

# STANDARD INTERVENTIONS

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

25 MAY 2020

A standard intervention is a simple, repeatable solution that is used for a particular problem that is well understood, and where the solution has been used for similar projects in the past and will continue to be used for those projects in the future.

Waka Kotahi NZ Transport Agency has developed guidance to outline the criteria that need to be met before new standard interventions are developed to streamline the Business Case Approach.

Transport optimisation has been identified as a potential area where standard interventions could be developed in 2020/21. The guidance will apply from 1 July 2020.

# PURPOSE

The purpose of this paper is to outline the criteria that need to be met before new standard interventions are developed for a streamlined Business Case Approach (BCA).

## STANDARD INTERVENTIONS FRAMEWORK

We have defined a standard intervention as:

*‘a simple, repeatable solution that is used for a particular problem that is well understood, and where the solution has been used for similar projects in the past and will continue to be used for those projects in the future’.*

Many activities that are included within the National Land Transport Programme (NLTP) have one clear solution that is common across many similar activities.

Based on the definition above, there are four criteria that need to be met for an activity to be eligible for standard interventions. These are:

1. Simple solution
2. Costs and benefits are understood
3. Part of a package or programme
4. History of implementation.

### Simple solution

Standard interventions need to be simple, ie they need to be options that are low risk and low complexity. Standard interventions are not well suited to more complex projects, as there are significant wider network implications that need to be considered. Trying to use standard interventions for a complex project increases the risk that an option with lower benefits return is implemented.

For example, Standard Safety Interventions uses a triaging process, and the safety interventions matrix, to ensure an activity is low risk and low complexity, before the Standard Safety Interventions approach is applied.

### Costs and benefits are understood

By using a standard intervention instead of developing a full business case, economic analysis is standardised thus saving time and money. For this to occur, the following elements for each standard intervention needs to be understood:

- **Benefits:** Activities that will use a standard intervention need to have common benefits that will be achieved. This allows benefits to be assumed across all the activities that will be using the intervention.
- **Cost range:** A cost range needs to be set, which will provide an acceptable return on investment, based on the expected achievable benefits. Standard interventions should only be used for activities with consistent implementation costs. The cost range needs to exceed the current Low Cost Low Risk (LCLR) threshold. Interventions whose cost range does not exceed this threshold can be funded through the LCLR programme.
- **Pre-requisites:** Pre-requisites are required to be met before the standard intervention can be applied to an activity. The pre-requisites should be based on the inputs used to estimate the benefits that will be achieved and the cost range.

For example, Standard Safety Interventions give a consistent benefit of reducing deaths and serious injuries. The cost range used is enough to cover any associated improvements that would need to be completed for the standard intervention to be implemented. The pre-requisite used for these interventions is traffic volume.

## Part of a package or programme

Waka Kotahi has developed guidance on business case programmes and packages. Refer to the final Programmes and packages guidance for more information.

Using the BCA, a programme/package ensures options have been considered at a systems level for addressing the identified issue/opportunity. By developing the programme/package, it ensures the right areas are being targeted for an intervention and that enough evidence and analysis exists to support its implementation.

For example, the Safe Network Programme was developed to address the recent negative trends in road safety performance. For Standard Safety Interventions to be used, the activity must form part of the Safe Network Programme.

## History of implementation

It costs a significant amount of money to develop the evidence base to support a programme of standard interventions, identify appropriate standard interventions suitable for specific situations and to model acceptable costs/benefits for these interventions. Therefore, we need to have confidence the proposed solutions have been frequently implemented in the past, have addressed the identified opportunities and/or problems, and will remain relevant for the development of future NLTPs.

For example, Standard Safety Interventions targeted areas with the highest safety risks. These areas were analysed to identify common interventions that were most likely to be used.

## Implementing standard interventions

When potential standard interventions have been identified, they should be highlighted to a relevant Waka Kotahi Investment Advisor. Feedback from the consultation with the sector on the types of standard interventions was considered along with analysis of suitability and availability of evidence. Transport optimisation has been identified as a potential area where standard interventions could be developed in 2020/21. Evidence will be gathered on optimisation solutions, such as traffic calming, variable speed limits, intersection treatments, network technology systems, etc.

The feedback and analysis have identified other potential areas for investigation of potential standard interventions:

- **Walking and cycling:** These initiatives have high alignment to the Government Policy Statement on Land Transport (GPS) and a significant number of these projects are being completed. We could investigate standard interventions across areas such as cycle facilities and walking and cycling accessibility and safety interventions.
- **Public transport (PT) improvements:** PT operations are funded as a continuous programme. However, funding for new PT infrastructure requires a separate business case. These improvements have been included in the region's public transport plan and consist of activities such as bus stops, bus priority measures and interchanges.
- **Resilience:** The national resilience programme has identified and categorised, by risk, resilience projects throughout New Zealand. These projects have been analysed to determine the type of intervention that is required (maintenance, improvements, etc).

We do not propose development of standard interventions for the following areas, raised through feedback, at this time:

- **Environment:** There is limited opportunity for environment-focused standard interventions. Noise pollution forms a small portion of National Land Transport Fund (NLTF)-funded activities. Climate change and freshwater (stormwater) projects have already been considered under the resilience programme. Dust mitigation is already able to be managed through two relatively simple processes either within the maintenance, renewals and operations continuous programme or as a LCLR (less than \$1M) or a simplified procedure between \$1 and \$5M.
- **Place:** Many place-based interventions form part of the LCLR programme. The level of expenditure and the relative priorities for investment can mostly be managed with a light touch through LCLR.

- **Permanent road closures:** Legislative requirements that need to be met for the stopping of a road is an eligible activity under WC 151; therefore, no business case or standard intervention is required.
- **Bridge replacements:** A streamlined process is already in place for end-of-life infrastructure renewals. It has been proposed to transition funding for like-for-like bridge renewals to the maintenance continuous programme allocation. The funding implications for this transition still need to be considered.
- **Stock effluent stations:** The current approach for funding eligible stations is considered a relatively light touch process. As only about five stations are required to be built over the next 10 years, we do not consider there to be any business need to develop stock effluent station standard intervention methodology.