

Part G Assessment methods and peer review

Overview

Introduction

This part covers the NZTA's detailed assessment methods for activities and combinations of activities.

It also covers the NZTA's approach to peer reviews.

It does not cover assessment methods for:

- completed strategies and plans (see *Chapter B4 Sub-regional strategies and plans*)
- the regional land transport programme (RLTP) itself (see *Chapter C12 Preparing a regional land transport programme*)
- the National Land Transport Programme (NLTP) itself (see *Chapter D3 Preparing the National Land Transport Programme*).

Purpose

The purpose of this part is to present:

- the methods used by the NZTA to assess activities and combinations of activities for the purpose of including them in the NLTP and approving them for funding
- the NZTA's methods for peer review.

It is also intended to help approved organisations and the NZTA in their own assessments of activities and combinations of activities for the purpose of inclusion in an RLTP or their peer reviews.

Audience

The audience for this chapter is:

- staff in approved organisations and the NZTA who are developing strategies, programmes, packages, and projects for inclusion in an RLTP
- NZTA staff reviewing activities and combinations of activities as part of the process of developing the NLTP or considering funding approval
- NZTA staff who are assisting and advising anyone involved in assessment
- anyone involved in a peer review.

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Overview, continued

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Chapter G1 Creating an assessment profile

G1.1 Overview

Introduction This chapter sets out the basis of the NZTA's methods of creating an assessment profile for studies, programmes, packages or projects, for the purpose of including these in regional land transport programmes (RLTPs) and in the National Land Transport Programme (NLTP), and for the purpose of funding approval.

This approach of creating an assessment profile should also be used by approved organisations for assessing studies, programmes, packages and projects that are to be considered for inclusion in the RLTP so that they will comply with requirements for funding approval when that time comes.

Purpose The purpose of this chapter is to give advice and guidance on the creation of an assessment profile.

Audience The audience for the chapter is anyone who wants to create an assessment profile using the NZTA's methods. This will include NZTA staff and staff working in approved organisations.

In this chapter This chapter contains the following sections:

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G1.2 What is an assessment profile?

Three factors involved

An assessment profile involves rating a programme, package or project that is ready for assessment across three factors:

- strategic fit of the problem, issue or opportunity that is being addressed
- effectiveness of the proposed solution
- economic efficiency of the proposed solution.

Each of these three factors is given a rating of H: high, M: medium, or L: low. Therefore, an assessment profile of HMM means the activity was rated high for **strategic fit**, medium for **effectiveness** and medium for **economic efficiency**.

The assessment of studies and strategy and plan development only considers the **strategic fit** of the problem, issue or opportunity and **effectiveness** of the proposed method and process.

Additional factors

The NZTA also considers any exceptional additional factors not otherwise captured by the above assessment factors.

These will be specific to the activity or combination of activities being assessed and relevant to determining its overall priority and funding source in the programme.

Evidence will be required if additional factors are to be considered.

When assessment takes place for large packages and projects

Determination of the assessment profile for large packages and projects is a continuous process:

- During the study or strategy development phase, a detailed assessment is made of the **strategic fit** of the problem, issue or opportunity addressed by each package and project and of the **effectiveness** of the proposed package and projects. The assessment of the **economic efficiency** may be coarse at this stage but effort should be made to produce as robust an indicator of economic efficiency as possible. For packages and projects that have low or medium ratings for economic efficiency, evidence should be provided that demonstrates the effort made to produce a robust estimate including peer review.
- During the investigation phase, the assessments of **strategic fit** and **effectiveness** are updated, and a detailed assessment is made of the **economic efficiency** of the proposed package and projects.
- During the design phase, the emphasis is on updating the assessments made in the previous phases, particularly the **economic efficiency** rating.

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G1.2 What is an assessment profile?, continued

When assessment takes place for large packages and projects,
continued

The following table summarises the continuous assessment process for large packages and projects.

Phase	Assessment	Purpose
Strategy and plan development	Assessment of strategic fit and the effectiveness of the proposed intervention strategy. No assessment profile is given.	NZTA support for strategy
	Detailed assessment of strategic fit and effectiveness of each package and project that is part of the implementation plan of the strategy. An assessment profile is given to each package and project, provided sufficient information is available. The economic efficiency rating is indicative but should be as robust as possible particularly for projects and packages with low or medium economic efficiency.	Funding approval of projects
Investigation	Update of the assessment of strategic fit and effectiveness of each package and project. Detailed assessment of the economic efficiency of each package and project.	Funding approval of projects
Design and construction/ implementation	Earlier assessments are updated, particularly the economic efficiency assessment of each package and project.	Funding approval of projects

G1.3 Assessment factors

Description of the assessment factors

The following table describes the assessment factors used in the assessment profile.

Assessment factor	Focus	Description	Rating
Strategic fit	Focus on the problem, issue or opportunity being addressed	A strategic fit assessment considers how an identified problem, issue or opportunity aligns with the NZTA's strategic investment direction. Strategic fit ensures that the activities the NZTA approves for funding address issues that are significant from a national perspective.	High, medium or low
Effectiveness	Focus on the effectiveness of the proposed solution	The effectiveness assessment considers the contribution that the proposed solution makes to achieving the potential identified in the strategic fit assessment and to the purpose of the LTMA and the relevant NZTS objectives.	High, medium or low
Economic efficiency	Focus on the economic efficiency of the proposed solution	The economic efficiency assessment considers how well the proposed solution maximises what is produced from the resources used.	High, medium or low

Additional factors

Additional factors, not otherwise captured by the above assessment factors, must be specific to the activity or combination of activities being assessed and relevant to determining its overall priority and funding source in the programme.

Evidence will be required if additional factors are to be considered.

G1.4 Guidance on strategic fit rating

Introduction	<p>This section gives general guidance to assist with rating the strategic fit of activities and combinations of activities for developing an assessment profile.</p> <p>The strategic fit rating is dependent on the activity class. The NZTA's detailed methodology for rating strategic fit is set out in <i>chapters G4 to G10</i>.</p>
Alignment with strategic direction	<p>The strategic fit rating is a measure of how an identified problem, issue or opportunity that is addressed by a proposed activity or combination of activities, aligns with the NZTA's strategic investment direction.</p> <p>Reference: For details of the NZTA's strategic investment direction, see <i>section B1.8</i>,</p>
Potential solutions excluded	<p>The strategic fit must be assessed without considering potential solutions.</p>
Source of criteria	<p>The strategic fit criteria are derived from the GPS and the NZTA's strategic investment direction.</p>
Evidence required	<p>Evidence on the strategic fit must be submitted through <i>LTP online</i>, preferably as part of a study or strategy.</p>

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G1.4 Guidance on strategic fit rating, continued

Definitions and explanation

This section sets out definitions and explanation of terms that are common to strategic fit assessment for a number of activities.

Terms in **bold** in this section are as defined in this section.

Roads of National Significance

Roads of National Significance (RONS) are listed by the government in the GPS. In general terms they are:

- Puhoi to Wellsford – State highway 1
- Completion of the Auckland Western Ring Route – State highway 20/16/18
- Auckland Victoria Park bottleneck – State highway 1
- Waikato Expressway – State highway 1
- Tauranga Eastern Corridor – State highway 2
- Wellington Northern Corridor (Levin to Wellington) – State highway 1
- Christchurch motorway projects.

Local roads critical to RONS

These are local roads connecting to **RONS** that are critical to realising the benefits of the **RONS**. These local roads will be identified by the NZTA in consultation with relevant stakeholders.

Tourism routes

Tourism routes are defined in the NZTA's Tourism Plan (to be released December 2009). This guidance is interim pending completion of this plan.

Tourism routes:

- provide access to **tourism areas** with forecast tourists (domestic and international visitors) greater than 5 million per annum (eg Waipu to Taupo, Amberley to Ashburton), or
- have tourism flows greater than 60% of the total traffic and greater than 1 million tourists per annum, or
- provide access to one of the top five **tourism areas** outside major urban areas.

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G1.4 Guidance on strategic fit rating, *continued*

Freight routes

Freight routes are defined in the NZTA's Freight Plan (to be released December 2009). This guidance is interim pending completion of this plan.

Freight routes are:

- connections between freight generators and attractors with traffic volumes of greater than 1,000 heavy commercial vehicles per day, including:
 - ports
 - airports
 - distribution centres
 - areas with a high concentration of **firms**, ie at a local authority level, the number of **firms** in the local authority area is greater than 2% of the total number of **firms** in New Zealand;

or

- a route that:
 - handles a **volume or value of freight** that is greater than 10% above the national total, or
 - handles significant volumes or values of specialised commodities not normally transported on routes;

and

- has no freight transport alternative if the route is closed.

Critical urban arterials

Critical urban arterials will be identified by the NZTA in consultation with relevant stakeholders.

These are arterials that provide access to one or more of the following:

- **significant markets;** or
- **significant areas of employment;** or
- **significant areas of economic growth;**

and:

- with average annual daily traffic (AADT) greater than 20,000 vehicles per day; or
- where there is a high potential for the route to be closed for more than 5 working days and there is no alternative route for closure.

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G1.4 Guidance on strategic fit rating, continued

Significant markets

Significant markets means areas with:

- **volume or value of freight** greater than 20% of the national total
- specialised freight not suited to other hubs; or
- areas with a high concentration of **firms**, ie at a local authority level, the number of **firms** in the local authority area is greater than 2% of the total number of **firms** in New Zealand.

Significant areas of employment

Significant areas of employment means areas with:

- share of **employment** greater than 2% of the total number of employees in New Zealand.

Significant areas of economic growth

Significant areas of economic growth means:

- areas where growth in total number of **firms** over the last 5 years is more than 20% above the national average; or
- areas where growth in number of **firms in an industry** over the last year is more than 20% above the national average for that industry; or
- areas where growth in **employment** over the last 5 years is more than 20% above the national average; or
- one of the top 5 **tourism areas** outside **major urban areas**.

Key routes

Key routes are routes providing access to:

- Markets, areas with:
 - **volume or value of freight** greater than 10% of the total volume or value of freight in New Zealand; or
 - areas with a high concentration of **firms**, ie at a local authority level, the number of **firms** in the local authority area is greater than 1% of the total number of **firms** in New Zealand; or to:
- Areas of employment, areas with:
 - share of **employment** greater than 1% of the total number of employees in New Zealand; or to:
- Areas of economic growth, areas with:
 - growth in number of **firms** over the last 5 years is more than 20% above the national average; or
 - growth in number of **firms in an industry** over the last year is more than 20% above the national average for that industry; or
 - growth in **employment** over the last 5 years is more than 20% above the national average.

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G1.4 Guidance on strategic fit rating, *continued*

Main urban areas

Main urban areas are as defined by Statistics NZ. They represent the most urbanised areas in with respect to the concentration of employment, firms and population. Main urban areas are centred on a city or main urban centre. They have a minimum population of 30,000 and an above-average concentration of businesses (typically greater than 90 businesses per 1000 population).

Under these criteria the main urban areas are represented by Whangarei, Auckland, Hamilton, Tauranga, Rotorua, Gisborne, Napier-Hastings, New Plymouth, Wanganui, Palmerston North, Kapiti, Wellington, Nelson, Christchurch, Dunedin and Invercargill.

Reference: For maps, see <http://www.stats.govt.nz/urban-rural-profiles/urban-rural-profile-maps/default.htm>

Major urban areas

Major urban areas have the highest concentration of economic activity in employment and firms. These are represented by the major business and employment areas within the main urban areas of Auckland, Hamilton, Tauranga, Wellington, Christchurch and Dunedin.

Tourism areas

Tourism areas are defined in the NZTA's Tourism Plan (to be released December 2009). This guidance is interim pending completion of this plan.

The top five tourism areas outside **major urban areas** are Taupo, Rotorua, Franz Josef/Mount Cook, Queenstown/Milford Sound, and Hamner Springs.

Volume or value of freight

For ports and airports, volume or value of freight as used in this section can be taken as the combined volume or value of imports and exports.

Reference: For detail on value of imports and exports, see <http://www.stats.govt.nz/datasets/exports-imports/overseas-merchandise-trade.htm>

Firms

Firms means geographical units as defined by Statistics NZ. This is a separate operating unit engaged in New Zealand in one, or predominately one, kind of economic activity from a single physical location or base.

Reference: For information on geographical units, see <http://wdmzpub01.stats.govt.nz/wds/TableViewer/dimView.aspx>

Employment

Employment, as used in this section, is the employee count as defined by Statistics NZ.

Reference: For information on employee count, see <http://wdmzpub01.stats.govt.nz/wds/TableViewer/dimView.aspx>

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G1.4 Guidance on strategic fit rating, continued

Safety

Potential for significant improvements in safety means:

- where there is a potential to reduce accident costs by at least 50% when analysed in accordance with Appendix A6 of the NZTA's *Economic evaluation manual*, volume 1
 - risk of road accident reduction and the mitigation measures is assessed in accordance with Appendix A13 of the NZTA's *Economic evaluation manual*, volume 1, for projects for which risk analysis is required as specified in *Part C Regional land transport programmes*.
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A relevant road safety strategy

Significant improvements resulting from implementing a relevant road safety strategy means where a road safety strategy that has been endorsed by the NZTA identifies the potential for significant road safety improvements.

The Ministry of Transport Road Safety to 2010 Strategy is to be replaced by the Road Safety to 2020 Strategy in December 2009.

Journey time reliability

Journey time reliability is the reliability of trips on the network, as defined in section 3.5 of the NZTA's *Economic evaluation manual*, volume 1.

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G1.4 Guidance on strategic fit rating, *continued*

Congestion

Congestion is where:

- the volume to capacity ratio exceeds 80% for 5 days per week over at least a 1 hour time period that affects at least 1.5 km of a route.

Severe congestion is where:

- the volume to capacity ratio exceeds 100% for 5 days per week over at least 1 hour in a time period on at least 3 km of a route; and
- with average annual daily traffic (AADT) greater than 20,000 vehicles per day

Reference: For information on the volume to capacity ratio, see Appendix A3 of the NZTA's *Economic Evaluation Manual*, Volume 1.

<http://www.landtransport.govt.nz/funding/manuals.html#eem1>.

Network security and resilience

Network security means the elimination of risks or effects of a disruption. Network resilience means the ability of the network to withstand, or recover quickly after a disruption. Both of these require consideration of the effects of:

- risk from natural hazard or other transport operation disruptions, and
- level of service.

Potential to meet agreed levels of service, to optimise levels of service or for significant improvements in network security and resilience, requires that:

- there is no alternative route, and
- the route is demonstratively susceptible to disruption.

Road levels of service

Agreed levels of service mean the maintenance target values for the particular road group set out in the NZTA's *Maintenance guidelines for local roads*, or as otherwise agreed with the NZTA - see

<http://www.landtransport.govt.nz/funding/nltp/docs/maintenance-guidelines-local-roads.pdf>

General considerations for optimisation

For general criteria to consider during optimisation, see *section C10.3* and *chapter G2 Standard criteria and considerations for assessment*.

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G1.4 Guidance on strategic fit rating, *continued*

Optimisation of levels of service for roads

Optimisation of levels of service for roads involves rational analysis of:

- road traffic demand forecasts
- asset condition
- asset deterioration/life
- service level targets
- whole-of-life costs
- risks and mitigation
- decision-making processes,

and

- maintaining the existing levels of service, including the service level target values, with reduced resources, or
- increasing the existing service levels, including the target values, within existing resources in response to changed demand, or
- reducing government costs while maintaining the existing service levels, including the target values,

through the consideration of

- **making better use** of existing infrastructure, and
- **extracting maximum value** from existing infrastructure.

Optimisation of PT services and infrastructure

Optimisation of public transport services and infrastructure involves rational analysis of:

- passenger transport demand forecasts
- passenger transport policies and measures, including farebox recovery policy
- related strategies, eg land use, demand management, walking and cycling
- service level targets
- whole-of-life costs
- risks and mitigation
- decision-making processes,

and

- reducing the government cost per passenger in the medium to long-term,

through the consideration of

- **making better use** of existing services and infrastructure, and
- **extracting maximum value** from existing services and infrastructure.

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G1.4 Guidance on strategic fit rating, *continued*

Making better use	Making better use of existing services and infrastructure means fully considering and analysing existing services and use of infrastructure and identifying opportunities for change without significant additional expenditure.
Extracting maximum value	Extracting maximum value from existing services and infrastructure includes optimising services and the use of existing infrastructure.
PT patronage during peak times	<p>Significant increase in public transport patronage during peak times in major urban areas with severe congestion means:</p> <ul style="list-style-type: none"> • making public transport a viable alternative to private vehicle travel • increasing public transport patronage in peak times from mode change that increases the effective travel capacity of the network.
Transport choice	Transport choice means making available to transport users, particularly those with limited access to a car or who are vulnerable to changes in fuel prices, alternative means of transport.
PT network and interchange capacity constraints	Significant improvements in public transport network and interchange capacity constraints means reducing the capacity constraints such that patronage during peak times is increased.

