# Chapter 6 Funding allocation process

## 6.1 Overview

**Introduction**

This chapter sets out Land Transport NZ's funding allocation process. The process has been devised to take account of the *New Zealand transport strategy* (NZTS) and the requirements placed on approved organisations and Land Transport NZ under the LTMA.

The LTMA sets a challenging new framework for Land Transport NZ to follow in allocating funding. It reflects a new multi-modal approach, encourages long-term planning and allows funding flexibility to achieve an integrated, safe, responsive and sustainable land transport system.

**Application**

Land Transport NZ will use this funding allocation process to:

- make any amendments to the current year's NLTP
- consider applications for approval of activities in the current year's NLTP
- develop the forward year's NLTP.

**In this chapter**

This chapter covers the following sections:

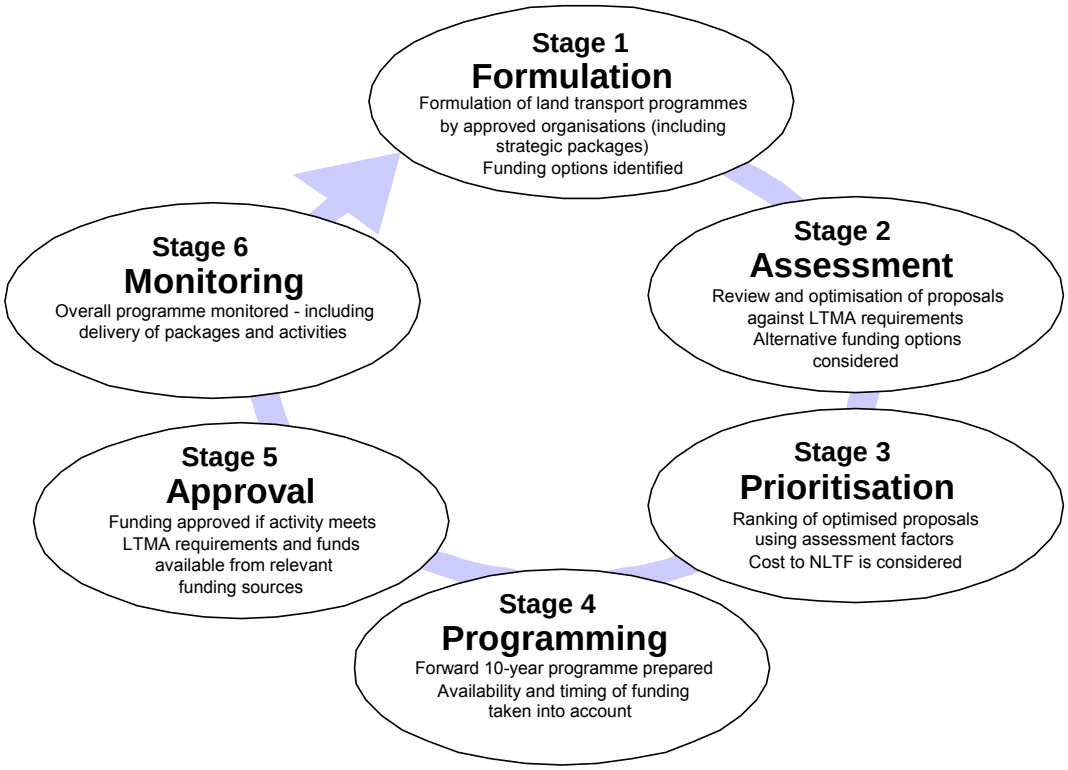
# 6.2 The six stage process

**Introduction**

Land Transport NZ's allocation process for the NLTP comprises six stages. The six stage process allows Land Transport NZ to:

- assist approved organisations and NZ Police understand Land Transport NZ legislated responsibilities when preparing and approving the ALTP and NLTP and approving activities to enable them to formulate proposals that best meet those requirements
- ensure proposals are assessed satisfactorily
- prioritise and programme activities over a 10-year period in accordance with Land Transport NZ's objective and other requirements in the LTMA
- approve activities and activity classes for funding in accordance with LTMA requirements
- report on the contribution that the NLTP has made towards achieving the outcomes of the government as set out in the LTMA.

**Figure 6.1 Land Transport NZ's six-stage allocation process**



# 6.2 The six stage process, continued

**Stage one – formulation of land transport programmes**

Land Transport NZ will assist and advise approved organisations on the formulation of their land transport programmes and assist and advise NZ Police on formulating road policing and associated activities to be included in the ALTP. This advice will seek to encourage:

- proposals that enable the NLTP to make efficient and effective use of funds to improve the integration, safety, sustainability and responsiveness of the land transport system, and to contribute to the objectives of the *New Zealand transport strategy*
- a responsive, collaborative approach between approved organisations, NZ Police, affected communities, Maori and relevant organisations that will reasonably avoid adverse social and environmental effects and take into account relevant regional land transport strategies
- early consideration of funding plans that adopt a more flexible approach to securing funding from alternative sources, such as tolling and development contributions
- the development, where appropriate, of forward-looking, complementary activities in the form of 'packages' (described below).

During the formulation of land transport programmes, Land Transport NZ will welcome:

- applications from approved organisations for funding of local and regional studies to ensure proposed activities are developed in accordance with the above advice
- opportunities for it to assist and advise approved organisations to formulate land transport programmes and activities in a way that best meets those requirements, especially with regard to options and alternatives, and early assessment of funding requirements.

# 6.2 The six stage process, continued

**Packages**

Land Transport NZ encourages approved organisations to develop 'packages' of inter-related and complementary activities, where appropriate. These packages should be clearly related to specific transport problems, and be optimised to make the most efficient and effective use of resources in addressing those problems.

Examples of packages might include a group of activities designed to ensure an integrated multi-modal approach to providing increased transport capacity, or a programme of transport demand management and infrastructure improvement activities.

Approved organisations are encouraged to develop joint packages with other approved organisations and NZ Police where this is appropriate.

Where activities are not formulated in packages, Land Transport NZ will continue to consider individual activities on an equal basis to packages. Road maintenance and passenger transport payments will generally fall into this category. Approved organisations will, however, be encouraged to indicate links between related activities where appropriate.

# 6.2 The six stage process, continued

**Stage two – assessment**

The method used to assess proposed activities will vary depending on the activity class in which the proposed activity belongs (see sections 6.4, 6.6 and 6.7 for more details).

Land Transport NZ will, where appropriate, assess each proposed activity against:

- the ***seriousness and urgency*** of the transport issue or problem addressed taking account of relevant strategies and regional and local priorities
- the ***effectiveness*** of the proposed activity in dealing with the issue or problem
- the ***economic efficiency*** of the proposed activity
- and in exceptional circumstances ***additional factors*** specific to the proposed activity and relevant to determining its overall priority.

Each proposed NLTP activity will be considered against the three standard assessment factors using the criteria listed in section 6.5. The assessment for each factor will reflect the degree of confidence associated with it. An assessment range will be produced where appropriate – for instance, the economic efficiency may be represented by a range of benefit cost ratio (BCR) values.

