

In confidence

Tolling programme decisions

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Whāinga | Purpose: For decision

This paper seeks Board approval to recommend tolling of Te Ahu a Turanga, Manawatū Tararua Highway (Manawatū Gorge), and seeks approval for an updated tolling scheme to be recommended for tolling of Ōtaki to north of Levin.

He kupu whakatau | Recommendations

Management recommends the Board:

- **Approves** the recommendation to the Minister of Transport for the initiation of public consultation and scheme development for tolling of Te Ahu a Turanga, Manawatū Tararua Highway (Manawatū Gorge).
- **Approves** an updated tolling scheme being recommended to the Minister of Transport for the initiation of public consultation and scheme development for tolling of Ōtaki to north of Levin.
- **Notes** that should the Minister agree to the Board's recommendations above, the next steps will be to undertake public consultation.
- **Notes** that a recommendation to toll Takitimu North Link was endorsed by the Board in June 2024, and that we will seek the Minister of Transport's support to proceed to public consultation alongside Te Ahu a Turanga Manawatū Tararua Highway (Manawatū Gorge) and Ōtaki to north of Levin.

Take matua | Key points

- The GPS 2024 sets an expectation that NZTA should consider tolling to construct and maintain all new roads. It states that the Government will support all recommendations by NZTA to toll roads.
- A reassessment of Te Ahu a Turanga, Manawatū Tararua Highway (Manawatū Gorge) has shown that it would meet the requirements for tolling set out in the Land Transport Management Act 2003 (LTMA).
- The previous Minister of Transport did not provide feedback on a Ministerial briefing for tolling of Ōtaki to north of Levin, provided in October 2022. Before we go to the Minister of Transport, we have taken the opportunity to review the tolling proposal against the current GPS to identify if there are opportunities for a more effective and efficient tolling scheme.

He kōrero mō tēnei kaupapa | Background

The LTMA permits the establishment of road tolling schemes to provide funds which can be applied to the planning, design, supervision, construction, maintenance, or operation (or any combination of these activities) of the tolled road. A road can only be tolled if it is a new road (or integral to that road).

The decision whether to recommend tolling to the Minister of Transport sits with the Board. This includes seeking permission to publicly consult. Following consultation, the final decision to recommend the establishment of a road tolling scheme to the Governor-General (through an Order in Council) sits with the Minister. The Minister may consult with Cabinet before making such a recommendation.

The GPS 2024 sets an expectation that NZTA should consider tolling to fund construction and maintenance of all new roads where likely to meet legislative requirements and net tolling revenues make a positive contribution to project costs. Importantly, it also states that the Government will support all recommendations by NZTA to toll roads.

Kia mōhio mai koe | What you need to know

Te Ahu a Turanga: Manawatū Tararua Highway

State Highway 3 through the Manawatū Gorge is a vital connection between the west and east of the North Island. As well as providing connection between the Manawatū-Whanganui and Hawkes Bay regions it connects the communities of Woodville and Dannevirke with Ashhurst and Palmerston North. The route carries freight volumes at a level that means it is an important national freight link.

The road was closed in April 2017 following a large slip and a history of landslides. Construction on Te Ahu a Turanga commenced in early 2020. It is a new 11.5km 100km/h single carriageway road built over the Ruahine Range, to provide a safe, resilient, and efficient route between Woodville and Ashhurst and is due to be completed in mid 2025.

The [tolling assessment of Te Ahu a Turanga Manawatū Tararua Highway](#) was presented at the 19 March 2020 Board meeting. At the time, the NZTA Board did not consider Te Ahu a Turanga appropriate for tolling due to the low benefits associated with the anticipated revenue (ranging from \$1-5m per annum 2025) compared with negative impacts to safety and access. On 6 April 2020 Minister of Transport Hon Phil Twyford accepted the Board's recommendation that Te Ahu a Turanga is not suitable for tolling (BRI-1912, Attachment 1).