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G1.4 Guidance on strategic fit rating, continued

Model walking/cycling communities with objective to reduce congestion

Model walking/cycling communities are defined in the NZTA's Model Walking/Cycling Communities Plan (interim under development, final to be released December 2009).

The objective to reduce **congestion** means that the plan aims to reduce **congestion in main urban areas** by creating environments where walking and cycling becomes a realistic and viable transport choice by:

- improving safety for walking and cycling
- improving access to walking and cycling
- improving awareness of walking and cycling;

with approved organisations that show commitment through:

- leadership
- community support
- local funding
- integration with other activities and policies, including land use, parking, vehicle access and transport user hierarchy.

Key walking and cycling networks

Key walking and cycling networks will be identified by the NZTA in consultation with relevant stakeholders.

G1.5 Guidance on the effectiveness rating

Introduction

This section gives general guidance for rating the effectiveness of activities and combinations of activities for developing an assessment profile.

The effectiveness rating is a measure of the contribution that the proposed solution makes to achieving the potential identified in the strategic fit assessment and to the purpose of the LTMA and the relevant NZTS objectives.

Higher ratings are provided for those proposals that provide long term, integrated and enduring solutions.

Evidence required

Sufficient evidence must be provided to support the effectiveness rating. This includes as appropriate:

- project feasibility report (PFR)
- a study
- a strategy
- an activity management plan (AMP)
- a scheme assessment report (SAR).

The evidence needs to be included in *LTP online*.

Minimum considerations

Evidence must be provided to demonstrate that the activity or combination of activities delivers on each of the following:

- the **potential identified in the strategic fit assessment** including the regional dimension of the GPS impacts
- the **purpose of the LTMA** (affordable, integrated, sustainable, safe and responsive land transport system)
- the **relevant NZTS objectives** (economic development, safety and personal security, access and mobility, public health, environmental sustainability)
- has considered:
 - all relevant problems, issues and opportunities
 - all appropriate alternatives and options
 - any adverse effects or impacts
- is an **affordable** solution
- the scale of the proposed solution is appropriate to the **potential identified in the strategic fit assessment**.

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G1.5 Guidance on the effectiveness rating, *continued*

Requirements for high rating

A high rating for effectiveness must only be given if the activity or combination of activities delivers on *each* of the following:

- meets all the low and medium rating criteria
- improves integration within and between transport modes, where appropriate to the activity
- provides a solution that integrates land transport, land use and other infrastructure, where appropriate to the activity
- supports networks from a national perspective, where appropriate to the activity
- is an **optimised** transport solution.

Reference: For guidance on optimisation, see *section G1.4*.

Requirements for medium rating

An activity or a combination of activities must only be given a medium rating for effectiveness if it meets *each* of the following:

- meets all the low effectiveness criteria
 - is part of an **accepted strategy, activity management plan or macroscope**
 - is **significantly effective** in achieving the **potential identified in the strategic fit assessment**
 - provides a long-term solution with **enduring benefits** appropriate to the scale of the solution
 - provides a solution that considers land use strategies and implementation plans, where appropriate to the activity.
-

Requirements for low rating

To achieve a low rating, all activities or combinations of activities must comply with the minimum criteria for effectiveness set out in this section.

Contd

G1.5 Guidance on the effectiveness rating, continued

<p>Strategic fit potential</p>	<p>To be effective, activities and combinations of activities must have a significant effect on the potential identified in the strategic fit assessment. This potential must specifically consider the regional dimension of the GPS impacts.</p> <p>Reference: For detail on the regional dimension of the GPS impacts, see <i>section B1.5</i>.</p> <p>For example, if a new and improved infrastructure activity for local roads has a medium rating for strategic fit because of the potential for significant 'Improvements on key routes in journey time reliability', then the effectiveness assessment must focus on the contribution of the activity to addressing this.</p> <p>Significantly effective in achieving this potential means that the potential is largely achieved.</p>
<p>Contribution to LTMA purpose and NZTS objectives</p>	<p>Activities and combinations of activities should make a contribution to achievement of the purpose of the LTMA and to the relevant NZTS objectives. Although these are requirements that regional land transport programmes and the National Land Transport Programme must meet, the contributions from individual activities and combinations of activities need to be taken into account by the NZTA in approving activities or combinations of activities for funding.</p> <p>Standard considerations relating to the LTMA purpose and the NZTS objectives are set out in <i>section G2.8</i>.</p>
<p>Consideration of problems, alternatives/ options and adverse impacts</p>	<p>Standard considerations relating to alternatives and options are set out in <i>section G2.8</i>.</p>
<p>Affordability</p>	<p>Standard considerations relating to funding and affordability are set out in <i>section G2.10</i>.</p>
<p>Accepted strategy, AMP or macroscope</p>	<p>Accepted strategy, AMP or macroscope means:</p> <ul style="list-style-type: none"> • a strategy or plan that has been supported by the NZTA in accordance with <i>section B4.7</i> • the macroscope of a package or project that has been endorsed by the NZTA in accordance with <i>section C9.5</i>, <p>or</p> <ul style="list-style-type: none"> • where formal support or endorsement has not been given by the NZTA, the NZTA is satisfied that the strategy, AMP or macroscope is adequate.

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G1.5 Guidance on the effectiveness rating, *continued*

**Enduring
benefits**

In urban and semi-urban areas, transport solutions are often only enduring if they are part of a package of activities balancing demand and supply measures and if they optimise the function of each transport mode taking into account local constraints and opportunities.

G1.6 Guidance on the economic efficiency rating

Introduction	This section gives guidance on the economic efficiency rating in an assessment profile for packages and projects.
About maximising output from resources	The economic efficiency rating demonstrates how well the proposed solution maximises the value of what is produced from the resources used.
Requirement for economic efficiency determination	<p>For projects costing more than \$250,000, the rating for economic efficiency must be determined on a project-by-project basis.</p> <p>For projects costing less than \$250,000, no rating for economic efficiency is required to be supplied to the NZTA. However, the NZTA expects that funding applicants will provide, on request, evidence that demonstrates the economic efficiency reasons for selecting these projects, eg the activity management planning process. Where there are simplified procedures in the NZTA's <i>Economic evaluation manual</i>, these should be used as part of the economic efficiency judgement.</p>
Benefit cost ratio (BCR)	<p>The benefit cost ratio (BCR) provides a basis to rate the economic efficiency of packages and projects as follows:</p> <p>BCR \geq 4 is High</p> <p>BCR \geq 2 and $<$ 4 is Medium</p> <p>BCR \geq 1 and $<$ 2 is Low.</p>
Basis for calculating BCR	The basis for calculating the BCR is to be found in the NZTA's <i>Economic evaluation manual</i> , volumes 1 and 2.
Non-monetised benefits	If a package or project has demonstrable non-monetised benefits that are not included in the BCR, then these should be taken into account and may, if the NZTA considers these benefits to be significant, result in a higher rating.
BCR <2	If the BCR of a package or project is less than 2.0, then if the package or project is to be considered for funding the NZTA reserves the right to require peer review of the economic efficiency calculations including any non-monetised benefits and adverse impacts, regardless of the scope.

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G1.6 Guidance on the economic efficiency rating, *continued*

BCR < 1

If the BCR of a package or project is below 1, then the NZTA's assessment of any non-monetised benefits will determine whether the total of monetary and non-monetary benefits outweigh costs, in which case the economic efficiency can be rated low.

If the NZTA's assessment of monetary and non-monetary benefits is that they do not outweigh costs, then the package or project is considered to be economically inefficient. In this case, no rating or assessment profile is to be given until further optimisation of the project scope and investigation of benefits provides evidence that benefits outweigh costs.

Economic efficiency of programmes

For assessment of road operations, maintenance and renewal programmes and passenger transport programmes, alternative methods may be used in place of BCR.

Chapter G2 Standard criteria and considerations for assessment

G2.1 Overview

Introduction This section sets out the standard criteria and considerations that must be taken into account when undertaking or reviewing an assessment of an activity or combination of activities.

The criteria and considerations cover, not only the information required to determine an assessment profile, but also information required to demonstrate that LTMA requirements are satisfied. *LTP online* information requirements reflect these criteria and considerations.

More specific criteria and considerations for determining the assessment profile of specific types of activities and combinations of activities are given in subsequent chapters.

Purpose The purpose of the chapter is to provide general guidance on the criteria and considerations that must be addressed when assessing activities and combinations of activities, particularly for improvement projects.

Audience The audience for this chapter is anyone who is doing an assessment for an activity or combination of activities for which standard questions are appropriate or who has been referred to this chapter by a subsequent chapter.

In this chapter This chapter contains the following sections:

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G2.2 Introduction to the tables

Organisation of tables

The criteria and considerations are shown in tables in sections *G2.5* to *G2.10*. They are grouped into the following segments:

- project outline
- readiness
- strategic fit
- effectiveness
- economic efficiency
- funding and affordability.

Note: Readiness considers the project in terms of programming and readiness for the project to proceed.

Using the considerations in assessment

All the considerations must be addressed before a project can be approved for funding.

Development of an assessment profile for prioritisation focuses on the three assessment factors of strategic fit, effectiveness and economic efficiency.

Questions in *LTP online*

The questions relating to projects, groups of projects and packages in *LTP online* mirror the criteria and considerations in the tables.

Some of the information required for groups of projects is entered into the *LTP online* phase screen rather than at the project level.

Additional information

The tables are not intended to be exhaustive and users may wish to provide additional, pertinent information in *LTP online*.

G2.3 Supporting information

Information required - improvement projects

Information providing evidence in support of assessments is required, including:

- activity management plans in support of generic project assessments
- supporting analysis to a project feasibility report standard, either as part of a strategy report or a stand-alone report, for initial investigation phase funding requests
- supporting analysis for secondary investigation and/or design funding requests to a scheme assessment report standard, which would be partly completed at the macroscope after primary investigation and should be largely completed at the end of the investigation phase prior to a request for design funding
- supporting analysis and justification for any changes in strategy, package/project scope changes and significant construction/implementation cost estimate increases (eg over 10 percent) from the previous funding application
- evidence to demonstrate that any prior conditions of funding, which have to be fulfilled for the current funding application to be considered by the NZTA, have been met
- other evidence, such as council resolutions, memoranda of understanding and funding agreements, in support of the assessment.
- Peer review report

Information required - programmes

Information requirements to support assessment of programmes is set out as follows:

- community programmes – see *chapter G8*
- passenger transport programmes – see *chapter G9*
- road operations, maintenance and renewals programmes – see *chapter G10*.

G2.4 Explanation of the tables

Introduction The tables indicate what level of information is required in *LTP online* for various types of activity or combinations of activities.

Two statuses The information required in *LTP online* varies depending on which status you are seeking to achieve.

There are two categories, as shown in the following table.

Status	Description
Cat2	Category 2: able to be considered for inclusion in the National Land Transport Programme (NLTP). Meets the provisions of LTMA s16 or s17 as appropriate,
Cat1	Category 1: able to be considered for funding approval. Meets the provisions of LTMA s20.

Three types The tables in this chapter cover three types of activity or combination of activities:

- package
- group of projects
- stand-alone projects.

Reference: For a description of a package and a group of projects, see *section C9.2* and *section C9.3*.

Equivalent tables for community programmes are given in *chapter G8 Assessment of community programmes*.

Criteria and considerations relevant to proposals for studies, and strategy and plan development are set out in *chapter G6 Assessment of proposals for studies, and strategy and/or plan development*.

One assessment for the whole package You do not need to complete all of the *LTP online* questions for the individual projects that form part of a package. For some of the criteria and considerations, you may complete the information requirements for the overall package (see below).

Contd

G2.4 Explanation of the tables, continued




Status column

The status column indicates which considerations are required for each status. Use this table to decide what to enter.

If the status column entry is...	Then...
Cat2	answers to the <i>LTP online</i> questions for the consideration are required when you are seeking inclusion in the NLTP.
Cat1	answers to the <i>LTP online</i> questions for the consideration are required when you are seeking funding approval.
Exp	answers to the <i>LTP online</i> questions for the considerations are expected, although it is not mandatory.

Meaning of symbols




This table shows the meaning of the symbols and letters in the table.

Symbol/letter	Meaning
	Information must be entered for the package, group or project
	If the project or group is part of a package, then you do not need to enter this information for the individual projects or groups in the package because the information is entered at the package level If the project or group is not part of a package, the information must be entered for the project or group
	Information not required
AMP	The information should be supported by evidence in an activity management plan

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G2.4 Explanation of the tables, continued

Example one




Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Details and location	Descriptive details (name, reference, description)	Cat2			

Meaning

This line in the table means that, if you are seeking category 2 status, you must complete the consideration 'Descriptive details (name, reference, description)' for:

- a package
- each of the projects that make up a package or group
- a stand-alone project.

Example two




























Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Details and location	Background and history of project	Cat2			

Meaning























































This line in the table means that, if you are seeking category 2 status, with reference to the consideration 'Background and history of project', then:

- you must complete the consideration for a package
- you do not need to complete the consideration for a group of projects
- you must complete the consideration for a stand-alone project but you do not need to do so if it is part of the package.
























G2.5 Table of considerations: project outline

Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Details and location	Descriptive details (name, reference, description)	Cat2			
	Background and history of project	Cat2			
	Main LTMA contribution	Cat2			
	Project objectives	Cat2			
	Link to package, strategy or plan	Exp			
Significance (RTC and ARTA only)	Regional significance	Cat2			
	Inter-regional significance	Cat2			
	Inclusion in RLTP	Cat2			
	Priority in RLTP	Cat2			




























G2.6 Table of considerations: readiness

Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Social responsibility	Needs of transport disadvantaged considered	Cat1			
	Walking and cycling, passenger transport and demand management considered/incorporated	Cat1			
Project management	Start date and duration (At group level only for a group of projects)	Cat2			
	Implementation process and management	Cat1			
	Operational process and management	Cat1			
Consultation	Views of affected communities	Cat1			
	Views of Māori	Cat1			
	Early and full opportunities for contribution	Cat1			
Procurement	NZTA-endorsed procurement strategy	Cat1			
	Procurement procedures consistent with strategy	Cat1			
	If not consistent, what procurement procedures will be applied?	Cat1			
Peer review and NZTA audit	Peer review report and responses	Cat1			
	Outstanding issues from peer review	Cat1			
	Variations from of any of NZTA's procedures and reasons (including safety audit findings and responses)	Cat1			
Risk management	Main risks and mitigation measures	Cat1			
	Risk analysis and management plan	Cat1			
	Implementation risks (consent, designation, environment, land, engineering, contracting, etc)	Cat1			
	Performance risks and mitigation	Cat1			

G2.7 Table of considerations: strategic fit



Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Problem, issue or opportunity addressed	Qualify the predominant problem, issue or opportunity being addressed	Cat1		<input type="checkbox"/>	
	Classify how the project was initiated or indentified	Cat1		<input type="checkbox"/>	
	Additional problems, issues or opportunities being addressed	Exp		<input type="checkbox"/>	
	Additional strategic aspects	Exp		<input type="checkbox"/>	
Urgency of problem, issue or opportunity	What is the urgency to resolve the problem, issue or opportunity	Cat1		<input type="checkbox"/>	
	Consequences of delaying, including potential failure of critical infrastructure, timing connected to other projects or specific events	Cat1		<input type="checkbox"/>	
Trends	Relevant trends in condition or performance of the land transport system	Exp		AMP	
Importance	Problem, issue or opportunity importance in national, regional and local strategies	Cat1		AMP	
	Problem, issue or opportunity with the Government Policy Statement (GPS), including adverse impacts	Cat1		<input type="checkbox"/>	
	Promoting organisation priority	Exp		AMP	
Strategic fit assessment rating	See the specific considerations for determining the strategic fit assessment rating set out in <i>chapters G4 to G10</i> .	Cat 2			

G2.8 Table of considerations: effectiveness

Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Strategic fit potential	How does the activity address the potential identified in the strategic fit assessment?	Cat1			
Externalities	Upstream and downstream network effects	Cat1			
	Adverse impacts from project (including adverse effects of GPS impacts)	Cat1			
Alternatives and options	Consideration of alternatives (types of intervention, mix of modes, scale of activity) and selection of preferred alternative	Cat1			
	Consideration of options (scope, effectiveness and efficiency), including a low-cost option, and selection of preferred option	Cat1			
	Optimisation process for selection of preferred option including incremental analysis of economic efficiency consideration of hierarchy of interventions and integration with the wider transport programme.	Cat1			
Integration	Integration with land-use and transport networks and services	Cat1			
	Integration amongst transport modes	Cat1			
	Urban design protocol and integration with place and communities	Cat1			




