Ratings will be produced to form an 'assessment profile' for the proposal. For example, a proposal may be rated as High against *seriousness and urgency,* Medium against *effectiveness*, and Medium against *economic efficiency.* This would produce an assessment profile, in this case, of High/Medium/Medium.

Assessment profiles for generic projects are given in table 6.1.

When an approved organisation is seeking funding for a feasibility study or investigation to define the nature of the proposal to address the transport problem or issue, the proposal will only be assessed against the ***seriousness and urgency*** factor.

Any exceptional ***additional factors*** not otherwise captured by the other assessment factors should be described. These will be specific to the activity being assessed and relevant to determining its overall priority in the programme and its eligibility for funding.

# 6.2 The six stage process, continued

**Table 6.1 Assessment profiles and descriptions for generic projects**

| WC | Generic project | | Profile* |
|---|---|---|---|
| | Works included | Works excluded | |
| **321** | **Traffic management – network efficiency** | | **HM_** |
| | • The implementation of traffic messaging, surveillance and control systems to increase the transport capacity and efficiency of networks and routes, including:<br>o ATMS, LATMS including SCATs, VMS, CCT<br>o Ramp metering. | • Miscellaneous upgrades to traffic infrastructure which may be conducted under the traffic services category 222.<br>• Route improvements with carriageway and/or pedestrian improvements plus traffic infrastructure improvements would generally be either a minor improvement project under category 341, or a reconstruction project under work category 324 depending on the details of the project.<br>• Projects costing > $4 million. | |
| **321** | **Effluent disposal facilities** | | **MM_** |
| | • The provision of facilities to receive stock effluent from tanks to obviate discharges of stock effluent to roadways or elsewhere from stock trucks. | • The provision of facilities where there is no reasonable plan for their management.<br>• Projects costing > $4 million. | |
| **322** | **Bridge renewals – structural, seismic strengthening** | | **MM_** |
| | • Renewal of existing bridges when it is more economic to renew than continue maintenance to meet service targets.<br>• Renewal of existing bridges when it is more economic to renew than replace in order to meet current seismic standards.<br>• The existing bridge is a necessary and economic component of the transport network. | • Upgrades to remove weight restrictions.<br>• Projects costing > $4 million.<br>• Bridge renewals instigated to improve service levels. | |
| **323** | **New roads and bridges – safety** | | **HM_** |
| | • The construction of new roads and bridges to address a safety problem, where safety benefits contribute more than 50% to the total benefits. | • Projects costing > $4 million. | |
| **323** | **New roads and bridges – route efficiency** | | **MM_** |
| | • Construction of new roads or bridges to improve route efficiency, where travel time related benefits contribute more than 50% to the total benefits. | • Projects developed without both consideration of TDM measures at the network or regional level, and of options to increase the efficiency of the current route.<br>• Projects costing > $4 million. | |
| **324** | **Route efficiency improvements at intersections or along urban routes** | | **MM_** |
| | • Improvements to the efficiency of existing routes, where travel time related benefits contribute more than 50% to the total benefits. | • Projects developed without both consideration of TDM measures at the network or regional level, and of options (including traffic management) to increase the efficiency of the current route.<br>• Projects costing > $4 million. | |

# 6.2 The six stage process, continued

| WC | Generic project | | Profile* |
|---|---|---|---|
| | Works included | Works excluded | |
| **324** | **Passing lanes** | | **MM_** |
| | • The provision of new or extended passing lanes alongside existing carriageways to reduce congestion, travel delays, driver frustration and increase safety. | • Projects costing > $4 million. | |
| **324** | **Rural realignment (travel time)** | | **MM_** |
| | • The realignment of rural roads to reduce travel time. | • Realignments where travel time related benefits <50% of total monetised benefits.<br>• Projects costing > $4 million. | |
| **324** | **Rural realignments (safety)** | | **MM_** |
| | • The realignment of rural roads to increase safety, where safety is a significant and well established problem of a type that will be significantly resolved by the realignment proposal. | • Realignments where safety related benefits <50% of total monetised benefits.<br>• Projects costing > $4 million. | |
| **324** | **Safety improvements at intersections / along urban routes** | | **HM_** |
| | • The improvement of intersections to enhance safety.<br>• The improvement of traffic management infrastructure, road alignment, crossing points, visibility etc. along an urban route to improve safety. | • Improvements where safety related benefits <50% of total monetised benefits.<br>• Projects costing > $4 million. | |
| **324** | **Safety retro-fitting** | | **HM_** |
| | • The improvement of existing features to increase safety.<br>• The addition of new features to increase safety, eg guardrails. | • Improvements where safety-related benefits <50% of total monetised benefits.<br>• Projects costing > $4 million. | |
| **324** | **Seismic retro-fitting** | | **MM_** |
| | • The improvement of existing features to increase route security.<br>• The addition of new features to increase route security. | • Improvements to structures where alternative routes are generally available.<br>• Projects costing > $4 million. | |
| **324** | **Streetlighting improvements** | | **MM_** |
| | • The improvement of existing streetlighting.<br>• Route treatment, treatment of blackspots.<br>• Installation of new poles and fittings. | • Amenity lighting.<br>• Replacement of existing fittings at the end of their effective life with more efficient types.<br>• Projects costing > $4 million. | |
| **324** | **Pavement smoothing** | | **MM_** |
| | • Operations to provide a smooth ride for the benefit of road users. | • Pavement smoothing arising from pavement renewal works.<br>• Projects costing > $4 million. | |

# 6.2 The six stage process, continued

| WC | Generic project | | Profile* |
|---|---|---|---|
| | Works included | Works excluded | |
| **325** | **Seal extensions** | | **MM_** |
| | • Seal extensions for local user benefit. | • Seal extensions for strategic purposes or in support of particular economic initiatives.<br>• Projects costing > $4 million. | |
| **332** | **Advanced property purchase – safety** | | **MM_** |
| | • Property purchase prior to any design or construction phase being included as approved or on an indicative priority list in an NLTP. | • Property purchase where the primary contribution to the outcomes of the LTMA is not safety and personal security.<br>• Projects costing > $4 million. | |
| **332** | **Advanced property purchase – route efficiency** | | **MM_** |
| | • Property purchase prior to any design or construction phase being included as approved or on an indicative priority list in an NLTP. | • Property purchase where the primary contribution to the outcomes of the LTMA is not economic development.<br>• Projects costing > $4 million. | |
| **332** | **Advanced property purchase – alternative modes** | | **MH_** |
| | • Property purchase prior to any design or construction phase being included as approved or on an indicative priority list in an NLTP. | • Property purchase where the primary purpose of the project is other than the provision of passenger transport, walking or cycling routes.<br>• Projects costing > $4 million. | |
| **451 or 452** | **Purpose-built walking or cycling infrastructure** | | **HM_** |
| | • The construction of purpose built facilities for walking or cycling. | • Walking or cycling facilities retrofitted to existing carriageways, or where there is no reasonable safety separation from vehicle traffic.<br>• Projects costing > $4 million. | |
| **451 or 452** | **Improvements to existing mixed walking or cycling networks** | | **HM_** |
| | • The construction of walking or cycling facilities as a retro-fit to existing carriageways. | • Purpose built walking or cycling facilities with safety separation from vehicles.<br>• Projects costing > $4 million. | |
| **521** | **Passenger transport infrastructure improvements** | | **HH_** |
| | • The development, and implementation of improvements to passenger transport infrastructure that will increase patronage or reduce the decline in patronage by:<br>o improving trip reliability, and travel times in comparison with other vehicles on a similar route<br>o improve access to and perceived security of passenger transport services and facilities where poor access or perceived danger suppress demand. | • Paratransit, PT social services.<br>• Trivial improvements which will not provide a sufficient change in the attractiveness of services to cause any mode shift.<br>• Improvements on routes with no suppressed demand for PT services.<br>• Projects costing > $4 million. | |