Since that time, the alternative routes of Saddle Road and Pahiatua Track have been upgraded through resurfacing, strengthening and smoothing some corners and road edges, installing more passing lanes and making intersection improvements through Ashhurst. In addition, alternative funding streams, such as tolling, have received an enhanced focus in the current GPS.

NZTA Board supported re-investigating the potential for tolling Te Ahu a Turanga at their June 2024 meeting and we have now updated our toll model and completed a gate two tolling assessment. The new assessment takes into account user perception factors such as safety, comfort and gradient which can influence route choice and we have incorporated a more sophisticated willingness to pay model which is less conservative with respect to diversion.

A recommended tolling scheme has been identified with fixed all day toll rates

A number of tolling scenarios were tested taking into consideration revenue, diversion (particularly to Saddle Road) and network impacts on Ashhurst as summarised below and presented in Attachment 2 The tolling consultation would enable further discussion around these matters. Tests included:

- Willingness to Pay Max: The highest toll level before vehicles start to divert from the toll road
- NZTA Status Quo Toll Levels: Toll rate similar to current NZ Toll Roads

- International Benchmarked 1: Higher toll rate benchmarked to wider Australian, European & American toll roads
- Revenue Maximising: Toll rate which maximises overall revenue

Scenario	Light toll*	2025 Forecast Daily Traffic Flows		% Diversion from Te Ahu a Turanga	2025 annual net revenue (\$m)	NPV revenue, 35 year toll scheme at 6% discount rate (\$2024)
		Te Ahu a Turanga	Saddle Road			
2016 Pre-closure	-	7,620	150	-	-	-
2022 Post-closure	-	0	3,010	-	-	-
Untolled	\$0.00	10,902	0	-	-	-
Willingness to Pay Max	\$1.40	10,902	0	0%	\$3.3m	\$54m
NZTA Status Quo Toll Levels	\$2.80	8,577	2,040	21%	\$6.9m	\$136m
Preferred	\$4.30	6,856	3,088	37%	\$9.0m	\$193m
International Benchmarked ²	\$4.75	6,077	3,862	44%	\$8.9m	\$223m
Revenue Maximising	\$6.35	3,966	5,207	64%	\$9.2m	\$268m

* Heavy charged at 2 x Light

The recommended toll scheme for consultation consists of a light vehicle charge of \$4.30 and heavy vehicle charge of \$8.60. This has been selected as it has similar revenue to the international benchmarked toll rate whilst having significantly less diversion and impact on Ashhurst.

section 9(2)(j)

The recommended toll scheme for Te Ahu a Turanga would meet the requirements set out in the LTMA

Tolling Te Ahu a Turanga would meet core legislative requirements (e.g. new road, feasible untolled alternative routes are available) and the proposed scheme is considered efficient, effective and represents value for money.

Te Ahu a Turanga is considered a new road until its opening in mid-2025. An equitable outcome for road users that choose not to travel on a tolled Te Ahu a Turanga is achieved through the availability of the existing Saddle Road and Pahiatua Track Road which have both been upgraded since Manawatu Gorge was closed.

The proposed scheme is considered to be efficient and effective. Construction costs for the project (funded from the NLTF) are forecast to be \$690m. Based on a 35-year tolling scheme, toll revenue net of transaction costs could support an estimated \$193m of funding³ (28% of construction, depending on the final cost of the project).

¹ https://australasiantransportresearchforum.org.au/wp-content/uploads/2022/05/ATRF2021_Resubmission_122-1.pdf

² https://australasiantransportresearchforum.org.au/wp-content/uploads/2022/05/ATRF2021_Resubmission_122-1.pdf

³ It is still to be determined whether separate borrowing would be sought or if the borrowing was notional (from the NLTF). Separate borrowing would free up NLTF funds.