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G2.8 Table of considerations: effectiveness, continued






















Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Sustainability	Evidence of impact on sustainability of land use and transport networks and services, including the measures included to ensure enduring benefits.	Cat1			
	Impact on environmental sustainability, including mitigation to avoid damage to the environment – emissions of CO2 due to high use of single occupancy vehicles, integration with coastal shipping and rail for freight, pollution of protected areas (water catchments, vulnerable ecosystems), areas of special environmental interest	Cat1			
	Impact on energy efficiency (in respect of the National Energy Efficiency Conservation Strategy)	Cat1			
	Induced traffic impacts (where applicable)	Cat1			
Safety and personal security	Impact on personal safety and security, including vulnerable users - describe demonstrated personal security risks and include preventative measures to minimise risk	Cat1			
	Impact on safety of transport network and services (link to safety audit and to GPS impacts) - describe number of fatal and serious injuries and include preventative measures to minimise risk	Cat1			
Responsiveness	Accounting for the transport and related needs of affected communities in development of proposal	Cat1			
Economic development	Impact on economic development, considering the GPS impacts for critical routes and freight movements (journey time reliability, severe congestion, efficient freight chains, better use of capacity, security and resilience of network)	Cat1			

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G2.8 Table of considerations: effectiveness, continued

Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Access and mobility	Impact on accessibility to the transport system across modes and users, considering the GPS impacts (better access to markets, employment and areas of economic growth, transport choices)	Cat1			
	Accounting for the transport disadvantaged	Cat1			
	Impact on transport interconnections and ease of changing modes	Cat1			
Public health	Impact on public health from harmful emissions	Cat1			
	Impact on health from excessive noise	Cat1			
	Impact on obesity-related problems	Cat1			
Other outcomes	Impact on other factors	Cat1			
Evidence	Sources of evidence used to support other outcomes	Cat1			
Effectiveness assessment rating	See the specific considerations for determining the effectiveness assessment rating set out in <i>section G15</i> .	Cat 2			

G2.9 Table of considerations: economic efficiency

Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Assessment calculations	National and government benefit cost ratios (BCRs) and calculations	Cat1			
	First year rate of return	Cat1			
	Present value (PV) monetised costs – do-minimum and option	Cat1			
	PV monetised benefits	Cat1			
	Non-monetised benefits	Cat1			
	Private benefits	Cat1			
Economic efficiency assessment rating	See the specific considerations for determining the economic efficiency assessment rating set out in <i>section G1.6</i> .	Cat 2			

Note * In some cases, for a large project, a benefit cost ratio (BCR) is required even when a project is part of a package.

Reference: For detail, see *Chapter G3 Assessment of packages*.

G2.10 Table of considerations: funding and affordability

Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Construction/ implementation cost estimates	Capital cost (including escalation)	Cat1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Total property value (purchased and to be acquired)	Cat1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Implementation cost	Cat1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	PV of operating, increased maintenance and renewal costs – includes lease and service provision costs	Cat1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	5th and 95th percentile costs (as required)	Cat1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Funding plan (For all phases from and including current phase, including escalation)	Funding expected from:				
	• NZTA – N funds (if assessment profile allows)	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• NZTA – R funds	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• NZTA – C funds	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• NZTA – T funds	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• local share	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• regional development (Tairāwhiti and Northland)	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• Canterbury Transport Project	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• other public sector organisations/ beneficiaries	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• tolls	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	• private beneficiaries (including in-kind donations)	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• private beneficiaries (including in-kind donations)	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• other – stipulate	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

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G2.10 Table of considerations: funding and affordability, continued

Criteria	Considerations	Status	Package	Group of projects	Stand-alone project
Funding availability	Funding identified in relevant LTCCP	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	RTC recommendation on R and/or C funds (if applicable)	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Formal agreement for third party and external sources (if funding expected from these sources) *	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Legal requirements for toll system (if funding expected from this source) *	Cat2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Note: Considerations marked * are mandatory after macroscope endorsement, ie for all phases after the primary investigation phase.

Chapter G3 Assessment of packages

Introduction	This chapter sets out the NZTA's method of assessment for packages.
Purpose and audience	The purpose of this chapter is to provide guidance to anyone assessing a package. It may also be useful to NZTA staff advising people who are assessing packages.
Use of standard criteria and considerations	<p>Packages are assessed using standard assessment criteria and considerations in <i>Chapter G2</i>.</p> <p>The resulting assessment profile applies to all activities in the package.</p>
Update required	<p>An update or new assessment of the package is required when either:</p> <ul style="list-style-type: none"> • any of the following have changed significantly: <ul style="list-style-type: none"> – the problem, issue or opportunity – the package maroscope – the costs – the impacts, or • the package assessment is outdated (>3 years old).
Optimisation needed	<p>Optimisation of packages is an important part of the assessment.</p> <p>The contribution of an individual activity to the effectiveness and economic efficiency of the package must be assessed if the activity:</p> <ul style="list-style-type: none"> • is a large project – refer to <i>section C9.4</i> • is likely to have a benefit cost ratio (BCR) around or below 2.0 • has a weak link to the rest of the package, eg when an activity is added to a package because it is in the same area and it is sensible to implement it at the same time but the activity is not related or complementary to the other activities in the package.
Use of incremental BCR analysis	<p>In the above cases, incremental BCR analysis must be used to determine whether component activities make a sufficient contribution to justify their inclusion in the package and whether the timing of the components is optimised.</p> <p>The NZTA may require incremental BCR analysis for components of other packages.</p>

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Chapter G3 Assessment of packages, continued

**Incremental BCR
not used**

Where a package consists only of integrated interdependent activities, then incremental BCR analysis should not be used to test components of the package.

This is because incremental analysis would not reflect the synergy effects.

Chapter G4 Assessment of generic projects

G4.1 Overview

Introduction This chapter defines projects that may be classified as generic, and sets out the NZTA's method of assessment for generic projects.

Purpose and audience The purpose of this chapter is to provide guidance to anyone assessing a generic project. It may also be useful to NZTA staff advising people who are assessing such projects.

In this chapter This chapter contains the following sections:

Section	Page
G4.2 Ratings for generic projects	G4-2
G4.3 Walking and cycling facilities	G4-3
G4.4 Public transport infrastructure	G4-5
G4.5 Roading infrastructure	G4-8
G4.6 Property purchase	G4-12

G4.2 Ratings for generic projects

Introduction	Generic projects automatically have the first two factors of the assessment profile assigned to them according to the criteria in the following sections. Only the economic efficiency rating needs to be determined for the particular project.
Strategic fit rating	<p>The strategic fit rating for a generic project depends on the type of activity and how the identified problem, issue or opportunity aligns with the NZTA's strategic investment direction for that activity.</p> <p>The ratings are given in subsequent sections. They are based on the criteria set out in <i>section G1.4</i>.</p>
Effectiveness rating	<p>Generic projects must comply with at least a medium rating for effectiveness as set out in <i>section G1.5</i>.</p> <p>Evidence should be provided to demonstrate that the project meets the requirements for medium effectiveness. This evidence includes:</p> <ul style="list-style-type: none"> • Project feasibility report (PFR) • a study • a strategy • an activity management plan (AMP) • a scheme assessment report (SAR).
Economic efficiency rating	<p>For projects costing more than \$250,000, the rating for economic efficiency must be determined on a project-by-project basis.</p> <p>For projects costing less than \$250,000, no rating for economic efficiency is required. However, the NZTA expects that funding applicants will provide, on request, evidence that demonstrates the economic efficiency reasons for selecting these projects, eg the activity management planning process. Where there are simplified procedures in the NZTA's <i>Economic evaluation manual</i>, these should be used as part of the economic efficiency judgement.</p>
Projects that are not generic	Projects that do not meet the criteria for generic projects set out in this chapter require a full assessment of all three standard assessment factors to determine the assessment profile.
Project cost	The estimated construction/implementation cost of the project must include the net property costs and escalation.

G4.3 Walking and cycling facilities

Introduction

This section defines walking and cycling projects that may be classified as generic and the type of generic project (based on strategic fit), which in turn assigns the rating for the first two factors of the assessment profile for the generic projects.

Pedestrian facilities (w/c 451) and cycle facilities (w/c 452)

Generic projects	Projects that are not generic
<ul style="list-style-type: none"> • New or improved purpose-built facilities • New or improved facilities as a retro-fit to existing carriageways 	<ul style="list-style-type: none"> • Pedestrian underpasses (experience shows that the effectiveness of these requires close scrutiny, which is not provided by the generic assessment profile) • Projects that predominately cater for recreational users • Projects including property costing > \$4.5 million

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G4.3 Walking and cycling facilities, continued

Pedestrian facilities (w/c 451) and cycle facilities (w/c 452)	Generic project type	Criteria	Assessment profile
	Strategic (high strategic fit)	Part of a Model Walking/Cycling Community with the objective to reduce congestion in main urban areas . Reference: For guidance on the application of this criterion, refer to <i>section G1.4</i> .	HM_
	Improvement (medium strategic fit)	Potential for significant improvements in <i>one or more of</i> : <ul style="list-style-type: none"> • Safety (including implementation of a relevant road safety strategy) • Links to complete or complement existing key walking and cycling networks with the objective to reduce congestion in main urban areas. Reference: For guidance on the application of these criteria, refer to <i>section G1.4</i> .	MM_
	Other	Does not comply with the requirements for high or medium strategic fit.	LM_

G4.4 Public transport infrastructure

Introduction

This section defines public transport infrastructure projects that may be classified as generic and the type of generic project (based on strategic fit), which in turn assigns the rating of the first two factors of the assessment profile for the generic projects.

Passenger transport infrastructure (w/c 531)

Generic projects	Projects that are not generic
<ul style="list-style-type: none"> • New, improved or replacement passenger transport infrastructure that will significantly increase patronage as part of a strategy by: <ul style="list-style-type: none"> – improving trip reliability and travel times in comparison with other vehicles on a similar route – improving access to and perceived security of passenger transport services and facilities where poor access or perceived danger suppresses demand – reducing interchange capacity constraints – improving transport interconnections and ease of changing modes. 	<ul style="list-style-type: none"> • Improvements that will not provide a sufficient change in the attractiveness of services to cause any mode shift • Improvements on routes with no suppressed demand for public transport services • Projects including property costing > \$4.5 million

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G4.4 Public transport infrastructure, continued

Passenger transport road improvements (w/c 533)

Generic projects	Projects that are not generic
<ul style="list-style-type: none"> • New, improved or replacement passenger transport related infrastructure on roads specifically enabling priority movements by high-occupancy vehicles to reduce severe congestion by: <ul style="list-style-type: none"> – improving trip reliability and travel times in comparison with other vehicles on a similar route – reducing network capacity constraints. 	<ul style="list-style-type: none"> • Projects including property costing > \$4.5 million

Contd

G4.4 Public transport infrastructure, continued

Passenger transport infrastructure (w/c 531)
Passenger transport road improvements (w/c 533)

Generic project type	Criteria	Assessment profile
Strategic (high strategic fit)	<p>Potential for significant improvements in <i>one or more of</i>:</p> <ul style="list-style-type: none"> • peak time public transport patronage in major urban areas with severe congestion • optimising public transport services and infrastructure. <p>Reference: For guidance on the application of these criteria, refer to <i>section G1.4</i>.</p>	HM_
Improvement (medium strategic fit)	<p>Potential for significant improvements in <i>one or more of</i>:</p> <ul style="list-style-type: none"> • Transport choice in major urban areas, particularly for those with limited access to a car or who are vulnerable to changes in fuel prices • Public transport network and interchange capacity constraints in major urban areas • Transport interconnections and ease of changing modes in major urban areas • Safety (including implementation of a relevant road safety strategy) • Network security and resilience. <p>Reference: For guidance on the application of these criteria, refer to <i>section G1.4</i>.</p>	MM_
Other	Does not comply with the requirements for high or medium strategic fit.	LM_

G4.5 Roading infrastructure

Introduction

This section defines road infrastructure projects that may be classified as generic and the type of generic project (based on strategic fit), which in turn assigns the rating of the first two factors of the assessment profile for the generic projects.

New traffic management facilities and effluent disposal facilities (W/C 321)

Generic projects	Projects that are not generic
<ul style="list-style-type: none"> • Traffic messaging, surveillance and control systems to increase the transport capacity and efficiency of networks and routes, including: <ul style="list-style-type: none"> – ATMS, LATMS including SCATs, VMS, CCTV – ramp metering • Stock-truck effluent disposal facilities that are part of a strategy with a pre-determined plan for management of the facilities 	<ul style="list-style-type: none"> • Traffic management facilities that are part of carriageway and/or pedestrian improvements that would generally be either a minor improvement project under W/C 341 or a reconstruction project under W/C 324 depending on the details of the project • Stock-truck effluent disposal facilities where there is no pre-determined plan for their management • Projects including property costing > \$4.5 million

Replacement of bridges (W/C 322)

Generic projects	Projects that are not generic
<ul style="list-style-type: none"> • Replacement of an existing bridge when it is more economic to replace than continue maintenance to meet service standards • Upgrade or replacement of an existing bridge to: <ul style="list-style-type: none"> – address safety concerns due to alignment or geometric issues – to meet current seismic standards – improve service levels – remove weight restrictions, where there is an alternative route 	<ul style="list-style-type: none"> • Projects including property costing > \$4.5 million

Contd

G4.5 Roading infrastructure, continued

New roads: (W/C 323)

Generic projects	Projects that are not generic
<ul style="list-style-type: none"> • New roads, including new road structures 	<ul style="list-style-type: none"> • Projects developed without consideration of both traffic demand management (TDM) measures at the network or regional level and options to increase the efficiency of the current route • Projects including property costing > \$4.5 million

Road reconstruction: (W/C 324)

Generic projects	Projects that are not generic
<ul style="list-style-type: none"> • New or extended passing lanes alongside existing carriageways to increase safety, reduce congestion, travel delays and/or driver frustration • Improvements to the efficiency of existing routes • 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), and to reduce travel time • The improvement of intersections to enhance safety • The improvement of traffic management infrastructure, road alignment, crossing points, visibility etc, along an urban route • The improvement of existing features and addition of new features to increase route security and/ or safety • Street lighting treatment at black spots, and new or improved street lighting at other locations • Work to provide improved ride smoothness • Pavement reconstruction for failing layers 	<ul style="list-style-type: none"> • Projects developed without consideration of both demand management measures at the network or regional level and options (including traffic management) to increase the efficiency of the current route • Improvements to structures where alternative routes are available • Projects including property costing > \$4.5 million

Contd

G4.5 Roothing infrastructure, continued

Seal extension projects (w/c 325)

Generic projects	Projects that are not generic
<ul style="list-style-type: none">Seal extensions	<ul style="list-style-type: none">Projects including property costing > \$4.5 million

Contd

G4.5 Roading infrastructure, continued

New traffic management facilities and effluent disposal facilities (W/C 321) Replacement of bridges (W/C 322) New roads: (W/C 323) Road reconstruction: (W/C 324) Seal extension projects (w/c 325)	Generic project type	Criteria	Assessment profile
	Strategic (high strategic fit)	<p>Roads of National Significance (RONS), including local roads and/or services identified as critical to the operation of a RONS;</p> <p>or</p> <p>Potential for a major contribution to national economic growth and productivity on:</p> <ul style="list-style-type: none"> • Freight routes or Tourism routes; or • Urban arterials critical for maximising access to significant markets, areas of employment or economic growth. <p>Reference: For guidance on the application of these criteria, refer to <i>section G1.4</i>.</p>	HM_
	Improvement (medium strategic fit)	<p>Potential for significant improvements in <i>one or more of</i>:</p> <ul style="list-style-type: none"> • Safety (including implementation of a relevant Road Safety Strategy); <p>or</p> <p>Potential for significant improvements on key routes in <i>one or more of</i>:</p> <ul style="list-style-type: none"> • Journey time reliability • Congestion in main urban areas • Capacity constraints • Network security and resilience. <p>Reference: For guidance on the application of these criteria, refer to <i>section G1.4</i>.</p>	MM_
	Other	Does not comply with the requirements for medium or high strategic fit.	LM_

G4.6 Property purchase

Introduction

This section refers to property purchase, State highways (w/c 331) and property purchase, local roads (w/c 332).

Generic project type and assessment profile

The generic project type and assessment profile for any property purchase must be that of the parent activity.

Chapter G5 Assessment of improvement projects

G5.1 Overview

Introduction This chapter sets out the NZTA's method of assessment for improvement projects.

Purpose and audience The purpose of this chapter is to provide guidance to anyone assessing an improvement project. It may also be useful to NZTA staff advising people who are assessing such projects.