*** Note that the assessment profile of a project reflects: the seriousness and urgency of the problem, the effectiveness of the solution and its efficiency. Generic profiles reflect a rating for the seriousness and urgency of the problem and the effectiveness of the solution, but the efficiency must be determined on a project by project basis.**

# 6.2 The six stage process, continued

**Stage two – assessment,** continued

Land Transport NZ will fund approved organisations to investigate and optimise their proposals having regard to the alternatives and options available. The following factors should be considered during the optimisation process:

- the extent to which the proposal contributes in an efficient and effective manner to Land Transport NZ's objective, including social and environmental responsibilities
- the contribution of the proposal to *New Zealand transport strategy* objectives, the *National energy efficiency and conservation strategy,* other relevant national strategies, relevant regional land transport strategies and relevant local strategies such as walking and cycling strategic plans
- the assessments made using the standard three assessment factors and any other relevant factors listed in section 6.4.

Land Transport NZ considers it prudent to review the potential optimisation and assessment of complex projects at critical stages during their formulation and investigation, and welcomes collaborative involvement in such reviews.

**Stage three – prioritisation**

Land Transport NZ will initially make a provisional allocation of the available funds to activity classes. (This provisional allocation will be reviewed during stage 4: Programming of activities – see below).

Land Transport NZ will then review the assessments made in stage 2: Assessment and optimisation of proposed activities, and apply prioritisation processes for proposals within activity classes.

Land Transport NZ will prioritise proposals in a given activity class in accordance with its *Programme and funding manual* and programme preparation guidelines. Where appropriate, prioritisation will be done by comparing proposals using the assessment profiles and additional factors identified in stage 2. Different prioritisation processes will apply to some activity classes – see 6.4 for details.

Projects that are partially funded from supplementary funds will be given an economic efficiency rating that takes account of the cost to the NLTA, as well as the overall benefits and costs from the government (central plus local) and national perspectives.

# 6.2 The six stage process, continued

**Stage four – programming**

Land Transport NZ will then carry out initial programming covering a 10-year period.[8] This will take into account:

- the priority order of proposals established in stage 3
- the affordability of proposals in the context of the modelling of estimated revenue and expenditure for the relevant activity classes over the 10-year period, taking into account N, R and C funds
- the availability and timing of funds from different funding partners, including supplementary funds
- the scope for integrating the timing of proposals with other related proposals to achieve efficient and effective use of resources
- implementation readiness, planning and land purchase requirements and other implementation constraints
- the stages that proposals have reached in terms of investigation, design and construction/implementation, and the factors that might delay (or speed up) implementation
- the expected reliability of cost estimates.

[8] The 10-year forecast is based on Land Transport NZ's financial planning model.

# 6.2 The six stage process, continued

**Supplementary funds**

Supplementary funds will be taken into account in the funding allocation process as set out below.

The use of funds generated from toll revenues (including capital sums borrowed against toll revenues) will be considered by Land Transport NZ on a case-by-case basis, having regard to whom the benefits accrue and other factors.

Other contributions will be dealt with in a way that reflects the circumstances of the project under consideration, and Land Transport NZ will have particular regard to where the benefits accrue.

***In the case where supplementary funds do not affect the scope of the proposed project***, the supplementary funds will normally be treated as local authority revenue. The contribution can then be used to assist with the cost of the local contribution towards the cost of the project.

***In a case where supplementary funds lead to a change of scope of the project*** (for example where a road scheme is significantly modified to enhance the value of a development), the supplementary funds will normally be treated as a third party contribution to the overall cost of the project.

***In a case where betterment is required under Public Works Act 1981 or the Local Government Act 1974*** in relation to the purchase of land by a local authority as part of road scheme, the amount of any betterment will normally be treated as a third party contribution to the overall cost of the project.

# 6.2 The six stage process, continued

**Allocation of funds**

Land Transport NZ uses three steps to allocate available funds; Land Transport NZ will:

***Step 1:*** first allocate nationally distributed funds (N funds) on the basis of national priority order within each activity class.

***Step 2:*** then allocate funds to activities that are not judged to be of sufficient national priority to be funded from N, but are of sufficient regional priority to be funded from the available R for each region.[9]

***Step 3***: then allocate the Crown appropriations (C funds) on the basis of the government's purpose for the funds and the priorities for the region.

In reaching decisions in steps 2 and 3, Land Transport NZ will take into account the priorities for the use of R and C funds stated by representatives of approved organisations in the region concerned. Refer to section 5.8.

Land Transport NZ will then review the overall conformity of the draft NLTP with Land Transport NZ's objective, and the requirements in section 19 of the LTMA including the contribution the programme will make to the *New Zealand transport strategy* objectives.

As a result of this review, Land Transport NZ will reassess the initial allocations to activity classes made at stage 3 and reallocate funds between activity classes, and then if necessary repeat the prioritisation and programming stages. Further iterations of stages 3 and 4 will be carried out until Land Transport NZ is satisfied the NLTP is optimised within the financial and legal constraints.

[9] R funds will be allowed to go into deficit for individual regions in any one year, provided there is assurance that R funds will be in balance for each region over the 10-year period.

