implications for the Future".

⁵² Regions' Advice on Transport Regional Funding Allocations - The First Round (Michael Faulkner, July 2006).

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- ◆ the treatment of different size schemes and regional versus local schemes, and the case for top-slicing part of the budget for locally-significant schemes;
 - ◆ assessment of schemes at different stages of development;
 - ◆ the aim of the prioritisation process – resource allocation of budgets, assessment of the relative merits of schemes, and/or policy compliance?;
 - ◆ the place of scheme appraisal (e.g. against NATA criteria) in the prioritisation process ; and,
 - ◆ the lack of robust evidence on scheme impacts.

A key message of local authorities is that all the RFA approaches were bespoke methodologies, developed in-house or by consultants, to fit the circumstances and priorities of the organisations concerned. From the perspective of regional stakeholders involved in the process, this was felt to be an important factor in developing a collective sense of ownership and responsibility.

A.5 - Highways Agency Scheme Prioritisation⁵³

The Highways Agency uses a four stage process for determining its overall programme of expenditure on smaller maintenance or enhancement schemes (known as Local Network Management Schemes), involving:

- ◆ identification by Agents and teams, of potential projects to meet set objectives;
- ◆ review and prioritisation of projects at Area level - assessment and review of schemes at Area level, including completion of a Project Appraisal Report (PAR) and an Area Value Management Workshop;
- ◆ review, update and assembly at Regional level - Regional Planning and Performance Team (RPPTs) and Regional Panels review Area submissions and identify a prioritised regional programme for each MPML category to match the indicative allocations for the regions; and
- ◆ monitor and review.

Project Appraisal Report (PAR)

The PAR is a key document where the need for a project, its costs and benefits (including those that cannot be quantified in money terms) are brought together to aid in judging the worth and priority of the project.

The completed document allows the benefits to be assessed against all of the Government's five objectives for transport (Environment, Safety, Economy, Accessibility, and Integration). The PAR is repeatedly refined at each key decision stage to provide a justification for the project's continued development and a historical record of the life of the project. It also provides a convenient source of data for the Value Management and prioritisation of the project among other competing schemes at each stage.

There are three types of PAR for schemes of different size and characteristics:

⁵³ Maintenance and Making Better Use: Value Management of Local Network Management Schemes (Highways Agency, March 2007); PAR4 Guidance, Project Appraisal Report, Guidance Notes, Version – 4.1c (Highways Agency, 2007).

- ◆ Brief – for all “appraisable” projects under £25,000, and all “non appraisable” projects (e.g. upgrade of software or a response to new regulations);
- ◆ Short – for all “appraisable” projects between £25,000 and £250,000, and all “appraisable” projects over £250,000 at the conception stage only;
- ◆ Full – for all “appraisable” projects over £250,000, at all stages subsequent to conception.

Value Management (VM) workshops

Data from the PAR feeds into an excel-based Value Management Report. Key elements are:

- ◆ an economic summary, in terms of the Net Present Value (NPV) and the Benefit to Cost Ratio (BCR) for Full PARs, and the First Year Rate of Return (FYRR) and the Net Benefits in the Opening Year for Short PARs;
- ◆ a Value Management Score for reflecting the benefits of the scheme in terms of safety, economy, environment and other (noise, accessibility, integration, pilot, technology, non-appraisable).

The PAR calculates the initial VM score automatically for Safety, Economy and Environment schemes and allows for additional scores to be awarded for Economy and Safety schemes with significant Reliability or Road-worker Safety benefits. The workshop provides an opportunity to challenge the inputs to the automatic PAR calculation. Other schemes are scored subjectively at the workshops.

Area Value Management Workshops can be held at any time through the year when there are sufficient projects identified to justify the process. All schemes costing more than £100,000 should be subject to a workshop at each key stage in the life of the scheme when a PAR should be completed or updated. Schemes in the range £100k to £250k should be reviewed at the workshops, but with less rigour than those over £250k.

Workshops are attended by project sponsors, managing agents, experts able to provide specialist advice and a member of the Regional Planning and Performance Team (RPP) to ensure consistency in approach between areas.

A description of each scheme is provided by the managing agent, and a checklist of questions is addressed in relation to each scheme. These are designed to verify the accuracy of the data provided and challenge any judgements made. Examples include:

- ◆ Is the problem clearly defined?
- ◆ Does the solution properly address the problem and is it of a scale and cost appropriate to the problem?
- ◆ Are there other solutions that should be considered, possibly an innovative solution as a pilot?
- ◆ Is the project type correctly identified, i.e. Environment, Safety etc?
- ◆ Is the project in line with the Agency’s objectives?
- ◆ If an unavoidable commitment has been claimed is it properly established?
- ◆ Are the project assessment scores at Part 2 of the PAR appropriate?

Approximately 20 minutes is allowed for each scheme. At the end of the process, schemes are categorized as 'unavoidable', 'highly worthwhile', or 'worthwhile'

Reserve projects

It is anticipated that during the year, individual projects may slip from their anticipated delivery timetable, or may drop out of the programme for a particular year due to reasons such as network or resource availability. To enable the allocated budget for a particular spending block to be spent appropriately and the outputs forecasted at the start of the year to be delivered, Year 1 Reserve projects are identified when compiling the basic delivery programme.

These Reserve Projects are shown as a forecast for Year 2 delivery, but are flagged as Reserve projects, to indicate that they may be pulled forward for delivery in the current financial year.

Applicability to small scheme prioritisation

The HA approach is resource intensive and would require considerable modification to adapt it to the circumstances of a particular LTP programme. However, specific elements to this approach which may be of use for local authorities include:

- ◆ use of a systematic and consistent approach for the assessment of all projects;
- ◆ a hierarchical approach which scales the level of appraisal scales to the size and type of project;
- ◆ the role of the Value Management Workshops in verifying, challenging and scrutinising the evidence presented;
- ◆ use of a qualitative approach for schemes where impacts can not be easily quantified, and where professional judgement may provide the most reliable approach for assessing benefits.

A.6 Thames Gateway Strategic Partnership⁵⁴

In June 2007, the Department for Transport (DfT), in conjunction with the Transport Advisory Sub Group (TASG) of the Thames Gateway Strategic Partnership invited the following bodies to submit a full list of schemes regarded as essential to the delivery of the Thames Gateway in their region:

- ◆ South Essex – East of England Regional Assembly (EERA);
- ◆ Kent and Medway – South East England Regional Assembly (SEERA); and
- ◆ London – Transport for London (TfL).

To complement the larger schemes being funded by mainstream budgets, TASG was tasked with identifying smaller and more local transport schemes (typically between £2m and £20m, and funded through the Community Infrastructure Fund, CIF) to establish their relative priority in accordance with the Thames Gateway Interim Plan and high level objectives.

A working group was set up, consisting of representatives from the 3 regions, to design a fair process to assess the impacts and benefits of schemes. A Prioritisation Questionnaire,

⁵⁴ Thames Gateway Strategic Partnership Transport Prioritisation Methodology, Department for Transport, June 2007.

based around the high level objectives for the sub-region and deliverability criteria, was required to be completed for every scheme considered to be of importance to the Gateway (Table A.1).

Table A.1 – Prioritisation questionnaire for smaller schemes in Thames Gateway

Objective	Prioritisation Questions
Supporting growth of the Thames Gateway region	<ul style="list-style-type: none"> ◆ To what extent does the proposed scheme address the problem and issues identified? ◆ Does the project provide improved journey time reliability within the Gateway? ◆ Does the project improve local and sub-regional access for freight movements by van, lorry or rail to commercial centre, business parks, ports and or existing industrial areas?
Supporting housing	◆ Level of support to housing development and brownfield sites.
Supporting employment	◆ Level of support to access to employment, floorspace development on brownfield sites, and access to employment training.
Improving quality of life	◆ Level of support to access to good, services, and greenspace.
Deliverability	◆ Project timescale, estimate cost, Benefit-Cost Ratio, revenue funding support and other funding which may be available.

Each region was required to set the context for the scheme and justify its inclusion as a priority. Detailed questions (with a range of defined response options) were used to obtain quantitative information on the type, scale and intensity of expected benefits (Table A.2). Scheme proposers were also required to justify their response in free-flow format.

Table A.2 – Example of more detailed questions on type, scale and intensity of expected benefits

<p>Q1.3 DOES THE PROJECT PROVIDE IMPROVED JOURNEY TIME RELIABILITY WITHIN THE GATEWAY?</p> <p>TICK ALL BOXES THAT APPLY:</p> <p>i) Adds capacity to the highway network</p> <p>ii) Actively provides measures to relieve congestion and improve traffic management on the strategic and / or local road network (e.g. SCOOT)</p> <p>iii) Provides bus priority measures</p> <p>iv) Addresses one or more rail bottlenecks</p> <p>v) Improve pedestrian and / or cycle routes</p> <p>vi) Improve interchange between modes as follows:</p> <p style="padding-left: 20px;">Any of Bus / Rail / Ferry interchange</p> <p style="padding-left: 20px;">Park and ride (car / rail)</p> <p style="padding-left: 20px;">Cycle racks at rail stations</p> <p>Justification for answer:</p> <p><i>“Public transport access opportunities are improved by the scheme, both in terms of access to and reliability of bus services, and also interchange opportunities with the heavy rail network”</i></p>	<p></p> <p>X</p> <p>X</p> <p></p> <p>X</p> <p></p> <p>X</p> <p>X</p> <p>X</p>
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Guidance was provided on the types of transport schemes which would contribute to each of the high level objectives (See Table A.3, for example).

Table A.3 – Guidance on how transport schemes might contribute to ‘Supporting growth of the Thames Gateway region’

What this means for transport?

Transport plays a key role in delivering productivity and economic efficiency to a specific area and - via the road and rail network - across the UK. Modelling and Studies in all parts of the Gateway demonstrate the serious impact that congestion or lack of access has on the attractiveness of an area for inward investment and business relocation.

Schemes that deliver against this objective will remove barriers to growth and will offer economic benefits to the Thames Gateway either through: reduced congestion; improved access to strategic economic drivers within the Gateway (such as international ports) or the distribution network; sites which otherwise would not be developed to their full potential; improved competitiveness of the region; or the accumulation of economic activity.

A Working Group (consisting of TfL, EERA, SEERA, DfT and DCLG) met to scrutinise, justify and analyse each scheme using the quantitative information given in the questionnaires, together with any qualitative justifications given by the proposers.

Schemes were graded high priority 1a, high priority 1b, medium priority and, low priority.

Applicability to small scheme prioritisation

There are a number of elements to this approach which could be applied within an integrated transport scheme context, including:

- ◆ the use of a combination of detailed questions (with a range of defined response options) and free-flow responses to identify and justify the type, scale and intensity of expected benefits;
- ◆ the use of criteria/guidance setting out requirements and expectations for successful schemes, in terms of scheme objectives and scheme characteristics;
- ◆ the use of an independent panel to scrutinise evidence presented and debate the benefits of schemes; and
- ◆ in the context of Local Area Agreements, the focus on demonstrating a scheme’s contribution to wider objectives, including economic development, health, education, community safety, and neighbourhood renewal.

A.7 Transport for London⁵⁵

Transport for London was created in 2000 as the integrated body responsible for the Capital’s transport system. Its primary role is to implement the Mayor of London’s Transport Strategy and manage transport services across the Capital.

An effective partnership between TfL and the boroughs is essential for the successful delivery of many of these improvements. This partnership is overseen by the Borough Partnerships Group, part of TfL’s Group Planning Directorate. Borough Partnerships is responsible for the liaison, funding and programme development with London boroughs. Borough Partnerships allocates funding for Borough schemes in accordance with its budget,

⁵⁵ Local Implementation Plan Annual Progress Report Guidance 2008/09-2010/11 (<http://www.tfl.gov.uk/assets/downloads/LIP-APR-Guidance-2008-09.pdf>) (Transport for London, February 2007).

which is set out in the TfL Business Plan and is broken down by policy area. Categories include area-based schemes; regeneration and access corridors; travel planning and awareness; other borough capital investment; bus priority; road renewals; traffic operations; and road safety.

Each London Borough is required to prepare a five-year Local Implementation Plan (LIP), in accordance with the LIP Guidance, showing how it proposes to implement the Mayor's Transport Strategy. All LIPs must be approved by Transport for London, on behalf of the Mayor.

A Borough must include details of all schemes which it wishes to implement over the following five year period, within the LIP. A LIP Form 1 Proforma must be completed for each individual scheme, setting out:

- ◆ a summary of the proposed scheme and description of the main elements; the relevant programme element;
- ◆ funding sought from TfL;
- ◆ other sources of funding;
- ◆ key delivery partners, dependencies and risks;
- ◆ the scheme's contribution to the Mayor's Transport Strategy, including priorities, targets and policies met;
- ◆ modal impact (positive, negative, neutral); and
- ◆ the impact on cross cutting goals (positive, negative, neutral).

Boroughs are also required to list and prioritise in descending order of importance, all schemes for which funding is sought in a Baseline Submission Form.

Transport for London reviews the LIPs, the LIP Form 1 Proformas and Baseline Submission Forms, (and the subsequent annual updates of LIP Form 1 Proformas and Baseline Submission Forms, in the form of LIP Annual Progress Reports), in order to allocate funding to specific schemes. Stage 1 involves an initial screening phase, and Stage 2 involves a detailed assessment of individual transport schemes by the relevant TfL Programme Managers, in accordance with:

- ◆ detailed assessment criteria set out in LIP Guidance, including policy compliance criteria, characteristics associated with schemes offering good value for money, and information required on the extent of impact and any positive or negative benefits; and,
- ◆ wider policy considerations and requirements such as the Traffic Management Act 2004, Network Management Plans, Local Area Agreements, climate change, traffic signals, the 2012 Olympic Games, and North London Railway, etc.

A separate and independent process is in operation for Boroughs applying for funding for Area Based Schemes, defined as Town Centre, Streets-for People and Station Access schemes. The bidding and funding allocation process consists of three stages:

- ◆ Step 1 – Scheme justification;
- ◆ Step 2 – Scheme development and consultation; and
- ◆ Step 3 – Scheme implementation.

More detailed assessment information is required as the scheme progresses through different stages of the assessment process. Schemes must be approved at each stage, before progressing to the next level of assessment.

Applicability to small scheme prioritisation

Specific elements to this approach which may be of use for local authorities include:

- ◆ adoption of a phased or stepped assessment methodology, which can be used to screen for any weak schemes at an early stage, and/or identify whether further scheme development should be undertaken on medium-sized schemes in order to allow a more robust appraisal of the benefits;
- ◆ the focus on delivery partners, other sources of funding; dependencies and risks; and the impact on cross-cutting goals.

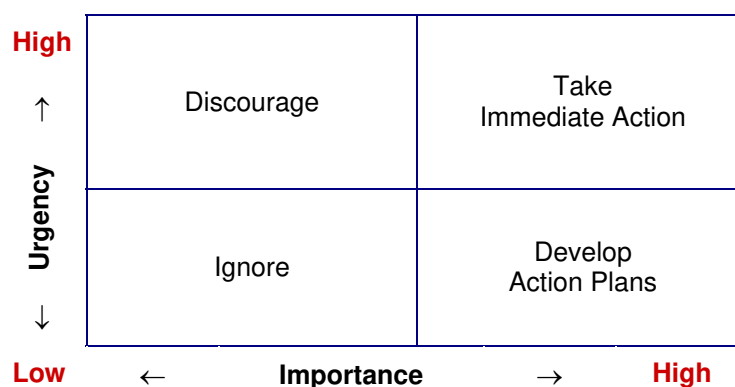
This model could be of use to Passenger Transport Authorities (PTAs), who under the Local Transport Bill 2007-08, will become Integrated Transport Authorities (ITAs) and will take on the sole duty to produce Local Transport Plans⁵⁶. The Act also enables changes to be made to the constitutions and functions of the renamed ITAs (through a City Region governance review), and opens up the potential for creation of a single strategic transport planning and delivery authority for the whole conurbation, similar to Transport for London.