In this chapter This chapter contains the following sections:

Section	Page
G5.2 Rail and sea freight	G5-2
G5.3 Walking and cycling facilities	G5-4
G5.4 Public transport infrastructure	G5-6
G5.5 New traffic management facilities	G5-8
G5.6 Road improvements	G5-10
G5.7 Minor improvements	G5-12

G5.2 Rail and sea freight

Introduction

This section covers the specific considerations for assessments for projects in activity class 6: rail and sea freight, as shown in the following table:

Name	Work category
Rail freight operations	WC 441
Rail freight infrastructure	WC 445
Sea freight operations	WC 442
Sea freight infrastructure	WC 446

Use standard criteria and considerations

Packages and projects in these work categories must be assessed against the standard criteria and considerations. The specific considerations for determining the assessment profile are set out in this section.

Reference: For detail, see *Chapter G2 Standard criteria and considerations for assessment*.

Assessment stages

The assessment should take place in two stages, as follows, with the assessment profile reported to the NZTA at the end of each stage:

1. Project feasibility report with a rough order of costs (ROC) estimate and preliminary assessment profile, including BCR calculation. The sensitivity analysis for the ROC should be –35 percent to +50 percent.
2. Further investigation to identify and evaluate the merits of each option.

The report at the end of stage 2 must include a list of alternatives and options assessed together with a preliminary assessed cost and an updated assessment profile, including BCR, for the preferred option.

Suitable to package approach

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

Domestic sea freight development

The NZTA has published a separate document on the requirements for domestic sea freight development activities.

Contd

G5.2 Rail and sea freight, continued

Default strategic fit rating	By default, the strategic fit rating for a rail and sea freight project is low.
Requirements for medium strategic fit rating	<p>A medium strategic fit rating may be given if there is:</p> <ul style="list-style-type: none"> • Potential for significant improvements in: <ul style="list-style-type: none"> – Safety (including implementation of a relevant Road Safety Strategy); <p>or</p> <ul style="list-style-type: none"> • Potential for significant improvements on key routes in <i>one or more</i> of: <ul style="list-style-type: none"> – Journey time reliability – Congestion in main urban areas – Capacity constraints – Network security and resilience. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Requirements for high strategic fit rating	<p>A rail or sea freight project must only be given a high strategic fit rating if there is potential for a major contribution to national economic growth and productivity in accordance with the NZTA's Freight Plan (interim under development, final to be released December 2009).</p> <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Effectiveness	Reference: For guidance on effectiveness rating, see <i>section G1.5</i> .
Economic efficiency	<p>The economic efficiency must be determined in accordance with the NZTA's <i>Economic evaluation manual</i>, volume 2.</p> <p>Reference: For guidance on economic efficiency rating, see <i>section G1.6</i>.</p>

G5.3 Walking and cycling facilities

Introduction

This section covers the specific considerations for assessment of projects in activity class 3: walking and cycling facilities, as shown in the following table:

Name	Work category
Pedestrian facilities	451
Cycle facilities	452

Package approach

Projects within these work categories should preferably 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 defined as a combination of interrelated and complementary activities that contribute to the objectives and goals of an approved organisation's walking and cycling strategic plan.

Use standard criteria and considerations

Packages and projects in these work categories must be assessed against the standard criteria and considerations. The specific considerations for determining the assessment profile are set out in this section.

Reference: For detail, see *Chapter G2 Standard criteria and considerations for assessment*.

However, most of the activities are expected to be generic activities for which the assessment profiles in *Chapter G4* apply.

Contd

G5.3 Walking and cycling facilities, continued

Default strategic fit rating	By default, the strategic fit rating for walking and cycling facilities is low.
Requirements for medium strategic fit rating	<p>A medium strategic fit rating may be given if there is potential for significant improvements in <i>one or more</i> of:</p> <ul style="list-style-type: none"> • Safety (including implementation of a relevant Road Safety Strategy) • Links to complete or complement existing key walking and cycling networks with the objective to reduce congestion in main urban areas. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Requirements for high strategic fit rating	<p>A walking and cycling facilities project must only be given a high strategic fit rating if it is part of a Model Walking/Cycling Community with the objective to reduce congestion in main urban areas.</p> <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Effectiveness	Reference: For guidance on effectiveness rating, see <i>section G1.5</i> .
Economic efficiency	<p>The economic efficiency must be determined in accordance with the NZTA's <i>Economic evaluation manual, volumes 1 and 2</i>.</p> <p>Reference: For guidance on economic efficiency rating, see <i>section G1.6</i>.</p>

G5.4 Public transport infrastructure

Introduction

This section covers the specific considerations for assessment of projects in activity class 5: public transport infrastructure, as shown in the following table:

Name	Work category
Passenger transport infrastructure	531
Passenger transport road improvements	533

Use of package

Projects within the above work categories and passenger transport operations that fall outside of the definition of existing services (see *section C6.2* for detail) should, where appropriate, be part of a package of new improvements/initiatives. Such packages should be used especially with respect to:

- public transport priority
- associated traffic management
- integration with walking and cycling networks
- interchanges
- real-time information systems.

Use standard criteria and considerations

Packages and projects in these work categories must be assessed against the standard criteria and considerations. The specific considerations for determining the assessment profile are set out in this section.

Reference: For detail, see *Chapter G2 Standard criteria and considerations for assessment*.

Contd

G5.4 Public transport infrastructure, continued

Default strategic fit rating	By default, the strategic fit rating for public transport infrastructure is low.
Requirements for medium strategic fit rating	<p>A medium strategic fit rating may be given if there is potential for significant improvements in <i>one or more</i> of:</p> <ul style="list-style-type: none"> • Transport choice in major urban areas, particularly for those with limited access to a car or who are vulnerable to changes in fuel prices • Public transport network and interchange capacity constraints in major urban areas • Transport interconnections and ease of changing modes in major urban areas • Safety (including implementation of a relevant Road Safety Strategy) • Network security and resilience. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Requirements for high strategic fit rating	<p>A public transport infrastructure project must only be given a high strategic fit rating if there is potential for significant improvement in <i>one or more</i> of:</p> <ul style="list-style-type: none"> • peak time public transport patronage in major urban areas with severe congestion • Optimising public transport services and infrastructure. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Effectiveness	Reference: For guidance on effectiveness rating, see <i>section G1.5</i> .
Economic efficiency	<p>The economic efficiency must be determined in accordance with the NZTA's <i>Economic evaluation manual</i>, volume 2.</p> <p>Reference: For guidance on economic efficiency rating, see <i>section G1.6</i>.</p>

G5.5 New traffic management facilities

Introduction

This section covers the specific considerations for assessment of projects as shown in the following table:

Name	Work category
New traffic management facilities	321

Use of package

Proposals within this work category should be developed and assessed as part of a package for new improvements/initiatives. Such packages should be used especially with:

- strategic safety proposals
- urban traffic control and integrated pedestrian networks
- traffic demand management proposals
- speed management.

Projects that seek to manage demand, manage speeds and improve or maintain levels of service will be particularly encouraged.

Use standard criteria and considerations

Packages and projects in this work category must be assessed against the standard criteria and considerations. The specific considerations for determining the assessment profile are set out in this section.

Reference: For detail, see *Chapter G2 Standard criteria and considerations for assessment*.

However, most of the activities are expected to be generic activities for which the assessment profiles in *Chapter G4* apply.

Contd

G5.5 New traffic management facilities, continued

Default strategic fit rating	By default, the strategic fit rating for new traffic management facilities is low.
Requirements for medium strategic fit rating	<p>A medium strategic fit rating may be given if:</p> <ul style="list-style-type: none"> • there is potential for significant improvements in: <ul style="list-style-type: none"> – Safety (including implementation of a relevant Road Safety Strategy) <p>or</p> <ul style="list-style-type: none"> • there is potential for significant improvements on key routes in <i>one or more</i> of: <ul style="list-style-type: none"> – Journey time reliability – Congestion in main urban areas – Capacity constraints – Network security and resilience. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Requirements for high strategic fit rating	<p>A new traffic management facilities project must only be given a high strategic fit rating if:</p> <ul style="list-style-type: none"> • it is on a Road of National Significance (RONS), including local roads and/or services identified as critical to the operation of a RONS; <p>or</p> <ul style="list-style-type: none"> • there is potential for a major contribution to national economic growth and productivity on: <ul style="list-style-type: none"> – Freight routes or Tourism routes; or – Urban arterials critical for maximising access to significant markets, areas of employment or economic growth. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Effectiveness	Reference: For guidance on effectiveness rating, see <i>section G1.5</i> .
Economic efficiency	<p>The economic efficiency must be determined in accordance with the NZTA's <i>Economic evaluation manual, volumes 1 and 2</i>.</p> <p>Reference: For guidance on economic efficiency rating, see <i>section G1.6</i>.</p>

G5.6 Road improvements

Introduction

This section covers the specific considerations for assessment of projects as shown in the following table:

Name	Work category
Replacement of bridges and other structures	322
New roads	323
Road construction	324
Seal extension	325
Property	331, 332, 333

Use of package

Major new projects within the above work categories should preferably be developed as part of a package of new improvements/initiatives. Such packages should be used especially with respect to:

- integrated networks
- safe and sustainable modes
- corridor initiatives.

Such projects are expected to be large projects – for detail, see *section C9.4*.

Use standard criteria and considerations

Packages and projects in these work categories must be assessed against the standard criteria and considerations. The specific considerations for determining the assessment profile are set out in this section.

Reference: For detail, see *Chapter G2 Standard criteria and considerations for assessment*.

Contd

G5.6 Road improvements, continued

Default strategic fit rating

By default, the strategic fit rating for road improvements is low.

Requirements for medium strategic fit rating

A medium strategic fit rating may be given if:

- there is potential for significant improvements in:
 - **Safety** (including implementation of a **relevant Road Safety Strategy**)

or

- there is potential for significant improvements on **key routes** in *one or more* of:
 - Journey time **reliability**
 - **Congestion** in **main urban areas**
 - Capacity constraints
 - Network **security** and **resilience**.

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

Requirements for high strategic fit rating

A road improvement project must only be given a high strategic fit rating if:

- it is on a **Road of National Significance (RONS)**, including local roads and/or services identified as **critical to the operation of a RONS**;

or

- there is potential for a **major contribution** to national economic growth and productivity on:
 - **Freight routes** or **Tourism routes**; or
 - **Urban arterials critical** for maximising access to **significant markets, areas of employment** or **economic growth**.

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

Effectiveness

Reference: For guidance on effectiveness rating, see *section G1.5*.

Economic efficiency

The economic efficiency must be determined in accordance with the NZTA's *Economic evaluation manual, volumes 1 and 2*.

Reference: For guidance on economic efficiency rating, see *section G1.6*.

G5.7 Minor improvements

Introduction

This section covers the specific considerations for assessment of projects as shown in the following table:

Name	Work category
Minor improvements	341

Allocation

Each approved organisation is allocated eight percent of the overall approved maintenance budget for expenditure on minor improvements.

Individual project maximum

The total cost of individual projects including property costs is limited to a maximum of \$250,000.

Specific approval required

All projects require the specific approval of the NZTA's regional representative prior to expenditure being committed.

Details held by organisation responsible

Details of each project must be held by the organisation responsible for the project. This includes, as appropriate:

- the location and description of the project
- the relationship to any relevant study, strategy, activity management plan or scheme assessment report
- consideration of the strategic fit
- consideration of the effectiveness
- an economic assessment.

Such evidence must be provided, on request, to demonstrate the value-for-money reasons for selecting these projects.

Part of strategy

Minor improvement projects should be part of an overall and effective network strategy.

Subject to audit

Minor improvement projects are subject to audit by the NZTA.

Chapter G6 Assessment of proposals for studies, and strategy and/or plan development

G6.1 Overview

Introduction

This section sets out the NZTA's methodology for assessment of proposals for:

- studies
- development of area-based (usually sub-regional) and modal (eg walking and cycling) strategies (for detail, see *Chapter B4*)
- development of plans, including development and improvement of activity management plans (AMPs).

Purpose

The purpose of this chapter is to assist in the assessment of studies, strategies and plans that are being:

- included in regional land transport programmes (RLTPs)
- included in the National Land Transport Programme (NLTP)
- considered for funding approval.

Reference: The NZTA's methods for assessing completed strategies is included in *Chapter B4 Sub-regional strategies and plans*.

Audience

The audience for this chapter is:

- anyone who is planning to seek National Land Transport Fund (NLTF) funding for studies, and strategy and/or plan development
- NZTA staff who are providing advice and guidance on the assessment of proposals for studies and strategies or plan development projects.

In this chapter

This chapter contains the following sections:

Section	Page
G6.2 Proposals for studies, strategies and plans: general assessment requirements	G6-2
G6.3 Proposals for studies, strategies and plans: readiness	G6-3
G6.4 Proposals for studies, strategies and plans: strategic fit	G6-4
G6.5 Proposals for studies, strategies and plans: effectiveness	G6-6

G6.2 Proposals for studies, strategies and plans: general assessment requirements

Assessment profile

Activities in work category 002 (studies and strategies) and 003 (activity management plans) must be assessed against the following criteria and considerations:

- readiness in *section G6.3*
- strategic fit in *section G6.4*
- effectiveness in *section G6.5*.

Detailed economic evaluations not required

Detailed economic evaluations are not required for proposals to undertake studies, or to develop strategies and plans.

G6.3 Proposals for studies, strategies and plans: readiness

Introduction

This section presents the criteria and considerations for assessing readiness of proposals for studies, strategies or plans under the following headings:

- completeness of terms of reference
- consultation
- procurement.

Completeness of terms of reference, etc

Considerations:

- Do the terms of reference and other aspects for the proposed study, strategy or plan development comply with all the requirements in *sections F2.3 and F2.4*?
- Are there any outstanding issues about the scope of the proposal? If yes, describe them.
- Are there any outstanding issues yet to be agreed between parties to the proposal? If yes, describe them.
- What are the constraints on completing the study, strategy or plan?
- How will the views of affected communities be taken into account?
- How will the needs of the transport disadvantaged be considered?

Consultation

Consideration:

- Has appropriate consultation and collaboration with stakeholders been done or will be done?

Procurement

Considerations:

- Does the approved organisation requesting the the study, strategy or plan development have a NZTA-endorsed procurement strategy that covers procurement of the study, strategy or plan development?
- Will procurement of the study, strategy or plan development be in accordance with the procurement strategy?

G6.4 Proposals for studies, strategies and plans: strategic fit

Introduction

This section presents the specific criteria and considerations for rating the strategic fit for proposals for studies, strategies or plans.

The strategic fit rating is a measure of how the problem, issue or opportunity that is addressed by the study, or strategy or plan development aligns with the NZTA's strategic investment direction. The strategic fit must be assessed without considering potential solutions.

Default rating

By default, the strategic fit rating for proposals for studies, strategies and plans is low.

Requirements for medium rating

A medium rating for strategic fit must only be given if there is:

- potential to apply best practice planning processes, including:
 - providing long term, strategic local, regional and national planning
 - ensuring integration between transport planning, land use and other infrastructure
 - creating opportunities for better integration within and between transport modes
 - **making better use** of existing services and infrastructure
 - managing adverse environmental effects from land transport
 - adopting a coordinated approach with relevant stakeholders;

and

- focused on areas where there is a medium strategic fit under the activity class(es) that are likely to be the outputs of the planning.

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

Contd

G6.4 Proposals for studies, strategies and plans: strategic fit, continued

Requirements for high rating

A high rating for strategic fit must only be given if there is potential to apply best practice planning processes, set out in the medium criteria above, focused on *one or more* of:

- **Extracting maximum value** from services and infrastructure
- Areas where there is a high strategic fit under the activity class(es) that are likely to be the outputs of the planning. For example, high strategic fit areas of planning for new and improved infrastructure for state highways and local roads are:
 - **Roads of National Significance (RONS)**, including local roads and/or services identified as **critical to the operation of a RONS**.
 - **Freight routes** and **Tourism routes**
 - **Urban arterials critical** for maximising access to **significant markets, areas of employment or economic growth**

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

G6.5 Proposals for studies, strategies and plans: effectiveness

Introduction

This section presents the specific criteria and considerations for rating the effectiveness of proposals for studies, strategies or plans.

The effectiveness rating is a measure of the contribution that the study, or strategy or plan development makes to achieving the potential identified in the strategic fit assessment and the contribution to the purpose of the LTMA and the relevant NZTS objectives.

Minimum considerations

The proposed methodology and process for the study, or strategy or plan development must ensure that the outputs of the study, or strategy or plan development contribute to *each* of:

- the **potential identified in the strategic fit assessment** including the regional dimension of the GPS impacts
- the **purpose of the LTMA** (affordable, integrated, sustainable, safe and responsive land transport system)
- the relevant **NZTS objectives** (economic development, safety and personal security, access and mobility, public health, environmental sustainability)
- consideration of:
 - all relevant problems, issues and opportunities
 - all appropriate alternatives and options (studies and strategies that are likely to lead to improvement projects should list which options need to be considered further in the investigation phase and why)
 - any adverse effects or impacts;
- an **affordable** solution
- an appropriate analysis of risk.