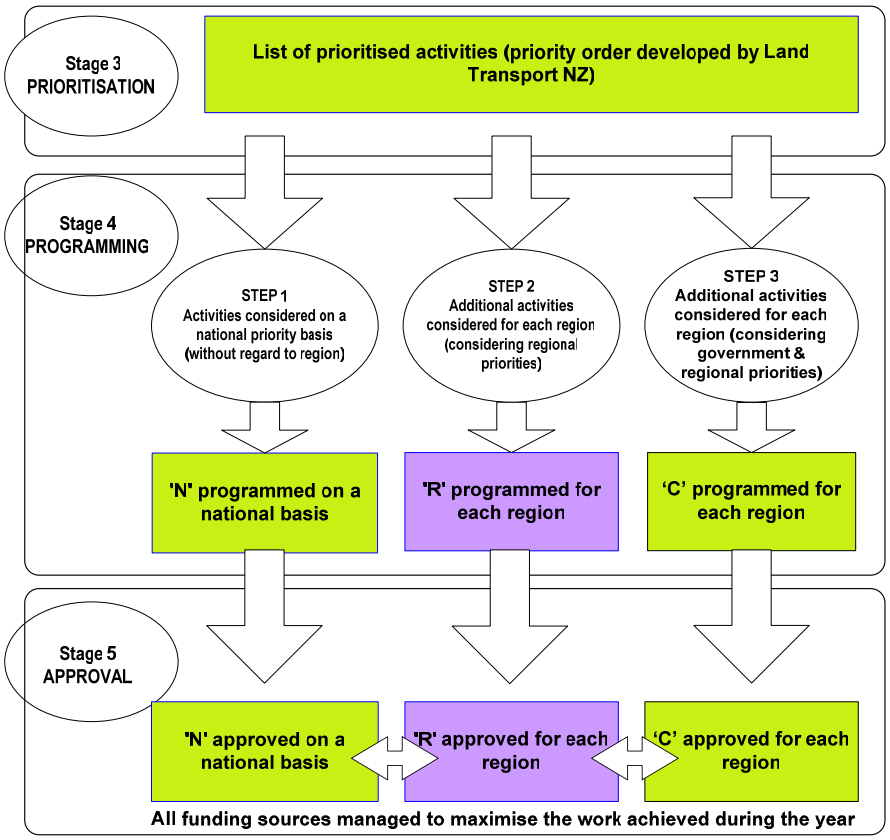
# 6.2 The six stage process, continued

**Stage five – approval of activities**

Before approving the funding of an activity[10] Land Transport NZ will verify the assessments carried out at stage 2 and ensure section 20 and other requirements of the LTMA are met (see figure 5.1 for details).

Activities approved for funding will generally follow the allocations from N, R and C funds determined at the programming stage. However, some projects will be programmed, and listed in the NLTP, prior to detailed funding applications being submitted. Therefore final allocations from N and R funds to specific projects cannot be confirmed until it is known that a project will be ready to start during the year and its final costs have been estimated. This could lead, during the year, to some changes in allocations from N, R and C funds as shown in figure 6.2.

**Figure 6.2 Programming and approval of N, R and C capital projects**




[10] In the case of infrastructure improvement projects Land Transport NZ gives separate approvals at the investigation, design and construction stages.

Activities to be delivered by NZ Police are approved by the Minister of Transport in the Authority's land transport programme.

# 6.2 The six stage process, continued

**Stage five – approval of activities,** continued

Finally, before giving funding approval to an approved organisation, Land Transport NZ will carry out other checks covering:

- availability of funds from local government and the private sector (where appropriate)
- relevant design standards and statutory requirements
- contract procurement methodology (where required)
- project governance arrangements (where required).

Where funding of an activity is not approved, Land Transport NZ will communicate its decision and the reasons for it to the relevant approved organisation.

**Stage six – monitoring and review**

Land Transport NZ will monitor the implementation of the NLTP through:

- assisting, advising and co-ordinating the development of performance monitoring tools for approved organisations
- performance monitoring of selected elements of the transport system
- monitoring the effectiveness of the overall programme at the strategic outcome level
- auditing packages of integrated proposals where appropriate
- monitoring of individual activities within the NLTP.

As a result of its monitoring process, Land Transport NZ will assist and advise approved organisations to review their land transport programmes to make them more effective in future years.

Monitoring of NZ Police land transport activities is carried out by the Ministry of Transport on behalf of the Minister of Transport.

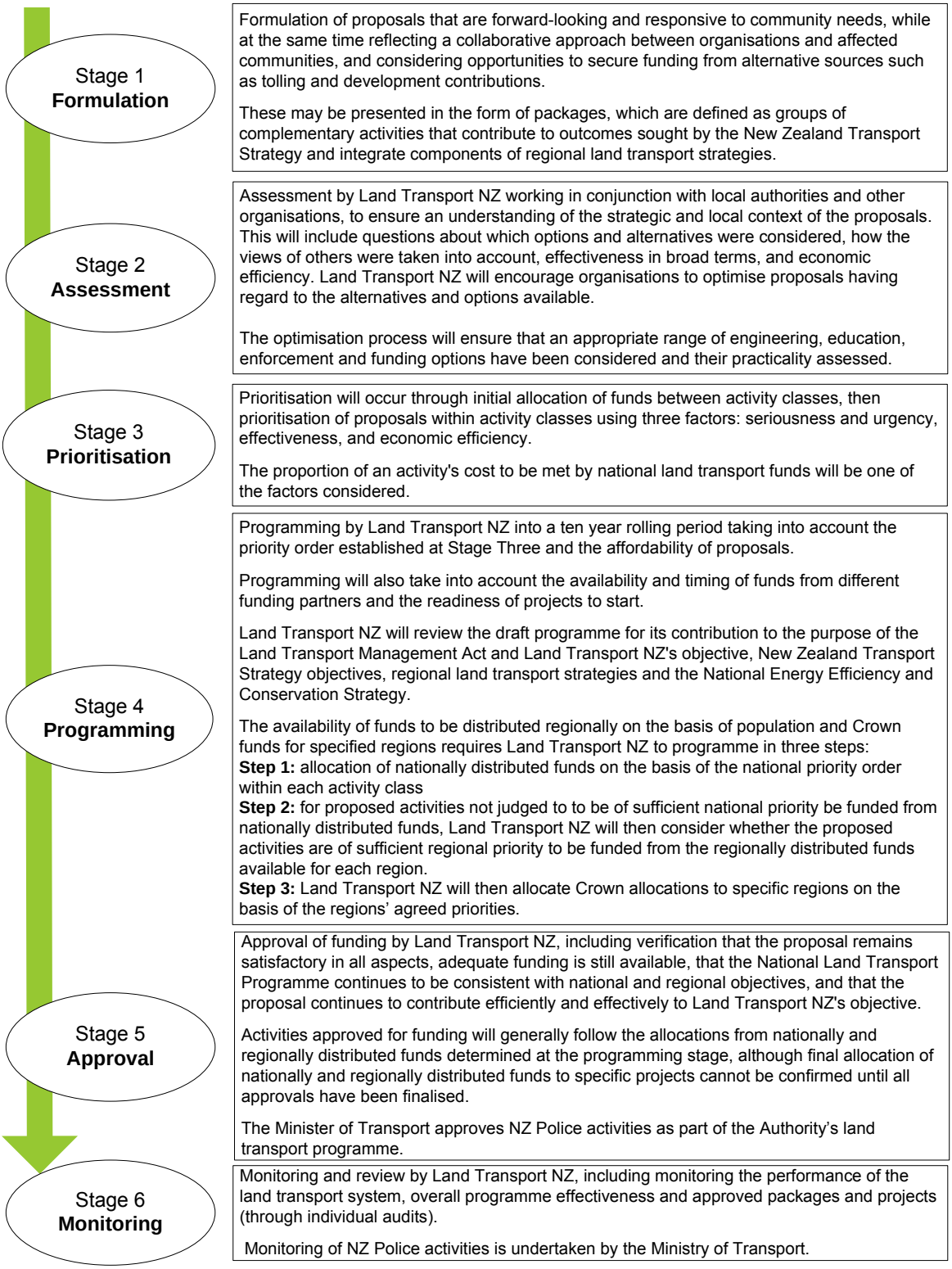
**Summary**

The six stages of the allocation process outlined in this document are intended to assist approved organisations and NZ Police in preparing activities in a way that best meets the requirements of the LTMA. Land Transport NZ maintains a flexible and open approach to the development of this six stage process. The criteria that are ultimately determinative are outlined in figure 5.1, and approved organisations should refer to these requirements when appropriate.

