

# PROGRAMMES AND PACKAGES

A technical paper prepared for the Investment  
Decision-Making Framework Review

4 DECEMBER 2019

Waka Kotahi NZ Transport Agency has updated its guidance for Approved Organisations (AOs) on programmes and packages in the context of business case development. This guidance will help AOs determine whether to develop a business case for an individual activity or for a programme or package of activities. The guidance also clarifies what is needed if the business case is being developed to obtain funding approval for implementation, and what is needed if it is seeking to develop a further business case.

The guidance also helps the Transport Agency make investment decisions based on a business case for a programme. This guidance builds on existing approaches to programmes (e.g. maintenance programmes, public transport services continuous programmes, the Safe Network Programme, and LED lighting programmes).

While this change will apply from 1 July 2020, AOs can seek the Transport Agency's support now for developing a case for a programme/package.

## PURPOSE

This technical paper provides a proposed framework, evaluation criteria and approval process for programme and package level investment proposals to give effect to the Government Policy Statement for Land Transport (GPS) <sup>1</sup>.

This includes definitions, examples, development and evaluation processes. It should be noted that all proposals must be developed with consistency to the Business Case Approach (BCA).

The purpose of programme and package level evaluations is to ensure optimal investment decisions for GPS outcomes and priorities.

## BACKGROUND

GPS 2018 provides greater flexibility to Waka Kotahi NZ Transport Agency in its investment decision making and application of the cost benefit appraisal.

The GPS (para 138) recognises the need for programme level evaluations to occur; it states:

‘It is expected that evaluations will normally occur at the project level, however there is flexibility for programme level evaluations to take place where this is essential to deliver on the GPS strategic priorities of safety or access. The NZ Transport Agency will develop criteria for deciding when programme level evaluations should take place and will transparently report when and why programme level evaluations have taken place.’

The Land Transport Management Act 2003 provides that an activity –

- a) Means a land transport output or capital project; and
- b) Includes any combination of activities.

The BCA provides the framework for developing any programme or package investment through development of a Programme Business Case.

## PURPOSE OF INVESTMENT ACTIVITY

The primary purpose of National Land Transport Fund (NLTF) investment in a transport activity is to deliver on the outcomes set out in the GPS.

Guidance from economic theory, project management, and Better Business Case literature informs that the having activities organised at different levels and type provides for issues to be dealt with at the level that is consistent with the scope of the problem, optimal choice of option to address the problem and the type of analysis to measure, evaluate and monitor.

Consider a congested road. The problem could be progressively defined as:

- a narrow engineering issue (widen or re-engineer the road)
- a wider engineering issue (build a bypass)
- an urban planning issue (change land-uses in the vicinity)
- a local pricing issue (tolling), or
- a network pricing issue (introduce general road pricing).

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<sup>1</sup> GPS <https://www.transport.govt.nz/multi-modal/keystrategiesandplans/gpsonlandtransportfunding/>

These definitions greatly affect the range of options to be considered, and probably also affect the optimal choice of option. In general, the wider the scope of the problem, the more options there are to analyse, but the more likely that one will be globally optimal.

## SCOPING THE PROBLEM

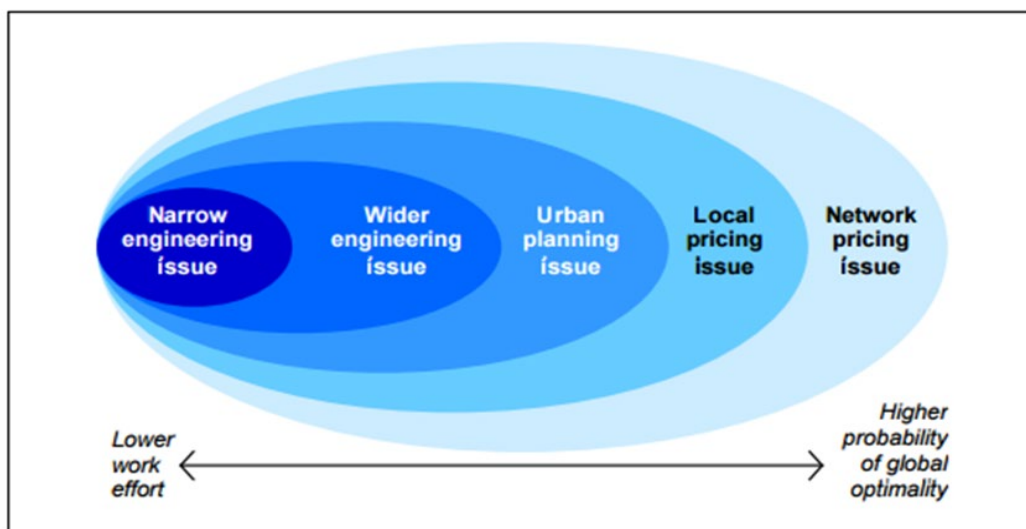
For the transport system within the constraint of available resources (including institutional resources) there is a trade-off between the work effort required to address the global optimum and the analytical requirements.

As the complexity of the problem grows, not only are there more options to analyse, but the analysis gets more complicated.

In this case, analysing a network-wide road pricing scheme is vastly more difficult than analysing a few engineering options.

Having a framework that allows for the development of an activity or combination of activities to be organised as a project, package, or programme provides for decisions to be made at the appropriate level and optimal choice of option(s) to achieve outcomes.

**Figure 1: Scoping the problem**



We have developed guidance on right sizing business cases and the required level of effort during business case development.

Please refer to the technical paper “Right-sized business case guidance” for more information.