Reference: For guidance on application of these criteria, refer to *section G1.5*.

Contd

G6.5 Proposals for studies, strategies and plans: effectiveness, continued

Requirements for low rating

To achieve a low rating, a proposal for a study, strategy or plan development must meet the minimum considerations for effectiveness set out in this section.

Requirements for medium rating

A proposal for a study, strategy or plan development must only be given a medium rating for effectiveness if it meets *each* of:

- all the low effectiveness criteria
- has the objective of producing a strategy, activity management plan or implementation plan for acceptance by the NZTA
- includes methodology that:
 - will identify activities or combinations of activities that are likely to be **significantly effective** in achieving the **potential identified in the strategic fit assessment**
 - will identify long-term solutions with **enduring benefits** appropriate to the scale of the solution
 - will consider land use strategies and implementation plans, where appropriate to the activity.

Reference: For guidance on application of these criteria, refer to *section G1.5*.

Requirements for high rating

A high rating for effectiveness must only be given if the proposal meets *each* of:

- all the low and medium effectiveness criteria
- includes methodology that will:
 - improve integration within and between transport modes, where appropriate to the activity
 - provide a solution that integrates land transport, land use and other infrastructure, where appropriate to the activity
 - support networks from a national perspective, where appropriate to the activity
 - give an **optimised** solution.

Reference: For guidance on application of these criteria, refer to *section G1.5*.

Chapter G7 Assessment of demand management

Introduction

This chapter sets out the NZTA's method of assessment for demand management activities.

For the description of what is included in the demand management work category, see section *F3.2*.

Purpose and audience

The purpose of this chapter is to provide guidance to anyone assessing a demand management activity. It may also be useful to NZTA staff advising people who are assessing such activities.

Develop as part of package

It is preferable to develop and assess demand management activities as part of a package of activities addressing safe and sustainable use of land transport.

Reference: For detail, see *Chapter G3 Assessment of packages*.

Use standard criteria and considerations

Packages and projects including demand management activities must be assessed against the standard criteria and considerations. The specific considerations for determining the assessment profile are set out in this section.

Reference: For detail, see *Chapter G2 Standard criteria and considerations for assessment*.

Contd

Chapter G7 Assessment of demand management, continued

Default strategic fit rating	By default, the strategic fit rating for a demand management project is low.
Requirements for medium strategic fit rating	<p>A demand management project must only be given a medium strategic fit rating if there is potential for significant improvements in <i>one or more</i> of:</p> <ul style="list-style-type: none"> • Safety (including implementing a relevant road safety strategy) • Transport choices in major urban areas, particularly for those with limited access to a car or who are vulnerable to changes in fuel prices • Adverse environmental effects from land transport • Public health outcomes. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Requirements for high strategic fit rating	<p>A high strategic fit rating may be given if there is:</p> <ul style="list-style-type: none"> • Potential to deliver a significant part of (or to significantly support) a relevant road safety strategy <p>and/or</p> <ul style="list-style-type: none"> • Potential to achieve change in travel behaviour in a way that will reduce severe congestion in major urban areas. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Effectiveness	Reference: For guidance on effectiveness rating, see <i>section G1.5</i> .
Economic efficiency	<p>The economic efficiency must be determined in accordance with the NZTA's <i>Economic evaluation manual</i>, volume 2.</p> <p>Reference: For guidance on economic efficiency rating, see <i>section G1.6</i>.</p>

Chapter G8 Assessment of community programmes

G8.1 Overview

Introduction

This section sets out the NZTA's method of assessment of community programme activities.

For a description of what is included in the community programmes work category, see *section F3.3*.

Purpose and audience

The purpose of this chapter is to provide guidance to anyone assessing a community programme. It may also be useful to NZTA staff advising people who are assessing such a programme.

In this chapter

This chapter contains the following sections:

Section	Page
G8.2 Extent of assessment for community programmes	G8-2
G8.3 Use of <i>LTP online</i> for community programmes	G8-3
G8.4 Community programmes: readiness	G8-4
G8.5 Community programmes: strategic fit	G8-6
G8.6 Community programmes: effectiveness	G8-8
G8.7 Community programmes: economic efficiency	G8-10
G8.8 Community programmes: programme balance and delivery competence	G8-12

G8.2 Extent of assessment for community programmes

Part of package	Community programme activities should preferably be developed and assessed as part of a package of activities addressing safe and sustainable use of land transport.
Criteria and considerations used	All community programmes must be assessed using the criteria and considerations specific to community programmes as outlined in <i>sections G8.4 to G8.8</i> .
Details to be agreed	The details of each activity in a community programme must be agreed with the NZTA before commitments are made.

G8.3 Use of *LTP online* for community programmes

How the considerations relate to *LTP online*

The considerations relating to community programmes in *LTP online* mirror the considerations in *sections G8.5 to G8.8*. They should help guide users to what the NZTA considers important in funding applications.

Considerations not exhaustive

These considerations are not exhaustive; users may provide additional information in *LTP online* to assist the application.

Level of information

The tables in *sections G8.4 to G8.8* indicate the level of information required depending on project hierarchy. Many of the questions are answered at the programme level, with fewer questions related to the detail specific to the individual activities.

Supporting information

All applications must be supported by the activity list or project plan, the template of which is provided in *LTP online*.

Information providing evidence in support of applications should be attached in *LTP online*. Supporting evidence may include:

- system use strategies
 - road safety action plans
 - sustainable transport plans
 - council resolutions, memoranda of understanding or other agreements.
-

G8.4 Community programmes: readiness

Introduction

The considerations related to project outline, funding affordability and readiness for community programmes are shown in following table.

Meaning of symbols

The meaning of the symbols in the table is:



Information must be entered for the group or for each activity within the group










Information is not required for the group or for the activity within the group

Criteria	Considerations	Group of activities
Project details	Descriptives of the project (name, description, etc)	
	Background and the history to the activity	
	Objective or objectives to be achieved	
	Geographic area covered	
Completeness of the programme	Outstanding issues about the scope	
	Outstanding issues between parties to the activity	
	Constraints on completing programme/activity	
	Views of affected communities	
	Needs of the transport disadvantaged	
Procurement	Alignment with council's procurement strategy	
	Alignment with procurement procedures for community activities	
	What procedure(s) are being used	

Contd

G8.4 Community programmes: readiness, continued

Criteria	Considerations	Group of activities
Funding resources and availability	Expected total cost	
	Expected funding source	
	Source of supplementary funds/in-kind donations	
	Maximised use of scarce resources	
	National resources and tools being used	
	Formal agreement for all third-party funding	
	Funding identified in the long-term council community plan (LTCCP)	

G8.5 Community programmes: strategic fit

Introduction

The considerations used to assess the strategic fit for community programmes are shown in following table.

Meaning of symbols

The meaning of the symbols in the table is:



Information must be entered for the group or for each activity within the group



Information is not required for the group or for the activity within the group

Criteria	Considerations	Group of activities
Problem, issue or opportunity addressed	Qualify the predominant problem, issue or opportunity being addressed	
	Additional problems, issues or opportunities being addressed	
	Additional strategic aspects	
Urgency of problems	What is the urgency to resolve the problem, issue or opportunity	
	What are the consequences of delaying	
Trends	Relevant trends that identify the problem	
Importance	Problem, issue or opportunity importance in national, regional and local strategies	
	Problem, issue or opportunity with the Government Policy Statement (GPS), including adverse impacts	
	Promoting organisation priority	
Strategic fit assessment rating	See the specific considerations for determining the strategic fit assessment rating.	

Contd

G8.5 Community programmes: strategic fit, continued

Default strategic fit rating

By default, the strategic fit rating for a community programme is low.

Requirements for medium strategic fit rating

A community programme must only be given a medium strategic fit rating if there is potential for significant improvements in *one or more* of:

- Safety (including implementing a **relevant road safety strategy**)
- **Transport choices in major urban areas**, particularly for those with limited access to a car or who are vulnerable to changes in fuel prices
- Adverse environmental effects from land transport
- Public health outcomes.

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

Requirements for high strategic fit rating

A high strategic fit rating may be given if there is:

- Potential to deliver a significant part of (or to significantly support) a relevant road safety strategy

and/or

- Potential to achieve change in travel behaviour in a way that will reduce **severe congestion in major urban areas**.

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

G8.6 Community programmes: effectiveness

Introduction

The considerations used to assess the effectiveness for community programmes are shown in following table.

Meaning of symbols

The meaning of the symbols in the table is:



Information must be entered for the group or for each activity within the group







Information is not required for the group or for the activity within the group

Criteria	Considerations	Group of activities
Strategic fit potential	How does the activity address the potential identified in the strategic fit assessment?	
Alternatives and options	Options and alternatives considered	
Optimisation	Integration of activity with the wider transport programme	
	Results of consultation	
	Collaboration with stakeholders and partners	
	Innovative ideas and solutions developed	
	Ongoing improvement to community programme	
	Exit strategy (implementation/information transfer programme) for the activity	
	Cost comparison with peers and other activities	
Enduring benefits	Long-term sustainability of benefits	
Evidence	Sources of evidence used to support the contributions and impacts	

Contd

G8.6 Community programmes: effectiveness, continued

Criteria	Considerations	Group of activities
Contribution to purpose of LTMA	Contribution to the purpose of the LTMA (ie achieving an affordable, integrated, sustainable, safe and responsive land transport system)	
Contribution to NZTS objectives	Contribution to the NZTS objectives (ie economic development, safety and personal security, access and mobility, public health, environmental sustainability)	
Contribution to GPS impacts	Contribution to the regionalised GPS impacts	
Effectiveness assessment rating	For guidance on effectiveness rating, see <i>section G1.5</i> .	

G8.7 Community programmes: economic efficiency

Introduction

The considerations used to assess the economic efficiency for community programmes are shown in following table.

Exclusion

If any single community activity costs less than \$250,000 per year, formal economic efficiency assessment is not required. However, the NZTA expects that funding applicants will provide, on request, evidence that demonstrates the value-for-money reasons for selecting these projects. This may be based on priorities determined in a safety or sustainability strategy. Where there are simplified procedures in the NZTA's *Economic evaluation manual*, these should be used as part of the value-for-money judgement.

Economic efficiency methodology

Economic calculations in the economic efficiency assessment must be in accordance with the NZTA's *Economic evaluation manual* (EEM), volume 2.

Meaning of symbols

The meaning of the symbols in the table is:



Information must be entered for the group or for each activity within the group



Information is not required for the group or for the activity within the group

Contd

G8.7 Community programmes: economic efficiency,

continued

Criteria	Considerations	Group of activities
Economic evaluation	Date economic evaluation completed	<input type="checkbox"/>
	Base date of economic evaluation	<input type="checkbox"/>
	National benefit cost ratio, BCR_n	<input type="checkbox"/>
	Government benefit cost ratio, BCR_g	<input type="checkbox"/>
	First-year rate of return	<input type="checkbox"/>
Monetised costs (PV)\$	Preferred option cost	<input type="checkbox"/>
	Net operational cost savings	<input type="checkbox"/>
	Net maintenance cost savings	<input type="checkbox"/>
Monetised benefits (PV)\$	Composite benefits for travel behaviour change (PV)\$	<input type="checkbox"/>
	Departures from EEM procedures	<input type="checkbox"/>
Non-monetised impacts	Non-monetised impact description	<input type="checkbox"/>
	Non-monetised impact quantification	<input type="checkbox"/>
	Non-monetised impact timeliness	<input type="checkbox"/>
	Sustainability of the benefits	<input type="checkbox"/>
Private benefits	Private benefit description	<input type="checkbox"/>
	Private beneficiary	<input type="checkbox"/>
	Private benefit quantification	<input type="checkbox"/>
Economic efficiency assessment rating	For guidance on economic efficiency rating, see <i>section G1.6</i> .	<input type="checkbox"/>

G8.8 Community programmes: programme balance and delivery competence

Introduction

The considerations used to assess the programme balance and delivery competence of community programmes are shown in following table.

Meaning of symbols

The meaning of the symbols in the table is:



Information must be entered for the group or for each activity within the group








Information is not required for the group or for the activity within the group

Criteria	Considerations	Group of activities
Programme balance	Are safety and sustainability both addressed in an appropriate proportion by the whole of the community programme?	
	Does the proposed community programme as a whole: <ul style="list-style-type: none"> • encourage community participation • develop and motivate local partnerships • assist communities to identify their transport issues and develop informed solutions • increase the community's capacity to address local issues and transfer expertise • integrate activities at the local level • encourage sustainable mode shift • target identified safety and sustainability issues? 	
	Is the community programme as a whole sufficiently developed and realistic given the available resources and local authority support?	

Contd

G8.8 Community programmes: programme balance and delivery competence, continued

Criteria	Considerations	Group of activities
Delivery competence	Is/are the principal deliverer(s) technically competent in the area of the proposed activity?	
	What is the evidence of this competence/experience?	
	What is the track record of the project leader for delivering the activity on time and within budget?	
	What is the probability of the activity being successfully completed and the results implemented?	
	Is the deliverer likely to meet the appropriate commitments in terms of completion of the project, timeliness and within budget?	

Chapter G9 Assessment of passenger transport programmes

G9.1 Overview

Introduction

This section sets out the NZTA's method of assessment of passenger transport programmes.

Reference: For a description of what is included in such a programme, see *Chapter C6 Preparing passenger transport programmes*.

Note: Passenger transport service improvements that fall outside of the definition of existing services are assessed as improvement projects. For detail, see *Chapter G5 Assessment of improvement programmes*.

Purpose and audience

Passenger transport programmes are assessed by the NZTA staff working together with regional councils (RCs) and territorial authorities (TAs), using the assessment methodology set out in this chapter. This is for the purpose of including the programmes in regional land transport programmes (RLTPs) and the National Land Transport Programme (NLTP), and for the purpose of approving the programmes for funding.

The purpose of this chapter is to give guidance on this activity.

In this chapter

This chapter contains the following sections:

Section	Page
G9.2 Information used in a passenger transport assessment	G9-2
G9.3 Components of a passenger transport programme	G9-3
G9.4 Passenger transport programme: general assessment requirements	G9-4
G9.5 Passenger transport programme: strategic fit	G9-6
G9.6 Passenger transport programme: effectiveness	G9-7
G9.7 Passenger transport programme: economic efficiency	G9-8
G9.8 Passenger transport programme: funding and affordability	G9-9

G9.2 Information used in a passenger transport assessment

Links to planning

The NZTA expects passenger transport programmes to be well linked to long-term planning documents, particularly regional public transport plans (RPTPs) and long-term council community plans (LTCCPs). These documents should describe the information assumptions underlying the programme and forecasts.

Information provided to support passenger transport programmes should make reference to the relevant parts of these planning documents.

Inputs to assessment

The NZTA will use the following information when assessing requests for passenger transport programmes:

- the growth strategy for the region
- the appropriate parts of the LTCCP
- the RPTP
- the passenger transport expenditure programme proposed by the regional authority
- passenger boardings history and forecasts
- bus/ferry/rail kilometre history and forecasts
- Total Mobility trips history and forecasts
- fare revenue history and forecasts
- minor infrastructure – number of bus shelters, number of wheelchair hoists
- future spikes or trends
- the basis of forecasts
- the accuracy of recent forecasts
- causes of variance between previous passenger transport programmes and the requested programme
- previous levels of investment
- benchmarking comparisons with similar regions
- deliverability of programme in the forward years
- balance between standard services (bus, ferry and rail, where applicable) and Total Mobility services
- targets set at a national level for end-of-year performance indicators.

G9.3 Components of a passenger transport programme

Programme components

Requests for funding for a passenger transport programme will be broken down into the following components for assessment purposes:

- a) the current services and current costs (the base programme) for peak times in major urban areas
- b) the current services and current costs (the base programme) for other times in other areas
- c) cost changes for current service levels, eg wage rises, increases in operating costs (fuel, etc), changes from re-tendered contracts
- d) minor changes to existing services, eg changes to routes, changes to service frequency, improved comfort, access or security within the definition of existing services
- e) new, improved or replaced facilities associated with existing services.

Components (a) and (b)

A higher strategic fit will be given to component (a) than to component (b) – see *section G9.5*. The priority for funding will depend on the effectiveness and economic efficiency ratings – see *sections G9.6* and *G9.7*.

Component (c)

Assessment of component (c) only involves consideration of the reasons for the cost changes, because activity levels are not changed.

Components (d) and (e)

A full description and cost of components (d) and (e) must be provided and will be assessed by the methodology in this chapter.

