Draft Investment Prioritisation Method for the 2024-27 National Land Transport Programme

Worked examples

Overview

As part of the development of the draft Investment Prioritisation Method for the 2024 – 27 National Land Transport Programme (draft IPM 2024) NZ Transport Agency Waka Kotahi (NZTA) has undertaken testing applying the draft IPM to a selection of activities and programmes of activities. These were selected from a previous year rather than live examples.

This testing has enabled the creation of worked examples based on information extracted from our Transport Investment Online system (TIO). The purpose is to illustrate how the assessment of prioritisation ratings was done for inclusion in the National Land Transport Programme (NLTP) and what information was used in the assessment.

| | AO | Project ID | Phase ID | Project Name |
|-----|---------------------------------|------------|----------|--|
| 1 | New Plymouth District Council | 131085 | 266985 | Walkway Extension – Waitara to Mangati |
| 2 | Auckland Transport | 127019 | 277940 | AKL – Public Transport Service Improvement |
| 3 | Wellington Regional Council | | | Rail Programme Business Case |
| 4 a | Auckland Transport | 135134 | 275989 | Low-Cost Low-Risk Improvements 21-24 |
| 4 b | Matamata-Piako District Council | 135182 | 276240 | Low-Cost Low-Risk Improvements 21-24 |
| 4 c | Hauraki District Council | 135167 | 276157 | Low-Cost Low-Risk Improvements 21-24 |
| 4 d | Tasman District Council | 135220 | 276444 | Low-Cost Low-Risk Improvements 21-24 |
| 4 e | Masterton District Council | 135181 | 276236 | Low-Cost Low-Risk Improvements 21-24 |

The activities that have been tested are listed as below:

1: Walkway extension – Waitara to Mangati

Case overview

Currently people travelling between Waitara and Bell Block rely heavily on State Highway 3 (SH3), which has been identified as a high-risk corridor.

The application was processed as a single stage business case (SSBC). The SSBC outlines the case for investment in the walkway extension between Waitara and Mangati to support the communities and the local economy through a safe, integrated, and attractive walking and cycling route.

A programme business case (PBC) was approved by NZTA in 2016, aimed at improving the safety for vehicles travelling along the corridor, but it doesn't address the safety of those walking and cycling.

The SSBC proposes a safe alternative to SH3 between Bell Block and Waitara by providing better travel options and improving safety for pedestrians and cyclists.

This project had a 2021-24 IPM rating of 3 being VH/M/L.

Applying the draft IPM 2024-27

The draft IPM was applied for the pre-implementation and implementation phases of this project which is a stage 1 IPM NLTP inclusion decision.

The early stage 1 assessment indicates that this project is eligible for consideration from the NLTP **Walking and Cycling Improvement** activity class.

GPS alignment

For this illustrative example, each of the 4 GPS strategic priorities have been assessed to determine the degree to which this project aligns with the strategic priorities in the draft GPS 2024.

Economic growth and productivity

- This project meets the **Medium** criteria because it "addresses a moderate network constraint in terms of network efficiency or wide economic productivity on regionally significant networks". It will provide improved access to markets, employment and areas that contribute to economic growth. It will also provide greater access for the Waitara community to New Plymouth amenities and employment and a key connection point to New Plymouth Airport. This makes the airport more accessible for locals and visitors and supports tourism which contributes to economic growth in the area.
- Cross checked against the Taranaki 2021/22- 2026/27 Regional Land Transport Programme; this pathway extension project is listed under the section "Proposed regionally significant activities." The reviewer's judgement is based on this, but this RTLP is subject to change in response to the new draft GPS 2024 direction.
- Enabling access for housing development in a regionally significant area means this activity meets the medium criteria of improving access to new housing. This project also enhances the connections to other key routes, connects future regional network improvement and supports Bell Block residential development.

Increased maintenance and resilience

• Not applicable. While there may be some freight resilience benefits, it is unclear what the contribution of this activity is likely to be.

Safety: Medium

- There are crash cost reduction benefits of \$9.7 million and a reduction in deaths and serious injuries by 50% over the next 10 years.
- This project addresses some of the safety issues on the high collective risk corridors and intersections but only accounts for less than 10% of safety benefits to be achieved through the wider corridor works.

Value for money:

• Not applicable, lack of information.

Overall, this proposal fits a Medium GPS alignment rating.

Scheduling

The scheduling factor is where interdependency and criticality are assessed. This activity is part of a programme to improve SH3 safety and efficiency (criticality medium), however non-delivery in the 2024-27 NLTP will not hold up realising the estimated benefits of the other parts of the programme. It may be potentially delayed for up to 3 years (therefore the interdependency is low).

The assessed scheduling rating overall is Low.

