

INVESTMENT PRIORITISATION METHOD WORKED EXAMPLES

5: WIDE CENTRELINE PROPOSAL

This is a fictional example, designed to be similar to the proposals we receive. To get the best understanding of how we might apply the Investment Prioritisation Method (IPM), you may also find it helpful to refer to the GPS alignment and Scheduling criteria in the IPM.

[IPM for the 2021-24 National Land Transport Programme \(NLTP\)
Planning and Investment Knowledge Base](#)

The proposal

The targeted state highway corridor is part of a national link between two major cities. The Average Annual Daily Traffic is between 6,000 and 12,000, with HCV making up between 10-14% of this count. Traffic is expected to grow at a rate between 2-4% for the future 10 years. Currently this corridor is one of the highest safety risk corridors in New Zealand. There has been 60 deaths and serious injuries (DSI) - 18 deaths and 42 serious injuries - in the last 10 years. The number of DSIs has reduced to 25 (10 deaths and 15 serious injuries) in the last five years. The collective risk is Medium-High, and the Personal risk is Low-Medium, based on the last five years of crashes.

The overall state highway corridor has been assessed and a Programme Business Case was completed and endorsed. A Single Stage Business Case was also completed and the next phase (phase being considered for inclusion) is pre-implementation.

The proposal is also included in the Road to Zero programme. The R2Z programme's overall DSI reduction target could be delayed for up to 3 years if the project is not delivered in 2021-24 NLTP. The completed business cases recommend a wide centreline treatment along with some shoulder widening and side barrier as the preferred option. A speed limit review is also conducted suggesting 80km/hr speed limit reduction is not required for the preferred option as the corridor is "engineered up" to the current speed limit of 100km/hr.

The benefit for the investment is the improved road safety. The preferred option is expected to achieve a DSI saving of 18 over the next 10 years (~30% reduction over 10 years), or a DSI saving of nine over the next five years (~36% reduction). The SSBC conducted a cost benefit analysis and suggested that the BCR for the preferred option is 1.5.

Applying the IPM to this proposal

The issue of concern is the safety risk of the corridor. This is supported by the evidence. As the proposal addresses a safety issue and is a named activity in the Road to Zero programme, it is eligible for consideration under the **Road to Zero** activity class.

GPS alignment

We consider this issue under Safety GPS alignment criteria:

- This project team conducted a speed limit review as part of the investment proposal, but speed limit change is not included in the preferred option. The operating speed in corridor is not reduced.
- The levels of concerns ratings are drawn from the 'All deaths and serious casualties' table in the most recent version of the Communities at Risk Register. This proposal only involves Low-Medium personal risk. By checking the register, the area is only of Normal Concern.
- This is a medium high collective risk corridor, as there have been quite a few serious accidents in the history. DSI per annum is 25/5=5. The expected DSI reduction over a 5-year period is 9/5=1.8 DSI per annum. The percentage of reduction is 1.8/5=36% which fits into the 25-39% category. This suggests a rating of **HIGH**.

This proposal fits a **HIGH** GPS alignment rating.

Note that for inclusion of activities within the Road to Zero programme, the proposal can also use the overall programme GPS alignment rating as its GPS alignment rating. Assessment could be deferred to the preparation of funding application.

Scheduling

We then consider the **Scheduling**, where interdependency and criticality are assessed.

We first assess this proposal under **Interdependency** against **HIGH** criteria. This proposal is a named activity in the Road to Zero programme. Non-delivery of the proposed activity in the 2021 NLTP will have moderate impact on realising the estimated benefits of a programme, package or another investment, i.e. safety benefit of the R2Z programme may be delayed for up to 3 years. We can see that this fits a **MEDIUM Interdependency** rating.

Next, we assess this proposal against **HIGH Criticality** criteria. This proposal is not aiming for improving access or resilience. The unplanned loss of service is not applicable as the corridor or intersection loss of service is irrelevant to this proposal. The activity is not necessary to deliver/prepare for remainder of the programme. We can see that this fits a **LOW Criticality** rating.

The overall **Scheduling** rating is **MEDIUM** for this proposal.

Efficiency

Last, we consider **Efficiency** factor. The business case gives a BCR of 1.5. We can see that the efficiency rating for this proposal is **Low**.

With H for GPS alignment, M for Scheduling, L for Efficiency, this proposal gets a Priority Order of 6 according to the Investment Prioritisation three-factor Matrix.

We hope you found this information useful and please remember to take a look at our other examples.

[See more examples online of how to apply the IPM](#)

If you have any questions about this information, or want to understand more about what we can invest in and how we can support your work, please contact your investment advisor or Director Regional Relationships. You can also contact the NLTP team directly at nltp@nzta.govt.nz