G9.4 Passenger transport programme: general assessment requirements

Introduction	This section lists the general assessment process used by the NZTA for passenger transport programmes.
Criteria and considerations	<p>Components of a passenger transport programme must be assessed against standard criteria and considerations similar to that given in <i>Chapter G2 Standard criteria and considerations for assessment</i>. The additional considerations for a passenger transport programme are described below. All the criteria and considerations are used in <i>LTP online</i>.</p> <p>The specific considerations for determining the assessment profile for a component of a passenger transport programme are set out in this chapter.</p>
Relationship with RPTP	Consideration will be given to the relationship between the recommendations in the approved organisation's regional public transport plan and the requested amounts for each work category in the passenger transport programme.
Relationship with growth strategy	Consideration will be given to the relationship between the recommendations in the approved organisation's regional public transport plan and the growth strategy for the region. This includes integration between land use and public transport provision.
Robustness of information	<p>Consideration will be given to the robustness of the approved organisation's:</p> <ul style="list-style-type: none"> • information systems • underlying assumptions • demand estimates • forward projections • optimisation analysis • consistency with other plans.
Regional public transport plan	Consideration will be given to the relationship between the recommendations in the regional authority's RPTP and the requested amounts for each work category in the passenger transport programme.
Regional dimension of the GPS	Consideration will be given to the regional dimension of the GPS - refer to <i>section B1.5</i> .

Contd

G9.4 Passenger transport programme: general assessment requirements, continued

Quality assurance

Consideration will be given to quality assurance processes to ensure delivery of the programme of activities.

Explanation of changes to requests and forecasts

Consideration will be given to the explanation of changes from previous requests and forecasts.

G9.5 Passenger transport programme: strategic fit

Introduction

This section lists the specific criteria and considerations for rating the strategic fit of a component of a passenger transport programme.

The strategic fit rating is a measure of how the problem, issue or opportunity that is addressed by the component of the passenger transport programme aligns with the NZTA's strategic investment direction. The strategic fit must be assessed without considering the proposed activity.

Default rating

By default, the strategic fit rating for a component of a passenger transport programme is low.

Requirements for medium rating

A component of a passenger transport programme must only be given a medium rating for strategic fit if there is the potential for significant improvements in *one or more* of:

- **Transport choice in major urban areas**, particularly for those with limited access to a car or who are vulnerable to changes in fuel prices
- Transport interconnections and ease of changing modes in **major urban areas**
- **Safety** (including implementing a **relevant road safety strategy**)
- Network **security** and **resilience**
- Reducing adverse environmental effects from land transport.

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

Requirements for high rating

A high rating for strategic fit must only be given to a component of a passenger transport programme if there is the potential for significant improvement in *one or more* of the following:

- **Peak time** public transport patronage in **major urban areas** with **severe congestion**; and
- **Optimising** public transport services and infrastructure; and
- Fare box recovery rates.

Reference: For guidance on bolded terms and application of these criteria, see *section G1.4*.

G9.6 Passenger transport programme programme: effectiveness

Introduction

This section refers to the criteria and considerations for rating the effectiveness of a component of a passenger transport programme.

The effectiveness rating is a measure of the contribution that the component of the passenger transport programme makes to achieving the potential identified in the strategic fit assessment and the contribution to the purpose of the LTMA and the relevant NZTS objectives.

Effectiveness rating

Each component of a passenger transport programme must be rated for effectiveness.

Reference: For guidance on effectiveness rating, see *section G1.5*.

Marginal changes

Consideration must be given as to how the effectiveness rating would change with refocusing of activities at the margin.

G9.7 Passenger transport programme: economic efficiency

Introduction

This section refers to the criteria and considerations for rating the economic efficiency of a component of a passenger transport programme.

The economic efficiency rating is a measure of how well the component of a passenger transport programme maximises the value of what is produced from the resources used.

Cost effectiveness

Cost-effectiveness analysis is commonly used instead of a full cost-benefit analysis where the objective is to compare the cost of different ways of achieving a given effect (eg level of service), or comparing the relative cost of different strategies with different effects.

The NZTA uses this approach to evaluate the economic efficiency of components of a passenger transport programme by comparing a programme with similar programmes for other approved organisations.

Benchmarking

Benchmarking information used in the cost-effectiveness analysis includes:

- operational expenditure per passenger boarding
- operational expenditure per passenger kilometre
- average farebox recovery
- average fare per passenger.

Trends in these measures over time are used rather than just annual values.

Comparisons will be made against similar regions and the national average. This may result in changes to the requested passenger transport programme or a requirement for a study as a condition of funding approval.

Effect of additions

As well as the cost benefit analysis required to support additions to the passenger transport programme, the effect of the additions on the benchmark information will be considered from a cost-effectiveness view point.

G9.8 Passenger transport programme: funding and affordability

Introduction	This section refers to the criteria and considerations used by the NZTA in deciding how to support the amounts requested for each component of the passenger transport programme.
Price escalation	Consideration will be given to the price escalation used by the approved organisation to forecast budgets.
Significant forecast activities	Information on significant activities in years 4, 5 and 6 will be considered.
Funding source	<p>The intended primary and additional funding sources for each work category in the passenger transport programme will be considered.</p> <p>Where other than N funds are proposed, this must be clearly shown in <i>LTP online</i>.</p>
Funding identified in relevant LTCCP	Consideration will be given to the funding identified in the relevant LTCCP.
Network condition and trends	Consideration will be given to the trends in performance measures.
Use of assessment profiles	Consideration will be given to the assessment profile for each component of the passenger transport programme and also the change in the profile with marginal changes to the activities involved.
Scaling as a result of GPS activity class funding	<p>Consideration will be given to the total of all passenger transport programmes compared with the relevant activity class funding ranges specified in the GPS and the target amount for each activity class set by the NZTA.</p> <p>If the total of all requested passenger transport programmes is greater than the target amount set by the NZTA, then the requested programmes will be scaled back. The amount of scaling for each component of the passenger transport programme will depend on the considerations listed above.</p>

Chapter G10 Assessment of road operations, maintenance and renewal programmes

G10.1 Overview

Introduction

This section sets out the NZTA's method of assessment of road operations, maintenance and renewal programmes.

Reference: For a description of what is included in such programmes, see *Chapter C7 Preparing road operations, maintenance and renewal programmes*.

Purpose and audience

Road operations, maintenance and renewal programmes are assessed by the NZTA staff working together with road controlling authorities (RCAs), using the assessment methodology set out in this chapter. This is for the purpose of including the programmes in regional land transport programmes (RLTPs) and the National Land Transport Programme (NLTP), and for the purpose of approving the programmes for funding.

The purpose of this chapter is to give guidance on this assessment methodology.

In this chapter

This chapter contains the following sections:

Section	Page
G10.2 Supporting documents and inputs	G10-2
G10.3 Changes to requirements	G10-4
G10.4 Components of a programme	G10-5
G10.5 Road operations, maintenance and renewal programme: general assessment requirements	G10-6
G10.6 Road operations, maintenance and renewal programme: strategic fit	G10-8
G10.7 Road operations, maintenance and renewal programme: effectiveness	G10-9
G10.8 Road operations, maintenance and renewal programme: economic efficiency	G10-10
G10.9 Road operations, maintenance and renewal programme: funding and affordability	G10-12

G10.2 Supporting documents and inputs

Introduction

The NZTA expects RCAs to use a structured and planned approach to road network management. Forward work programmes and budgets for road operations, maintenance and renewals must be derived from network inventory and condition information, a regular field inspection programme, a robust treatment selection process and funding affordability considerations. RCAs should be able to demonstrate how the proposed road operations, maintenance, renewal and improvement activities optimise the life-cycle costs of their road networks.

Details held by organisation responsible

Details of road operations, maintenance, renewal and improvement activities must be held by the organisation responsible for the project. This includes, as appropriate:

- the location and description of the works
- the relationship to any relevant study, strategy, activity management plan or scheme assessment report
- candidate prioritisation and treatment identification information
- historic maintenance information for past ten years
- general assessment considerations
- consideration of the strategic fit
- consideration of the effectiveness
- an economic efficiency assessment.

Such evidence for individual sites must be provided on request to demonstrate the value-for-money reasons for selecting the activities.

Contd

G10.2 Supporting documents and inputs, continued

Input to assessment

The NZTA will use the following information when assessing requests for road operations, maintenance and renewal programmes:

- the RCA's submission for operations, maintenance and renewals funding, including the supporting information set out in *section C7.4*
 - the road operations, maintenance and renewal expenditure programmes included in the RLTP
 - the programme of work as recommended in the RCA's road activity/ asset management plan
 - targeted levels of service in accordance with the NZTA's *Maintenance guidelines for local roads* or as otherwise agreed with the NZTA
 - the RCA's LTCCP, or equivalent 10-year plan, and any relevant annual plan
 - the relevant regional land transport strategy (RLTS)
 - recommendations from an accepted treatment selection algorithm and/or pavement deterioration modelling
 - evidence of periodic condition monitoring and traffic counting processes
 - maintenance activity/cost information held in RAMM
 - trends in network condition, including from physical inspections
 - benchmarking comparisons with other RCAs
 - contractual arrangements
 - previous levels of expenditure
 - movement in relevant cost indexes
 - findings from technical audit reports.
-

G10.3 Changes to requirements

Use of assessment process

In addition to the long-term planning undertaken for the development of programmes, the NZTA recognises that there may be additional issues that can lead to changes in road operations, maintenance and renewal requirements.

The NZTA will discuss these issues as part of the regular liaison with RCAs to review and optimise programmes and also during the assessment process.

Reference: For detail, see *Chapter C7 Preparing road operations, maintenance and renewal programmes*.

G10.4 Components of a programme

Components of programme

A road operations, maintenance and renewal programme will be divided into the following components for assessment purposes:

- Network security and resilience (Emergency reinstatement, Structures maintenance, Structures component replacement, Rail level crossing warning devices).
 - Optimum use (Operational traffic management, Traffic services maintenance, Traffic service renewals).
 - Pavement renewals to minimise lifecycle costs (Sealed road pavement rehabilitation, Sealed road resurfacing).
 - Measures to extend asset life and/or minimise lifecycle costs (Preventive maintenance, Drainage maintenance, Drainage renewals).
 - Measures to maintain agreed levels of service (Sealed pavement maintenance, Unsealed pavement maintenance, Unsealed road metalling).
 - Associated improvements for network security or resilience.
 - Network management (Network and asset management, Property management).
 - Environmental effects (Cycle path maintenance, Environmental maintenance, Environmental renewals).
 - Remaining components of the road operations, maintenance and renewals programme.
-

G10.5 Road operations, maintenance and renewal programme: general assessment requirements

Introduction	This section lists the general requirements of the NZTA for assessment of road operations, maintenance and renewal programmes.
Criteria and considerations	<p>Components of a road operations, maintenance and renewal programme must be assessed against standard criteria and considerations similar to that given in <i>Chapter G2 Standard criteria and considerations for assessment</i>. The additional considerations for a road operations, maintenance and renewal programme are described below. All the criteria and considerations are used in <i>LTP online</i>.</p> <p>The specific considerations for determining the assessment profile for a component of a road operations, maintenance and renewals programme are set out in this chapter.</p>
Relationship with AMP	Consideration will be given to the relationship between the recommendations in the RCA's activity/asset management plan and the requested amounts as well as defined quantities for each work category in the road operations, maintenance and renewal programme.
Robustness of information	<p>Consideration will be given to the robustness of the approved organisation's:</p> <ul style="list-style-type: none"> • asset information systems (including condition information) • underlying assumptions • optimisation analysis • risk assessment • asset management strategies.
Network management: management processes	<p>Consideration will be given to:</p> <ul style="list-style-type: none"> • inspection programme • condition surveys • maintenance activity and cost information • decision-making process • performance for the forward three years • field validation • benchmarking • completeness and accuracy of inventory systems and data.

Contd

G10.5 Road operations, maintenance and renewal programme: general assessment requirements, continued

Network management: user satisfaction, safety and asset preservation

Consideration will be given to changes from national and regional levels of service targets relating to road user satisfaction, safety and asset preservation as set out in the NZTA's *Maintenance guidelines for local roads* or as otherwise agreed with the NZTA.

Network management: performance history

Consideration will be given to:

- trends in performance monitoring measures undertaken for the road network (see *section E5.13*), and
- how the trends are addressed in the road operations, maintenance and renewal programme.

Quality assurance and innovation

Consideration will be given to:

- quality assurance processes, including the field verification of maintenance treatment decisions and technical audit recommendations
- close monitoring on reinstatement of services relocation activities
- innovation in sustainable practices when selecting materials, maintenance methods, etc.

Explanation of changes to requests and forecasts

Consideration will be given to explanation of changes from previous requests, including previous forecasts.

G10.6 Road operations, maintenance and renewal programme: strategic fit

Introduction	<p>This section lists the specific criteria and considerations for rating the strategic fit of a component of a road operations, maintenance and renewal programme.</p> <p>The strategic fit rating is a measure of how the problem, issue or opportunity that is addressed by the component of a road operations, maintenance and renewal programme aligns with the NZTA's strategic investment direction. The strategic fit must be assessed without considering potential solutions.</p>
Marginal changes	<p>Consideration must be given as to how the strategic fit rating would change with refocusing of activities at the margin.</p>
Default rating	<p>By default, the strategic fit rating for a component of a road operations, maintenance and renewal programme is low.</p>
Requirements for medium rating	<p>A component of a road operations, maintenance and renewal programme must only be given a medium rating for strategic fit if there is potential for timely intervention to meet agreed levels of service on existing infrastructure for:</p> <ul style="list-style-type: none"> • Safety (including implementing a relevant road safety strategy) • Road network security and resilience • Managing adverse environmental effects from land transport. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>
Requirements for high rating	<p>A high rating for strategic fit must only be given to a component of a road operations, maintenance and renewal programme if there is potential to make better use of existing infrastructure on key routes and to optimise levels of service for:</p> <ul style="list-style-type: none"> • Safety (including implementing a relevant road safety strategy) • Road network security and resilience. <p>Reference: For guidance on bolded terms and application of these criteria, see <i>section G1.4</i>.</p>

G10.7 Road operations, maintenance and renewal programme: effectiveness

Introduction

This section refers to the criteria and considerations for rating the effectiveness of a component of a road operations, maintenance and renewal programme.

The effectiveness rating is a measure of the contribution that the component of a road operations, maintenance and renewal programme makes to achieving the potential identified in the strategic fit assessment and the contribution to the purpose of the LTMA and the relevant NZTS objectives.

Effectiveness rating

Each component of a road operations, maintenance and renewal programme must be rated for effectiveness.

Reference: For guidance on effectiveness rating, see *section G1.5*.

Marginal changes

Consideration must be given as to how the effectiveness rating would change with refocusing of activities at the margin.

G10.8 Road operations, maintenance and renewal programme: economic efficiency

Introduction	<p>This section refers to the criteria and considerations for rating the economic efficiency of a component of a road operations, maintenance and renewal programme.</p> <p>The economic efficiency rating is a measure of how well the component of a road operations, maintenance and renewal programme maximises the value of what is produced from the resources used.</p>
Cost effectiveness	<p>Cost-effectiveness analysis is commonly used in infrastructure management instead of a full cost-benefit analysis where the objective is to compare the cost of different ways of achieving a given effect (eg level of service), or comparing the relative cost of different strategies with different effects.</p> <p>The NZTA uses this approach to evaluate the economic efficiency of components of a road operations, maintenance and renewals programme by comparing with similar programmes for other RCAs with similar network characteristics.</p>
Benchmarking	<p>Benchmarking information used in the cost-effectiveness analysis includes:</p> <ul style="list-style-type: none"> • cost of activities, including maintenance treatments, renewal treatments and network management, allowing for differences in traffic, network size, etc • cycle times for road renewal activities, eg re-gravelling, re-surfacing and pavement rehabilitation. • selected treatment against condition status
Balancing to reduce life-cycle costs	<p>Consideration will be given to the balance between maintenance, renewal and capital improvement activities to achieve lowest life-cycle costs.</p>
Treatment selection support	<p>The NZTA will use approved treatment selection reports, supported by field inspection and asset condition reports to support economic efficiency assessment for renewal activities in the following work categories:</p> <ul style="list-style-type: none"> • 211: unsealed road metalling • 212: sealed road resurfacing. <p>A medium economic efficiency rating may be given where the proposed activity levels are compatible with optimised maintenance and renewals for the roads involved.</p>

Contd

G10.8 Road operations, maintenance and renewal programme: economic efficiency, continued

Cost saving for renewals

For assessment of a renewals component of a road operations, maintenance and renewals programme, the present value (PV) of cost savings may be used in place of a full cost benefit analysis.