A.7 Other approaches

Matrices

Matrices can be useful in analysing different attributes, in a clear and transparent manner, in order to help focus on the things that will make a real contribution to objectives, e.g. urgent vs. important matrix, value v. cost matrix, impact v. deliverability matrix.

Figure A.4 – Matrix approach to analysing scheme attributes



Schemes are allocated to one of the four quadrants and the matrix is used to determine what action to take on each scheme. Further prioritisation may be required if the number of schemes requiring positive action.

⁵⁶ Replacing the current joint duty on districts councils and PTAs.

Pairwise comparison

This involves comparing pairs of options against a set of questions designed to identify the options which should be prioritised. All combinations of options are considered (e.g. in order to prioritise a list of 5 options, 10 pairwise comparisons are required), and a ranked list of options is produced. Typical questions include:

- ◆ Which of these is most important?
- ◆ Which of these must be done first?
- ◆ Which of these will be the most crucial for success?
- ◆ Which of these will be the most helpful for achieving our objectives?
- ◆ Which of these will benefit users more?

The process is designed to assist organisations in thinking logically through a range of possible priorities and consider possible trade-offs. The process can be especially useful in deciding what order to do things, or which actions are absolutely essential, and which can be postponed or dropped.

IDeA⁵⁷ has developed an interactive online tool to assist in undertaking pairwise comparisons. However, like many tools it is only as good as the options listed and the criteria used to judge them.

MoSCoW

This involves identification of options into the following categories:

- ◆ M – MUST have this
- ◆ S - SHOULD have this if at all possible
- ◆ C – COULD have this
- ◆ W – WONT have this

Applicability to small scheme prioritisation

The above processes might be useful for prioritising across policy areas, or for prioritising between a limited number of schemes with different types, intensity and scale of benefits, and with different timescales for implementation (e.g. a series of bus priority corridors), or where there are clear trade-offs to be made.

Pairwise comparison can be an effective method for weighting prioritisation or assessment criteria. However, those individuals responding to the questions must have a clear understanding of the value of the options they are comparing, and the questions being posed must be very clear and specific about what they are asking respondents to consider.

Potential uses could include:

- ◆ involving the public and wider stakeholders in relative importance of different scheme attributes (e.g. cost, frequency, reliability, cleanliness, etc. for bus use);
- ◆ ranking schemes of a similar type by policy experts, who have a clear understanding of the benefits of each scheme; and
- ◆ prioritising between policy areas by transport experts, providing there is a clear understanding of the benefits (type and scale) associated with each policy area.

⁵⁷ Priorities and Prioritisation (I&DeA) (<http://www.idea.gov.uk/idk/core/page.do?pageId=4446257>)

Appendix B – Examples of prioritisation approaches used by case study authorities

B.1 Authority A (Buckinghamshire)

Introduction

Buckinghamshire started to develop its Scheme Assessment Matrix (SAM) in 2005, due to pressures on capital budgets and the increasing need to ensure delivery of LTP targets. The process has been improved through various iterations, and the initial paper-based exercise has evolved into a more sophisticated software-driven spreadsheet.

The Scheme Assessment Matrix is used to assess and prioritise all capital expenditure on maintenance and integrated transport schemes. There is some initial prioritisation of road safety schemes (and to a lesser extent other scheme types), in order to identify schemes to be taken forward for funding. A slimmed down version of SAM has been developed for use by parishes to allocate the £125,000 capital allocated to each District, for schemes requested by the local community.

Recent additions to SAM include:

- ◆ the use of Whole Life Costs to improve the management of capital and revenue budgets, identify future resource requirements, and to reduce overall expenditure;
- ◆ identification of scheme impact (in terms of number of people affected and the extent to which the scheme outcomes will contribute to LTP targets); and,
- ◆ an assessment of in-year deliverability to assist in programming.

Assessment of schemes

Schemes are initially assessed by scheme proposers using a standard proforma, based on the following components: Scheme Details, LTP Themes, Scheme Costs, Scheme Justification and Deliverability, and Impact. Some maintenance schemes are packaged up to ensure the process is manageable.

Policy Compliance

Schemes are assessed in terms of the actions set out in the Local Transport Plan that they contribute to, grouped by Shared Priority and Asset Management:

Officers proposing schemes are also asked to justify their selection of LTP actions, and provide supporting evidence.

1. Scheme Details | 2. LTP Themes | 3. Scheme Costs | 4. Justification | 5. Impact

If you believe the scheme will increase road safety please provide information on collisions over the last 3 years by referring to the Synology mapping layer: Accident Statistics

If you are unsure of how to find this information please contact Synology through Synology Customer Service or contact Elaine Marshall ext 7440, Kathy Palmer ext 2575 or John Wiley ext 7003.

Please provide any other justifications or 3rd party obligations/commitments for the scheme e.g. statutory obligation (quote ref.), scheme partly completed, political request, identified through existing priority scheme, jointly funded etc.

Value for Money

Scheme proposers are asked to describe the overall impact that the scheme will have, choosing from a selection of response options, covering:

- ◆ the number of people affected by the scheme (i.e. the 'scale' of impact); and,
- ◆ the extent to which the scheme outcomes will contribute to LTP targets (i.e. the 'intensity' of impact).

The assessment reflects the overall impact of the scheme, rather than the impact in relation to each of the individual LTP themes, to which the scheme contributes. The latter approach was felt to be too difficult to complete based on evidence available and too time consuming.

Scheme proposers are also asked to describe what pre-implementation monitoring data has been gathered to justify the scheme.

Whole Life Costing

A further assessment of value for money is made through the use of Whole Life Costing.

Scheme proposers are asked to provide information on the future cost implications, against revenue and capital budgets, for three different scenarios:

- ◆ the 'preferred option' which is the primary scheme being submitted;
- ◆ an 'alternative option', such as an interim measure or different treatment that is not ideal but would be better than doing nothing at all, and
- ◆ a 'do-nothing option'.

For some schemes, such as implementing a new pedestrian crossing, there may be no further direct financial costs incurred if the scheme is not funded⁵⁸. However, if improvements on a particular bus corridor are not funded, there may be a need to continue

⁵⁸ Although there would be a cost to society if a collision occurred at that location.

to subsidise bus services on that route, or, if a road resurfacing scheme does not go ahead there may be further patching required over time.

Costs are specified over a ten year period, and expressed as a Net Present Cost (NPC) – this is the cost if all the money was allocated today.

Table B.1 - Example of a Whole Life Costing Approach to improve the condition of a footway

Scenario	Description	Future Cost Implications	Net Present Cost
Do Preferred	A length of footpath is in poor condition along the whole length with numerous safety defects that require immediate treatment. The preferred scenario is to resurface the entire length of footpath.	Year 1 = £10,000 (resurface footpath) Total = £10,000	£10,000
Do Nothing	If funding is not awarded for the 'preferred option', then the safety related defects will still have to be fixed, with eventual reconstruction required.	Year 1, 3, 5, and 7 = £1,000 per year (patch footpath) Year 9 = £25,000 (reconstruct footpath) Total = £29,000	£19,072
Do Alternate	If funding is not awarded for the 'preferred option', then the patching will still be needed and resurfacing will need to be reconsidered in future years as further safety defects arise.	Year 1 = £1,000 (patch footpath) Year 3 = £10,000 (resurface footpath) Total = £11,000	£9,900
The above results show the 'Do Alternative' option costing a very similar amount to the 'Preferred Option'. However, other justification factors such as footpath category, customer complaints and accessibility needs could promote the preferred treatment.			

Deliverability

Scheme proposers are asked to specify the current stage the scheme is at, specify dates for key project milestones, and provide a view on how urgent and critical the scheme is. This assists the programme manager in deciding when a scheme should be implemented, should it be approved for delivery.

Schemes which are unlikely to be ready for implementation in the funding year, will be re-considered the following year.

There is no adjustment to the scheme score to reflect specific risks to delivery. It is assumed that such risks should be overcome for schemes which score well in terms of policy compliance and value for money, and that any delays associated with such risks should be reflected in the key milestone dates.

Deliverability - Select one of the 3 levels of deliverability - Forecast the start level the scheme has reached by August 07, (to 07 where you think it will be at the beginning of the 08/09 financial year):

1

	Start Date	End Date
Expected date for completion of design phase (MM/YY):	sep-07	sep-07
Expected date for completion of consultation phase (MM/YY):	sep-07	sep-07
Expected date for start of construction phase (MM/YY):	sep-07	sep-07
Expected date for evaluation of scheme (MM/YY):	sep-07	

Overall, in your view how would you rate this particular scheme:

A: Critical that the scheme is started in 08/09 for political/technical/customer/partnership/legal reasons.

Scoring of schemes and scrutiny of assessments

Responses are converted to an overall score by an independent and impartial panel (including the programme manager and performance management officer). This ensures all schemes are scored on a consistent basis.

A 'Theme Score' is calculated based on the scheme's contribution to the Shared Priorities, reflecting the scheme's policy compliance; and an 'Impact Score' is calculated based on the scale and intensity of the impact and the relative cost of the scheme.

Supporting information provided in the justification sheet is used by the panel to review the robustness of the assessments carried out by the scheme proposer, and responses are adjusted if necessary.

A final score is calculated from the Theme and Impact Scores, and schemes are ranked in priority order.

Scheme proposers have further opportunities to strengthen their case for a scheme and challenge the view of the panel through monthly performance management meetings.

Ensuring a balanced programme

Scheme proposers are asked to allocate 100 percentage points across the LTP themes, to represent where the costs are most appropriately allocated. The information is used to look at the overall shape of the programme, and the spread of schemes by theme (i.e. congestion, accessibility, safety, environment and asset management).

This is compared with data on overall progress against LTP targets, to ensure that the themes with greatest levels of expenditure are also those where most progress is needed to ensure delivery of LTP targets. If necessary, weightings are applied to different LTP themes when calculating Theme Scores, and schemes are re-ranked to reflect this bias.

In the past, there has been some attempt to ensure a geographical spread of schemes across the County, but this is becoming increasingly difficult given current pressures on budgets.

Focus on geographical clusters of schemes and scheme interactions

Location data provided by the scheme proposers (road reference and spatial co-ordinates), is used to identify clusters of schemes. This provides an opportunity for other schemes to enter the programme if located within a cluster and if there are benefits in terms of cost-savings or added benefits which increases the score for these schemes.

Overall process

July 2007 – Scheme Assessment Matrix (SAM) Forms issued to officers for completion.

August 2007 – Completed SAM forms (typically 400+) scored by independent panel.

September 2007 - A draft programme is produced, and circulated amongst officers for comment.

Autumn 2007 – Final programme is produced. A high level programme, specifying funding by policy area, is presented to the Cabinet for final approval.

Other features

- ◆ Information provided by scheme proposers on the contractor and consultant to be used, allows contractor and consultant requirements to be managed throughout the year.

Areas of improvement

- ◆ Early versions of SAM asked proposers to identify the scheme's contribution to a much longer list of all the strategic aims and objectives set out in individual action plans. Thus there were 60+ congestion aims, 50+ accessibility aims, etc. However, experience showed this approach to be unsuccessful:
 - completion of forms was very time consuming;
 - there was a tendency for officers to tick as many boxes as possible, and linkages were often tenuous and subjective;
 - too much information was collected to be meaningful.

The current list of broad LTP actions, includes approximately 20 options, and is more manageable.

- ◆ Early versions of SAM produced a cost per unit outcome factor (i.e. [Scheme Score] / [Cost]). However, there was insufficient confidence in the results to use these factors in the prioritisation process. The latest version, scheme costs can influence the 'Impact Score' if costs are particularly high.

Future improvements

- ◆ Aspiration to extend process to all revenue expenditure.
- ◆ Greater integration with Level of Service Matrix.

Buckinghamshire's Level of Service Matrix sets out level of service criteria covering all aspects of transport, and the required level of funding, for the following Asset Service Options:

- Low priority – statutory minimum requirements

- Protect – Steady State
- Improve – Desired / Option

Buckinghamshire proposes to use these Levels of Service to allocate its capital and revenue budget across different LTP themes. SAM will then be used to prioritise schemes within these theme areas.

For further information, please contact Ian Boll at Buckinghamshire County Council:
iboll@buckscc.gov.uk.

B.2 Authority B (Durham)

Introduction

Part of Durham's prioritisation approach has been developed in response to government advice to engage Local Strategic Partnerships (LSPs) in the determination of local priorities for LTP expenditure. The process emerged as the LTP2 submission was being developed, but has been continually refined since.

The capital Integrated Transport programme consists of a Countywide programme and seven District-based Area programmes. Approximately three quarters of the budget is allocated to the Countywide Programme for implementation of strategic improvements. The remainder is allocated to the Area programmes.

Area programmes

Area Programmes are originated at a local level, with an emphasis on accessibility schemes involving walking, cycling and disabled access improvements.

'Base' funding is awarded to each Area to address transport elements of community strategies, and is allocated in accordance with:

- ◆ population; and
- ◆ the extent of deprived wards, as measured through the Super Output Area (SOA) index value.

In addition, each Area programme receives a further sum to address the 'rural dimension', based on their percentage of rural area. Rural transport issues are a particular concern for Durham (where rural areas account for over 50% of the County), and it was felt that they were not sufficiently addressed through LTP1.

The Local Strategic Partnership (usually the transport and environment sub-group) and the corresponding County Council Member Area Panel (MAP) in each area put forward schemes / initiatives, for inclusion in the Area Programme. To ensure schemes are consistent with the LTP2 strategy, each scheme is assessed using a proforma, completed by the scheme proposer. To assist the process, there are 4 local authority link officers who have a liaison role between the LSP and MAP.

At the outset of LTP2, the LSPs were asked to produce a programme with a 3-year outlook, to align with priorities of their respective Community Strategies.

Area Programmes also had to align with the shared priorities of LTP2: Accessibility and better public transport; Road safety; Quality of life and health; Road congestion and Air quality. LSPs were encouraged to ensure some spread across all of these priorities, as well as considering scheme contribution to realising LTP2 targets.

Exploiting the opportunity to supplement LTP2 funding with other streams and thereby enhance the benefits from any scheme or to meet the transport requirements of another separate project being promoted through the LSP was essential. For example, funding from the Council's own Urban and Rural Renaissance Initiative (URRI) has been used to improve the public realm, by being able to design in better quality materials than would have been

possible using LTP funds alone. Neighbourhood Renewal and Liveability funding were examples of other potentially complementary funding available in the more deprived parts of County Durham, whilst funding from Natural England has also been obtained in enhancing biodiversity. The opportunity exists to for co-ordination between adjoining LSP sub-groups and cost-sharing where a proposal has mutual cross-boundary benefits.

Programme content for the following year is established in November/December of the preceding year, with agreement by Member Area Panels in January/February and implementation from April onwards. As funding can not be transferred from one year to the next, proposers are encouraged to ensure proposed schemes are deliverable within a particular financial year.

Assessment Proforma

The proforma includes a series of tick boxes to assess alignment with LTP2 aims, objectives and targets, and with Community Strategy key actions. This uses a four point scale (fully, moderately, slightly, neutral), which also lends itself to a simple scoring system.

Confirmation of any revenue funding has to be forthcoming before a scheme can proceed.