A summary of the six stage allocation process is shown in figure 6.3.

# 6.2 The six stage process, continued

**Figure 6.3 Land Transport NZ funding allocation process**



# 6.3 Profiling of activities

**Introduction**

This section provides information on the use of profiles for improvement projects and other activities.

**Assessment profiles**

The following text outlines how Land Transport NZ will treat activities in compiling the NLTP and how they will be treated throughout each year.

When compiling the NLTP, Land Transport NZ develops an assessment profile for all activities, as outlined in section 6.*2*. Profiling involves scoring the activity across each of the three factors: *seriousness and urgency* of the problem; *effectiveness* of the proposed solution; and *economic efficiency* of the proposed solution. Therefore, an assessment profile of HMM, means the activity was scored high for *seriousness and urgency*, medium for *effectiveness* and medium for *economic efficiency*. These assessment profiles form the basis of activity prioritisation.

On the basis of funds allocated to activity classes, threshold assessment profiles may be established for different work categories. Those category 2 activities that, on the basis of information supplied, have assessment profiles at or above the indicative N funding threshold will be listed as *indicative priority activities*. Land Transport NZ anticipates these activities will proceed to funding approval once preparatory issues, such as resource consents, property purchase and completion of design, have been completed (ie, the activity has achieved category 1 status) and provided the original assessment profile continues to be validated by subsequent information.

Those activities that, on the basis of information supplied, have assessment profiles below the N funding threshold (or there was insufficient information to complete the assessment profile) are listed as *reserve activities*. These activities could proceed to funding approval only if the characteristics of the activity change such that its assessment profile meets the threshold for its work category, they are funded from R or C or Land Transport NZ's ability to fund these activities changes.

**Note:** Land Transport NZ will review its funding threshold assessment profiles each year as it develops its NLTP using its funding allocation process.

**Note:** Land Transport NZ may use different thresholds for activities funded using regionally distributed funds, or Crown appropriated funds than those funded using nationally distributed funds.

# 6.3 Profiling of activities, continued

**Assessment profiles,** continued

For the majority of local road improvement work categories, the threshold assessment profile for including activities as indicative priority (category 2) projects in the NLTP has been either MMH or HMM. Effectively, this means that, for generic activities with medium *seriousness and urgency* and *effectiveness*, only those with relatively high *economic efficiency* would be funded. However, activities that addressed a very serious or urgent problem may have had lower economic efficiency and still have been approved for funding.

Consequently for an activity on the reserve list to proceed to funding approval, it needs to demonstrate that either the activity's *economic efficiency* has improved to meet the threshold or there are features of the activity that mean it should rate more highly than the generic assessment profile on the factors for *seriousness and urgency* or *effectiveness*.

# 6.4 Assessment of NLTP activities by work category

**Introduction**

This section provides details of the assessment and prioritisation processes that will be followed for each activity class (excluding NZ Police activities, which are covered in section 6.6) when preparing the NLTP.

**Assessment of packages**

Packages of projects will be assessed as a whole. Additionally, component projects will be assessed individually to determine whether they make a sufficient contribution to justify their inclusion in the package and funding approval.

**Maintenance and operation of roads, and renewal of roads**

| | |
|---|---|
| **Structural maintenance** | (work categories: 111 to 114) |
| **Corridor maintenance** | (work categories: 121 to 124) |
| **Other maintenance activities** | (work categories: 131 to 161) |
| **Structural renewals** | (work categories: 211 to 215) |
| **Corridor renewals** | (work categories: 221 to 223) |

Approved organisations proposed maintenance and renewal programmes will be assessed by Land Transport NZ as described in section 5.4: *Road maintenance and renewal programme*.

There are many factors that can lead to changes in road maintenance and renewal requirements. Land Transport NZ discuss these issues as part of the regular liaison with approved organisations to review and optimise programmes and also during the annual negotiation process – refer to section 5.4.

continued

# 6.4 Assessment of NLTP activities by work category, continued

**Maintenance and operation of roads, and renewal of roads,** continued

The assessment process for road maintenance and renewals focuses on:

- the robustness of an approved organisation's information systems, predictive modelling, optimisation analysis, risk assessment and asset/activity management strategies
- trends in key network performance measures about the condition of the road network
- variation to national and regional level of service targets relating to road user satisfaction, safety and asset preservation
- the balance between routine maintenance, renewal and capital improvement activities to achieve lowest lifecycle costs
- benchmarking of recycle times for periodic maintenance activities (eg, re-gravelling) and renewals (eg, re-surfacing and pavement rehabilitation)
- explanation of variances from previous requests
- quality assurance processes, including the field verification of the need for maintenance treatments and technical audits
- potential effectiveness of the programme in contributing to NZTS objectives
- innovation in sustainable practices when selecting materials, maintenance methods, etc
- improvements in network management practices.

# 6.4 Assessment of NLTP activities by work category, continued

**Improvement of roads**

Activities in these activity classes, except for planning activities, will be assessed against the three standard assessment factors. However, many of the activities are expected to be generic activities for which the assessment profiles in table 6.1 apply. The economic efficiency factor will be determined in accordance with Land Transport NZ's *Economic evaluation manual*, *volume 1*.

**Road studies** (work category: 311)

Studies in this work category will be assessed against the *seriousness and urgency* factor only. Land Transport NZ will review the scope, cost and terms of reference for road studies prior to confirmation of funding.

**Traffic management** (work category: 321)

Proposals within this work category should be developed and assessed as part of a package for new improvements/initiatives, especially with respect to strategic safety proposals, urban traffic control and integrated pedestrian networks, traffic demand management proposals, and speed management. Projects that seek to manage demand, manage speeds and improve or maintain levels of service will be particularly encouraged.

**Bridge renewals** (work category: 322)

**New roads and bridges** (work category: 323)

**Road reconstruction** (work category: 324)

**Seal extension** (work category: 325)

**Property** (work categories: 331, 332)

Major new projects within these work categories should be developed as part of a package for new improvements/initiatives, especially with respect to integrated networks, safe and sustainable modes and corridor initiatives. These are expected to be complex projects – refer to section 5.6.

**Minor improvements** (work category: 341)

Each approved organisation is allocated eight percent of the overall maintenance budget for expenditure on minor improvements. The cost of individual projects is limited to a maximum of $150,000. All projects require the specific approval of Land Transport NZ regional staff. Details of the projects, including an economic assessment, must be held by the approved organisation.

Minor improvements should be part of an overall and effective network strategy and are subject to audit by Land Transport NZ.

# 6.4 Assessment of NLTP activities by work category, continued

**Use of the land transport system**

**Regional studies** (work category: 411)

**System use studies** (work category: 412)

Regional studies and system use studies will be assessed against the *seriousness and urgency* factor only. Land Transport NZ will review the scope, cost and terms of reference for the study prior to confirmation of funding.

**Community coordination** (work category 431)

Requests for funding under this work category will be assessed against the objectives specified in the work category description in section 2.6. Details of the activities carried out under this work category must be held by the approved organisation for audit purposes.

**Travel demand management** (work category: 421)

Activities should preferably be developed and assessed as part of a package of initiatives addressing safe and sustainable use of land transport.

