Note: Information in this document was accurate when presented to the NZTA Board; some details may have since changed.

Attachment 1

SH1 Wellington Improvements Investment Case

NZ TRANSPORT AGENCY
WAKA KOTAHI

New Zealand Government

Overview

- **Project Objective:** The RoNS SH1 Wellington Improvements project will address the problem of the two to one lane bottlenecks at the Terrace and Mount Victoria Tunnels, and in unblocking the bottlenecks will "provide more efficient and reliable access on State Highway 1 from north of the Terrace Tunnel to Wellington Airport and Wellington Hospital to support regional economic growth".
- SH1 is a nationally and regionally significant transport route that provides connection to Wellington city's main employment centre, the international airport and regional hospital. Providing an efficient and reliable connection is imperative to support New Zealand's economic growth and prosperity and enables housing growth in the Eastern Suburbs. A freer-flowing state highway also reduces traffic on alternative local roads that are used for public transport and other purposes.
- The **investment envelope for the project is $2.9b to $3.8b** s 9(2)(b)(ii)
- s 9(2)(ba)(ii)
- The project has a **BCR of 0.7—1.2** (with Wider Economic Benefits that are relevant given the business agglomeration opportunity raised by the access improvements to the CBD).
- A range of funding and financing options have been identified that will need wider engagement to test their acceptability.
- s 9(2)(ba)(ii), s 9(2)(f)(iv) Given the inter-related nature of the Wellington transport system, it is recommended to explore congestion charging opportunities for a more integrated solution.
- The Delivery Strategy has identified the need to deliver the project in its entirety s 9(2)(ba)(ii).
- The project is intending to seek statutory approvals via the Fast-track Approvals Act 2024, with lodgement targeted by July 2026
- s 9(2)(j)
- The project is ready to proceed to Pre-Implementation for the consenting, specimen design and property acquisition that targets lodgement of consent and early work in 2026, s 9(2)(ba)(ii)
- The funding request for the **Pre-implementation phase is $185m**.

Recommended Option

The SH1 Wellington Improvements Roads of National Significance (RoNS) project will unblock the bottlenecks at the Terrace and Mt Victoria Tunnels and unlock growth through Te Aro and the Basin Reserve to support economic growth, boost productivity and increase connectivity between the central city, the eastern suburbs and the wider Wellington region.

The SH1 Wellington Improvements Recommended Option Includes:

- Terrace Tunnel | A second southbound tunnel, providing two traffic lanes from the Wellington Urban Motorway into the city, with associated work on the Ghuznee Street bridge.
- Te Aro | A third eastbound lane on Vivian Street with improved traffic signal operations for reliable throughput while maintaining connectivity to key connector roads. Optimising Karo Drive with a third westbound lane crossing the Willis Street traffic signals.
- Basin Reserve | Separating SH1 east west traffic from local north south traffic and buses by taking Sussex Street on the western edge of the Basin Reserve over an extended Arras Tunnel that connects with the Mt Victoria Tunnel. This involves changes on Kent and Cambridge Terrace, and Paterson Street to divert traffic along the north edge of the Basin.
- Mount Victoria Tunnel and Eastern Connections | A second eastbound parallel tunnel plus widening of Ruahine Street and Wellington Road to provide two lanes of general traffic in each direction between the Basin Reserve and Cobham Drive. The new tunnel will include an improved walk/cycle facility (to replace the existing SUP that needs to be removed for fire life safety and enables lane widening in the existing tunnel).

Investment envelope
$2.9b - $3.8b

NPV Benefit	NPV Cost	BCR
$1.6b to $2.9b	$2.5b	0.7 – 1.2
GPS alignment – Very High	Schedule – High	Efficiency – Low

Outcomes

- Improved travel time on SH1 of up to 10 minutes at peak times
- Reduced travel time variability up to 40%
- 20% reduction in traffic on the Harbour Quays to enable increased bus use
- 200 additional walking and cycling journeys per day between the eastern suburbs and the central city

Staging is not recommended

Second Terrace Tunnel → **Te Aro Improvements** → **Basin Improvements** → **Second Mt Victoria Tunnel and Wellington Rd/Ruahine St**

Cost: s 9(2)(b)(ii) Second Terrace Tunnel, s 9(2)(b)(ii) Te Aro
Benefits: 11% alone, 20% with Te Aro, 35% as part of delivering full scope

Cost: s 9(2)(b) Basin Improvements, s 9(2)(b)(ii) Second Mt Vic Tunnel
Benefits: 40% alone, 45% with Basin Improvements, 65% as part of delivering full scope