A simplified economic efficiency procedure using PV of cost savings is provided in the *Economic evaluation manual*, volume 1 – see SP1, for the following work categories:

- 213: drainage renewals
 - 214: pavement rehabilitation
 - 231: associated improvements (seal widening).
-

G10.9 Road operations, maintenance and renewal programme: funding and affordability

Introduction	This section refers to the criteria and considerations used by the NZTA in deciding how to support the amounts requested for each component of the road operations, maintenance and renewals programme.
Price escalation	Consideration will be given to the price escalation used by the RCA to forecast budgets.
Significant forecast activities	Information on significant activities in years 4, 5 and 6 will be considered.
Funding source	<p>The intended primary and additional funding sources for each work category in the road operations, maintenance and renewals programme will be considered.</p> <p>Where other than N funds are proposed to be used, this must be clearly shown in <i>LTP online</i>.</p>
Funding identified in relevant plan	Consideration will be given to the funding identified in the relevant LTCCP or equivalent 10 year plan.
Track record for delivery	Consideration will be given to the track record of delivery of the road operations, maintenance and renewal programme.
Network condition and trends	Consideration will be given to the network condition and trends in performance measures.
Use of assessment profiles	Consideration will be given to the assessment profile for each component of the road operations, maintenance and renewals programme and also the change in the profile with marginal changes to the activities involved.
Scaling as a result of GPS activity class funding	<p>Consideration will be given to the total of all road operations, maintenance and renewals programmes compared with the relevant activity class funding ranges specified in the GPS and the target amount for each activity class set by the NZTA.</p> <p>If the total of all requested road operations, maintenance and renewals programmes is greater than the target amount set by the NZTA, then the requested programmes will be scaled back. The amount of scaling for each component of the road operations, maintenance and renewals programme will depend on the considerations listed above.</p>

Chapter G11 Assessment of police activities

G11.1 Overview

Introduction This chapter sets out the NZTA's method of assessment of police land transport activities.

It does not include the method for assessing the relationship of police activities to regional land transport programmes (RLTPs).

Reference: For detail, see sections *C12.10 Police activities and the RLTP: inputs* and *C12.11 Police activities and the RLTP: assessment*.

Audience The audience for this chapter is NZTA staff undertaking assessment of police activities and anyone concerned with land transport planning who wishes to know how police land transport activities are assessed.

In this chapter This chapter contains the following sections:

Section	Page
G11.2 What are police activities?	G11-2
G11.3 The NZTA's assessment of police activities: requirements	G11-3
G11.4 The NZTA's assessment of police activities: inputs	G11-4
G11.5 The NZTA's assessment of police activities: methodology	G11-5

G11.2 What are police activities?

Strategic road policing

Strategic road policing (W/C 711) involves:

- speed control
- drunk or drugged driver control
- restraint device control
- visible road safety and general enforcement
- commercial vehicle investigation and road user charges enforcement.

Incident and emergency management

Incident and emergency management (W/C 712) involves:

- crash attendance and investigation
- traffic management services.

Road policing resolutions and community engagement

Police land transport activities also involve:

- road policing resolutions (W/C 713)
- community engagement (W/C 714):
 - police community services
 - school road safety education.

Development of plans and projects

Road policing and associated activities are focused by road safety action plans (see section *F2.4*) and Network Safety Coordination projects developed at the local level in a collaborative process involving the NZTA, NZ Police, regional authorities, territorial authorities and other representatives.

Integration

The NZTA encourages road controlling authorities (RCAs) to view road policing as activities that need to be fully integrated with other interventions and local needs.

G11.3 The NZTA's assessment of police activities: requirements

Introduction	<p>This section sets out the requirements for the NZTA's assessment of police activities.</p> <p>Legislation: LTMA s18G(2).</p>
Contribution objectives, benefits and targets	<p>The NZTA must be satisfied that police activities or combinations of activities:</p> <ul style="list-style-type: none"> • contribute to the aim of achieving an affordable, integrated, safe, responsive and sustainable land transport system • contribute to each of the following: <ul style="list-style-type: none"> – assisting economic development – assisting safety and personal security – improving access and mobility – protecting and promoting public health – ensuring environmental sustainability • give effect to the relevant Government Policy Statement (GPS).
Consideration of strategies and policies	<p>The NZTA must be satisfied that the police activities or combinations of police activities take into account:</p> <ul style="list-style-type: none"> • any current national land transport strategy • any relevant regional land transport strategies (RLTSs) • any national energy efficiency and conservation strategy • any relevant national policy statement and any relevant regional policy statements or plans that are for the time being in force under the Resource Management Act 1991.
Special reviews	<p>From time to time, special reviews are commissioned of police processes, productivity, efficiency, effectiveness, etc, of the standard set of activities and/or policies and legislation likely to influence road safety.</p>

G11.4 The NZTA's assessment of police activities: inputs

Introduction

This section sets out the inputs for the NZTA's assessment of police activities.

Legislation: LTMA s18G(2).

Safety and personal security performance

The assessment will consider the safety and personal security performance for regions and territorial authority areas or clusters.

GPS, LTMA and strategies

The assessment will consider:

- the regional dimension to the GPS targets, particularly for road safety
 - the Land Transport Management Act 2003 (LTMA) provisions for recommendations for police activities
 - the current National Road Safety Strategy
 - the current NZ Police Road Policing Strategy
 - relevant RLTSs
 - other strategies with relevance for road policing.
-

Police resource

The assessment will consider the level of police resource for:

- road types and/or police activities shown in the current National Land Transport Programme (NLTP) for each region and the constituent territorial authority areas or clusters (for detail, see the NZTA website – www.nzta.govt.nz)
 - each of the police activities shown in the current Road Policing Programme for each NZ Police district and the constituent territorial authority areas or clusters (for detail, see the NZ Police website – www.police.govt.nz).
-

Forecast and modelling

The assessment will consider:

- the current 10-year forecast for police activities
 - outputs from resource allocation modelling.
-

G11.5 The NZTA's assessment of police activities: methodology

Introduction	This section sets out the methodology for assessment of recommendations for police activities.
Quantities and costs	<p>The assessment will include:</p> <ul style="list-style-type: none"> • comparing the quantity for each activity with the updated Road Safety Strategy (and other relevant strategies) • comparing the cost with previous forecasts • explaining variances from prior quantity and cost forecasts • reviewing the basis for cost escalation.
Crash performance	<p>The assessment will include a review of road crash performance compared with goals (or targets, if available) for outcomes and intermediate outcomes.</p> <p>If possible, these outcomes will be reviewed by road type, road user type and region or local area.</p> <p>The NZTA will recommend adjustments necessary to meet goals and targets.</p>
RLTS and policing planning	The assessment will take into account RLTSs and road safety/road policing planning (and other planning/proposals, as appropriate).
Optimising allocation	The assessment will take into account optimising allocation of strategic road policing between territorial authorities.
Funding request grouping	<p>Funding requests for police activities above the current levels are grouped into:</p> <ol style="list-style-type: none"> 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 global positioning system (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.
Assessment of group (a) funding requests	Assessment of group (a) requests only involves consideration of the reasons for the cost adjustments, because activity levels are not changing.

Contd

G11.5 The NZTA's assessment of police activities: methodology, continued

Assessment of group (b) funding requests

A similar assessment approach is used for group (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 by NZ Police is required.

In some circumstances, it may be appropriate that a group (b) request is assessed using the standard criteria and considerations (for detail, see *Chapter G2 Standard criteria and considerations for assessment of improvement projects*). This will be determined on a case-by-case basis.

Assessment of groups (c) and (d) funding requests

Groups (c) and (d) requests are assessed using the standard criteria and considerations in accordance with *Chapter G2 Standard criteria and considerations for assessment of improvement projects*.

Generic assessment profiles have not been completed for these activities because the activities tend to be unique.

Chapter G12 Assessment of research activities

G12.1 Overview

Introduction

This section sets out the method of assessment for the NZTA's research activities.

Audience

The audience for this chapter is NZTA staff, researchers and members of the Research Reference Group (RRG), which consists of representatives of:

- the NZTA
- road controlling authorities (RCAs)
- regional councils
- contractors
- consultants
- road users
- research funders
- NZ Police
- universities
- Australian transport research community
- relevant government agencies.

It will also be useful to people concerned with land transport planning who wish to know how the NZTA assesses its research activities.

Contd

G12.1 Overview, continued

In this chapter

This chapter contains the following sections:

Section	Page
G12.2 Research strategy and funding allocation	G12-3
G12.3 Requirements and process for assessing industry-generated research proposals	G12-4
G12.4 Research assessment factors	G12-6
G12.5 Assessment questions: seriousness and urgency	G12-9
G12.6 Assessment questions: effectiveness	G12-10
G12.7 Assessment questions: cost-effectiveness	G12-12
G12.8 Assessment questions: feasibility/capability	G12-13
G12.9 Research: overall assessment	G12-15
G12.10 Standard form for research programme assessment	G12-16
Research programme assessment form	G12-17

G12.2 Research strategy and funding allocation

Introduction

The NZTA's research strategy establishes the guiding principles, key topic areas and management arrangements for land transport research funded from the National Land Transport Fund (NLTF).

Reference: For detail, see the NZTA's website (www.nzta.govt.nz).

Guiding principles

The guiding principles are that research proposals:

- are responsive to the evolving transport environment and future user needs
 - contribute to the New Zealand Transport Strategy (NZTS) objectives, Government Policy Statement (GPS) targets, and the NZTA's objective and research definition
 - align with one or more key research topic areas and the NZTA's research priorities
 - qualify against the research definition and assessment criteria.
-

Key topic areas

The NZTA translates its analysis of priority areas into allocations for each of the key topic areas. In doing so, it considers issues such as New Zealand's capacity to deliver research in emerging areas.

Research proposals compete for this funding according to the assessment criteria given below.

G12.3 Requirements and process for assessing industry-generated research proposals

Criteria

The research proposals that the NZTA prefers will satisfy 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.

Two-stage assessment process for industry-generated research

Industry-generated research proposals go through a two-stage assessment process:

1. Expression of Interest (EOI)

EOIs are received and prioritised by the NZTA and the RRG in accordance with the NZTA's research strategy. A shortlist is drawn up.

2. Request for Proposal (RFP)

Researchers whose EOIs are shortlisted are asked to submit full proposals. The full proposals are assessed by NZTA staff and RRG members with appropriate expertise. The assessment results are collated and presented to the RRG, which prepares the research programme for approval.

Assessment form

For each proposal, assessors are required to complete a research programme assessment form, which is to be found at the end of this chapter (page G12-17).

The form should be completed with reference to the assessment questions to be found on pages G12-9 to G12-14.

Note: An assessor need not fill out the assessment form if they consider that there is an overriding reason why the project should not be funded.

Contd

G12.3 Requirements and process for assessing industry-generated research proposals, *continued*

Directed research

Where there are identified research needs not covered by industry-generated research proposals, the NZTA will call for proposals in accordance with a specific terms of reference.

This is called **directed research**.

Assessment of directed research

Directed research proposals are assessed and considered for inclusion in the research programme using the same assessment criteria as for industry-generated proposals.

Approval of research programme

The research programme is approved by the NZTA Board in May each year, included in the National Land Transport Programme (NLTP), and made available in more detail on the NZTA's website (www.nzta.govt.nz).

G12.4 Research assessment factors

Introduction

The NZTA's research activities are assessed using factors under:

- seriousness and urgency
- effectiveness
- cost-effectiveness
- feasibility/capability.

An overview of these is given in the rest of this section. More detailed assessment criteria are given in subsequent sections.

Seriousness and urgency

This table shows the assessment factors for seriousness and urgency.

Criteria	Considerations
Knowledge gap	<ul style="list-style-type: none"> • Is the knowledge gap causing undesirable trends in the performance of the land transport system? • How significant is the knowledge gap? • Does research need to be done now? • Does new research need to be undertaken or can it be adapted from elsewhere? • What is the level of confidence that the issue or problem is serious and urgent?
Rating	H/M/L

Contd

G12.4 Research assessment factors, continued

Effectiveness

This table shows the assessment factors for effectiveness.

Criteria	Considerations
Effectiveness of the research in addressing the knowledge gap	<ul style="list-style-type: none"> • Will the proposed research significantly address the knowledge gap? • Does the proposed research take account of the evolving transport environment? • Will the proposed research provide an effective solution over the long term? • How well does the proposed research contribute to the land transport objectives, goals and trends set out in the NZTS, the GPS and the NZTA's research strategy? • What is the level of confidence that the research output will be used?
Rating	H/M/L

Cost-effectiveness

This table shows the assessment factors for cost-effectiveness.

Criteria	Considerations
The cost of achieving the desired result	<ul style="list-style-type: none"> • Is the proposal efficient in its use of scarce resources? • Is there a lower-cost way of achieving the same or similar effect? • Is there any external funding source available, in full or in part, and will it be used? • Is the proposal dependent on any other funding for completion, and if so are the funding constraints compatible with NZTA criteria? • What is the level of confidence about the estimated costs?
Rating	H/M/L

Contd

G12.4 Research assessment factors, continued

Feasibility/ capability

This table shows the assessment factors for feasibility/capability

Criteria	Considerations
The practicality/feasibility of the research and the capability of the researchers	<ul style="list-style-type: none"> • Is the proposed research methodology and timetable clear and feasible? • Is the proposed composition of the research team suitable for this project? • Does the proposed research team have a good track record? • Does the proposed research team have competent project management skills? • What is the level of confidence that the research will be completed on time and to an appropriate quality?
Rating	H/M/L

G12.5 Assessment questions: seriousness and urgency

Introduction	<p>The questions in this section must be considered when determining the assessment for seriousness and urgency. The questions are listed under the following headings:</p> <ul style="list-style-type: none"> • seriousness of knowledge gap • urgency of the problem • strategic alignment.
Sufficient information	<p>Research proposals should provide sufficient information to enable these questions to be answered.</p>
Seriousness of knowledge gap	<p>Consider these questions when assessing the seriousness of the knowledge gap:</p> <ul style="list-style-type: none"> • What is the background to the proposal and has it been adequately explained? • What is the user need or knowledge gap being addressed? • What is the seriousness of the knowledge gap or issue? Provide evidence related to the strategic context. • Does the research aim to address any additional issues?
Urgency of the problem	<p>Consider these questions when assessing the urgency of the problem:</p> <ul style="list-style-type: none"> • Has research been done, or is it being done, on this or an associated knowledge gap or issue? • How is previous research taken into account in the project? • Why does new research need to be done now? • Has a literature search been done, and if so what did this show? • What are the consequences of delaying the proposed research?
Strategic alignment	<p>Consider these questions when assessing strategic alignment:</p> <ul style="list-style-type: none"> • What are the relevant trends in the condition or performance of the land transport system that identifies the knowledge gap? • What importance is given to the knowledge gap in national, regional and local strategies? • What importance is given to the knowledge gap in the NZTS and GPS? • Are there any additional aspects of strategic context?
Overall seriousness and urgency	<p>What is the overall seriousness and urgency rating? H/M/L</p>

G12.6 Assessment questions: effectiveness

Introduction

The questions in this section must be considered when determining the assessment for effectiveness. The questions are listed under the following headings:

- optimisation
- contribution to objectives, targets and trends
- implementation
- evidence.

Sufficient information

Research proposals should provide sufficient information to enable these questions to be answered.

Optimisation

Consider these questions when assessing the optimisation:

- What consultation has been carried out with stakeholders?
- How does the proposed research take account of the evolving transport environment?
- Will the need/issue still be relevant in the next 5–15 years?
- What options and alternatives to the proposed research have been considered and what are the reasons for choosing the proposed research?
- Is the research fundamental or applied?
- How will the proposed research provide an effective solution over the long term?
- What collaboration is proposed with stakeholders during the research?
- Who are the likely/potential end users of the research?
- How useful will the research be to:
 - the industry in general?
 - the end users?
- How transferable is the research or is it inherently local in focus?
- What proportion of road users/road user groups will benefit (eg all, light/heavy vehicles, pedestrians/cyclists, school children)?
- How has the usefulness of the research been assessed (eg requests or feedback from the industry or end users)?
- Have external clients signed up to using the research?
- What are the incentives for users to take up the research result?

Contd

G12.6 Assessment questions: effectiveness, continued

Contribution to objectives, targets and trends

Consider these questions when assessing the contribution to objectives, targets and trends:

- How does the research contribute to the purpose of the Land Transport Management Act 2003 (LTMA) and the NZTA's objective and responsibilities?
- How does the research contribute to the NZTS objectives and the GPS targets?
- How does the research relate to the key topic areas and issues in the NZTA's research strategy?

Implementation

Consider these questions when assessing the implementation:

- How does the research produce a useful output?
- How well are the end results and their effects specified?
- Is there an implementation/information transfer programme?
- How realistic/appropriate is the implementation/transfer programme?
- How soon will research results be available for implementation?
- How long will it take to implement the research results?

