

In confidence – Paper dated 8 November 2024

## SH1 Wellington Improvements RoNS scope decision

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This paper presents information on the preferred option for the SH1 Wellington Improvements Roads of National Significance (RoNS) project, following the Board workshop held on 22 August 2024, and the Board meeting on 18 October 2024.

It reflects and expands on the information provided verbally by Management to the Board at the meeting.

### Take matua | Key points

The Second Mt Victoria Tunnel and Basin Reserve upgrade is one of the RoNS included in the GPS. Before progressing to the next stage of project development and based on a request from the Minister of Transport, some initial work was undertaken to determine the best approach for this stretch of SH1 in Wellington. The options presented to the Board were:

- Second Mt Victoria Tunnel and Basin Reserve upgrade
- Second Mt Victoria Tunnel and Basin Reserve upgrade plus Terrace Tunnel duplication
- Long Tunnel between north of the Terrace Tunnel and Wellington Road in Kilbirnie

Following assessment, the option of duplicating both tunnels with upgrades at the Basin Reserve was endorsed by the NZTA Board as the preferred option to move forward to the investment case phase of project development. This will be presented to the Board in mid-2025.

### He kōrero mō tēnei kaupapa | Background

Improving SH1 from the Wellington Urban Motorway through the city centre to the airport has consistently been part of Wellington's transport strategies. It was included in the 2009 Wellington Northern Corridor (Levin to Wellington) RoNS project; this included a duplicated Terrace Tunnel, grade separation at the Basin Reserve and a second Mt Victoria Tunnel.

The 2019 Let's Get Wellington Moving (LGWM) 'Recommended Programme of Investment' also included tunnel duplications and upgrades at the Basin Reserve. The Terrace Tunnel duplication was omitted from the Indicative Programme that was taken forward by LGWM due to affordability constraints.

Whilst the RoNS projects are identified by the Minister for Transport in the GPS, decisions on the benefits, scope, form, and potential funding of these options are the responsibility of NZTA. In support of this approach, the team have presented updates on this project to the Board in August and October 2024 and to the Minister in September.

## Kia mōhio mai koe | What you need to know

### Project objective

The objective for this project is to “provide more efficient and reliable access to support regional economic growth”, and this is primarily aligned with the first of the 4 Key Strategic Priorities within the GPS, which include a focus on enhancing economic growth and productivity, increased maintenance and resilience, improved safety and achieving value for money.

### Project options

Details of project options, including plans, are shown in Attachment 1.

#### *Second Mt Victoria Tunnel and Basin Reserve Upgrade*

This option aims to enhance traffic flow between Wellington’s central city and the airport/hospital by duplicating the existing Mt Victoria Tunnel and improving traffic movements at the Basin Reserve. This will be accomplished by extending the Arras Tunnel to separate north-south and east-west movements, distinguishing it from the previous Basin Bridge proposal. s 9(2)(ba)(ii)

#### *Second Mt Victoria Tunnel and Basin Reserve Upgrade plus Terrace Tunnel duplication*

This is an extension of the above option through the inclusion of a duplicated Terrace Tunnel s 9(2)(ba)(ii) to improve traffic flow between the Wellington Urban Motorway, the Wellington central city and the airport/hospital. This would complete the SH1 corridor, addressing all single lane sections through Wellington.

#### *Long Tunnel*

This is an alternative option that would provide a new route between north of the Terrace Tunnel and Wellington Road in Kilbirnie. This would improve traffic flow between the Wellington Urban Motorway, the Wellington central city and the airport/hospital, and would remove all through traffic from the central city.

### Option evaluation

After evaluating the 3 proposed options, the second Mt Victoria Tunnel and Basin Reserve upgrade with a Terrace Tunnel duplication has emerged as the preferred choice due to its optimal balance of cost and delivering against the project objective and GPS priorities.

The option without the duplicated Terrace Tunnel, while the least expensive, does not contribute as well to the project’s strategic goals. It risks delivering insufficient improvements in congestion reduction, and overall travel efficiency along the whole SH1 corridor through Wellington, requiring additional upgrades in the medium term. Specifically, this option provides travel time savings of up to 8 minutes in the peak for key journeys across Wellington and to key destinations such as the hospital and airport, but does not resolve the Terrace Tunnel pinch point into the city from the north via SH1.