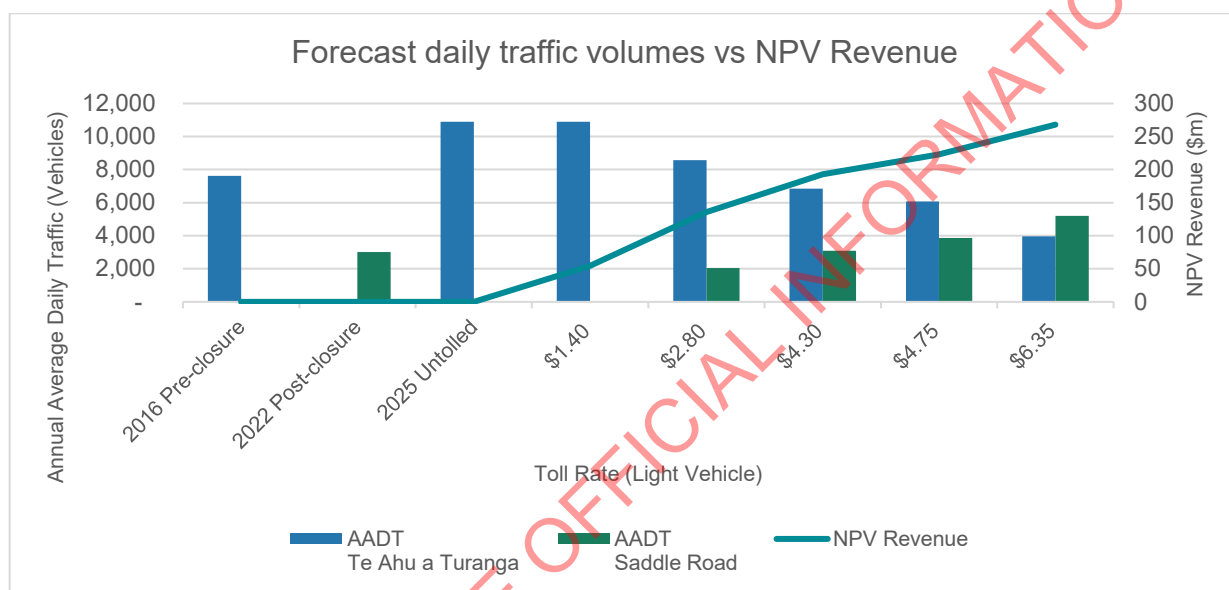
We would propose to toll in perpetuity to recover as much of the road build, operating, and maintenance costs as possible i.e. beyond the \$193m.

Toll revenues would make a positive contribution to the costs of the project whilst not undermining the road's positive contribution towards the GPS priorities of increased resilience and economic growth and productivity.

Project objectives and wider transport system impacts

The objectives of Te Ahu a Turanga are to reconnect the closed Manawatū Gorge State Highway 3 with a more resilient, safer, and efficient connection than the Saddle Road and Pahiatua Track. Tolling Te Ahu a Turanga would continue to meet these objectives.

The recommended toll rate balances revenue with the level of forecast diversion and consequential impacts particularly on Saddle Road and through the township of Ashhurst. These trade-offs are shown in the figure below.



The most significant impact is through the town of Ashhurst which is on the Saddle Road alternative route. There was an expectation that Te Ahu a Turanga would be a free road and that traffic through Ashhurst would return to pre-closure levels with minimal traffic on Saddle Road. While there have been some network improvements in the town to accommodate increased traffic as a consequence of the gorge closure, the higher levels of traffic through Ashhurst as a consequence of tolling is likely to be of concern to the residents of Ashhurst. The recommended toll rate maintains through traffic at present Gorge closed levels. Higher toll rates are forecast to increase volumes of traffic on the Saddle Road and through Ashhurst at levels in excess of what is presently experienced. Revenue maximisation would lead to more traffic on the existing Saddle Road than on the new safer Te Ahu a Turanga and is not therefore recommended.

It is feasible to put an Order in Council in place before the road opens

If supported by the Minister, an Order in Council (OIC) needs to be in place prior to the new road opening, which is currently forecast to be for May 2025.