The assessment will use the three standard assessment factors. The economic efficiency factor will be determined in accordance with Land Transport NZ's *Economic evaluation manual, volume 2.*

**Community programmes** (work category: 432)

**Community advertising** (work category: 433)

Activities within these work categories should preferably be developed and assessed as part of a package of initiatives addressing safe and sustainable use of land transport.

All projects will be assessed using the three standard assessment factors. Formal evaluation of economic efficiency will not normally be required for projects with a total cost of less than $150,000, but the details need to be agreed with Land Transport NZ before commitments are made. For other projects assessment should be in accordance with Land Transport NZ's *Economic evaluation manual, volume 2.* However, until evaluation methods are developed for community activities not yet covered by the *Economic evaluation manual, volume 2,* assessment of proposals will follow the methods used in 2005/06.

continued

# 6.4 Assessment of NLTP activities by work category, continued

**Use of the land transport system,** continued

**Rail freight operations** (work category: 441)

**Sea freight operations** (work category: 442)

Projects and packages in these work categories will be assessed against the three standard assessment factors. The economic efficiency factor will be determined in accordance with Land Transport NZ's *Economic evaluation manual, volume 2*.

The assessment shall be staged as follows with the assessment reported to Land Transport NZ at the end of each stage:

- Stage 1 – Feasibility report with a rough order of costs and preliminary assessment profile including BCR calculation.
- Stage 2 – Further investigation to identify and evaluate the merits of each option. The report at the end of this stage shall include a list of alternatives and options assessed together with a preliminary assessed cost and updated assessment profile, including BCR, for the preferred option.

Projects within these work categories are particularly suitable for application to the package approach for new improvements/initiatives, especially with respect to mode change initiatives, inter-modal freight facilities, etc.

**Pedestrian facilities** (work categories: 451)

**Cycle facilities** (work categories: 452)

Projects within these work categories should be assessed as part of a package of initiatives addressing safe and sustainable use of the land transport system, including mode change. A walking and cycling package is part of this, and is defined as a group of inter-related and complementary activities that contribute to the objectives and goals of an approved organisation's walking and cycling strategic plan.

The assessment will use the three standard assessment factors. However, most of the activities are expected to be generic activities for which the assessment profiles in table 6.1 apply. The economic efficiency factor will be determined in accordance with Land Transport NZ's *Economic evaluation manual, volume 2*.

# 6.4 Assessment of NLTP activities by work category, continued

**Passenger transport**

**Bus services** (work category: 511)

**Ferry services** (work category: 512)

**Bus and ferry concession fares** (work category: 513)

**Bus and ferry facilities maintenance & operations** (work category: 514)

**Passenger rail services** (work category: 515)

**Passenger rail facilities maintenance & operations** (work category: 516)

**Total mobility** (work categories: 517, 518, 519, 521)

**Passenger transport service management** (work category: 520)

Assessment of this standard set of passenger transport activities involves annually:

(c) comparing the quantity for each activity with the updated passenger transport strategy (and other relevant strategies)

(d) comparing the cost with previous forecasts

(e) explaining variances from prior quantity and cost forecasts

(f) reviewing the basis for cost escalation

(g) reviewing passenger transport performance compared with goals (or targets if available) for outcomes and intermediate outcomes and recommend adjustments necessary to meet the goals (and targets).

Funding requests for these work categories above the current funding level are grouped into one of four categories for purposes of the type of assessment required to support the funding request. The three categories for passenger transport activities are:

(a) cost increases/adjustments for current service levels – eg, wage rises, increases in operating costs (fuel, etc), increases from re-tendered contracts

(b) replacement/upgrade of existing equipment – eg, replacement buses, seat replacement

(c) new or improved services – eg, increased frequency, improved comfort, access or security.

continued

# 6.4 Assessment of NLTP activities by work category, continued

**Passenger transport,** continued

Assessment of category (a) only involves consideration of the reasons for the cost adjustments, because activity levels are not changed.

A similar assessment approach is used for category (b) activities, because these are essentially to maintain current levels of service. However, in general, such replacements should be funded from accumulated depreciation, rather than as a capital cost.

Category (c) is assessed using the standard assessment factors.

From time to time special reviews are commissioned of passenger transport, productivity, effectiveness, etc of the standard set of activities, and/or policies, legislation, facilities, etc, likely to influence passenger transport service and cost.

**Bus and ferry infrastructure** (work category: 521)

**Passenger rail infrastructure** (work category: 522)

**Passenger transport road improvements** (work category: 523)

Projects within these work categories should, where appropriate, be part of a package of new improvements/initiatives, especially with respect to public transport service level and priority, associated traffic management, integration with walking and cycling networks, interchanges and real time information systems.

The projects and packages will be assessed against the three standard assessment factors. The economic efficiency factor will be determined in accordance with Land Transport NZ's *Economic evaluation manual, volume 2*.

# 6.4 Assessment of NLTP activities by work category, continued

| | | |
|---|---|---|
| **Administration** | **State highway administration** | (work category: 611) |
| | **Regional land transport planning** | (work category: 631) |
| | **Passenger transport administration** | (work category: 632) |
| | **Total mobility administration** | (work category: 633) |
| | Assessment of funding requests for anything above current funding levels for these work categories involves consideration of the reasons for the cost adjustments, eg, wage rate changes. If activity levels are changed, then an explanation and justification of the change is required. | |

# 6.5 Assessment factors

**Introduction**

This section describes the composition of the assessment factors used in the funding allocation process. The factors are summarised in the following table.

| Assessment factor | | Criteria | Rating |
|---|---|---|---|
| Seriousness and urgency | Focus on the issue or problem | What is the main issue or problem in relation to the LTMA and NZTS that needs to be addressed?<br>Is the issue or problem causing undesirable trends in the performance of the land transport system?<br>How significant is the issue or problem?<br>How urgent is the issue or problem?<br>What is the level of confidence that the issue or problem is serious and urgent? | High, medium or low |
| Effectiveness | Focus on the effectiveness of the proposed solution | Will the solution do the job it is intended to do, and will it be effective over the long term?<br>Have alternatives, options and complementary measures been assessed?<br>Does the proposal represent an optimised activity or package of activities?<br>To what degree does the proposal contribute to the requirements of the objectives of the LTMA and the NZTS?<br>Have adverse effects been taken into account in assessing effectiveness?<br>What is the level of confidence that the proposal will be effective in doing the job it is intended to do? | High, medium or low |
| Economic efficiency | Focus on the economic efficiency of the proposed solution | Is the proposal efficient in its use of scarce resources in terms of the costs and benefits?<br>How sustainable are the benefits in the longer term?<br>Does the proposal represent value for money in terms of the overall monetised and non-monetised benefits?<br>What is the level of confidence about the estimated costs and benefits? | High, medium or low |

| | |
|---|---|
| Additional factors | Land Transport NZ will consider any exceptional additional factors not otherwise captured by the other assessment factors. These will be specific to the activity being assessed and relevant to determining its overall priority in the programme. |

# 6.5 Assessment factors, continued

**Assessment of proposals**

The tables below list the categories of information sought from project submitters and considered when establishing profiles and priorities for allocation of land transport funds.