Evidence

Consider this question when assessing the evidence:

- What sources of evidence are used to support the contributions and impacts described above?

Overall effectiveness

What is the overall effectiveness rating? H/M/L

G12.7 Assessment questions: cost-effectiveness

Introduction

The questions in this section must be considered when determining the assessment for cost-effectiveness. The questions are listed under the following headings:

- cost
- co-funding.

Sufficient information

Research proposals should provide sufficient information to enable these questions to be answered.

Cost

Consider these questions when assessing the cost:

- What is the expected total cost?
- What is the cost to the NZTA?
- Is the proposal efficient in its use of scarce resources?
- Is there a lower-cost way of achieving the same or similar effect?
- Has an assessment of the 'at-risk' costs been performed, and is it acceptable?

Co-funding

Consider these questions when assessing co-funding:

- Is there any external funding source available, in full or in part, and will it be used?
- Is the proposal dependent on any other funding for completion, and if so are the funding constraints compatible with NZTA criteria?

Overall cost-effectiveness

What is the overall cost-effectiveness rating? H/M/L

G12.8 Assessment questions: feasibility/capability

Introduction

The questions in this section must be considered when determining the assessment for feasibility/capability. The questions are listed under the following headings:

- methodology
- researcher's competency
- confidence.

Sufficient information

Research proposals should provide sufficient information to enable these questions to be answered.

Methodology

Consider these questions when assessing the methodology:

- Is the purpose of the research clear?
- Will the research proposal achieve its stated purpose?
- How well are the objectives of the research proposal defined?
- How specific/well scoped are the deliverables?
- Will the research as outlined meet the objectives?
- Is the project technically sound?
- Is the field mature or developing?
- Has a realistic programme to carry out the work been identified?
- Has the cashflow been determined, and if so how feasible is it?
- Are the milestones appropriate?
- Are the review points built into the project practical and reasonable?
- Is the quality of the research appropriate for the outputs specified?

Contd

G12.8 Assessment questions: feasibility/capability, continued

Researcher's competency

Consider these questions when assessing the researcher's competency:

- Is/are the principal researcher(s) technically competent in the area of the proposed research?
- What is the evidence of this competence/experience?
- Are the skills of the project team comprehensive enough?
- What is the evidence of project management skills?
- Is the project leader a clear champion for this project?
- What is the track record of the research project leader for delivering the goods on time and within budget?
- Do the principals have the ability to produce useful, well-constructed information?
- What is the probability of the research project being successfully completed and the results implemented?
- Is the researcher likely to meet the appropriate commitments in terms of completion of the project, timeliness and within budget?

Confidence

Consider this question when assessing the confidence:

- What is the level of confidence that the research will be completed on time and to an appropriate quality?

Overall feasibility/capability

What is the overall feasibility/capability rating? H/M/L

G12.9 Research: overall assessment

Overall assessment required

Assessors must give an overall assessment of the proposal and can suggest that the RRG includes, considers for inclusion or rejects the proposal from the research programme.

Factors other than rating

Even if a proposal achieves a high/low rating according to the standard assessment factors, other factors may influence the overall recommendation.

These factors may include:

- The proposal could fall more appropriately within the ambit of another agency's research programme, eg Ministry for the Environment, Public Good Science Fund. If so, has the external funding source been identified?
- The proposal may be dependent on other funding for completion and the proposer has not explained how funding cycles from different organisations will be reconciled.
- Constraints imposed by other sources of funding may not be compatible with the NZTA's criteria.
- The project may only meet the needs of a single user (such as the NZTA) rather than those of multiple-end users.
- End users may not recognise that there is a need/problem in the research area.
- The proposal may provide knowledge in a very important area, but may be time consuming and not cost-effective.
- The proposal could be clearly commercial.

Comments encouraged

Assessors are encouraged to provide general comments about the proposal to support the assessment or overall recommendation. Comments are especially important where the assessment rating is very low (or high), but the overall recommendation is to approve (or decline).

Note clarification needed

Assessors are also encouraged to note aspects that need further clarification or refinement before funding is approved, such as the need for further details on the budget, milestones or end-user support.

Conditions may be recommended

Assessors may recommend conditions to be satisfied before funding approval is given.

G12.10 Standard form for research programme assessment

Introduction

The form on the next page is to be used by NZTA staff and members of the RRG for the assessment of research proposals.

Not necessary for rejections

An assessor need not fill out the form if he or she considers that there is an overriding reason why the project should not be funded.

Research programme assessment form

Assessor's name				
Proposal name				
Reference no.		Organisation		
Assessment profile				
Assessment factor	Seriousness and urgency: Focus on the issue or problem (Refer: G12.5)	Effectiveness: Focus on the effectiveness of the research in addressing the issue or problem (Refer: G12.6)	Cost-effectiveness: Focus on the cost of achieving the desired effect (Refer: G12.7)	Feasibility/capability: Focus on the practicality/feasibility of the research and the capability of the researcher (Refer: G12.8)
Comment				
Rating*				
* H/M/L				
Overall assessment	Include	Consider	Reject	
Overall recommendation (please tick):				
Suggested conditions on researcher:				
Overall comment:				

Chapter G13 Assessment of national education and training activities

Introduction

This chapter sets out the NZTA's method of assessment for national education and training activities.

National education and training activities are covered by:

- activity class 16: national education and promotion
- activity class 17: sector training and support.

Reference: See sections *F12.3* and *F12.4* for descriptions of the activities.

Purpose and audience

The purpose of this chapter is to provide guidance to NZTA staff who are assessing national education and training activities. It may also be useful to anyone wishing to know how such activities are assessed.

Management and delivery

National education and training activities are managed by the NZTA and mostly delivered by external providers.

Approach to assessment

National education and training activities are assessed in a similar manner to that described for road policing in *Chapter G11*.

Relationship to demand management

Some national 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.

Chapter G14 Assessment of programme management and performance monitoring

Introduction

This chapter sets out the NZTA's method of assessment for programme management and performance monitoring activities.

Programme management and performance monitoring activities are covered by:

- activity class 18: management of the funding allocation system
- activity class 19: performance monitoring.

Reference: See sections *F12.5* and *F12.6* for the description of the activities.

Purpose and audience

The purpose of this chapter is to provide guidance to NZTA staff who are assessing programme management and performance monitoring activities. It may also be useful to anyone wishing to know how such activities are assessed.

Funding and delivery

Programme management and performance monitoring activities are fully funded from the National Land Transport Fund (NLTF) and delivered by the NZTA.

Need and scope

The need and scope of programme management and performance monitoring activities are identified as part of the NZTA's business planning process, including its strategic plan.

Assessment

The same considerations apply to assessment of these activities for the purpose of including the activities in the National Land Transport Programme (NLTP), in accordance with section 19B of the Land Transport Management Act 2003 (LTMA), as for approving the activities for funding in accordance with section 20 of the LTMA. These considerations are how the activities:

- contribute to the purpose of the LTMA
- contribute to the NZTA's objective, including its social and environmental responsibility, in an efficient and effective manner
- contribute to the five New Zealand Transport Strategy (NZTS) objectives
- give effect to the relevant Government Policy Statement (GPS)
- take into account any national land transport strategy, regional land transport strategies (RLTSs), national energy efficiency and conservation strategy, and relevant national policy statement and any relevant regional policy statements or plans that are for the time being in force under the Resource Management Act 1991.

Chapter G15 Peer reviews of activities

G15.1 Overview

Introduction This chapter sets out the NZTA's requirements for peer review of studies, strategies, project assessments, economic evaluations, cost estimates and research.

In this chapter This chapter contains the following sections:

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G15.2 Activities that may require peer review

Peer review of studies and strategies

The NZTA may require that studies and strategies are peer reviewed.

The peer review process must be agreed as part of agreement of the terms of reference.

Reference: For detail, see section *F2.3*.

Peer review of complex improvement projects

For complex projects, the NZTA requires applicants for funding assistance to have their project assessments and economic evaluations independently reviewed by an external peer reviewer.

This is to increase confidence in the quality of the assessments and evaluations, and to give greater certainty that the projects will be approved.

Peer review of regular improvement projects

For regular projects and generic projects over \$1 million, the NZTA encourages applicants for funding assistance to have their project assessments and economic evaluations independently reviewed by an external peer reviewer.

This is to increase confidence in the quality of the assessments and evaluations, and to give greater certainty that the projects will be approved.

Independent review

The NZTA reserves the right to require any project to be independently reviewed by an external peer reviewer or to review any project itself.

G15.3 Undertaking the review

What the peer review must address

The peer review must include at least a review of the:

- conformity
- credibility
- choice of do-minimum
- identification of alternatives and options
- cost estimate
- economic efficiency evaluation
- sensitivity analysis.

These components are described in this section.

Conformity check

The reviewer must determine whether the project description and assessment supports the purpose and objectives of the Land Transport Management Act 2003 (LTMA) as described in this manual.

To perform a conformity check, the reviewer must do the following:

- Critically review the applicant's information against the LTMA to ensure it conforms with the Act's purpose and objectives relevant to the type of project.
- Ensure that the economic efficiency evaluation conforms to the NZTA's *Economic evaluation manual*.
- Review the project information against the relevant regional, territorial authority or local plan(s) and consider the fit.

All projects should be part of (or consistent with) a transport plan or strategy for the route or area, or an activity management plan or long-term financial strategy.

Reviewers should comment on whether the project meets this requirement, including whether the project is in balance with the other parts of the network.

Contd

G15.3 Undertaking the review, continued

Credibility check	<p>To check credibility, the reviewer must do the following:</p> <ul style="list-style-type: none"> • Ensure the transport problem has been identified, is reasonable and is adequately described. • Critically assess the results of each stage of the project's economic efficiency evaluation, avoiding unnecessary detail where possible. <p>The test as to the level of detail to consider is whether the conclusion reached in the report is a reasonable and a credible result from the information and data used in the analysis.</p> <ul style="list-style-type: none"> • Assess the costs estimated for the project and consider how realistic these are, taking into account current market rates. • Identify the key benefits and determine whether they are realistic (eg are the travel time savings realistic or are excess delays being forecast under congested conditions in the do-minimum?). Some quick 'back-of-the-envelope' calculations are necessary to check the level of forecast benefits. • Identify the factors or assumptions, particularly forecasted estimates, that have a major influence on the evaluation. Describe each of these factors/assumptions and include a commentary on the sensitivity of the evaluation to each factor or assumption. • Highlight any significant areas of risk for costs and benefits.
Choice of do-minimum	<p>The reviewer must assess the do-minimum as stated in the project report.</p> <p>They must determine whether it is a realistic do-minimum, rather than another option to be considered in the analysis.</p>
Identification of alternatives and options	<p>The reviewer must examine the evaluation and judge whether all options that are capable of solving the problem have been identified and considered adequately.</p>
Parallel cost estimates	<p>For all improvement projects with a construction/implementation cost estimate over \$20 million, a parallel estimate of costs undertaken by an independent external reviewer must be provided to the NZTA at each funding application.</p> <p>The reviewer must assess compliance to this.</p>

Contd

G15.3 Undertaking the review, continued

Economic efficiency evaluation

The reviewer must determine whether the economic efficiency evaluation has conformed to all the relevant requirements of the NZTA's *Economic evaluation manual* (EEM), volumes 1 and 2. The reviewer must determine whether there are any outstanding issues not addressed in the project report.

If there is a departure from the requirements, or any defect or omission, the reviewer must comment on its significance.

Where the reviewer considers that there have been discrepancies and departures from procedure, or has concerns on cost and/or benefit estimation, the reviewer will determine the project benefit cost ratio (BCR) and compare this with the evaluator's calculations.

The reviewer must determine whether the options identified in the analysis are mutually exclusive. If the options identified:

- are mutually exclusive, then the reviewer must determine that an incremental analysis of the options has been carried out correctly
- are not mutually exclusive, by definition they must be independent projects, in which case the reviewer must determine that the analysis has been undertaken in terms of independent projects, and has been undertaken correctly.

In **special cases**, other economic impacts may be considered (eg intangibles or agglomeration). These are to be shown as sensitivity analyses, in addition to the EEM procedure economic analysis.

Where third-party contributions to funding occur, a government BCR should be shown in addition to the national BCR.

Sensitivity analysis

The reviewer must consider the sensitivity of selected aspects of the project evaluation.

Pay particular attention to:

- information and data values that are 'out of the ordinary' or unusual
- the sensitivity of the project's outcomes to the input parameters.

Ensure that:

- risks have been assessed adequately in the applicant's evaluation
- realistic mitigation measures have been considered
- a full risk analysis has been undertaken for complex and high-risk projects.

Contd

G15.3 Undertaking the review, continued

Raise any concerns

The reviewer must raise in writing with the applicant organisation for funding assistance (and its representative) any:

- discrepancies or departures from the requirements of this *Planning, programming and funding manual* or the *Economic evaluation manual*
- material concerns about the project as a result of the review.

The reviewer must request that the applicant organisation:

- responds to the reviewer within a reasonable period
- provides reasons for any discrepancies or departures and answers to resolve the reviewer's concerns.

The review must note any outstanding concerns in the review report.

Completing the report

The reviewer must prepare a report on the completed review.

Typically, this will be 3–6 pages in length, and will reflect the value and complexity of the proposed project.

A review template is provided on page G15-7.

The reviewer must append to the report a copy of any correspondence with the applicant that relates to the review.

Peer review template for improvement projects

Section A: General

Applicant for funding assistance: <i>(Organisation)</i>	
Evaluator: <i>(Applicant's representative responsible for the project analyses and report)</i>	
Evaluation date:	
Reviewer: <i>(Name and organisation)</i>	
Project name:	
Problem description:	
Alternatives and options considered:	
Preferred option:	
Do-minimum description:	
Project cost: <i>(Undiscounted construction/implementation cost, including escalation. Include lease and operating costs where applicable.)</i>	
Key project attributes: <i>(eg length (km), accident history, existing and predicted roughness, existing and predicted traffic speed, etc)</i>	

Peer review template for improvement projects, continued

Section B: Conclusions

Conformity: <i>(With the Planning, programming and funding manual and the Economic evaluation manual)</i>		
Credibility: <i>(Problem description, results of economic evaluation, costs, key benefits, assumptions, risks)</i>		
Choice of do-minimum:		
Identification of options:		
Economic efficiency evaluation: <i>(Reviewer's analysis vs evaluator's analysis, incremental analysis – see sections D and E)</i>		
Sensitivity and risk analysis:		
Assessment profile: <i>(Reviewer's profile vs evaluator's profile)</i>	Evaluator's profile	Reviewer's profile
	Seriousness & urgency: H / M / L	Seriousness & urgency: H / M / L
	Effectiveness: H / M / L	Effectiveness: H / M / L
	Economic efficiency: H / M / L	Economic efficiency: H / M / L
Reviewer's comments:		
Funding applicant's responses: <i>(Answers to discrepancies, departures from procedure and reviewer's concerns)</i>		

Peer review template for improvement projects, continued

Section C: Reviewer's recommendations

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Section D: Evaluator's economic efficiency analysis

Options			
Present value (PV) benefits	1	2	3
Vehicle operating cost (VOC)			
Travel time			
Accidents			
Other			
Total			
PV costs	1	2	3
Capital			
Maintenance			
Other			
Total			
Benefit cost ratio (BCR)			
Incremental BCR			

Peer review template for improvement projects, continued

Section E: Reviewer's economic efficiency analysis

Options			
Present value (PV) benefits	1	2	3
Vehicle operating cost (VOC)			
Travel time			
Accidents			
Other			
Total			
PV costs	1	2	3
Capital			
Maintenance			
Other			
Total			
Benefit cost ratio (BCR)			
Incremental BCR			

Section F: Reviewer's comments on differences

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Peer review template for improvement projects, continued

Section G: Other comments on the evaluation

Section H: Attached correspondence

G15.4 Peer review of research projects

Peer review of research projects

The NZTA requires that all projects in the research programme undergo external peer reviews. The participation of peer reviewers is integral to the success of the research programme and ensures that the NZTA receives a satisfactory report at the completion of a research project.

Peer reviews are required on completion of a research project and before the presentation of any final report to the NZTA for editing and publishing. Peer reviews may also be required after the completion of individual stages or tasks if specified as milestones in the approved research project plan.

Peer reviewers independently review research reports, whereas steering group members may be called on to act as mentors during the progress of a project. Reviewers are often in a position to provide guidance and professional advice.

The researcher must organise the peer reviewers and peer review process. This requirement is set out in the procurement documents for research projects.

The research proposal must include a clear description of the reviews that will be undertaken during the course of the project, at what point those reviews will be completed, and by whom. The reviewers must be expert peers or users who will have given their prior agreement to the project's timeframe. This will ensure the timely provision of comments or advice.

Peer review guidelines and the agreement form for research projects are available on the NZTA's website (www.nzta.govt.nz).