Engagement with the Ministry of Transport has confirmed that it would be feasible to introduce an OIC in the available time, however there is little opportunity for further acceleration of the timeline.

section 9(2)(g)(i)

Key steps would include:

Activity	Critical Path
Minister approves NZTA to undertake consultation	Mid-end Aug
Public engagement and NZTA Board considers and approves Gate 3	Sept - Nov
section 9(2)(f)(iv)	
Road opening	End – May 2025

section 9(2)(f)(iv)

Next steps

Subject to Board approval, we will seek the Minister's approval to proceed to public consultation in September. In parallel with this we would work with the Ministry of Transport to finalise the OIC timeframes.

Ōtaki to north of Levin (Ō2NL) highway

At the August 2022 meeting, the NZTA Board approved recommending tolling [Ōtaki to north of Levin \(Ō2NL\) highway](#) to the then Minister of Transport. The preferred tolling scheme consisted of:

- a two gantry scheme – one on Ō2NL between Taylors Road interchange and the Tararua interchange and one on Ō2NL between the Tararua interchange and the intersection with SH57.
- a constant, all-day toll level of \$2.50 (\$2022) for light vehicles and a \$5.00 (\$2022) for heavy vehicles for through traffic (users of the both the South section and the Central section).
- an incremental toll for local, non-through traffic, with light vehicles paying \$1.25 (\$2022) and heavy vehicles paying \$2.50 (\$2022) per section travelled.
- revenue allowing approximately \$99m to be borrowed to supplement NZ Upgrade Programme funding and contribute to the projects planning, design, supervision, construction, maintenance, or operational costs.

No feedback was provided on the Ministerial briefing provided in October 2022. Before we go back to the Minister of Transport we have taken the opportunity to review the tolling proposal against the current GPS to identify if there are opportunities for a more effective and efficient tolling scheme.

Ō2NL users have a particularly low willingness to pay as a high proportion of users are generally making local trips (in and around Levin) and there are multiple alternative free routes to choose from to avoid the tolled route. Hence, there are very high levels of diversion at even quite small toll rates. In exploring alternatives our focus has therefore been in exploring efficiencies in the tolling scheme and focussing on strategic movements which are more likely to have a higher willingness to pay.

In addition to the sixteen toll tests undertaken originally we have now also explored single gantry options at two tolling levels: rates similar to existing toll roads in New Zealand, and an Internationally Benchmarked toll rate as summarised below and in more detail in Appendix 2.

Scenario	Light toll*	Daily traffic on Ō2NL South of Levin (2039) (Vehicles)	Daily traffic on existing SH1 south of Levin (2039) (Vehicles)	% Diversion from Ō2NL	2039 Annual Crash Costs (\$m)	NPV net revenue, 30 year toll scheme at 6% discount rate (\$2022)
No Ō2NL	-	-	17,400 (in 2018)	-	\$15m	-
Untolled	\$0.00	24,300	6,400	-	\$7.5m	-
Current recommended: NZTA Status Quo Toll Levels (Two Gantry System)	\$1.25 / \$2.50	17,800	11,500	27%	\$9.5m	\$99m
Revised recommended: (One gantry)	\$2.50	13,800	15,300	43%	\$10.2m	\$100m
International Benchmarked ³ (One gantry)	\$5.00	7,000	21,500	71%	\$11m	\$143m

* Heavy toll rate is twice the Light toll.

We are now recommending a simplified tolling scheme:

- a single gantry on Ō2NL between Taylors Road interchange and the Tararua interchange.
- a constant, all-day toll level of \$2.50 (\$2022) for light vehicles and a \$5.00 (\$2022) for heavy vehicles.