To ensure that a scheme delivers the best possible value for money, a calculation of the scheme's **cost effectiveness index** is included as part of the pro-forma submission: $[Total\ points\ score\ for\ the\ scheme] / [Required\ funding\ from\ LTP2\ in\ £'000s]$. If a scheme attracts non-LTP complementary funding and therefore requires less LTP funding, then this is clearly an advantage and is reflected within the scoring process.

The LTP core team check and if necessary, rescore submitted proformas, as well as having the opportunity/authority to sift out ineligible or poor performing proposals with ineffective outcomes. Schemes put forward have to return a reasonable score in order for them to progress - any that do not are rejected.

LSPs and MAPs often have differing views on the priority of candidate schemes within their own area and in this event, the scoring regime lends itself to prioritising the content of the Area Programme objectively rather than subjectively. The process also allows the LTP Core Team to directly compare schemes across the County as a whole.

Guidance

The Council has produced detailed guidance to assist the LSPs and MAPs in completing the proformas and drawing up their programmes. This includes information on the aims and objectives of the LTP, and public consultation material outlining how LTP2 spending priorities were derived.

Scheme proposers are required to demonstrate: the need for the scheme; how the scheme will make a difference; and what measurable benefits it will deliver for the public.

Benefits of the approach

- ◆ Local 'buy-in' from the Local Strategic Partnerships (LSPs) to the Local Transport Plan.
- ◆ Utilises local knowledge of needs and demand for smaller schemes, particularly walking and cycling improvements.

- ◆ Securing additional funding from non-LTP sources. In 2006/07, this boosted the LTP Integrated Transport budget by about 10%. External funding is often much-needed revenue support for accessibility improvements, such as community transport schemes where revenue has proved difficult to attract in the past.
- ◆ The process has ensured that non-LTP funding is more closely aligned to schemes that contribute to delivery of LTP targets.
- ◆ The process provides a clear justification for rejecting ineligible or ineffective schemes.
- ◆ The process is well documented and ensures consistency of approach from year to year, particularly when there is a change in the key staff involved in the process.

Drawbacks, limitations and challenges

- ◆ The process took some time to embed within the mix of local governance structure.
- ◆ Diverse and often conflicting opinions between LSPs, elected members at district and County level and in Member Area Panels had to be dealt with, and the methodology had to cater for this.
- ◆ LSPs had to be 'educated' as to the LTP2 aims, objectives and targets, and briefed on how to complete the proforma. This was helped through the introduction of a summary booklet entitled "LTP2 Made Simple", together with guidance notes for the completion of the proforma.
- ◆ The process requires additional input of time and resources from local authority officers and members of the Local Strategic Partnerships. In particular, the LTP team has to assess all the scheme proformas, which can be a resource intensive process.
- ◆ The LTP team needs to manage the expectations of LSPs and MAPs, whilst ensuring they remain sufficiently motivated to continue the process.
- ◆ Issues relating to financial regulations and the allocation of LTP funds to third parties (e.g. Groundwork Trust) to implement schemes. Cabinet approval is needed for most schemes as they tend to be above the (low) limit for delegated officer powers.
- ◆ The LTP team has little influence to adjust existing and traditional transport revenue streams, despite attracting external sources of revenue.

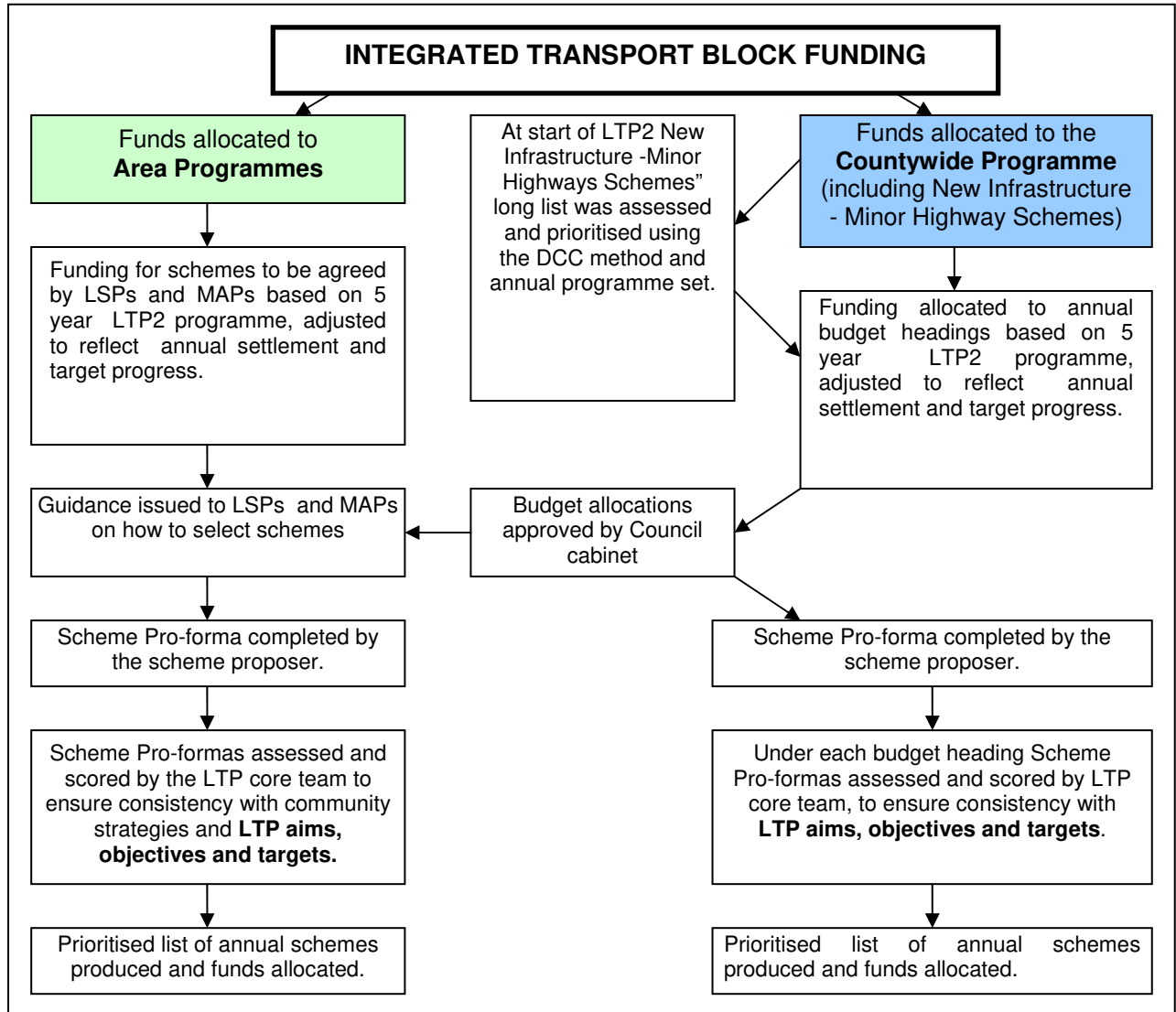
Countywide programme

Following receipt of the capital transport settlement letter from the Department for Transport in December, budget allocations for the new financial year are based on the planned LTP2 5-year programme, but adjusted to take account of any reductions/increases arising from the previous/new financial year and the state of play in the targets. Final budgets are approved by Cabinet in January/February. A further mid-term review of progress and underspend/overspend within individual budgets takes place in September.

Although budget holders have a fair degree of autonomy, continuous monitoring is carried out through regular monthly meetings of the Programme Management Group (PMG). In practice, most programmes are determined with respect to an associated daughter strategy, such as the Casualty Reduction Plan.

From 2007/08, all Countywide programme content (including maintenance) have been assessed using a similar proforma to that used for the Area Programme schemes. A gateway process operates, whereby the two Heads of Service (for Transport Strategy and Finance) are required to sign off submitted pro-formas.

Figure B.1 – Summary of Durham’s scheme prioritisation process



Countywide minor highway schemes

Countywide minor highway schemes (costing less than £5 million) have been prioritised using a NATA-based spreadsheet approach.

This used the NATA criteria (plus others) to determine priorities for new future highway infrastructure. The methodology, was used to determine the top 3 short-listed schemes (from a long-standing list of 23 schemes, first mooted in the predecessor TPP process) earmarked for construction during the LTP2 plan period. The methodology identified linkages with LTP aims, objectives and targets, and provided a clear and transparent justification for delivery.

For further information, please contact Harris Harvey at Durham County Council: hharvey@durham.gov.uk.

B.3 Authority C (East Sussex)

Introduction

East Sussex developed its Balanced Scorecard approach for LTP1 to help identify the most appropriate schemes for inclusion in the Integrated Transport Capital Programme. The overriding objective was to achieve the LTP targets and objectives within the profiled investment levels.

It has provided a relatively robust and transparent framework within which to allocate Integrated Transport expenditure.

The use of the Balanced Scorecard approach was commended by the Audit Commission during the appraisal of the performance of the Transport service in 2004.

Schemes included in prioritisation process

The Council's Integrated Transport (IT) budget is initially split into two budgets:

- ◆ the authority has a corporate priority to improve road safety and has established an independent prioritisation process, based on accident data supplied by Sussex Police. The LTP2 safety objective is also very closely related to one of the County Council's key policy steers, so safety schemes command an appropriate level of investment. The rationale for the precise proportion allocated to safety schemes is largely historic, based on similar levels of investment throughout the period of LTP1. The level of expenditure available for these types of schemes is approximately £1.1 million, equivalent to about one third of the Integrated Transport allocation;
- ◆ the remainder of the Integrated Transport funding is allocated to 'other Integrated Transport' schemes, and expenditure is prioritised using the Balanced Scorecard approach. The level of expenditure available for these types of schemes is approximately £2.3 million per year. This level of expenditure will also be augmented with other external funding (grants, s106 contributions etc).

Potential 'other Integrated Transport' schemes are primarily generated through twelve geographically defined Local Area Transport Strategies (LATS). The Council works in partnership with local stakeholders within the wider LTP policy framework to identify key priorities and issues appropriate to the area, and action plans containing short, medium, and long term schemes are developed.

Process

To ensure scheme continuity in scheme development and delivery, the County Council has recently moved to a three year rolling Integrated Transport capital programme.

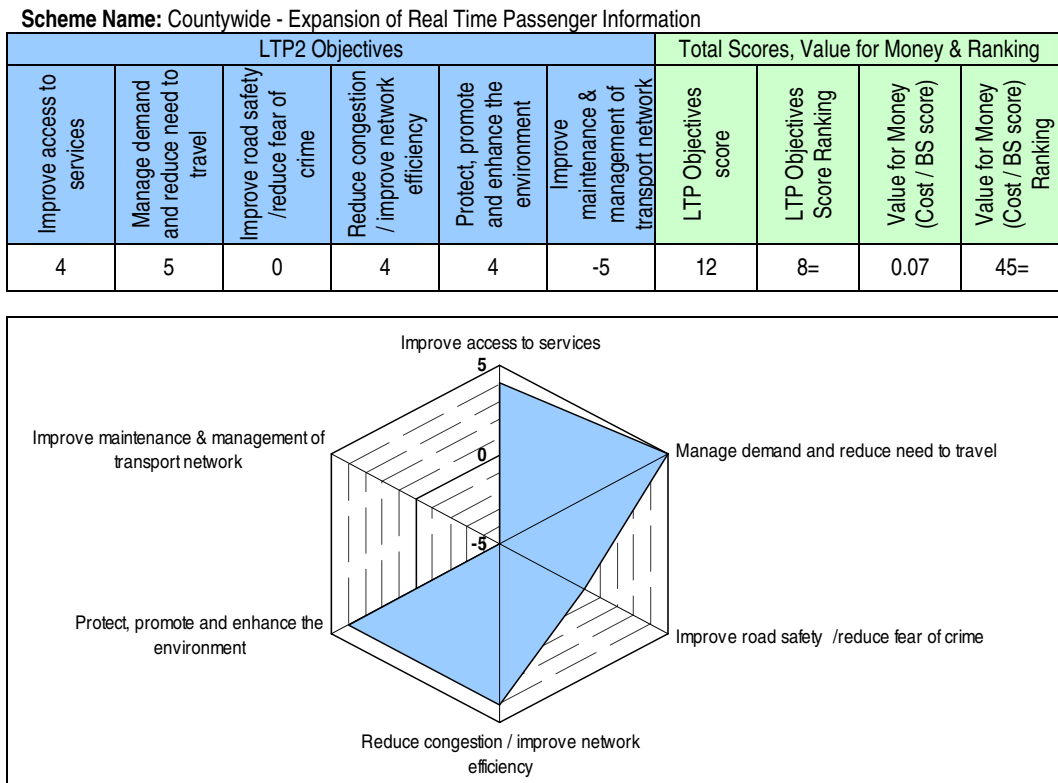
New LATS schemes which are potentially to be added to the capital programme, are assessed at feasibility stage, using the Balanced Scorecard approach. This scores schemes in terms of their relative contribution to each of the LTP objectives* (Figure B.2). Schemes are scored between +5 (strong positive contribution) to -5 (negative contribution), and a total score is produced. A Value for Money factor is also calculated by dividing the scheme's score by the estimated scheme cost. This identifies the cost of achieving one Scorecard point of benefits, for the scheme concerned.

* Earlier versions of the Scorecard also assessed schemes against corporate objectives. However, linkages were often very tenuous and the scoring process became very subjective. The view was taken to remove the corporate objectives as LTP objectives already reflect the corporate framework, from a transport perspective.

A key strength of the process is the scrutiny element. This is undertaken by (i) a panel of officer experts, (ii) a Cross Party Panel of Members, (iii) the Lead Member for Transport & Environment (and any other Councillors who wish to comment on the programme).

(i) Schemes are assessed by a panel of experts broadly representing each of the shared priorities and LTP objectives (namely a Road Safety officer, an Accessibility officer, a Transport Strategy officer, the Traffic Manager, a Maintenance officer and an Environment officer). While the specific road safety schemes referred to above are not part of this process, many other schemes have road safety benefits, and it is felt important to include a road safety expert on the panel.

Figure B.2 – Balanced Scorecard Approach



Scheme proposers introduce each scheme, and provide information covering the scheme description and rationale, scheme benefits, and overall scheme cost. Each ‘expert’ is specifically responsible for scoring schemes against their specific shared priority/LTP objective with the opportunity to challenge the score if necessary and deferring the decision if insufficient evidence is available to make a valid judgement.

A recommended list of schemes is then drawn up, based on both the scheme score and the value for money factor, with the scheme score being most influential.

(ii) The draft programme is then presented to a Cross Party Panel of Members, and scheme proposers present each of the prioritised schemes. Schemes are then subject to further scrutiny with individual scheme scores and the draft programme amended if necessary.

An updated three year rolling programme is then agreed. There is some over programming of schemes to allow for scheme delays. Members ensure that there is a geographical spread of schemes across the County.

(iii) The amended programme then goes to the Lead Member for Transport and the Environment for formal approval. The Cabinet Report is circulated to all Members in advance of the meeting and all Members are invited to attend and comment on the programme.

Programme during a typical year

September to December – Identification of potential new schemes for inclusion in the Balanced Scorecard assessment

January – New schemes assessed by panel of experts at a one day Case Conference (generally includes 60 - 80 schemes – rejected schemes are re-considered the following year but are not re-assessed each year). A draft programme is then identified.

January/February – Scrutiny by Cross Party Panel of Members (0.5 days).

March – Final approval by Lead Member for Transport and the Environment.

Post March – Schemes worked up further and implemented as appropriate.