## WHY DEVELOP PROGRAMMES AND PACKAGES

There are advantages in developing programmes and packages in that they:

- identify interdependencies and relationships between activities with impacts at a place and network level allowing an optimised investment plan to be developed and approved that will integrate land use planning with infrastructure improvements, network management and operation of services, to optimise the outcomes for both a place and across the network.

- Provide delivery certainty where an entire package has been assessed, prioritised in the National Land Transport Programme (NLTP) and approved for funding from the NLTF.
- Provide for better understanding of strategic options and alternatives and the assessment and assignment of costs and benefits from a wider network/system and outcome delivery perspective.

## DEFINITIONS

### Programme definition

A programme is a group of related activities seeking to progress an integrated response to a transport issue nationally, regionally or system-wide.

Programmes are likely to span several years, during which activities maybe added or removed to adapt to new information and improve outcome delivery over time. In other words, activities in a programme are not inherently inter-dependent.

Examples of programmes are:

- continuous programmes, eg public transport services programme; maintenance, operations and renewals programme
- Safe Network Programme
- Auckland Transport Alignment Project programme.

This list is neither comprehensive nor prescriptive.

### Package definition

A package is a group of inter-related and inter-dependent activities that are synergistic. A package of activities requires co-ordinated implementation of all the activities in the package in order to achieve desired outcomes.

Packages can involve more than one mode, or more than one organisation, and can incorporate more than one activity class. Packages can involve activities that the Transport Agency does not fund, but are required to provide the synergies in combination with activities that are eligible for funding out of the NLTF.

Packages are most appropriate in the implementation of integrated, multi-modal strategies involving large and/or complex activities, which require coordinated implementation to achieve the strategies' intended outcomes.

Examples of packages are:

- improvements to all modes along the length of an arterial road
- a new state highway interchange together with connecting local roads
- rural highway safety treatments incorporating speed management measures alongside network improvements.

This list is neither comprehensive nor prescriptive.

**Table 1: Key attributes of a programme or package**

	Programme	Package
Location	Network, Region, System-wide	Specified (typically urban) area, eg town centre, corridor
Funding	Any combination, less likely to contain non-transport components	Any combination and may include non-transport components
Timeframe	Any timeframe including continuous/perpetual	Defined timeframe (may be over several years)
Activity class	Sometimes one or sometimes more	Almost always more than one
Relationship between individual activities	Inter-related, some activities may be inter-dependent	Activities inter-dependent and inter-related
Implementation of activities	Align but separable delivery	Co-ordinated

## DEVELOPMENT OF A PROGRAMME OR PACKAGE

All proposals to establish a new activity, or combination of activities must be supported by an appropriately evidenced business case<sup>2</sup>, before an activity can be considered for assessment, prioritisation and approval for investment from the NLTF.

The BCA provides the framework for developing a business case. There are different pathways depending on the nature of the programme or package including:

- full process with a programme business case, followed by an indicative business case and a detailed business case
- a single-stage business case that supports a funding decision for a package
- a business case for a programme of standard interventions that has a streamlined process for funding approval of each standard intervention
- a streamlined process that establishes the case for funding approval (such as the case for a continuous programme of maintenance, operations and renewals set out in an activity management plan).

Agreement on the appropriate investment pathway at the point of entry will provide clarity on the approach and effort required, in particular:

- the business case pathway
- the assurance pathway
- the decision pathway.

The Transport Agency has developed guidance on right-sizing business cases and the required level of effort during business case development.

Please refer to the technical paper “Right-sized business case guidance” for more information.

<sup>2</sup> Transport Agency Business Case Approach <https://www.nzta.govt.nz/planning-and-investment/learning-and-resources/business-case-approach-guidance/>

# ASSESSMENT OF A BUSINESS CASE FOR PROGRAMMES AND PACKAGES

The BCA assessment requirements continue to apply for any business case proposing a programme or package investment. The Transport Agency currently assesses a business case using the [16 business case investment assessment questions](#) and the Investment Assessment Framework (IAF).

The assessment and prioritisation components of the IAF are being separated as part of the Investment Decision-Making Framework (IDMF) review.

All programmes and packages must demonstrate value for money.

Where a programme/package consists only of integrated interdependent activities, then incremental benefit-cost ratio (BCR) analysis should not be used to test between each of the components.

## Optimisation of programmes and packages

Optimisation of programmes and packages is a critical element, and concerns:

- the selection of the programme and package macroscope
- the identification and selection of alternatives and options to deliver results
- the sequencing and timing of the component projects
- the coordination of the delivery of component projects and supporting services across modes, networks and organisations to maximise package synergies.

Optimisation involves understanding the impact on outcomes of the above elements from a consideration of:

- operational effectiveness and constraints
- integration and synergistic effectiveness, and
- economic efficiency.

Commonly, trade-offs amongst these considerations will be required to optimise the package.

The contribution of an individual activity to the effectiveness and economic efficiency of the package must be assessed if the activity:

- is likely to have a BCR around or less than 1.0
- has a weak link to the rest of the package, e.g. 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.

In optimising combinations of activities, interdependency analysis by way of incremental analysis must be used to determine whether component activities make a sufficient contribution to justify their inclusion in the programme or package and whether the timing of the components is optimised.

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

## Monitoring and review

A programme or package needs to have a monitoring and reporting plan, to guide optimisation through implementation, review of whether the programme or package is delivering the intended outcomes, and what lessons can be learnt and applied to other activities.

In addition to an overall monitoring and review plan, a strategic check-in, review and reconfirmation is required at each NLTP period for any programme or package that spans multiple NLTP periods. This is to ensure programmes or packages remain aligned to GPS results and can be optimised for emergent information. A funding approval from the NLTF can only cover the three-year period of the NLTP for a programme and is made when the NLTP is adopted by the Transport Agency Board.