The Long Tunnel option also resolves this pinch point and outperforms the above option in terms of performance metrics but is financially unaffordable. The financial burden associated with the Long Tunnel, which is projected to cost \$5.2bn - \$7.5bn, could divert resources away from other critical infrastructure projects. This option does offer greater travel time savings of up to 19 minutes in the peak, but this benefit does not easily justify the increased expenditure.

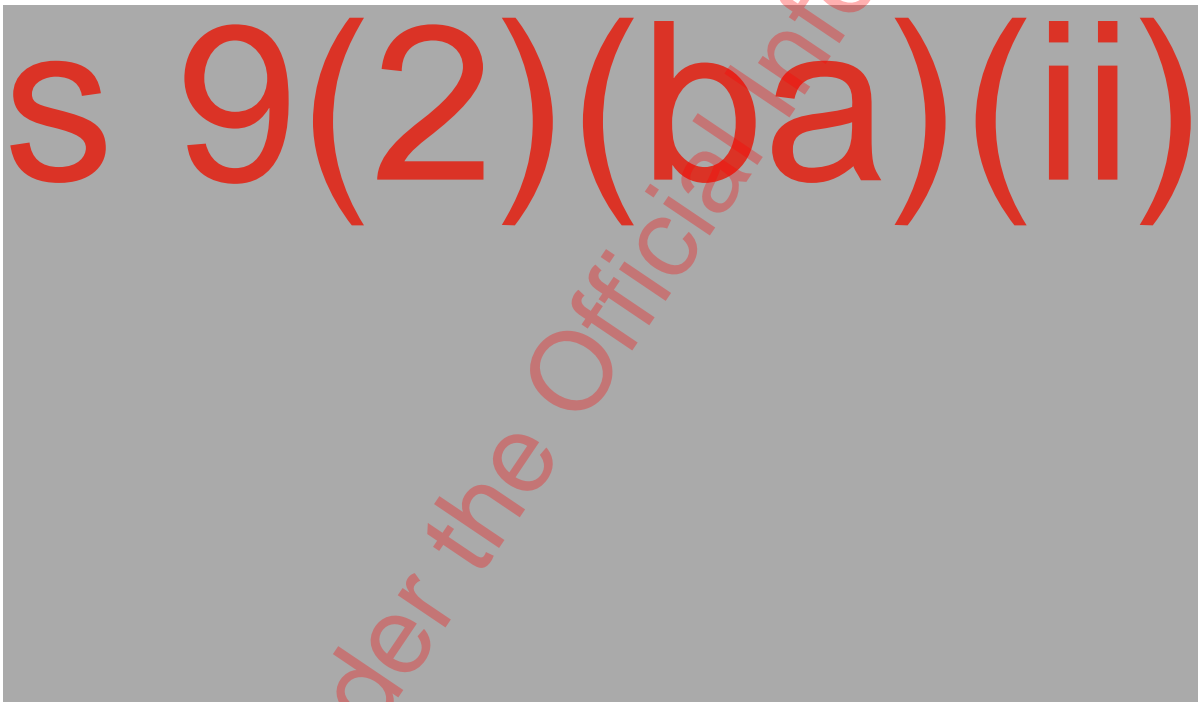
The option of a second Mt Victoria Tunnel and Basin Reserve Upgrade plus a Terrace Tunnel duplication lies between the above 2 options in terms of cost and performance. However, it stands out for its better benefit cost ratio, which will be further investigated in the next phase. This option offers travel time savings of up to 11 minutes in the peak for journeys across Wellington and also offers travel time improvements for traffic travelling into the city from the north. In addition, it will deliver similar travel time and reliability improvements for key public transport routes. s 9(2)(ba)(ii)

### Preferred option

In conclusion, the second Mt Victoria Tunnel and Basin Reserve Upgrade plus a Terrace Tunnel duplication option is preferred, as it effectively addresses the project's objective at a cost that is significantly lower than the Long Tunnel. Selecting this option ensures a balanced investment that will enhance the overall functionality of SH1 through Wellington and meet the access needs of the wider region both now and in the future.

### Ā muri ake nei | Next steps

An outline of the forward programme is shown below. The next step is preparation of the Investment Case, endorsement will be sought from the Board mid-2025.



### Ngā whakapiringa | Attachments

#### Attachment 1

Presentation from August Board Workshop on SH1 Wellington Improvements

This document is to be released as part of the release of advice to the Minister and Board.

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