Ensuring a balanced programme

Schemes are prioritised according to both the scheme score and the value for money factor, with the scheme score being most influential. In addition, modifications are made to the programme to ensure a spread of scheme types, sizes and stages. This ensures delivery across all targets, and assists with the practicalities of implementing schemes.

A quarterly monitoring system is in place to review progress against targets throughout the year, and adjust the programme if necessary. Weightings could, in theory, be applied to specific objectives if necessary.

The spread of scheme types being put forward for assessment tends to reflect the scheme types identified through the Local Area Transport Strategies, and the range of objectives tends to encourage a cross-section of prioritised schemes.

Smaller schemes tend to score more highly than larger ones. Bus infrastructure schemes also tend to score highly. This is partly a reflection of the range of different objectives these types of schemes address.

Value for money

The evidence on the value for money associated with schemes, in terms of predicted outcomes, is presented by scheme proposers and considered as part of the scrutiny process.

The value for money of schemes, in terms of scale and intensity of impact, is expressed through the score (positive or negative) the scheme scores against each LTP objective. The type and extent of evidence available to inform the scoring process varies across schemes and the robustness of this evidence is assessed by the panel of experts. Where there is insufficient evidence for the panel to undertake a reliable assessment, scheme proposers are asked to provide more information to inform the scoring and decision-making process.

Final scores for certain types of schemes which, historically, have been shown to have had little impact on LTP targets in the past, are reduced by 1 point.

Revenue

Revenue budgets within the Council face increasing pressures and capital schemes which also require revenue expenditure place further pressures on the available budget.

The Scorecard process includes two mechanisms which reduce the relative score such schemes receive:

- ◆ the score for all schemes which require significant levels of revenue funding to enable the scheme to go forward are reduced by 1 point; and
- ◆ schemes requiring revenue-based maintenance score negatively against the LTP objective to 'Improve maintenance & management of transport network'.

Strengths

- ◆ The procedure ensures that the implementation of the capital programme is clearly aligned for the achievement of LTP targets and objectives.
- ◆ Scrutiny element of the process is a key strength, and ensures that the process is robust and defensible.
- ◆ Members have clear role in the process.
- ◆ Has reduced the amount of challenge the Council receives from stakeholders about the schemes included and not included in the programme. The process is well documented and transparent, and efforts were made to ensure that stakeholders were informed about and understood the process.

Future improvements

- ◆ Inclusion of deliverability criteria to maximise use of resources. To date, deliverability has not been considered as part of the process, on the basis that deliverability issues should be overcome if a scheme is worth implementing. Scheme delays have been addressed to date by over-programming.

For further information, please contact James Harris at East Sussex County Council: James.Harris@eastsussex.gov.uk.

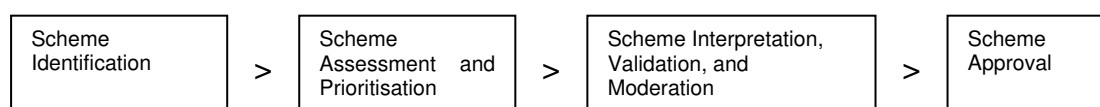
B.4 Authority D (Kent)

Introduction

Since 2000, Kent has been developing and refining its process for prioritising schemes and identifying its annual programme.

Its approach is based around a prioritisation tool, developed in-house, called PIPKIN (Prioritising Investment Programmes on the Kent Integrated Transport Network) (Figure B.3). This assesses schemes in terms of (i) scheme deliverability, (ii) public acceptability, (iii) their contribution to the shared priority objectives, regional transport objectives, corporate objectives and (iv) their contribution to targets set out in the Community Strategy, and LTP targets and objectives.

The overall process involves:



District-based investment programmes are derived through an effective and on-going dialogue with local Members and effective liaison and consultation with local community representatives, including: Parish Councils, District Councils, Joint Transportation Boards, and the Highways Advisory Board.

Kent Highway Services Transport and Development Planning Teams and other scheme promoting teams are responsible for co-ordinating the Scheme Identification process and ensuring that the views of local communities and Members are duly considered. Local scheme proposals must be consistent with Kent's principal transport priorities.

Overall approach (for the 2008/09 programme)

During 2007/08, PIPKIN was used to prioritise approximately 130 schemes from an initial list of more than 280 integrated transport schemes, for the 2008/09 programme. The initial list represented a diverse range of scheme types from across Kent's twelve Districts.

Schemes were scored as 'high', 'medium', 'low' or 'zero', against each of the above components and sub-components. Supporting guidance was provided to assist assessors. Contribution to objectives was assessed in terms of the number of objectives the scheme was perceived to have a direct positive, indirect positive, or no positive impact on. Contribution to targets was assessed in terms of the number of targets a scheme directly contributes to.

Assessors giving their scheme a 'low' or 'zero' score for 'deliverability' or 'public acceptability' were invited to upgrade their scheme to 'medium' or withdraw the scheme from the PIPKIN process.

A final score ranging from 0 to 100 was produced for each scheme in order to rank them in order of importance for funding and implementation.

LTP officers and Members were given the flexibility to override some of the prioritisation decisions coming out of PIPKIN if other factors were relevant. Other schemes became reserve schemes, to be bought into the programme following changes in funding levels or scheme delays.

Figure B.3 – PIPKIN Scheme Assessment Form (2007/08 process)

Section 1. Scheme Details & PIPKIN Assessment.					
Scheme Name	Pipkin Street Traffic Calming Scheme	Scheme Type	TM9		
Scheme Location	Potato Road between Sprout Avenue and Turnip Crescent.	District	Maidstone		
		Est. Scheme Cost (£K)	100		
Scheme Description	This scheme consists of a series of traffic calming features including entry gateways at Pipkin Street/Potato Road Junction and Sprout Avenue/ Turnip Crescent. A number of strategically located speed cushions and horizontal deflections will be installed along Pipkin Street. The Pedestrian Crossing adjacent to the Swede Road Junction will be relocated to Cabbage Road. Some improvements to signing and lining will be undertaken.	Developer Funded/ Contribution?	Yes		
			No	✓	
			Don't Know		
Key Objective(s)	Casualty Reduction.				
PIPKIN ASSESSMENT CRITERIA – ALL SCHEMES MUST BE ASSESSED USING THE PIPKIN ASSESSMENT TABLES					
1. SCHEME DELIVERABILITY & 2. PUBLIC ACCEPTABILITY		H	M	L	Z
1. Scheme Deliverability.			✓		
2. Public Acceptability.		✓			
3. NATIONAL/ LTP SHARED PRIORITY OBJECTIVES		H	M	L	Z
A. Delivering Accessibility.					✓
B. Tackling Congestion.				✓	
C. Safer Roads.		✓			
D. Better Air Quality.					✓
4. REGIONAL PRIORITIES		H	M	L	Z
A. Policy Compatibility.					✓
5. KENT PRIORITIES		H	M	L	Z
A. Vision for Kent.			✓		
6. LOCAL TRANSPORT PLAN OBJECTIVES		H	M	L	Z
A. Accessibility.				✓	
B. Demand Management.					✓
C. Environment, Heritage and Community.					✓
D. Integration.					✓
E. Keep Kent Moving.					✓
F. Road Safety.		✓			
G. Health.				✓	
H. Sustainable Regeneration.				✓	
I. UK Connections.					✓
J. UK Gateway.					✓
7. CORE , 8. LOCAL, 9 CORPORATE & 10. OTHER TARGETS.		H	M	L	Z
7. Core LTP Targets.			✓		
8. Local LTP Targets.			✓		
9. Corporate Targets.					
10. Other Targets.		✓			
ADDITIONAL COMMENTS					
This scheme has full local community support. Analysis of crashes at this site has revealed mean and 85%ile speeds of 33.5 mph and 39.4mph respectively. Analysis of Kent's Road Crash database shows 5 serious injury casualties in the last three years.					

Assessments were undertaken by scheme proposers, at outline design stage and included an estimated scheme cost.

Schemes included in prioritisation process (for the 2008/09 programme)

PIPKIN was used to assess all schemes under £5 million. Scheme costs ranged from a few thousands to £650,000.

In previous years, a separate budget has been allocated for Crash Remedial Measures (CRMs), and these schemes have been prioritised separately based on historic accident data. For the 2006/07 process, CRMs were (i) assessed through PIPKIN, and (ii) using the previous approach. The results were found to be similar, and Road Safety Officers supported the inclusion of CRMs in the PIPKIN process.

Timetable (for the 2008/09 programme)

February 2007 – Scheme proposers receive Assessment Forms and Supporting Guidance. Extensive training and support was provided to assist proposers in completing the forms.

May 2007 – Submission of completed Assessment Forms to LTP Team.

June 2007 – Checking, scrutiny and validation of completed forms by LTP Team to ensure consistent application of scoring criteria. Scores for each scheme are compared with typical scores for similar types of schemes, and adjusted if necessary. This process minimises subjectivity and ensures the process is not unduly influenced by optimism bias.

June 2007 – Draft programme for 2008/09 produced.

September 2007 – Final list of prioritised schemes sent to Highways Advisory Board for Council approval.

Output (for the 2008/09 programme)

Outputs from PIPKIN included:

- ◆ a summary of all proposed schemes (Type, Area, Cost, PIPKIN Score, PIPKIN Rating);
- ◆ an analysis of schemes by type (by DfT scheme code);
- ◆ an analysis of schemes by District & Divisional Office;
- ◆ a list of high risk schemes (based on Scheme Delivery and Public Acceptability); and,
- ◆ a prioritised list of schemes.

Value for money (for the 2008/09 programme)

The value for money offered by a scheme (in terms of the type and extent of outcome benefits delivered on the ground) was expressed through the scoring categories assigned to the scheme (i.e. 'high', 'medium', 'low', etc.).

The process relied on:

- ◆ the robustness of the objectives and targets set, in reflecting the priorities within the Council and the scope for improvement;

- ◆ officers following the guidance and completing the forms in a consistent and objective manner.

A Scheme Cost Ratio (SCR) was calculated for each scheme by dividing the scheme's PIPKIN score by the estimated scheme cost. This identified the cost of achieving one PIPKIN point of benefits, for the scheme concerned.

The SCR was not used to prioritise schemes, but was provided for information only. Reasons for this are as follows:

- ◆ schemes were assessed at outline design stage, and costs were estimates only;
- ◆ the SCR is a crude representation of value for money, and its meaning is difficult to interpret;
- ◆ schemes which scored highly were considered to be important to implement;
- ◆ prioritising by SCR may result in a bias towards low cost schemes.

Ensuring a balanced programme (for the 2008/09 programme)

A political decision was made not to allocate higher order budgets for particular policy themes or geographical areas. This was seen as pre-judging which types of schemes would offer best value for money, and could prevent some good value schemes being delivered.

Instead a Design Guide Model (DGM) provided guidance to area offices and scheme proposers on how the annual programme should broadly reflect the shared priorities. The weightings were broadly consistent with the Government's weighting of the shared priorities for its planning guideline formula.

Kent's Design Guide Model: air quality (5%); congestion (30%); public transport (25%); road safety (20%); accessibility (20%).

Within PIPKIN, weightings were applied to the various assessment categories, to ensure an appropriate balance of schemes which met LTP targets. These weightings broadly reflected the weightings set out within the Design Guide Model. Thus schemes which address congestion were scored more highly, reflecting the importance of tackling congestion within Kent.

The weightings can be adjusted each year to reflect performance against targets and to ensure schemes with certain outcomes are more likely to be prioritised.

The approved programme included a good spread of scheme types and scheme costs. It included a large number of low cost schemes (e.g. cycle and footway improvements) which contributed to a range of objectives and targets, and hence received high PIPKIN scores.

Future improvements (proposals for the 2009/10 programme)

Following its successful application in 2006/07, a decision was taken by the Head of Planning and Transport Strategy and the Head of Transportation and Development to enhance the PIPKIN process and to seek the views of PIPKIN users on how the process could be developed. This work was endorsed by the Cabinet Member.

The PIPKIN^{V2} Development Project has been carried out in an inclusive manner. The project was phased around a number of key stages and consultation with PIPKIN users was ongoing throughout.

The main proposed changes to the process for the **2009/10** programme are summarised below:

- ◆ **Treatment of Deliverability/Acceptability Assessments** - Scheme ‘deliverability’ and ‘public acceptability’ assessments will no longer contribute to the overall PIPKIN score. A separate deliverability and acceptability score will be produced and considered alongside the overall impact score when establishing a deliverable programme.
- ◆ **New Assessment criteria** – The new assessment form has been designed to measure the **positive** impact of each scheme using an approved list of 33 PIPKIN Assessment Questions. The criteria are based around Kent’s four Shared Priority objectives for transport (Improving Accessibility, Tackling Congestion, Casualty Reduction, and Improving Air Quality), and were developed to address the LTP2 targets. Each of the four assessment areas is weighted to reflect Kent’s own transport priorities, with weightings approved by the Cabinet Member.

Example of assessment criteria:

Improving Accessibility	Guidance
Will this scheme seek to improve access to key services by sustainable modes of transport? (Yes/No)	Key services – places of employment (inc. town centres), education (e.g. schools, colleges), health care (e.g. hospitals, GP surgeries, dentists), leisure (e.g. theatre, cinema). Sustainable transport modes – walking, cycling, public transport, car sharing.

When undertaking a PIPKIN assessment, assessors will be required to consider the **direct** impact or primary objective of their scheme; rather than using indirect impacts or knock-on effects to justify their answers.

This approach will replace the ‘High’, ‘Medium’ and ‘Low’ assessment approach used in the original PIPKIN. Scheme assessors will be required to answer each question either ‘Yes’ or ‘No’. The approved questions have been piloted on a number of existing PIPKIN users to ensure that they can be easily interpreted and accurately answered.

The focus on ‘Yes’/‘No’ responses and ‘direct’ impacts is intended to encourage greater consistency in the way officers complete the assessment process, and reduce the element of subjectivity in the process resulting from the failure of some officers to follow the guidance. However, it does reduce the emphasis on professional judgement, which was seen as a valuable part of the 2007/08 process.

- ◆ **Ensuring a balanced programme** – Each individual assessment question will be allocated a weighting for each of the four shared priorities, to ensure secondary benefits are recognised. It is hoped that this will address the perceived lack of good air quality schemes proposed and prioritised in the 2007/08 process. It should also help ensure a balanced programme, which addresses all the shared priorities. A pie chart will be produced for each scheme at the end of the assessment, showing its contribution to each of the shared priorities.
- ◆ **Bonus Scores** – Bonus points will be awarded to schemes that reflect specific characteristics, address specific priority issues, or are based in certain locations. The

criteria aim to reflect the priority assigned to transport, socio-economic and environmental characteristics. The criteria addresses four themes:

- Scheme Ward Deprivation for all schemes – The number of bonus points assigned to each ward is proportional to the level of deprivation.
 - Proximity to a recognised Congestion Hot Spot for traffic management and sustainable transport schemes.
 - Evidence of Personal Injury Crash/Casualties recorded for Casualty Reduction schemes – Bonus points are allocated based on the severity and number of casualties in the locality of any scheme that actively seeks to reduce the occurrence of personal injury crashes.
 - Proximity to a designated Air Quality Management Area (AQMA) for traffic management schemes and sustainable transport schemes.
- ◆ **Testing schemes** – The new assessment form provides an opportunity for scheme assessors to test options at an early stage and to provide immediate feedback on how each scheme is likely to score. However, while scheme assessors will be able to quantify overall PIPKIN scores on a scheme by scheme basis, they will not be able to determine the overall priority assigned to each scheme as this is established at a countywide level.
 - ◆ **Training and Guidance** - To attempt to minimise the affect of optimism bias, all scheme assessors must be fully trained to use PIPKIN and managers and team leaders must take responsibility for ensuring that scheme assessments are undertaken by a competent person and that they themselves check and approve each scheme assessment. Supporting guidance is provided, identifying the characteristics associated with high scoring schemes, and the type of outcomes which need to be demonstrated.
 - ◆ **Initial Screening of Schemes** - Both the positive and negative impacts of a scheme should be considered fully before a scheme is put forward for assessment in PIPKIN. If the negative impacts of a scheme are likely to outweigh the positive impacts, then the merit of including the scheme in the Integrated Transport Programme must be reconsidered.