- Delivering the project as a whole delivers the greatest transport benefits and unlocks wider economic benefits from improved access to the CBD with associated business agglomeration.
- Benefit analysis of the individual pieces of the project delivers only around 60% of the whole potential benefit realisation. The complex nature of the Wellington urban area means that fixing one piece of the SH1 corridor merely shifts the problem and delays along to the next segment.
- The analysis further showed that unblocking the Mount Victoria bottleneck requires matching capacity at the Basin to cater for the increased traffic growth and could deliver around 40% of the total project benefits. Unblocking the Terrace Tunnel needs to be implemented with Te Aro improvements along Vivian Street and if staged first could deliver around 20% of the total project benefits.
- The commercial assessment highlights the following benefits of delivering the project with a concurrent s 9(2)(ba)(ii) programme:
  - Efficiency of public money spending – a 'piecemeal' approach results in duplicated efforts (increasing costs) and reduction in cost efficiency gains
  - Reduction in disruption over time - lowering community fatigue and erosion of public support
  - Shortened timeline – maintains political and economic focus, reduces difficulty in resource planning and retention of skilled labour
  - Maintains the urgency to deliver the government objectives and delivery commitments.

It is recommended to deliver the project in its entirety to achieve the investment objective in a timely and efficient manner.

Sequencing

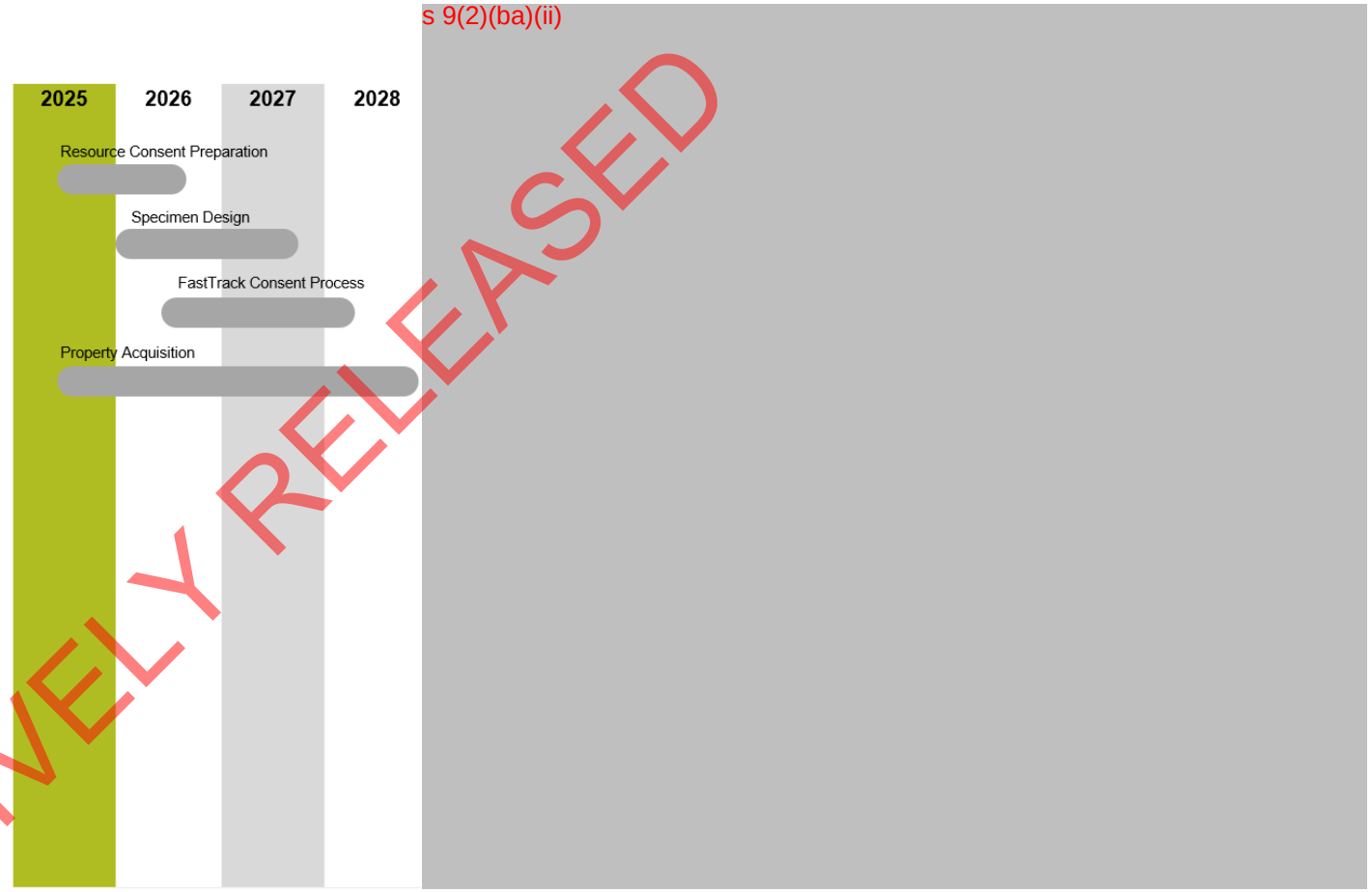
Programme for delivery
The scale and scope of the project provides options around sequencing and overall programme for delivery. Two options were considered:

- Sequential programme – delivery over a longer duration s 9(2)(ba)(ii) prolongs disruption and increases escalation.
- Concurrent programme – delivery over a shortened programme s 9(2)(ba)(ii) . ***(Recommended Option)***

Benefits of the Shorter Programme

- **Disruption** - minimises overall traffic disruption during construction through effective traffic management, reducing inconvenience for residents and road users s 9(2)(g)(i)
- **Value for Money –** commercial efficiencies to be gained from a tight programme with reduced time-related costs for example "preliminary and general". A shorter programme reduces escalation s 9(2)(g)(i) providing a balance between cost minimisation and time efficiency.
- **Uncertainty** - reduces uncertainty for packages delivered later in the programme s 9(2)(g)(i)
- **Specialist packages –** concurrent programme recognises the specialist nature of the tunnels taking advantage of shared design and construction resources helping to maximise project value outcomes while minimising cost.
- **Market capacity** – market sounding indicates an appetite for the project and that consultants and contractors would resource up for, both from within New Zealand and internationally.

Managing a tight programme within a constrained urban environment
With any packaging approach, careful management of interface and disruption risk will be required. A Network Planning Group will be established to manage traffic operations, TTM, utility interfaces, and forward work package coordination.



Unblocking the bottlenecks unlocks growth that requires the entire project to be delivered to ensure the end to end SH1 corridor through the Inner City can operate efficiently and reliably

Delivery

Approving pre-implementation funding will enable lodgement of consent and early works in 2026 and prepare for implementation procurement in 2027. We will return to the Board in 2027 for a decision to implement.

2025	2026	2027	2028	s 9(2)(ba)(ii)
• Commence consenting design and assessment activities. • Stakeholder engagement. • Commence property acquisition (willing buyer / seller and town belt PWA). • Planning for development of Specimen Design.	• Consent lodgement via FTAA. • Procure PTA and develop Specimen Design. • Property acquisition including PWA. • Early works - identifiable roading improvements that allow early substantive progress of the project.	• Decision on Fast Track Consent Application. • Decision to Implement. • s 9(2)(ba)(ii) • Property acquisitions ongoing.	• s 9(2)(ba)(ii) • Property acquisition complete. • s 9(2)(ba)(ii)	

Decision to invest

Decision to implement

Delivery pathway	
Procurement and Delivery	s 9(2)(b)(ii)
Consenting Pathway	The project consenting pathway will be via the Fast Track Approvals Act, being a named project under the Act. Consenting procurement and delivery has commenced to achieve a consent lodgement date on or before 30 June 2026.
Proposed Property Strategy and Status	Property acquisition on a willing seller / willing buyer basis will start late 2025. Property acquisition completed by end of 2028.
Key Risks with Delivery Pathway	s 9(2)(g)(i)

Key Risks

s 9(2)(g)(i)

Cost and Contingency

s 9(2)(g)(i)

Funding and Finance

Funding source		Comment
Public Private Partnerships (PPP)	X	PPP is not considered desirable due to the project's constrained network size makes it costly and unattractive, and its likely timeline make return on investment less appealing. Additionally, the financing and management costs associated with a PPP model do not provide sufficient value.
Tolling/Cordon Charging	☑	Tolling is feasible. Opportunity to improve outcomes through integration with a congestion charge. A combined toll / cordon charge is expected to generate more revenue. The BCR of a tolled scheme is 0.6 to 1.0 (untolled BCR is 0.7 to 1.2).
Time of Use Charging	X	Not intended as a revenue tool, & surplus expected to be primarily used for local government projects.
Regional RUC/Fuel Levy	☑	Worth exploring at both national and regional level.
National Land Transport Fund (NLTF)	☑	NLTP requested for Pre-implementation/Property. A mix of NLTF and / or Crown funding will be required to cover the Implementation funding gap.
IFF Levy – Existing Residents	☑	Current analysis based on a city-wide charge.
IFF Levy – New Development	☑	Current analysis based on a city-wide IFF charge on new rating units.
IFF Levy – Business	☑	Charge would be an IFF levy on commercial properties.
s 9(2)(g)(i)		
Crown Grant / Capital Contribution	☑	A mix of NLTF and/or Crown funding will be required to cover the funding gap.

Tolling Proposal

s 9(2)(ba)(ii), s 9(2)(f)(iv)

Tolling Rate

s 9(2)(ba)(ii), s 9(2)(f)(iv)