## *Readiness of proposal for assessment*

| **Quality of analysis** | |
|---|---|
| Peer review outcome | |
| Variations from standard procedures | |
| Road safety audit | |
| Summary | |
| **Procedural requirements** | |
| Needs of transport disadvantaged, s35 | |
| General consultation of affected and interested parties, s15 | |
| Consultation of affected Iwi or Hapu, s18 | |
| Consideration of options and alternatives, s20(3)(d) | |
| Summary | |
| **Stage of proposal development** | |
| Implementation constraints | |
| Designations, consents and approvals | |
| Environmental, land and property, engineering, services or earthworks | |
| Purchase/contracting risks | |
| Summary | |
| **Readiness of proposal for assessment** | |
| Conclusion and recommendation | |

# 6.5 Assessment factors, continued

## *Seriousness and urgency*

| **Strategic context** | |
|---|---|
| Relevant objectives in LTMA and NZTS | |
| Relevant trends in the performance of the land transport system | |
| Relevant sections of RLTS identifying issues and problems | |
| Relevant regional outcomes | |
| Relevant local outcomes | |
| Any additional information? | |
| **Scope of problem being addressed** | |
| Predominant type of problem | |
| Background to the project | |
| Scale of problem | |
| **Priority** | |
| Project priority of the promoting organisation | |
| Reason for priority | |
| What are the consequences of delaying this proposal? | |

## *Effectiveness*

| **Optimisation** | |
|---|---|
| Background to the project | |
| Collaboration with stakeholders | |
| Relevant package if any | |
| Outcomes of alternatives considered | |
| Outcomes of options assessed | |
| Upstream and downstream effects | |
| Consultation carried out | |

| **Implementation risks** | |
|---|---|
| Date of any risk assessment undertaken | |
| Risks and mitigation measures | |
| Risk rating | |
| **Performance risks** | |
| Performance risks and mitigation measures | |
| Benefit or performance risk rating | H/M/L |

# 6.5 Assessment factors, continued

| **Contribution to purpose of Act** | | | |
|---|---|---|---|
| | Comment | Impact | Confidence |
| **Integration** | | | |
| Improves transport connectivity of users | | H/M/L | H/M/L |
| Compatibility with Urban Design Protocol | | H/M/L | H/M/L |
| Summary | | H/M/L | H/M/L |
| **Sustainability** | | | |
| Improves energy efficient | | H/M/L | H/M/L |
| Minimises undesirable emissions and wastes | | H/M/L | H/M/L |
| Encourages sustainable travel patterns | | H/M/L | H/M/L |
| Improves management of transport network | | H/M/L | H/M/L |
| Able to meet needs long term | | H/M/L | H/M/L |
| Able to be provided long term | | H/M/L | H/M/L |
| Summary | | | |
| **Safety** | | | |
| Improves safety and security | | H/M/L | H/M/L |
| **Responsiveness** | | | |
| Increases reliability and transport efficiency | | H/M/L | H/M/L |

# 6.5 Assessment factors, continued

| **Contribution to objectives of Act** | | | |
|---|---|---|---|
| **Economic development** | | | |
| | Comment | Effectiveness | Confidence |
| Supports sustainable land use policies | | H/M/L | H/M/L |
| Improves travel time reliability | | H/M/L | H/M/L |
| Assista freight transport | | H/M/L | H/M/L |
| Improves energy efficiency | | H/M/L | H/M/L |
| Sources of evidence | | H/M/L | H/M/L |
| Summary | | H/M/L | H/M/L |

| **Safety and personal security** | | | |
|---|---|---|---|
| | Description | Effectiveness | Confidence |
| Reduces fatalities | | H/M/L | H/M/L |
| Reduces crashes | | H/M/L | H/M/L |
| Improves personal security | | H/M/L | H/M/L |
| Protects vulnerable users | | H/M/L | H/M/L |
| Sources of evidence | | H/M/L | H/M/L |
| Summary | | H/M/L | H/M/L |

| **Access and mobility** | | | |
|---|---|---|---|
| | Description | Effectiveness | Confidence |
| Improves access to transport system | | H/M/L | H/M/L |
| Facilitates transport interchange | | H/M/L | H/M/L |
| Reduces severance | | H/M/L | H/M/L |
| Sources of evidence | | H/M/L | H/M/L |
| Summary | | H/M/L | H/M/L |

| **Public health** | | | |
|---|---|---|---|
| | Description | Effectiveness | Confidence |
| Encourages walking | | H/M/L | H/M/L |
| Encourages cycling | | H/M/L | H/M/L |
| Other effects | | H/M/L | H/M/L |
| Sources of evidence | | H/M/L | H/M/L |
| Summary | | H/M/L | H/M/L |

# 6.5 Assessment factors, continued

| **Environmental sustainability** | | | |
|---|---|---|---|
| Minimises or mitigates impacts on: | Description | Effectiveness | Confidence |
| Landscape / townscape | | H/M/L | H/M/L |
| Heritage of historic resources | | H/M/L | H/M/L |
| Biodiversity | | H/M/L | H/M/L |
| Noise and vibration | | H/M/L | H/M/L |
| Air quality | | H/M/L | H/M/L |
| Greenhouse gases | | H/M/L | H/M/L |
| Water environment | | H/M/L | H/M/L |
| Effect on non-renewable resources | | H/M/L | H/M/L |
| Sources of evidence | | H/M/L | H/M/L |
| Summary | | H/M/L | H/M/L |

| **Other impacts** | | | |
|---|---|---|---|
| | Description | Effectiveness | Confidence |
| Summary | | H/M/L | H/M/L |

## *Economic efficiency*

| **Monetised impacts** | |
|---|---|
| Summary | Expected total cost:<br>Cost to the National Land Transport Account:<br>Monetised benefits:<br>National benefit cost ratio, $BCR_N$:<br>Government benefit cost ratio, $BCR_G$: |

| **Funding package** | |
|---|---|
| Summary | |

| **Non-monetised impacts** | |
|---|---|
| Non-monetised impact | |
| Quantification | |
| Immediacy | |
| Summary | |
| Sources of evidence | |

# 6.6 Assessment and allocation for NZ Police activities

**Introduction**

This section describes the assessment and allocation methodologies for NZ Police land transport activities.

**NZ Police activities**

NZ Police land transport activities included in the ALTP are:

(a) speed control

(b) drinking or drugged driver control

(c) restraint device control

(d) visible road safety and general enforcement

(e) commercial vehicle investigation and road user charges enforcement

(f) crash attendance and investigation

(g) traffic management

(h) resolutions

(i) police community services

(j) school road safety education.

Road policing and associated activities are focused by *Road safety action plans* developed at the local level in a collaborative process led by territorial authorities and involving Land Transport New Zealand, NZ Police, Transit NZ, regional authorities and other representatives. Land Transport NZ encourages road controlling authorities to view road policing as a service that needs to be fully integrated with other interventions and local needs.