For further information, please contact Vicki Farley at Kent County Council: vicki.farley@kent.gov.uk.

B.5 Authority E (Leicestershire)

Introduction

Leicestershire County Council has developed a new approach for prioritising its expenditure on Integrated Transport schemes following a Best Value Review in 2002. The process has been developed over the last five years and is now comprehensively documented in its Transport Capital Improvements Programme Development Workshop Manual. The new process has been designed to ensure:

- ◆ all schemes contribute strongly to LTP2 objectives and targets;
- ◆ schemes are identified for implementation early enough to allow a smooth flow of completed projects.

The Council has identified eighteen programme headings, which are intended to give the best overall combination of measures to ensure delivery across the full range of LTP objectives.

Prioritisation of expenditure between objectives and between measures

Prioritisation of expenditure between objectives is based on:

- ◆ public consultation results used to identify LTP2 objectives;
- ◆ progress against targets and objectives; and
- ◆ quantitative evidence from transport models and analysis.

Allocation of expenditure between different programme headings within the five improvement based LTP objective budgets, is based on professional judgement about the relative contribution different measures and policies can be expected to make towards delivery of the stated objective and specific commitments set out in the LTP2 strategy.

**Each scheme type is associated with a single objective to provide a clear focus and avoid over spending on schemes which contribute only weakly to targets and objectives.*

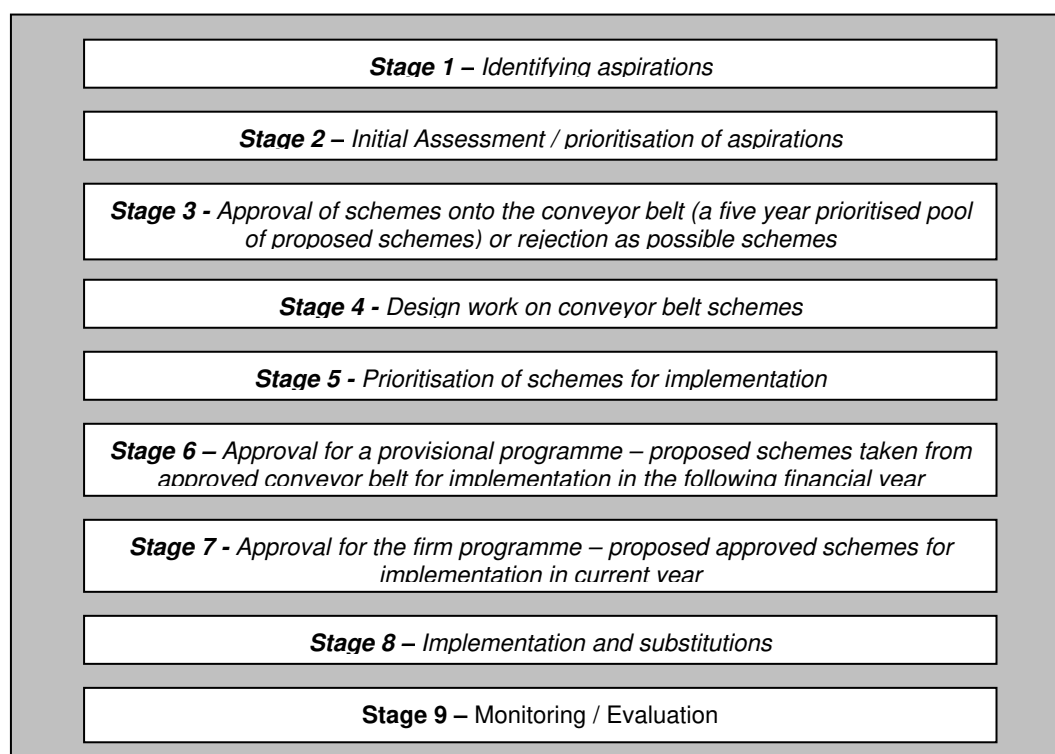
Prioritisation of expenditure within programme headings

Detailed guidance sets out the process for developing, implementing and monitoring a five year programme of schemes for each individual programme heading (Figure B.4). Each programme heading therefore has its own prioritisation system.

Key roles and responsibilities in the process are:

- ◆ Programme Initiators – Nominated individuals for each programme heading, responsible for ensuring that a supply of potential schemes for individual programme headings are initiated, assessed, prioritised and passed to the Programme Developer for approval onto the conveyor belt.
- ◆ Programme Developer - Ensures there is a continuous supply of proposed schemes coming through initiation, assessment, prioritisation and approval for the Programme Manager to develop and deliver.
- ◆ Programme Manager – Responsible for delivering the programme each year.
- ◆ Officer Jury – Responsible for the officer approval of proposed schemes onto the conveyor belt, provisional and firm programmes.

Figure B.4 – Generic Process for Developing, Implementing and Monitoring Scheme Programmes



A key element of the process is the identification of a ‘conveyor belt’ of schemes - a five year prioritised pool of proposed schemes that have approval in principle from both the Officer Jury and lead member for Highways and Transportation for implementation during LTP2. Once schemes are on the ‘conveyor belt’ further scheme design work can be undertaken to take the scheme forward to entry into the ‘provisional’ programme (for the following year) or ‘firm’ programme (for the current year). The only design work that is done before a proposed scheme reaches the conveyor belt is that which is necessary to make an informed decision on whether it should be approved onto the conveyor belt, including a preliminary cost estimate, to determine its relative priority.

For some programme headings (e.g. cycle networks), five years worth of proposed schemes are approved at the start of the five year period and then prioritised into programme years. Other scheme types (such as local safety schemes) are approved on an on-going basis.

All proposals that are considered feasible are recorded on a central database.

Generation of schemes for consideration / identifying aspirations (Stage 1)

A distinction is made between proactive and reactive schemes. The majority are ‘proactive’ schemes, identified through studies or investigations. Reactive schemes are those identified through requests from the public and from Highway Forums. Reactive schemes include walking improvements, community safety lighting and schemes to reduce the impact of traffic, designed to respond to community concerns. A credibility check is undertaken for all reactive schemes, prior to assessment/prioritisation.

Assessment and prioritisation of aspirations (Stage 2)

Each Programme Initiator is responsible for assessing and prioritising scheme aspirations within their programme heading. The specific process varies for each programme heading:

- ◆ Some programmes are prioritised on a discretionary basis using recommended criteria, e.g. *Walking Improvements (New and Improved Footways)* are prioritised on a discretionary basis against the following criteria:
 - scale of benefit the link will provide - for example, a scheme that links a large residential area to facilities such as a school should be prioritised highly;
 - whether problems with existing infrastructure have been highlighted by the public, including people with mobility problems; and
 - whether the scheme can be added onto an existing maintenance scheme at low cost.Other examples include *Cycling Improvements* identified by the public or partners, *Junction Improvements*, *Community Safety Lighting*, and *Air Quality Action Plan* schemes.
- ◆ Some programmes involve ranking schemes using a scoring system, e.g. *Bus Interchange Improvements* are scored based on:
 - number of buses per hour, pattern of network, radial, terminating, through route;
 - budget availability/cost of scheme;
 - ability to grow market;
 - accessibility both physical and geographical;
 - third party funding contributions; and
 - stakeholder/customer feedback.Other examples include *Bus Corridors*, *Priority Bus Access*, *Bus Stop Upgrades*, and *Local Safety Schemes*.
- ◆ Some programmes involve an initial sift of schemes prior to ranking. For example, for *Routes to School* measures an initial sift is undertaken which looks at whether the school has an adopted school travel plan with identified 'routes to school' measures. Schools with the highest potential number of pupils who could change from being driven to school to walking or cycling based on the results of the School Travel Plan Survey are carried through to the second sift. The second sift considers the estimated cost of measures identified in the School Travel Plan and the cost per potential modal change pupil. Those schemes with the lowest costs per modal shift pupil are then scored and ranked using criteria relating to the schools' commitment to their School Travel Plan and the 'cost per pupil modal shift'.
- ◆ Other programmes involve assessing schemes in terms of their adherence with the LTP2 Strategy, specific Action Plans or Business Plans. Examples include: *Cycle Networks*, *Bus Corridors*, *Urban Traffic Management Control*, *Accessibility improvements*, and *Park and Ride*.

Prioritised schemes are then taken forward for approval onto the conveyor belt or rejection as possible schemes.

Approval of schemes onto the conveyor belt or rejection as possible schemes (Stage 3)

Schemes identified through Stage 2 are presented to an Officer Jury (five officers) where they are approved, rejected or further information is required. Information on each scheme

or package of measures is presented to the Jury using a conveyor belt proforma. This includes the following information:

- ◆ Scheme summary – Location, Type of measure(s), Timescale for implementation, State of readiness, Factors that may delay implementation, Earliest implementation year;
- ◆ Why proposed – Summary, Benefits, Assessment results, Key trip generators, Link to interchanges, Number of accidents, Other;
- ◆ Cost – Construction (works), Design (fees), Land, Other, Total Cost, Estimated cost from: Detail design/Preliminary design/Best guess, Miscellaneous Contributions / Complementary investment;
- ◆ Added value / links to other works;
- ◆ Priority.

The decision the Jury makes on each proposal represents the officer recommendation to the Lead Member. Once approved by the Lead Member a proposed scheme will be included on the conveyor belt.

The list of schemes on the 'conveyor belt' is then passed to the Programme Manager to take forward to implementation stage. The Programme Manager appoints a scheme manager who will be responsible for developing the scheme further and keeping the database up to date.

If a scheme is rejected either by the Jury or the Lead Member it needs to be reported back to the Programme Initiator by the Programme Developer, so that amendments can be made to the database. Either the Jury or Lead Member may ask for further information before giving approval for a proposed scheme. Lead Member is only asked to approve proposed schemes that have already been approved by the Jury.

Development of provisional and firm programmes (Stages 5 – 7)

Once approved onto the conveyor belt, the Programme Manager develops a prioritised programme, taking account of practicalities, urgency, and state of readiness. For schemes that are more difficult to implement either through difficulties in design or consultation the conveyor belt will give more time for these phases to be completed. If changes occur to a scheme after it is approved onto a conveyor belt (e.g. cost changes) the scheme will need to be reported back to the Jury to approve the changes, unless the changes are modest.

To give greater certainty to programme delivery, a provisional programme is developed by the Programme Manager and approved as soon as practicable in the year before implementation.

At the beginning of each calendar year Cabinet approves the overall expenditure for the capital programme for the following financial year, with a cost banding allocated against each programme heading. Once the expenditure against each programme heading is approved the programme is finalised by the Programme Manager.

Implementation and substitutions (Stage 8)

The approved firm programme might include an element of over-programming. The Programme Manager identifies reserve schemes to take this over-programming into account and maintain a balanced Programme.

Monitoring / evaluation (Stage 9)

All significant schemes have before and after monitoring to measure their effectiveness in delivering objectives and targets.

Cost assessments

A preliminary cost estimate is needed before an aspiration can be approved onto the conveyor belt and to determine its relative priority.

Once a scheme is approved onto the conveyor belt a budget estimate is needed before approval onto a provisional programme. If the budget estimate is significantly different to the preliminary cost estimate then the priority of the scheme will need to be revisited.

Once on the provisional programme the scheme design will be revisited and a second budget estimate prepared before it is approved onto the firm programme.

Developing the process

The scale of work required to develop prioritisation methodologies for 18 programme headings was a challenging process, in both resource terms and technically. Officers involved in implementing schemes played a key role in the process, with overall coordination provided by the LTP and Programme Development Team.

The prioritisation process was first documented shortly after the final LTP2 was submitted. Further development work has since been undertaken and the Workshop Manual was published in May 2007. Information seminars were held at an early stage, with officers at all grades invited. Prior to its publication key officers attended a seminar to review the prioritisation process.

Overall the methodology took 2-3 years to develop, but this was fitted around other LTP work/deadlines. The process was developed in-house.

Strengths

- ◆ Provides a robust and transparent policy-driven process which ensures schemes delivered address identified targets and objectives. Schemes are assessed using similar levels and types of quantifiable evidence.
- ◆ Provides a robust process and defensible process for addressing requests for schemes from the public and other stakeholders.
- ◆ Has enabled the County to develop a programme at an early stage and plan for delivery. Programmes are approved sufficiently in advance to enable design work and implementation to be balanced over a 12 month period.
- ◆ Provides officers with greater ownership and certainty regarding delivery of schemes.
- ◆ The Officer Jury provides a scrutiny element to the process and enables local knowledge and professional judgement to be incorporated into the decision-making process in a robust manner. Jury members have sufficient expertise to identify and take into account the revenue implication of schemes being considered.

For further information, please contact Joanne Eynon at Leicestershire County Council: JEynon@leics.gov.uk.

B.6 Authority F (Reading)

Introduction

Reading Borough Council developed its prioritisation process during the first round of Local Transport Plans, and has since updated it to reflect changes to the LTP objectives which incorporate the shared priorities for transport.

The process is used to prioritise expenditure on all integrated transport schemes (<£5 million).

Schemes are multi-targeted which means that they are assessed as packages rather than as individual schemes. All scheme packages are assessed and prioritised against each other. There is an initial allocation of budgets to specific policy areas in the LTP, however there is also flexibility in budgets where schemes are multi-targeted, covering a number of policy areas.

Generation of schemes for consideration

Reading has adopted an area package-based approach to deliver its LTP2 strategy. Seven separate action plans, covering the whole of the Reading area, have been developed in draft based on the Council's understanding of demographics, current movement characteristics, future travel demands, and likely development and regeneration proposals. The action plans are dynamic documents and all are expected to have been reviewed by the end of the second round of Local Transport Plans.