Efficiency

Last, we consider the efficiency factor. With a BCR of 1.6, the indicative efficiency rating for this proposal is **Low**.

Overall ranking

Applying the prioritisation matrix: with M for GPS alignment, L for Scheduling, L for Efficiency, this proposal gets an IPM priority ranking of 9.

The 2021-24 IPM profile was VH M L priority order 3. So, this assessment indicates a much lower ranking, which appears consistent with the direction of the draft GPS 2024.

2: Auckland Public Transport Service Improvements

Case overview

This is a multi-faceted public transport (PT) services improvement programme:

- The Bus PT Improvement SSBC attempts to improve mode shift and access.
- The Ferry Programme Business Case/Single Stage Business Case attempts to address fleet capacity and level of service. It also looks at the ferry network and an upgrade to diesel vessels.

Applying the draft IPM 2024-27

A stage 1 assessment indicates that this programme aligns with our policy and is eligible for consideration under the **Public Transport Services** activity class.

GPS alignment

For this illustrative example, each of the 4 GPS strategic priorities have been assessed to determine the degree to which this programme aligns with the strategic priorities in the draft GPS 2024.

Economic growth and productivity

• There are general improvements to PT and therefore this programme has the potential to get a medium rating. This is because it meets the criteria for "improvements in public transport frequency and coverage enabling access to employment and other economic opportunities."

Increased maintenance and resilience

• Not applicable

Safety

• Not applicable

Value for money

• The programme may improve patronage but it's unclear how this would be achieved so the rating would be **neutral (low)** or **Medium** (but more information would be required to confirm).

Overall, this proposal fits a Medium GPS alignment rating.

Scheduling

This activity is part of the overall Auckland Transport Alignment Programme ¹. Non-delivery of this activity in the 2024 NLTP would have a significant impact on the realisation of estimated benefits of the other parts

¹ GPS 2024 signals the Government's intention to develop city deals. We anticipate ATAP will be a significant influence on the options for infrastructure and services to be managed under the city deal and that the GPS intent is to continue progress on these deals.

of the programme, including infrastructure projects that were completed or expected to be completed in this period. We assess this as a **High** scheduling rating.

Efficiency

With a BCR in the range of 1.0 to 2.9, the indicative efficiency rating for this proposal is Low.

Overall ranking

Applying the prioritisation matrix: with M for GPS alignment, H for Scheduling, L for Efficiency, this proposal gets an IPM priority order of 5.

The 2021-24 IPM profile was HHL priority order 5. So, the ranking profile is unchanged.

3: Wellington Rail Programme Business Case

Case overview

The Programme Business Case (PBC) is a programme of work with maintenance, operations and renewals and infrastructure and service improvements. The work includes:

- maintaining the condition of the existing transport system at current levels, including meeting current design standards such as use by people with a disability, technology requirements, safety requirements, etc.
- increasing network resilience through a programme of improvements across the network.
- safety improvements such as rail level crossing upgrades.
- improved infrastructure and services to provide travel choices for passengers and freight.
- targeting an overall reduction in emissions.

Applying the draft IPM 2024-27

An initial assessment indicates that this programme aligns with our policy. Parts of it are eligible for consideration under the **Public Transport Services** and **Infrastructure** activity classes. Crown funding would also be expected for other improvements more related to freight.

GPS alignment

For this illustrative example each of the 4 GPS strategic priorities have been assessed to determine the degree to which this project aligns with the strategic priorities in the draft GPS 2024.

Stage 1 assessment

Economic growth and productivity

- Freight criteria are not directly applicable as this programme is focused on passenger services on the Wellington rail network. The resilience works would result in some improvement to freight network resilience but that is a secondary outcome and is not the focus of the programme. At best it could be a medium rating because it meets the criteria for "rail improvements that maintain productivity of freight movement across the rail networks".
- This activity supports maintaining and enhancing passenger rail services and so the "operation of public transport services enables access to employment and other economic opportunities" criteria could apply. The programme includes a proposal for improvements to passenger rail services therefore the medium criteria are also applicable - "improvements in public transport services enabling access to employment and other economic opportunities".

• This programme fits the criteria of "maintains the level of service (for example the condition of the existing transport system across modes), including meeting current design standards" and so overall a **High** rating is appropriate.

Increased maintenance and resilience (High)

• This programme fits the criteria of "maintains the level of service (for example the condition of the existing transport system across modes), including meeting current design standards" and so overall a **High** rating is appropriate.

Safety

• Not applicable

Value for money

• This activity would improve patronage so a High rating as it should increase PT farebox.