# 6.6 Assessment and allocation for NZ Police activities, continued

**Assessment of NZ Police activities**

Assessment of NZ Police activities involves annually:

(a) comparing the quantity for each activity with updated road safety strategy (and other relevant strategies)

(b) comparing the cost with previous forecasts

(c) explaining variances from prior quantity and cost forecasts

(d) reviewing the basis for cost escalation

(e) reviewing road accident performance compared with goals (or targets if available) for outcomes and intermediate outcomes (by road type, road user type and region or local area if available) and recommend adjustments necessary to meet goals (and targets)

(f) taking account of regional land transport strategies and road safety/road policing planning (and other planning / proposals as appropriate)

(g) optimising allocation of strategic road policing between territorial authorities.

From time to time special reviews are commissioned of NZ Police processes, productivity, effectiveness, etc of the standard set of activities, and/or policies, legislation, road works, etc likely to influence road safety.

Funding requests for NZ Police activities above the current levels are grouped into:

(a) cost increases/adjustments – eg, police wage round, adjustment to allocation for crash attendance and investigation

(b) replacement/upgrade of existing equipment – eg, digital cameras, booze bus support and replacement, tyre deflation device replacement

(c) new technology – eg, automated vehicle location and GPS, automatic number plate recognition, mobile access to Police databases, portable saliva test kits for drug testing, electronic ticketing

(d) new or increased activity – eg, urban arterial support, rural patrols, school road safety education, environmental protection.

continued

# 6.6 Assessment and allocation for NZ Police activities, continued

**Assessment of NZ Police activities,** continued

Assessment of criteria (a) requests only involves consideration of the reasons for the cost adjustments, because activity levels are not changing.

A similar assessment approach is used for criteria (b) requests, because these are essentially to maintain current activities. Where possible such increases should be funded from accumulated depreciation. However, it may be found that accumulated depreciation is insufficient and a capital injection is required. In some circumstances it may be appropriate that a criteria (b) request is assessed using the standard three assessment factors in accordance with section 6.5, this will be determined on a case by case basis.

Criteria (c) and (d) requests are assessed using the standard three assessment factors in accordance with section 6.5. Generic assessment profiles have not been completed for these activities because the activities tend to be unique.

# 6.6 Assessment and allocation for NZ Police activities, continued

**Allocation of funding for road policing**

Allocation of road policing resources occurs every year when the ALTP is prepared. The ALTP details the amount of NZ Police resources to be spent on strategic road policing and other operational and management road policing activities nationally.

In order to optimise the level of safety gains achievable within allocation and budget constraints, road policing resources are allocated to the areas where the resources are required and where most safety benefits will be achieved.

The road policing resource allocation model[11] is used to optimise the allocation of road policing resources between the 74 territorial authorities for:

- speed control
- drinking or drugged driving control
- restraint use control
- other road trauma control (visible road safety enforcement).

The model optimises the overall reduction in risk using the marginal BCR for each road policing activity. Differences in road length and traffic volume are taken into account.

The allocation model works on the basis of balancing enforcement options and costs against road safety outcomes. The important concept, as shown below, is 'social cost'.

| | | | | |
|---|---|---|---|---|
| Total risk | **=** | [risk by road type without enforcement] | **-** | [impact of enforcement] |

Changes in road policing activity levels in an area have implications for training and assignment of NZ Police resources. This needs to be taken into account when considering any changes to road policing outputs.

Like road maintenance, the application of road policing activities within an area is determined by detailed assessment of risk locations, times, etc. Each territorial authority (or cluster) annually prepares for this purpose – see section 1.5.

[11] A Road Safety Resource Allocation Model – Working Paper 1, Land Transport Safety Authority, November 1996.

# 6.7 Assessment and allocation for research, education and training

**Introduction**

This section describes the assessment and allocation methodologies for research, education and training activities.

**Research strategy**

Land Transport NZ's research strategy establishes the direction, guiding principles and management arrangements for land transport research funded from the NLTA.

The guiding principles are that research proposals:

- are responsive to the evolving transport environment and future user needs
- contribute to Land Transport NZ's outcomes, objectives and research definition
- align with one or more key research topic areas and Land Transport NZ's research priorities
- qualify against the assessment criteria.

Land Transport NZ has established the following key topic areas for research:

- **Asset management –** to improve the performance of the land transport asset.
- **Natural hazard risk management –** to reduce the impact of a natural hazard.
- **Safety and personal security –** to improve public safety and security through improvements to the land transport environment/architecture.
- **Environmental effects –** to mitigate the adverse impacts of land transport.
- **Travel behaviour –** to provide a better understanding of travel behaviour and user preferences.
- **Traffic management –** to more efficiently and safely manage the movement of vehicles.
- **Sustainable land transport –** to improve the sustainability of the land transport system.

# 6.7 Assessment and allocation for research, education and training, continued

**Research Reference Group**

Research proposals are assessed by the Research Reference Group, which includes representatives from key industry groups including local road controlling authorities, Transit, regional councils, contractors, consultants, road users and research organisations.

**Research proposals**

The type of research proposals that Land Transport NZ prefers meet one or more of the following criteria:

- have clear user support and involvement
- use co-funding/a collaborative approach, where appropriate
- apply or build on overseas experiences
- are applied research with practical application
- improve or maintain the transport system
- evaluate the effects of transport interventions
- develop performance measurement and benchmark techniques
- develop more efficient roading solutions
- minimise system costs
- address information transfer and implementation.

Research proposals go through a two stage process:

1. Expression of Interest (EOI) – are received and prioritised by the Research Reference Group according to the research strategy. Researchers whose expressions of interest were successful are then invited to submit full proposals for the second stage.

2. Request for proposal (RFP) – where researchers were successful in the previous stage, they are asked to submit a full proposal. This is evaluated by industry users and experts in the topic area. The evaluation results are collated and presented to the Research Reference Group, which considers all the evaluation recommendations. The Research Reference Group makes its funding recommendations to the Land Transport NZ Board. The annual programme is approved at the May Board meeting each year.

**Allocation of funding for research**

Land Transport NZ translates its analysis of priority areas into indicative funding allocations for each of the seven key topic areas. In doing so it considers issues such as what is New Zealand's capacity to deliver research in emerging areas. Research proposals compete for this funding according to the assessment criteria given below.

# 6.7 Assessment and allocation for research, education and training, continued

**Research assessment criteria**

The information sought from submitters and considered by Land Transport NZ when assessing and allocating researchfunding and an explanation of the assessment criteria is provided in appendix 4 of the *Land Transport NZ Research Strategy*.

**National education and training programme**

Education and training activities include:

a) provision of information and statistics

b) publications

c) advertising

d) school road safety education

e) industry education and training.

Activities in the education and training activity class are activities managed by Land Transport NZ.

Education and training activities managed and delivered at the local level are included in the NLTP under work categories such as community programmes change rather than in the research, education and training activity class.

Advice and assistance to approved organisations is part of the programme management activity class rather than the research, education and training activity class.

**Assessment of national education and training activities**

National education and training activities will be assessed in a similar manner to that described for road policing in section 6.6.

Some education and training activities, particularly advertising, support road policing and are a component of most travel demand management programmes. In such cases the package will be assessed rather than the individual activities.

**Allocation of funding for national education and training**

Land Transport NZ is developing methodology for allocating funding to national education and training activities.