Under this single gantry option the southern 15km of Ō2NL would be a tolled with the remaining 9km to the east and north of Levin being free. However, we are forecast to obtain revenue of around \$100m (NPV @ 6% discount rate over 30-years) which whilst similar to the two gantry option has the advantage of halving tolling infrastructure costs and ongoing operating costs. Removing the northern gantry sees more local trips utilising Ō2NL which is likely to enhance overall community support versus the two gantry option.

A critical consideration is the level of diversion back to the less safe old state highway (existing SH1) particularly on the southern section. Traffic modelling for 2039 forecasts that volumes on the old state highway will increase from 11,500 vehicles per day (vpd) under the current two-gantry scheme to 15,000 vpd for a single gantry. This is less than observed volumes in 2018 (17,400 vpd) but significantly higher than is forecast were Ō2NL untolled (6,500 vpd). Under the internationally benchmarked toll rate the levels of diversion are forecast to be significant at 71% with traffic volumes on the old state highway three times those of the new road. With increased diversion, forecast annual crash costs are forecast to increase. In 2039, modelled crash costs are forecast to increase from \$9.5m per annum for a two gantry scheme to \$10.2m per annum for a single gantry. By comparison, an untolled Ō2NL has annual crash costs of around \$7.5m per annum. For this reason, higher toll rates are not recommended for this particular scheme.

He whakaaro anō | Other key considerations

Ō ti s hononga | Partner, community, and stakeholder considerations

Adequate public consultation is a requirement for Te Ahu a Turanga and Ō2NL under the LTMA. Should the recommendation to pursue tolling and commence public consultation be accepted by the Minister, it is proposed that the consultation process would take place over September for a period of four weeks. Takitimu North Link (approved by the Board in June 2024) will also follow this timeline and commence public consultation in September, following Minister approval at the end of July.

All submissions and feedback collected via the public consultation will be summarised to the Minister. This will provide insights into the level of community support for the proposed tolling scheme in the region/regions - meeting the LTMA requirement that NZTA has carried out adequate consultation on the proposed tolling scheme.

Ngā tūraru matua | Key risks and how we will manage them

Key risk	Management
Inadequate public consultation	<ul style="list-style-type: none">Comprehensive communications and engagement approach.
Insufficient lead times mean the tolling decision not made in time, Due to O2NL project not yet consented. Therefore there is a risk of delays due to appeals being lodged on Notices of Requirement (NOR) and consents driven by negative public sentiment on tolling proposal	<ul style="list-style-type: none">Te Ahu a Turanga is on the critical path to obtain an OiC in advance of the road opening. NZTA has been working with the Ministry of Transport to identify a delivery plan that is achievable.Develop an strategy to manage the potential impact on RMA decisions including evaluating impact on 'Assessments of Effects'.
Te Ahu a Turanga infrastructure installation post road opening may result in inefficient implementation of roadside structures and technology	<ul style="list-style-type: none">Exploring pre-work which can be undertaken prior to road opening as well as alternative infrastructure solutions to a traditional gantry as part of multi-lane free flow tolling RFP
Tolling start date for Te Ahu a Turanga section 9(2)(f)(iv) any delays in this project would further delay revenue collection on this road.	<ul style="list-style-type: none">Ensure community engagement is maintained and any delays are well communicated. Ensure the impacts of delays are clearly known to Digital teams.

Ā muri ake nei | Next steps

Should the recommendations in this paper be approved, we will submit a briefing and recommendation paper to the Minister of Transport.

If the Minister agrees, we will proceed with community consultation on the proposed tolling schemes. Following engagement, we will report back to the Board with a final tolling scheme recommendations.

Timing will be dependent upon the Minister's decisions but is anticipated to be approximately three to four months to provide recommended approaches to the NZTA Board.

Ngā whakapiringa | Attachments

Attachment 1	Min Briefing 1912 - Road tolling recommendations: Ara Tūhono Pūhoi to Warkworth and Te Ahu a Turanga: Manawatū Tararua Highway, April 2020
Attachment 2	Tolling ranges
Attachment 3	Ōtaki to north of Levin toll scheme

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