Stage 2 assessment

Economic growth and productivity

- Journey time and travel time reliability rail freight: The programme will, as a secondary outcome, assist in maintaining travel time reliability and/or trip time for rail freight in or across the rail networks as set out in the benefits. Freight benefits are estimated at about 13.6% (higher growth scenario) of total benefits. **Medium**
- Access to key destinations: This programme meets the criteria "contributes to transport network efficient access to/from regionally important economic growth location". The programme would support increased existing and new passengers travelling by rail, at a constant or improved level of service (comfort). The overall impact on all trips on the road/rail corridor would be the appropriate way to measure travel time improvement across the regional network. Medium Evidence in the business case showed about a 1% difference in throughput (rail passengers and vehicles) between the preferred option and the do minimum at a screen-line where the road and rail network converge in 2046 (peak hour). For rail alone, the difference is about a 3% increase in passengers. Despite the above date, for these types of comparisons, it is suggested that a 10-year period is used as this aligns with the GPS timeframe.

Increased maintenance and resilience (High)

• This activity maintains the condition of the existing transport system at current levels, including meeting current design standards. Overall, this proposal fits a **High** GPS alignment rating.

Scheduling

Applying the scheduling factor criteria to PBCs uses the criticality criteria as PBCs are a planning activity for subsequent phases.

Criticality criterion: "Significant adverse consequences would arise in terms of outcomes (measured using benefits framework) or financial impact if the phase of the activity is not undertaken during the 2024-27 period".

We assess this as a **High** scheduling rating.

Efficiency

A large portion of the projected costs (24%), from which benefits are derived, are scheduled from now until 27/30), with preparatory work required to be undertaken in the 24/27 period, to inform implementation activities. It was considered that the scale of costs reflects the expected benefits across multiple constituent

activities of the programme (although benefits will accrue over a very long period). With a BCR (excluding WEBs) < 1.0 the indicative efficiency rating for this proposal is **Very Low**.

Note this is as stated in the IPM "Efficiency rating for all other activities- to ensure consistency across activities, wider economic benefits (WEBs) should not be applied as part of the BCR for prioritisation in the NLTP. The NZTA Board may consider WEBs in any adjustments to the prioritised NLTP".

Overall ranking

Applying the prioritisation matrix: with H for GPS alignment, H for Scheduling, VL for Efficiency, this proposal gets a IPM priority order of 9.

The 2021-24 IPM profile was VH H VL, priority order 7, so the priority order is lower under the draft IPM 2024-27.

4: Low-cost low-risk programmes

Applying the draft IPM 24-27 to the programme

Each LCLR programme was assessed following similar guidance for continuous programmes: The starting rating for an LCLR programme in each activity class is HHM, priority order 3.

- The assessment is made at the programme level, not at the individual activity level.
- The LCLR programme will be assessed for its overall impact on the GPS outcomes. As a result, the rating may be adjusted following the assessment and moderation process and NZTA may prioritise an LCLR programme to account for the relative priority of an LCLR programme with other programmes and activities for each activity class. This may involve removing or deferring activities that don't align well with GPS 2024 or are better scheduled for a subsequent NLTP or are considered not to be value for money, and to ensure the approved programme is affordable for the NLTF.
- As for continuous programmes, insight as to the quality, scheduling requirements
 (interdependencies, opportunity costs/delivery efficiency e.g., associated improvements/build back
 better opportunities) and value proposition of these programmes and activities is provided by a
 strong linkage to good quality activity management planning (AMP) documents.

Case overview 2021-24

LCLR programmes in the 2021–24 NLTP were prioritised based on the generic rating of HHM priority order 3 under the IPM 2021-24.

In accordance with the draft IPM 2024-27, LCLR testing has been undertaken at a high level only noting the commentary on the supporting information and the NZTA commentary as the basis for the approval of each LCLR programme in the current NLTP. No right sizing was undertaken as part of the draft IPM testing.

As a result, the testing has determined a rating for each LCLR programme as follows:

| AO | Project ID | Phase ID | Project Name | IPM 2021-24 | draft IPM 2024-27 |
|-----------------------------|---------------|-------------|---------------------------------------|-------------------------|-------------------------------------|
| Matamata- Piako District | 135182 | 276240 | Low-Cost Low-Risk Improvements 21- | HHM priority order 4 | LR Imp MMM 5 W&C LLM 10 |
| Council | | | 24 | | PT services MMM priority order 5 |

| Hauraki | 135167 | 276157 | Low-Cost Low-Risk | HHM priority order | MMM priority order 5 |
|-----------|--------|--------|-------------------|--------------------|----------------------|
| District | | | Improvements 21- | 4 | W&C LLM 10 |
| Council | | | 24 | | |
| Masterton | 135181 | 276236 | Low-Cost Low-Risk | HHM priority order | MMM priority order 5 |
| District | | | Improvements 21- | 4 | |
| Council | | | 24 | | |

Overall ranking

Applying the prioritisation criteria each programme was considered to have a ranking profile below the starting profile.