

INVESTMENT PRIORITISATION METHOD WORKED EXAMPLES

2: RURAL ROUNDABOUT 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

A rural roundabout is proposed at a T-intersection. The intersection is a priority-controlled T-intersection in a high speed (80km/h posted speed) environment, with comparatively high turning and through volumes. The proposed roundabout will have four legs, providing access to an adjacent development.

The long straight road has vehicles travelling at relatively high speed, leading to high severity crashes. The primary concern is the high volume, high speed major road offering few opportunities for right turning vehicles to safely join the traffic stream. The very high proportion of vehicles using the left turn slip lane frequently blocks visibility of through vehicles. This combination of factors has resulted in two deaths and serious injuries (DSIs) and two minor casualties in the past five years at this intersection. The collective risk rating is Medium-High with DSIs per annum being 0.4.

A speed limit review has been done and the proposed speed limit is 50km/h. This would be consistent with the adjacent environment.

The proposal is identified as a Standard Safety Intervention. Investigation has been done and the next phase (phase being considered for inclusion) is an SSI funding application.

By applying the [SSI toolkit](#), the expected DSI reduction is 0.24 DSI per year, based on the five year record. This is a 60% reduction in DSIs.

The proposal is already included in the Road to Zero programme. The programme's overall DSI reduction target could be delayed for up to three years if the project is not delivered in 2021-24 NLTP.

Applying the IPM to this proposal

The issue of concern is the safety risk caused by left turn in a T intersection. 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

Under the Safety criteria, the below aspects are assessed:

- The intersection has a medium high collective risk rating. The expected death and serious injuries reduction is $0.24/0.4 = 60\%$ over a five year period. This meets the criteria of $\geq 40\%$ DSI reduction for a **VERY HIGH** rating.
- Given that the proposal meets the VERY HIGH criterion for DSI reduction, it is not necessary to consider the Communities at Risk Register or speed limit reduction criteria.

This proposal fits a **VERY 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 can 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. According to the SSI toolkit results, the benefit cost ratio of this proposal is below 0. For inclusion, proposals in Road to Zero programme can use the overall programme BCR instead. The efficiency rating for the proposal is **LOW** in alignment with the Road to Zero programme.

With VH for GPS alignment, M for Scheduling, L for Efficiency, this proposal gets a Priority Order of 3 according to the Investment Prioritisation three-factor Matrix. Its subsequent funding will depend on approval by exception at the appropriate level of delegation.

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 on 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.