

INVESTMENT PRIORITISATION METHOD WORKED EXAMPLES

3: PUBLIC TRANSPORT HUB 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 public transport (PT) hub business case incorporates a combination of activities including bus lanes, bus priority measures, and improved walking and cycling facilities for a popular local road outside a shopping centre. The business case builds on work undertaken in the public transport improvement programme and the city-wide PT network investigation. These previous works identified the target area as one of the busiest PT hubs in the city.

The primary problem arises for this core public transport route when the overall traffic continues to grow. Increased travel time and reliability issues of buses make it difficult to optimise the city's transport network. Also due to the lack of infrastructure investment, bus service and bus infrastructure delivery is poorly coordinated resulting in sub-optimal service for customers.

The objectives of the investment are:

- improved travel time reliability
- improved customer satisfaction
- improved public transport mode choice
- increased access to key activity centres.

With the new and improved walking and cycling facilities near the public transport hub, cyclists and pedestrians are expected to save time for their trips to the bus stops. Successful delivery of this investment is expected to increase the proportion of population within 15 - 45 minutes access of key activity centres (including economic and social opportunity) by bus, walking, and cycling in the morning peak by 6%. It is also expected that the reliability of bus service will be greatly improved with much less wait time for passengers.

A cost benefit analysis has been conducted. The benefits include travel time and vehicle operating costs (VOC) saving, PT reliability, safety, walking and cycling, etc. With sensitivity testing, the benefit-cost ratio range is determined to be 3.0-3.5.

As a part of the public transport improvement programme, this proposal's delivery in 2021-24 NLTP would play an important role in optimizing the overall public transport network and enabling the benefits of other service improvements in the public transport improvement programme. Finally, further investments for the public transport hub are under investigation and will be scheduled for implementation in 2027. This current proposal will prepare for the implementation of those further investments.

A detailed business case has been completed and endorsed. But no funding was requested in previous application. The next phase (phase being considered for inclusion) is pre-implementation and a funding request will be included.

Applying the IPM to this proposal

The first thing we consider is how well this proposal aligns with our investment policy. Under the **Public transport infrastructure** activity class, investments for bus lanes and related infrastructure are allowed.

This business case has already been endorsed. The pre-implementation phase can now be considered under the IPM assessment criteria. The issue of concern can be assessed under both “**Better Travel Options and Climate Change**” and “**Better Travel Options**”. Since this proposal’s objective is primarily around improving access to opportunities rather than encouraging mode shift, only assessment under “Better Travel Options” is shown in this example.

GPS alignment

We first consider this proposal under the **Better Travel Options** GPS alignment criteria.

- The estimated change in number of jobs accessed within 45 minutes by PT and active modes in the morning peak is expected to be around 6% according to the business case investigation. It is the same case for change in proportion of population within 15 minutes access of social opportunity in the morning peak. To achieve a VERY HIGH GPS alignment, a change >6% is sought. We can see that the proposal can be assessed as **HIGH GPS alignment criteria** under the first two criteria.
- Mode specific criteria for **Better Travel Options** (e.g. for new stops/stations, or significant tourism destinations) are not appropriate for this investment. The investment objectives do not include increasing the percentage of the population living within 500m of a bus stop or 1km from a rail or bus rapid transit station where service frequency is ≤ 30 minutes per hour.

Given that the proposed investment is within the Public transport infrastructure activity class, setting the GPS Alignment factor based on the mode specific criterion associated with walking and cycling would not be appropriate.

This proposal can also be assessed under “Better Travel Options and Climate Change”, but that will also achieve a **High** rating as the expected change from private vehicle to other modes is 3%-6%.

Scheduling

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

We first assess this proposal under **Interdependency** against **HIGH** criteria.

This proposal belongs to the overall public transport improvement programme. But there is no clear implementation/delivery interdependency. There are no other activities that require this proposal’s delivery to enable their further implementation.

Non-delivery of the proposed activity in the 2021-24 NLTP is unlikely to make benefits of the programme/package not achieved or delayed for more than 3 years. The dependent bus service improvement investment can still realise part of the benefit in time without this infrastructure improvement.

Non-delivery of proposed activity in the 2021-24 NLTP has a moderate impact on realising the estimated benefits of the programme/package. The benefit of the related bus service improvement activity may be reduced. We can see that this fits a **MEDIUM** Interdependency rating.

Next, we assess this proposal against **Criticality** criteria. The unplanned loss of service is not applicable as the corridor or intersection loss of service is irrelevant to this proposal. This proposal is necessary in order to deliver/prepare other investment in the programme where its implementation is to begin in 2027 NLTP or beyond. We can see that this fits a **LOW** criticality rating.

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

Efficiency

Last, we consider **Efficiency** factor. According to the cost benefit analysis, the benefit cost ratio of this proposal is 3.0-3.5, which is within the range of 3.0-5.9. That gives the proposal an efficiency rating of **MEDIUM**.

With H for GPS alignment, M for Scheduling, M for Efficiency, this proposal gets a Priority Order of 5 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.