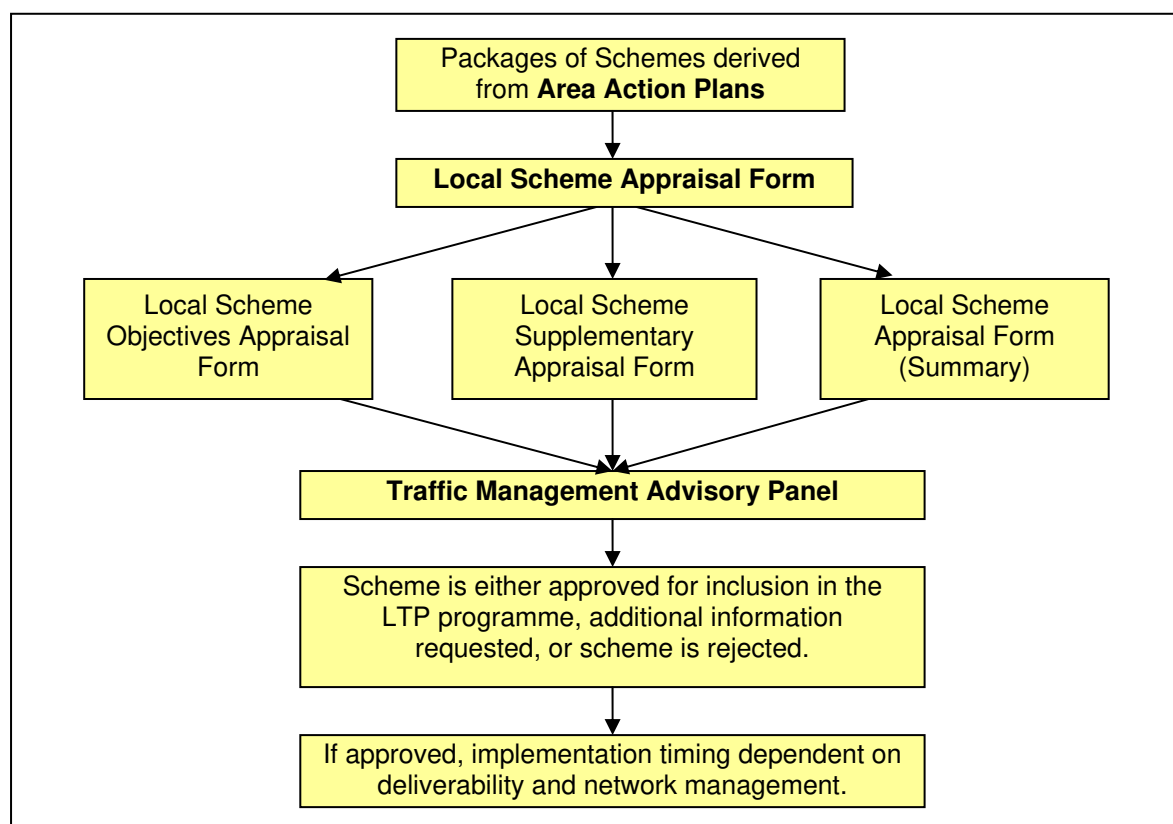
Action Plan proposals have been developed through detailed analysis using various components of the Transport Planning Toolkit, which enables the Council to provide evidence based appraisals of the likely outcomes of key elements of their transport strategy.

Reading's Transport Planning Toolkit

- ◆ The Local Community - The Council publishes 'Horizons' to ensure that the community is involved in the decision making process.
- ◆ Accessibility Planning - Use of 'Accession' and other modelling packages to help identify and address accessibility problems through the use of mapping techniques and datasets.
- ◆ Reading Transport Model (RTM).
- ◆ Noise and Air Quality Models - To help identify problems and assess the impacts of proposed solutions.
- ◆ Accident Analysis and Prevention - Analysis and monitoring of STATS19 data. The council also collects and plots information on perceived road safety hazards near schools as part of their school travel plan monitoring programme.
- ◆ Urban Traffic Management and Control (UTMC) Common Database.

Overview of prioritisation process

The prioritisation process is based around a Local Scheme Appraisal Form, which enables Council officers and members to make informed decisions about which schemes to deliver. The forms are completed by the lead project officer followed by a discussion with a more senior manager. The forms are reviewed at the monthly transport programme board, the Traffic Management Advisory Panel (TMAP), which consists of three transport managers, the head of service and is chaired by the lead councillor. Decisions about scheme approval/rejection are the responsibility of inter alia the Traffic Management Advisory Panel (TMAP) following review of the information presented and active debate.

Figure B.5 – Reading’s scheme prioritisation process

Local Scheme Appraisal Form

The Local Scheme Appraisal Form consists of three sub-forms:

- ◆ Local Scheme Objectives Appraisal Form;
- ◆ Local Scheme Supplementary Appraisal Form; and
- ◆ Local Scheme Appraisal Form (Summary).

The forms ensure that scheme packages under consideration are closely aligned to LTP policies, and ensure schemes being proposed have been developed using robust transport planning processes which will deliver good value for money.

Full versions of these forms are included in Annex C of Reading’s Second Local Transport Plan.

(i) Local Scheme Objectives Appraisal Form (Policy Compliance and Deliverability Analysis)

Each scheme is assessed against 40+ local scheme objectives, structured under the LTP2 objective headings of Accessibility, Congestion, Safety, Quality of Life, and Economy. Schemes are assessed as ‘high’, ‘medium’, ‘low’ and ‘not applicable’ in terms of how important they are in delivering each of the objectives.

Scheme proposers are also required to identify the importance of public and stakeholder consultation, and various funding sources, to delivery of the scheme.

Table B.6 – Part of Local Scheme Objectives Appraisal Form

Safety	Importance			
	High	Medium	Low	Not Applicable
Address known local road safety issues				
Reduction in vehicle speeds				
Improved pedestrian crossing facilities				
Improved junction visibility for vehicles				
Improved carriageway lighting				
Creation of pedestrianised area				
Creation of Home Zone				
Creation of Safer Route to School				

Figure B.7 – Part of Local Scheme Objectives Appraisal Form (Deliverability Issues)

Consultation	Importance			
	High	Medium	Low	Not Applicable
Public consultation				
Stakeholder consultation				

Funding	Importance			
	High	Medium	Low	Not Applicable
Integrated Transport Block				
Local Authority (including S106 funding)				
Local Transport Operators				
Homezone Funding				
Sustrans				
Business Sponsorship				

(ii) Local Scheme Supplementary Appraisal Form (Value for Money evidence)

This form attempts to quantify the level of existing facilities and required/predicted improvements. The questions are asked in such a way that a heavily weighted response of “yes” answers would indicate that the scheme proposals are feasible. Some questions require quantitative responses.

There are also questions relating to the processes undertaken to design the scheme, to ensure schemes have been developed in a robust manner.

The questions cover the following areas:

- 1) Scale of benefits to the local community
- 2) Accessibility and Integration
- 3) Congestion
- 4) Safety
- 5) Quality of Life
- 6) Local Economy
- 7) Public Consultation
- 8) Funding
- 9) Local Transport Policy
- 10) Implementation Programme

Examples of specific questions are included in Figures B.8 to B.10.

(iii) Local Scheme Appraisal Form (Summary)

This summarises key information from the Local Scheme Objectives Appraisal Form and the Supplementary Appraisal Questions proforma:

- ◆ Links to LTP Key Objectives;
- ◆ Benefits to the Local Community;
- ◆ Bus Services;
- ◆ Vehicle Flows;
- ◆ Accident Records;
- ◆ Traffic Speeds;
- ◆ Detailed Assessment Scores*; and
- ◆ Estimated Scheme Cost: High = over £100,000; Medium = between £50,000 and £100,000; or Low = under £50,000).

*Detailed assessment scores are taken from the Supplementary Appraisal Form. The scores provide information for the decision-makers, but are not used to rank schemes against each other.

Figure B.8 – Questions to appraise the scale of benefits to the local community

Approximate number of people benefiting from the enhancements	
i. Number of properties fronting the scheme	___
ii. Number of properties within 400m of the scheme	___
iii. Number of schools fronting the scheme	___
iv. Number of schools within 400m of the scheme	___
v. Number of businesses fronting the scheme	___
vi. Number of pedestrians walking through the area	___
vii. Number of cyclists travelling through the area	___

Figure B.9 – Questions to appraise the impact of cycle schemes on accessibility

Improvement to existing cycle route	
i. Do cycle routes currently exist in the enhancement area?	Y/N
ii. If yes, any resurfacing requirements on existing cycleway?	Y/N
iii. Length of new surfacing required (metres)	___
iv. Have any existing poor surfaces caused injury to the public?	Y/N
v. Are existing cycle paths/lanes on desire lines?	Y/N
vi. Are existing facilities to Sustrans guidelines?	Y/N
Additional cycle pathways	
i. Has a cycle audit been conducted?	Y/N
ii. Are additional cycle paths/lanes proposed?	Y/N
iii. If yes, length of new pathways/lanes proposed (metres)	___
iv. Are their proposed alignments on desire lines?	Y/N
Safer cycle routes	
i. Number of existing Toucan crossings in the enhancement area	___
ii. Are additional Toucan crossing facilities required?	Y/N
iii. If yes, how many new Toucan crossings are proposed?	___
iv. Are existing cycle paths overlooked?	Y/N
v. Will proposed cycle paths be in open/visible locations?	Y/N
New cycle stands / parking	
i. How many cycle parking facilities currently exist (spaces)?	___
ii. Number of new cycle parking facilities proposed?	___
iii. Any security problems with the existing cycle parking facilities?	Y/N
iv. Are any existing cycle parking facilities in poor condition?	Y/N
v. Do the proposals overcome existing issues with cycle parking?	Y/N
General comments	

Figure B.10 – Questions to appraise the impact of traffic reduction schemes on congestion

Reduction in road traffic volumes
<p>i. Has a 'do minimum' scenario been examined (committed changes)?</p> <p>ii. Do existing traffic flow levels cause problems for pedestrians?</p> <p>iii. Can vehicles exit side roads safely?</p> <p>iv. Is scheme likely to reduce traffic flows in the area?</p> <p>v. What is the estimated impact on transport flows in the area:</p> <ul style="list-style-type: none"> - Reduction greater than 10% - Reduction between 5% and 10% - Reduction between 5% and 0% - Increased Traffic Flows <p>vi. Proposals expect not to divert existing traffic onto other routes?</p> <p>vii. Has an assessment of traffic impacts been completed on:</p> <ul style="list-style-type: none"> - Junctions? - Network? <p>viii. Are Urban Traffic Control systems being proposed?</p> <p>ix. Physical restrictions on car travel been included in the scheme?</p> <p>x. Are improvements to signage proposed?</p> <p>xi. Are Variable Message Signs proposed? _</p> <p>xii. Are High Occupancy Vehicles lanes included within the scheme?</p>
General comments

For further information, please contact Ruth Leuillette at Reading Borough Council: Ruth.Leuillette@reading.gov.uk.

B.7 Authority H (Somerset)

Introduction

At the outset of LTP1, the County Council developed a ‘minor schemes prioritisation framework’, to prioritise scheme requests according to the extent to which schemes were likely to deliver LTP1 objectives. This covered schemes that could not be delivered through established programmes arising from the public transport and road safety strategies.

The methodology was completely revised for LTP2, following a review of best practice, and was extended to cover the whole integrated transport programme.

The approach has two stages:

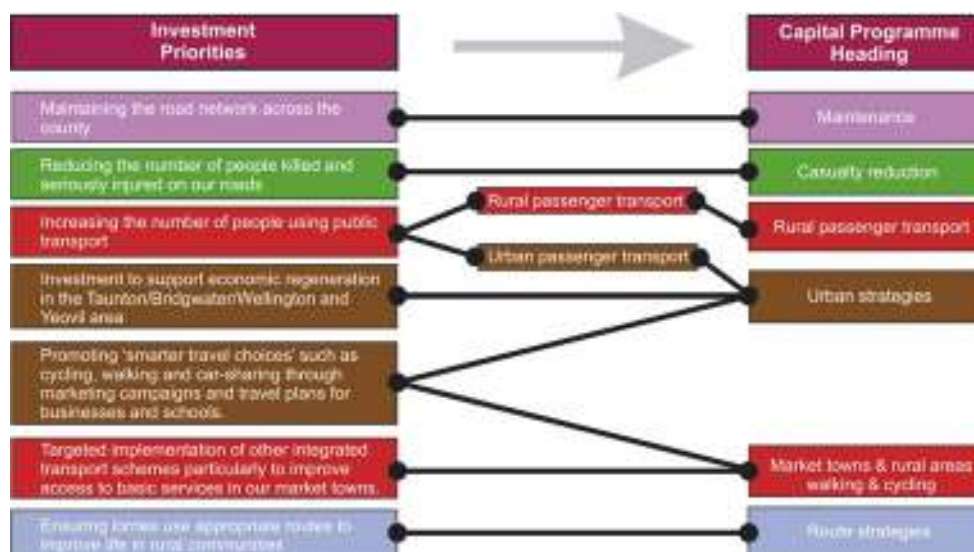
1. Allocation of budget between programme headings;
2. Prioritisation of individual schemes.

Stage 1: Allocation of budget between programme headings;

The first stage of the process involved determining the proportion of the LTP Integrated Transport capital budget which should be allocated to each of the five programme headings identified for LTP2:

- ◆ casualty reduction – road safety and safer routes to school;
- ◆ urban strategies – urban passenger transport, demand management, urban cycling and walking, and urban highway improvements;
- ◆ rural passenger transport – rural passenger transport, community transport;
- ◆ route strategies – rural network management; and
- ◆ other (including market town / rural walking & cycling schemes).

Figure B.11 – Relationship between LTP2 investment priorities and capital programme headings



This process involved:

(i) a subjective assessment of the potential contribution of each of the programmes to the delivery of the LTP2 objectives and sub-objectives, represented by a score varying from 0 (for no contribution) to 3 (for a strong contribution). These scores were used to make an initial apportionment of the budget between programme headings;

	Casualty reduction	Urban strategies	Rural passenger transport	Route strategies	Other
Policy compliance score	22	36	20	6	20
Initial share of budget	21%	35%	19%	6%	19%

(ii) the potential contribution of each scheme type towards the delivery of the core indicator targets, based on an evaluation of progress made during LTP1. A score was allocated to each target ranging from +3 where a target was met well ahead of schedule to -3 where poor progress towards a target was made. Those targets which were met on schedule were scored 0. The initial budget is then refined to reflect these findings. Budgets were enhanced for those programmes which were unsuccessful in delivering the intended targets in LTP1.

The above analysis was undertaken by officers, members and stakeholders on a Capital Away Day, and was largely a subjective process. It was recommended that an evidence-based study was undertaken to confirm whether failure to deliver targets in LTP1 was due to: too little investment; too much investment in poor performing schemes; or the wrong type of investment including capital investment in infrastructure rather than revenue investment.

As at December 2007, no major changes to the initial allocation of budgets to programme headings had been made. Any future changes will be agreed through the LTP2 governance structure established in Somerset County Council.

Stage 2: Prioritisation of individual schemes

The second stage of this process is to determine which schemes within the different programmes are prioritised. The methodology developed is intended to consider both the potential contribution of each scheme to LTP2 targets and its relative value for money. The four stage approach is a generic one which can be applied to each of the programme headings:

(i) Collation of scheme data and information – This requires the completion of a proforma for each scheme proposed for inclusion in the LTP programme. The proforma requires the following information:

- ◆ a description of the scheme, its origin (e.g. policy-specific strategy, member request, etc.), and what problem it is trying to address;
- ◆ identification of any member specific issues;
- ◆ estimated cost and timescales for design and construction;

- ◆ its current stage of development (i.e. ranging from conceptual stage to detailed design) and risks to delivery of the scheme.

(ii) Assessment of scheme against LTP indicators - This step analyses the likely impact of each scheme on each of the LTP2 targets by appraising the potential contribution of a scheme to each target against a 4 point scale (ranging from 0 for 'Neutral' impact to 3 for 'High' impact). Guidance has been produced setting out the criteria which a scheme needs to meet in order to receive a Low, Medium or High score (see Table B.2 for example). A total 'Benefit Score' is then calculated for each scheme.

A review of the scoring process is currently being carried out. One proposal is to expand the scoring matrix so that it ranges from -3 to +3 points. This will allow the any negative impacts of a scheme (e.g. the possible negative impacts of a bus lane scheme on congestion) to be represented.

Table B.2 – Examples of scheme requirements for a 'High', 'Medium' or 'Low' contribution to LTP2 targets

LTP2 Target: Change in area wide road traffic mileage	
High	Demand management or large scale sustainable mode schemes, probably serving large employers, two or more schools or key routes to town centres.
Medium	As above, but serving fewer "key destinations".
Low	Scheme improves non-car options (e.g. cycle route, public transport) in a context/location where this has potential to lead to modal shift.
LTP2 Target: Cycling trips	
High	Scheme improves cycle route (cycle lanes and priority at junctions), and improves cycle parking. Any road crossings are appropriate for cyclists.
Medium	Scheme improves cycle route but no further complementary infrastructure improvements.
Low	Scheme includes cycle parking improvements or appropriate road crossings.
LTP2 Target: Public Transport Patronage	
High	Scheme on a route of potential high demand (e.g. serving 3 or more "key attractors" e.g. schools, employment areas, hospitals).
Medium	Scheme on a route serving 2 or more "key attractors".
Low	Other schemes.

