INVESTMENT PRIORITISATION METHOD WORKED EXAMPLES

4: BRIDGE UPGRADE 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 bridge is located immediately south of a nearby commercial centre and separates two of the three main township population segments in the study area over a narrow tidal estuary. The current bridge is single lane with 3.66m lane width between kerbs. It is in poor condition and having frequent closures due to maintenance. It is proposed that an additional lane is added to the bridge, and the existing deck be replaced.

The state highway corridor is a key freight and tourism route and provides a key lifeline to the local community. Resilience issues have been identified as this bridge is the only means of access for the bulk of the study area. There are no bypasses of any kind when these routes are cut off, as regularly occurs. The best detour will take around 1.5 hours extra travel time for most users.

It is expected that the improved condition of the bridge will lead to reduced maintenance costs and increased safety for road users. With the upgrade to two lanes and the reduced maintenance, the bridge lane closures will decrease or have less impact on the network resilience. The expected improvement in predictability of travel time is only about 15% as this bridge does not have a large volume of traffic. There is also an expected reduction of 25% in the duration of unplanned road closures of over 2 hours.

Currently the corridor is not a target of major improvement programme or other investment.

A point of entry has been endorsed recognizing the next phase (phase being considered for inclusion) is SSBC.

Applying the IPM to this proposal

An initial assessment indicates that this proposal aligns with our policy and is eligible for consideration under the **State highway improvements** activity class.

GPS alignment

Looking at the importance of the bridge to freight and tourism and the GPS strategic priority, the proposal best fits in the **Improving Freight Connections**.

We consider this proposal under the **Improving Freight Connections** GPS alignment criteria.

- In order to qualify for VH, the proposal need to have a >31% improvement in predictability (reduction in variability) of travel time on priority routes for freight. The targeted bridge is a priority for freight, but the improvement in predictability is only expected to be 15%. This fits in the **MEDIUM** criteria.
- This proposal does not involve mode shift to rail.
- There is no nationally significant production and distribution points involved in this proposal.
- The expected reduction in duration of unplanned road closures/service disruptions of over 2 hours is 25% which is below 31% for a VERY HIGH rating. This fits in the **HIGH** criteria.

Overall, this proposal fits a **HIGH GPS alignment rating**.

Scheduling

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

We first assess this proposal under **Interdependency** against **HIGH** criteria. This proposal does not belong to a programme or a package i.e. the proposed activity is a **standalone activity**. Non-delivery of the proposed activity in the 2021 NLTP does not have significant nor moderate impact on realising the estimated benefits of a programme, package or another investment. We can see that this fits a **LOW Interdependency** rating.

Next, we assess this proposal against **HIGH Criticality** criteria. This proposal is not necessary in order to deliver/prepare remainder of programme/package. The unplanned loss of service for the bridge requires 1.5 hours extra travel time for most users. This fits a **MEDIUM Criticality** rating.

As the highest rated criterion sets the overall **Scheduling** rating, we see Scheduling is **MEDIUM** for this proposal.

Efficiency

Last, we consider **Efficiency** factor. By using the IER tool, the indicative 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.