(iii) Cost to benefit assessment - The Benefit Score calculated in Step 2 is divided by a second score relating to the cost of the scheme (ranging from 1 point for a scheme costing below £50,000 to 5 points for schemes costing £500,000 or more). This provides the final score for each scheme. An optimism bias is applied to the cost depending on the stage of development the scheme is at.

(iv) Allocation of Schemes to Priority Bands - Schemes are allocated into one of four categories (High, Medium, Low, or Scheme Not Allocated to the Programme), to avoid placing too much reliance on an exact score which may be based on limited evidence.

'High' priority schemes are required to have a 'High' impact score for at least a third of the 21 LTP2 targets. This approach ensures that integrated "cross cutting" schemes which impact on a wide range of LTP2 indicators, are given a higher priority.

Table B.3 – Example of scorecard calculation

1) Scheme scored against each Performance Indicator according to scoring criteria assessment ()	
High = 3 points Medium = 2 points Low = 1 points Neutral = 0 points	Total score = 13 points
2) Then look at cost with optimism bias applied depending on stage of the scheme	
Contract documents 1.102 Detailed design 1.134 Outline design 1.298 Conceptual 1.320	Estimated scheme cost at conceptual design stage = £330,000 Cost (with optimism bias applied) = £330,000 x 1.32 = £436,000
3) Score then adjusted to reflect value for money by dividing by a VFM cost factor, dependent on cost	
<£25,000 = 1 points £25-£50,000 = 1.25 points £50-£75,000 = 1.5 points £75-£100,000 = 2 points £100-£150,000 = 2.5 points £150-£200,000 = 3 points £200-£300,000 = 3.5 points £300-£500,000 = 4 points £500-£750,000 = 4.5 points >£750,000 = 5 points	Score = 13 points Value for Money Cost = 4 points (£436,000) Value for Money Score = 13 points / 4points = 3.25 points Total Score = 3.25 points
Total Score = 3.25 points	

Drawing up the capital programme

A 5 year programme of schemes was developed at the start of the LTP2 period. At that stage funds were not fully allocated. Since then there have been new candidate schemes that have been through the above process and then introduced to the LTP2 programme. There have also been other LTP2 schemes which have been abandoned following further feasibility. The above scorecard process and the LTP2 governance structure in Somerset is sufficiently robust to accommodate the fluidity of this situation.

There is no strict guide as to which category of schemes will be included in the approved programme.

For further information, please contact Stephen Walford at Somerset County Council: SWalford@somerset.gov.uk.

Appendix C – Examples of prioritisation approaches used for specific policy areas

C.1 Road safety

Example 1: Comprehensive data-led approach to improving safety

West Sussex' Accident Investigation and Prevention (AIP) Data Analysis Team has developed a comprehensive data-led approach to improving safety.

The Team analyses information from the police Stats 19 forms about all personal injury accidents within the County, and uses this to prioritise and inform all casualty reduction programmes. This includes the single site schemes, route speed management safety schemes, village speed limit programme, safer routes to school, traffic calming and urban speed management schemes, and also the maintenance and asset management programme.

The Council has also put in place a comprehensive data monitoring programme. This has enabled them to estimate the contribution of different types of schemes to reducing casualties, in terms of cost per KSI saving. These factors can be used to forecast the likely level of casualty reduction associated with different levels of expenditure on different scheme types, and helps the Council formulate its road safety programme.

- ◆ Local Safety Schemes - Local safety schemes are identified using cluster analysis and sites are prioritised according to the number of weighted casualties. The local safety scheme programme has been and remains the cornerstone of the Council's casualty reduction programme.
- ◆ Route safety and speed management programme - The entire strategic and supporting road network has been split up into sections which are monitored for casualties. The casualties are weighted on a simple 3, 2, 1 points system for fatal serious and slight casualties respectively. These routes are then ranked and prioritised by weighted casualties per kilometre.

The route speed management programme has contributed significantly in the reduction of casualties, with schemes typically showing a reduction in casualties of at least 25%, and up to 80%, following implementation. The schemes involved a combination of measures tailored to specific routes, based on analysis of problems and consultation with locals and the police. In addition, the Council have operated a central reserve safety fence programme to help address a specific safety problem on the A24, targeted at locations where casualty rates were highest.

- ◆ Speed limit Programme - The above network analysis identified a specific problem with casualty rates on rural roads. The Speed Limit Review Panel (SLRP), made up of County, District and Parish Council representatives together with Sussex Police, was set up to oversee the introduction of speed limits in rural settlements. The County has over 300 rural settlements most of them relatively small in population size. Speed limit criteria were developed for setting limits in these settlements relating to average speeds and frontage development. To ensure that the speed limits met the criteria the panel met regularly to approve inclusion of a speed limit onto the programme. The limits have

been very well received by residents. Monitoring shows a 25% reduction in casualties and 10% lower in speeds.

- ◆ Urban Road Safety Programme - The Council has also delivered an urban road safety programme which included a large homezone in one of the more deprived areas of the County. This was also an area identified as containing the County's highest child casualty rates.
- ◆ Safety Cameras - The location of safety enforcement cameras is casualty-led.
- ◆ Education, Training and Publicity - Child cycle training prioritises locations where there are most accidents.

For further information, please contact Rob Salmon at West Sussex County Council: Rob.Salmon@westsussex.gov.uk.

Example 2: Area-based approach to road safety

Luton Borough Council developed its Area Studies programme in 2004, following its success in dealing with 'accident cluster sites'. The Area packages reflect a holistic view towards road safety, which incorporates safer-routes-to-school schemes and prioritises investment according to accident rates, indices of deprivation and other social indicators. This approach ensures contributions to other LTP objectives are also considered and is key to the integrated approach to transport in the Luton Dunstable Houghton Regis LTP.

The conurbation has been split into 26 separate areas, where local traffic is confined by physical boundaries such as main roads and railway lines. Areas have been prioritised for treatment using the following criteria:

- ◆ Accidents – assessed using the following information:
 - a= Assessment of size of area/length of road in area
 - b= Total number of injury casualties
 - c= Total number of injury casualties in area involving vulnerable road users
 - d= Assessment of accidents problem $[(b+c)/a]$
 - e= Factor carried forward to ranking list obtained by dividing (d) by 86 (the highest accident problem in an untreated area) and multiplying by 10 to get a weighting between 0 to 10
- ◆ Traffic Intrusion (scored from 1 = minimal impact to 5 = strong impact);
- ◆ Rat Running (scored from 1 = minimal impact to 5 = strong impact);
- ◆ Parking Problems (scored from 1 = minimal impact to 5 = strong impact);
- ◆ Social Deprivation (scored from 1 = minimal impact to 5 = strong impact); and
- ◆ Community Use (scored from 1 = minimal impact to 5 = strong impact).

The Council aim to complete two areas each financial year. The consultation process for each of the Area Studies schemes (set out in chapter 5 of the LTP) starts with asking local residents what improvements they would like, followed by consultation on indicative engineering proposals, before final design is completed and any necessary Orders are published.

For further information, please contact Jonathan Palmer at Luton Borough Council: jonathan.palmer@luton.gov.uk.

Example 3: Area-based approach to road safety

East Riding's performance against its road safety targets was relatively weak in LTP1, compared with that of other authorities. As a result, the Council undertook a detailed analysis of road casualty data. This looked at:

- ◆ casualty reduction by age, gender, road user type, and rural/urban location;
- ◆ casualty reduction levels across the major settlement areas in terms of casualty severity and different road user types;
- ◆ actual casualty rates (casualties per km) and change in casualty rates on major highway routes; and,
- ◆ actual casualty rates (casualties per km) and change in casualty rates on trunk roads.

The Council has subsequently increased its capital and revenue budget for road safety schemes, and re-focused its road safety and wider integrated LTP strategy. A key change involved reprioritising its Area Action Plans to ensure those with the greatest potential accident benefits are implemented first.

For further information, please contact Ian Burnett at East Riding Council: Ian.Burnett@eastriding.gov.uk.

Supporting evidence

One source of supporting data is the MOLASSES (Monitoring Of Local Authority Safety SchemES) database. This has been active since 1991 and is managed by TRL Limited. The database assesses the effectiveness of different treatments in relation to specific accident problems; gives a better idea of the effectiveness of different types of Local Safety Schemes; and wherever possible, produces reports and provides information in response to specific enquiries.

C.2 Walking and cycling

Example 1: Cycle assessment framework

All schemes are assessed using a scorecard mechanism (see Section B.7). Cycle schemes which receive a strong score are then prioritised against other cycle schemes using a cycle assessment framework. This takes into account issues such as potential level of usage, restraints from topology, perceived safety and personal security, and identifies them as being of 'high' or 'medium' priority (Table C.1).

For further information, please contact Stephen Walford at Somerset County Council: SWalford@somerset.gov.uk.

Table C.1 – Somerset’s Cycle assessment framework

Criteria	5 points	3 points	1 point
Settlements served	Large – main urban area	Medium – market town	Small – village
Destination			
Education	Where route leads towards a secondary school or college of further education within 2km.	Where route leads towards a primary school within 2km, or where the route leads towards a secondary school or college within 2-5km.	Where route is over 5km from a secondary school or college.
Employment	Where route leads towards a significant employment centre within 5km eg. town centre or industrial estate.	Where route leads towards a moderate employment centre eg. a single large employer, or several smaller employers within 5km.	Where route is over 5km from significant or moderate employment centre, or where route is within 5km of single or small employer.
Retail	Where route leads towards a significant retail centre within 2km eg town centre or major out of town shopping centre.	Where route leads towards a significant retail centre within 2-5km, or where route leads towards a small retail centre eg. local shop or group of shops within 2km.	Where route is over 5km from significant retail centre, or over 2km from small retail centre.
Leisure	Where route forms part of the National Cycle Network or other named leisure cycling route.	Where route leads towards a leisure facility or a leisure cycling route within 5km.	Where route is over 5km from a leisure facility or leisure cycling route.
Attractiveness			
Gradient	Flattish	Moderately Hilly	Very hilly
Perceived safety	Very safe - route is traffic free and involves no hazardous manoeuvres.	Moderately safe - route is partially traffic-free, involves no Class 1 or greater than 30mph on-road sections, and involves less than 3 potentially hazardous manoeuvres.	Least safe – route is on Class 1 road, or in speed limit 30mph or above.
Directness	Direct.	Less direct.	Awkward.
Personal security after dark	Route is street lit and is on or adjacent to a road over its whole length.	Route may be lit and has natural surveillance by properties, road users etc.	Route may be lit but has little or no natural surveillance.
Attractiveness	Route is through open countryside.	Route is away from roads but in a built up area, or on quiet, lightly trafficked roads e.g. through a housing estate.	Route is on or adjacent to a busier road.
Strategic Impact			
Strategic Impact	Scheme opens up a significant new route that is not currently available.	Scheme provides a better alternative to an existing route that connects the same settlements and facilities.	Scheme provides a link to, or short extension of an existing route or localised improvement. Scheme legalises existing regular cycle use of footpath.

Example 2: Cycle assessment framework

West Sussex developed a points-based questionnaire approach in 2005 in order to prioritise expenditure on cycle schemes within its 11 Area Transport Plans. Nineteen questions seek to prioritise those schemes with the potential to generate highest levels of usage, which contribute to delivery of the LTP objectives, and which are likely to be delivered on time and to budget.

The methodology gives extra priority to schemes which:

- ◆ provide a link to an education-related establishment (1pt per establishment);
- ◆ serve a significant business area, a main railway station or transport interchange, a major retail area, a leisure facility or tourist attraction (2 pts: links directly, 1 pt: links indirectly, 0 pts: no link);
- ◆ are on a route with a serious or fatal injury involving a cyclist in the previous three years (1 pt: slight, 2 pt: serious, 3 pt: fatal);
- ◆ link with at least one other cycle route which is constructed or on forward works programme, and/or are part of the County Strategic Cycle Network;
- ◆ overcome a significant barrier; and
- ◆ provide cycle parking facilities (2pts covered, 1pt uncovered, 0pt none).

In addition:

- ◆ greater priority is given to schemes in areas where a significant proportion of the network is already complete, in order to encourage completion of specific networks.

The approach also includes a number of questions relating to the deliverability of the scheme, and prioritises schemes:

- ◆ which have been approved by County Local Committee / County Cycle Forum or member;
- ◆ have external funding available and confirmed; and
- ◆ use existing highway land.

Less priority is given to schemes which:

- ◆ require Traffic Regulation Orders and particularly Compulsory Purchase Orders, Cycle Tracks Act processes, or a Public Enquiry; and
- ◆ require private land, particularly if the landowner is willing to negotiate.

For further information, please contact Tim Yair at West Sussex County Council:

Tim.Yair@westsussex.gov.uk.

C.3 Highway schemes

Example 1: Review of countywide highway improvement schemes

Cornwall County Council undertook a review of its Countywide Highway Improvement Schemes (£50,000 to £1m) prior to LTP2. Schemes were assessed and scored against criteria relating to (i) LTP and NATA-based⁵⁹ objectives, and (ii) deliverability criteria (Table C.2).

⁵⁹ New Approach to Appraisal.

Table C.2 - Countywide highway improvement scheme evaluation criteria

	CATEGORIES	SCORE	COMMENT
Safety (Max score =16; Min score =0)	Very beneficial in accident prevention	16	A scheme which includes a location which meets the minimum Local Safety Scheme accident criteria, but which is too expensive to be considered as a Local Safety Scheme AND has further accidents which the scheme will address.
	Beneficial in accident prevention	12	A scheme which includes a location which meets the minimum Local Safety Scheme accident criteria, but which is too expensive to be considered as a Local Safety Scheme.
	Moderately beneficial in accident prevention	8	A scheme with 3 or more personal injury accidents in the length of the scheme which will be addressed by the scheme, but which does not meet the Local Safety Scheme criteria
	Slightly beneficial in accident prevention	4	A scheme with potential to reduce an existing accident record of 2 injury accidents or less
	Negligible benefit to accident prevention	0	A scheme which will not reduce the existing accident record
Economic (Max score =12, Min score =0)	Restriction to large vehicle movement (<5.5m on Strategic Freight Network) ?	>100m =2 <100m =1 None = 0	Where a scheme proposed is on the Strategic Freight Network AND there is a restriction to HGV movement
	Heavy goods and Bus flows	<50 =0 51-100 =1 101-224 =2 225-300 =3 > 300 =4	Where the volume of heavy goods and bus flow is significant, regardless of road category
	On Primary Route Network ?	Yes = 2 No = 0	Where a scheme is on a Primary Route (i.e. the highest category road in Cornwall)
	Facilitates planned industrial/commercial development opportunity or contribution	0 to 4	Where a scheme links with development proposals and may be subject to contributions from developers
Environmental (Max=4, Min=-4)	V.negative impact on natural environment (e.g. designated site)	-4	Where a scheme will have a significant adverse impact on the natural environment
	Negative Impact on environment (e.g. tree loss, other issues)	-2	Where a scheme impacts on the natural environment, but is outside designated or protected sites
	No significant environmental Issues	0	No adverse impact on the natural environment
	Quality of life and noise/emissions benefits	0 to 4	0 score for no benefits, 1 point for some benefit to less than 6 properties adjacent to the improved section, 2 points for overall benefits to residents adjacent to the improved section (>6 properties) but some detriment to others, 3 points for benefits to adjacent residents (>6 properties) and wider community but some detriment to others, 4 points for community benefits (>6 properties) with minimal/no detriment to others
Integration/Accessibility	On Strategic Public Transport Network ?	Yes = 2 No= 0	Where a scheme is on the Strategic Public Transport Network
	Demonstrated benefits to non-motorised vehicle users ?	Yes = 2 No= 0	Where the provision of facilities for non-vehicular users is appropriate and could be incorporated as part of a scheme
	Links with Strategic Plans/Initiatives/Improvement to local services?	0 to 4	Links with CCC Strategic Plan, District Council Local Plans, Parish Plans, Regeneration schemes, or benefit to access local services – one point for each, up to 4 points maximum
Deliverability (Max score=4, Min score=-4)	V.Low programme risks	+4	Where the delivery programme is unlikely to be affected due to land acquisition or other issues (e.g. negotiations, complicated ground conditions or statutory undertakers plant relocations)
	Low programme risks	+2	Where a scheme is within the highway, but may require attention to other issues which may affect the delivery programme
	Moderate programme risks	0	Where land is owned or dedicated, or within the highway, but legal formalities and/or other issues will need to be addressed before a delivery programme can be determined
	High programme risks	-2	Where a scheme requires land and some consideration to other issues, which will affect the delivery programme
	V.High programme risks	-4	Where a scheme requires land and significant attention to other issues which will severely impact on the delivery programme
Max Score = 44 points			

Scheme scores were factored by scheme costs, to give a cost per unit outcome factor.

The framework criteria are regularly reviewed and updated, and the approach is due to be revisited and updated in 2008/09.

For further information, please contact Bill Mitcham at Cornwall County Council: bmitcham@cornwall.gov.uk.

Example 2: Review of minor highway schemes

In January 2005, Jacobs were commissioned by Durham County Council (Environment Service) to develop an appraisal system to prioritise existing and future minor road schemes being considered throughout the County. The prioritisation process was based on a subjective appraisal of factors advocated in the New Approach to Appraisal (NATA): Environment, Safety, Economy, Accessibility, Integration. In addition a further six contributing factors were used to assess each scheme: Timescale, Cost, Deliverability, Effectiveness, Accident cost benefit, Congestion cost benefit.

A series of flow charts and spreadsheets were used to automate the process. In order to ensure that the system did not become unwieldy, assessment of each of the NATA areas was considered in a simple and objective manner. For example, the air pollution, noise pollution, landscape and townscape flow charts all require an assessment of net change in the number of houses affected by the scheme. This enables much of the assessment / appraisal to be carried out by staff of a non technical nature and to a limited extent removes the need for the appraiser to have a detailed understanding of the scheme under consideration.

Schemes are scored from -2 to +2 against each of the assessment factors, relating to the level of improvement or detrimental effect the proposed scheme will have on the existing road section.

Outputs from the system include:

- ◆ a summary of how each individual scheme performs against (i) NATA and (ii) the shared priorities in both qualitative and quantitative terms; and
- ◆ an overview showing how each scheme scores in comparison to the other schemes being assessed.

Table C.3 –Scheme performance against NATA objectives

Scheme name		Points raised from scheme
NATA	Safety	Safety is subdivided into two subsections in relation to the appraisal method. These subsections are: Accidents and Security. This scheme was rated as -2 in terms of Safety. This relates to the worst case scenario, increasing the accidents on the roads significantly and increasing the security problem to all road users.
	Environment	Environment relates to the seven subsections: including air and noise pollution, town and landscape. This scheme received a score of 0 for environment. This relates to no improvement in terms of the seven subsections of environment.
	Economy	Economy is subdivided into three subsections, these include the reliability to road users and the efficiency to both consumer and business users. This scheme received a score of 1 for economy relating to a net score of 1 for each of the subsections.

Other Points Raised	Cost	Cost relates to the actual cost the scheme will take to be built. This scheme has been rated as a 1 for cost. This means that the cost to build this scheme is in the upper band of between £3.3million and £4million to build.
	Deliverability	Deliverability relates to the how practical the scheme is to being put into place. This scheme has been rated as a 0 for Deliverability. This rating relates to the worst situation for Deliverability. The purchasing of land and with no detailed plans available at present.
	Effectiveness	Effectiveness relates to how well the scheme addresses the objectives it is put in place to accomplish, this scheme received a score of 1 for effectiveness. The scheme did not address the goals it was set out to achieve. Adjustments may need to be made or a possible review of if the initial goals.
	Timescale	Timescale relate to the time it will take for the scheme to be completed. This scheme has been rated as a 2, relating to the second band of time, between one and two years.

For further information, please contact Harris Harvey at Durham County Council: hharvey@durham.gov.uk.

C.4 Maintenance

West Sussex has prioritised its maintenance schemes based on their contribution to LTP objectives, as well as the scheme defect assessment score (Table C.4).

Table C.4 – Priority rating system for highways maintenance schemes

LOCAL TRANSPORT PLAN OBJECTIVE - CHOICE	Yes = 1/ No = 0		Max. Score		Total Score
Provides Footway to encourage walking	0	X	5	=	0
Improves Cycling Facility	0	X	5	=	0
Safe routes to School	0	X	10	=	0
Part of a strategic footway/cycleway network	0	X	10	=	0
Total Score =					0
LOCAL TRANSPORT PLAN OBJECTIVE – SAFETY	Yes = 1/ No = 0		Max. Score		Total Score
Recorded Pedestrian Claims in last 3 years	0	X	10	=	0
Notified Accidents in last 3 years	0	X	10	=	0
Potential of site to cause accidents:					
- Improvement to: Vertical alignment	0	X	10	=	0
- Improvement to: Drainage	0	X	10	=	0
- Improvement to: Pedestrian Crossing Facility	0	X	10	=	0
- Improvement to: Structural Condition	0	X	10	=	0
Total Score =					0
LOCAL TRANSPORT PLAN OBJECTIVE - INTEGRATION	Yes = 1/ No = 0		Max. Score		Total Score
Benefits Public Transport Users	0	X	5	=	0

Improvement for Public Transport & Accessibility	0	X	5	=	0
Total Score =					0
LOCAL TRANSPORT PLAN OBJECTIVE – ECONOMIC PERFORMANCE					Total Score
Outside Contribution Factor (Contribution/Estimate) Cost - % of Scheme Cost	0				0
Annual Routine Maintenance Costs in last 3 years - % of Scheme Cost	0				0
Total Score =					0
LOCAL TRANSPORT PLAN OBJECTIVE - ENVIRONMENTAL ENHANCEMENT	Yes = 1/ No = 0		Max. Score		Total Score
Improves Appearance	0	X	5	=	0
Improvement for Disabled/Pushchairs etc	0	X	5	=	0
Scheme suitable for Recycled Material	0	X	5	=	0
Total Score =					0
LEVEL OF SUPPORT	Yes = 1/ No = 0		Max. Score		Total Score
Member of Parliament Support	0	X	5	=	0
County Councillors Support	0	X	10	=	0
District Councillors Support	0	X	5	=	0
Parish Council Support	0	X	10	=	0
Public Support	0	X	5	=	0
Other Bodies	0	X	5	=	0
Total Score =					0
SCORE SUMMARY					
CHOICE					0
SAFETY					0
INTEGRATION					0
ECONOMIC PERFORMANCE					0
ENVIRONMENTAL ENHANCEMENT					0
LEVEL OF SUPPORT					0
SCHEME DEFECT ASSESSMENT SCORE					0
TOTAL SCORE					0

For further information, please contact Charlotte Eastley at West Sussex County Council:
Charlotte.Eastley@westsussex.gov.uk.

C.5 Safer routes to school

Example 1: Prioritisation process based on need and opportunity

The number of schools interested in joining Cambridgeshire County Council's Safer Routes to School project has rapidly increased in recent years. This has resulted in the development of a new application pack and prioritisation criteria that selects schools on a needs basis. For schools to qualify for selection they must have completed and analysed pupil and parent/carer questionnaires as part of their application and participated in the annual monitoring process. Schools are then prioritised with different weightings being given to the following factors:

- ◆ potential for modal shift;
- ◆ accidents;
- ◆ partnership opportunities;
- ◆ commitment to project; and
- ◆ social inclusion.

A number of the highest priority schools are registered onto the project for a two to three year period. This prioritisation seeks to ensure that a range of school sizes and types are included, and that there are sufficient resources available to work with all of the registered schools. Schools that do not score highly can re-apply to join the project in future years.

Once schools are enrolled on the project, Safer Routes officers work with the schools co-ordinator to establish a working group. The group focuses on three main aspects of the project:

- ◆ the production of a sustainable school travel plan;
- ◆ educating the school and community on environment, health and road safety issues; and
- ◆ identification of the need for infrastructure improvements.

For further information, please contact Kirsty Gilliland at Cambridgeshire County Council: Kirsty.Gilliland@cambridgeshire.gov.uk.

Example 2: Prioritisation process based on commitment and cost per modal shift pupil

Leicestershire County Council only implement Safer Routes to School schemes at schools where there is an adopted School Travel Plan. Schemes are scored and ranked using criteria relating to the school's commitment to their School Travel Plan, and the 'cost per pupil modal shift' (Table C.5).

For further information, please contact Joanne Eynon at Leicestershire County Council: JEynon@leics.gov.uk.

Table C.5 – Prioritisation criteria for safer routes to school schemes

Schools commitment to their School Travel Plan		
◆ Completed STP meets DfT/DfES essential criteria		1 point
◆ Completed STP has desirable elements identified by DfT and DfES		3 points
◆ School has introduced 1 to 2 road safety and/or travel awareness initiatives		
◆ School Travel Advisor has contact with active School Travel Plan working group		
◆ Completed School Travel Plan has desirable elements identified by DfT and DfES		5 points
◆ School has introduced 3 or more road safety and/or travel awareness initiatives		
◆ School Travel Advisor has contact with active School Travel Plan working group. Links STP to wider initiatives e.g, Healthy Schools Initiative		
Cost Per Modal Shift Pupil		
◆ < £0		10 points
◆ £0 to £200		8 points
◆ £201 to £500, etc.		6 points, etc

C.6 Public transport schemes

Example 1: Three stage process for prioritising bus stop and interchange improvements

Centro, the West Midlands Passenger Transport Executive, has a programme of minor works to improve public transport stops and interchanges, to provide integration between services, a safe environment, passenger information and appropriate levels of facilities accessible to all passengers (£250,000-£5,000,000). To evaluate and prioritise the minor works programme a 3-stage process is followed: (i) coarse sieve of scheme ideas; (ii) business case evaluation; and, (iii) prioritisation.

This 3-stage process has been successfully used to prioritise Centro's minor works programme for four years.

Stage 1: Coarse sieve of scheme ideas

Schemes are identified as one of the following: (i) local area bus improvement, (ii) node or interchange improvement, or (iii) strategic corridor improvement; and scored according to various criteria representing 'need' and 'extent of impact' (i.e. number of individuals benefiting).

Scheme Type	Criteria	
Local area bus improvements (Max score = 20)	Need	◆ Deprivation score for local ward.
	Extent of Impact	◆ Usage score (either load or average score for boardings, alightings, and transfers)*.
Node (interchange) schemes	Need	◆ Type of interchange and location - <i>schemes linked to large interchanges in an LTP centre score more highly than schemes at small bus-bus interchanges.</i>

(Max score = 20)	Extent of Impact	◆ Usage score (<i>average score for boardings, alightings, and transfers</i>)* – if at existing interchange.
Strategic corridor improvements (Max score = 20)	Need	◆ Need and Potential for Mode Shift - % of population with (i) no car (ii) 2+ cars, within 400 metres of the bus route. ◆ Population density (indicator of the level of latent demand in the corridor).
	Extent of Impact	◆ Extent of Impact - Load per km of route*.

* Data obtained from PT model.

In addition, the deliverability of schemes is assessed as high, medium, or low based on advice from officers.

Stage 2: Evaluation of schemes passing the coarse sieve criteria

Those schemes that pass through the coarse sieve are identified as (i) being in locations at which there is demand for public transport improvements, and (ii) with potential to deliver the improvement within the LTP timescale.

These schemes are now subject to a more detailed appraisal, justifying the investment in terms of a 'business case'. The aim is to compare scheme costs with scheme benefits, producing a cost benefit ratio – and therefore the means of assessing the potential of each scheme on an economic basis. Schemes are assessed against 5 NATA objectives, as part of the methodology.

Centro have a range of evaluation and forecasting tools to assist with this process.

Stage 3: Prioritisation of Scheme with Positive Economic Case using a Transport Investment Model (TIM)

Schemes with a positive output, based on the above quantitative and qualitative assessment are carried forward to the capital programme. The Transport Investment Model (TIM) is then used to prioritise schemes for delivery. This prioritises schemes against twelve factors, identified in Centro's Twenty Year Public Transport Strategy (through market research) as barriers to public transport usage and critical factors for success:

- ◆ Frequency, Reliability, Journey time, Comfort, Customer care, Personal security, Direct services, Passenger information, Network coverage, Integration (bus & rail), Accessibility design, Affordability.

Having run all schemes through the model, a list prioritising schemes is produced. This is based upon each output (new trips per annum, cost per trip, percentage reduction in barriers, percentage of new trips diverted from car, and social inclusion rating), and the relative ranking of each output by scheme, relative to all other schemes. Having ranked all of the outputs individually, an average rank is calculated for each scheme across the five results.

For further information, please contact Paul Cobain at Centro: paulcobain@centro.org.uk.

Example 2: Prioritisation scoring matrix for bus corridor improvements

Leicestershire County Council assesses bus corridor schemes against nine criteria:

Table C.6 - Prioritisation scoring matrix for bus corridor improvements

Criteria	High Rating Score 3	Medium Rating Score 2	Low Rating Score 1
Buses per hour, pattern of network, radial, terminating, through route	21 or more buses per hour.	Between 11 and 20 buses.	Up to 10 buses per hour.
Bus priority already in place on route	Fully prioritised.	Some prioritisation.	Prioritisation planned.
Budget availability/cost of scheme	Under £150,000.	Between £150,001 and £250,000.	More than £250,000.
Ability to grow market	High density of population within 400m.	Medium density of population within 400m.	Low density of population within 400m.
Partner bus improvements and contract/commercial	Average age of buses on route 3 years and under and low floor.	Average age of buses between 4 and 6 years and low floor.	Average age of buses 7 years and over and to DDA spec.
Accessibility both physical and geographical	Within 400 metres of hospital, shopping area, school or industrial estate.	Between 401 and 800 metres of hospital, shopping area, school or industrial estate	Over 801 metres of hospital, shopping area, school or industrial estate
Third party funding contributions	Over 30% of costs from third party.	Up to 30% contribution from third party.	No third party contribution.
Stakeholder/customer feedback	Good support from relevant stakeholders.	Medium support from stakeholders.	No support.
Visual Impact	Very obvious improvements eg bus lanes/ separate signal junction.	Some obvious improvement eg shelters/StarTrak.	Few obvious measures e.g. signal priority.

Schemes considered using the above process include schemes included in the prioritised five-year programme of corridor improvements, identified in the Second Local Transport Plan; as well as:

- ◆ schemes proposed through Quality Bus Partnerships, and
- ◆ schemes resulting from problems identified by bus operators as affecting their reliability.

For further information, please contact Joanne Eynon at Leicestershire County Council: JEynon@leics.gov.uk.

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