Regulatory Impact Statement: Tolling Takitimu North Link

Coversheet

Purpose of Document	
Decision sought:	To place a toll on Takitimu North Link under section 46 of the Land Transport Management Act 2003
Advising agencies:	Ministry of Transport - Te Manatū Waka
Proposing Ministers:	Hon. Simeon Brown
Date finalised:	28 November 2024

Problem Definition

Takitimu North Link is a road being delivered in two stages. Construction of Stage 1 will be funded by the Crown. Construction of Stage 2 will be met by the National Land Transport Fund (NLTF). In the absence of any alternative, the cost of operations and maintenance of both stages will be funded from the NLTF and there will be no reimbursement for any of the construction costs for Stage 2. The New Zealand Transport Agency (NZTA) is proposing to toll the road to cover maintenance and operations of the road and to reimburse the NLTF for a portion of the notional debt incurred during construction to pay for construction costs of Stage 2.

Executive Summary

Takitimu North Link is a new 13 8km, four-lane expressway between Tauranga and Ōmokoroa located to the North-West of Tauranga. State Highway Two (SH2) has developed into a busy commuter route for people travelling into Tauranga, and is an important tourist link for the northern Bay of Plenty and Coromandel Peninsula.

On completion, the full Takitimu North Link will deliver around five minutes of travel time savings compared to the alternative route. The road is being delivered in two stages:

- Stage 1 is a 68km, four-lane offline expressway that is currently under construction, funded through Crown funding and scheduled to open in 2028.
- Stage 2 (one of the Government's Roads of National Significance) extends the expressway a further 7km to the SH2 / Ōmokoroa Road Intersection with funding for route protection provided through Crown funding. Construction will be funded through the National Land Transport Fund (NLTF). Based on the remaining design, consenting and construction phases, \$9(2)(ba)(i)

NZTA is seeking a tolling order on Takitimu North Link to recover maintenance and tolling infrastructure costs for both stages, and to cover a portion of the construction costs for Stage 2. Tolling orders are legislated for under Section 46 of the Land Transport Management Act 2003 (LTMA).

NZTA is recommending variable peak and off-peak rates on weekdays, with different rates for whether a motorist uses just one stage or both stages of the road. The toll rate for Stage 1 will be \$3.10 or \$2.10 for light vehicles and \$4.20 or \$6.20 for heavy vehicles.

Once Stage 2 opens, those using the extent of Takitimu North Link will pay \$4.10 or \$3.10 for light vehicles and \$8.20 or \$6.20 for heavy vehicles in 2024 dollars. Peak hours will be 6am-9am and 3pm-6pm. Off-peak rates will be in place for weekends and public holidays.

Traffic modelling indicates that NZTA's recommended toll rates would collect present value gross revenue of approximately \$365 million over a 35-year period. ^{\$9(2)()} of total gross revenue would be retained for back-office costs and maintenance/replacement of physical assets, ^{\$9(2)()}

With NZTA's preferred toll rate, in 2048 Takitimu North Link would be used between 30-32% less on both Stage 1 and 2 compared to an untolled scenario. Modelling also expects a marginal increase in crash costs in 2031 versus an untolled scenario. However, by 2048, there is a marginal (less than 1%) modelled decrease in crash costs versus an untolled scenario. It is also expected that an untolled scenario would have greater benefits in travel time savings and wider economic benefits than a tolled scenario due to increased use. Monetised figures to reflect these disbenefits have not been produced in the time available.

NZTA has provided six options for Stage 1, which we have assessed as part of this Regulatory Impact Statement (RIS) (including the recommended rate).

- Option 1: Untolled Proceed with the road with notional NLTF debt, operations and maintenance funding coming from the NLTF
- Option 2 The option consulted on with the community with a rate for light vehicles at \$3.10 for peak and \$2.10 off peak, heavy vehicles will be double these prices (NZTA recommended, and the option consulted on)
- Option 3 A flat rate more in line with current NZTA tolling levels of \$2.80 for light vehicles and \$5.60 for heavy vehicles
- Option 4 A higher toll rate of \$3.40 for light vehicles and \$6.80 for heavy vehicles
- Option 5 An internationally comparable toll rate of \$4.75 for light vehicles and \$9.50 for heavy vehicles
- Option 6 A revenue-maximising toll with a rate for light vehicles of \$6.20 at peak and \$4.20 at off-peak, and heavy vehicles would be charged \$8.20 at peak and \$6.20 at off-peak.

Options 3-5 have a higher toll rate than NZTA's recommended option, leading to increased diversion onto alternative routes. NZTA has not provided specific crash costs for options 3-6 but have advised that in all cases the impact to crash costs would be less than 1%, which we consider to be statistically insignificant. There would also likely be a reduction in travel time savings benefits and wider economic benefits roughly equivalent to the diversion rate. These have also not been modelled given the time available. Option 3 has slightly tolNower rate than the peak rate of Option 2, with an identical annual revenue profile in 2031 but with a higher rate of diversion.

Public consultation on Option 2 was undertaken between 9 September and 7 October 2024. It received 2,317 unique submissions. The majority were opposed to tolling Takitimu North Link with 71% not supporting the tolling scheme of the road or tolling in general. The most predominant themes from those who didn't support the proposal were a belief that the toll rate was too high, or a rejection of the user-pays principle. Those in support expressed agreement with the user-pays principle and that the better road warranted a toll.

The two updates to the scheme from consultation is to exempt drivers who use both Takitimu North and Takitimu Drive in one trip from paying the Takitimu Drive toll, and a change to the variable rate time periods proposed. The peak periods proposed for consultation were weekdays from 7am-9am and 4pm to 6pm. After observed traffic flows from the existing SH2 were assessed, it became clear that the peak time periods as consulted would miss a large proportion of peak period traffic. For the final proposal, NZTA are proposing peak times between 6am-9am and 3pm to 6pm.

We are satisfied that this tolling proposal meets the statutory criteria in the LTMA (it is a new road and has a feasible, untolled alternative route), provided the Minister of Transport is satisfied with the adequacy of consultation, the level of community support, and the effectiveness and efficiency of the scheme.

We consider that the effectiveness and efficiency of the scheme should be assessed based on the impact diversion has on project benefits. An updated benefit-cost ratio for this project accounting for the toll is not available, but the available diversion statistics indicate that the impact on overall project benefits could be significant. The relative benefit of additional revenue produced by the proposal against the potential for project disbenefits is a matter of judgement for the Minister of Transport, and further information about the extent of these disbenefits would help clarify that judgement.

Limitations and Constraints on Analysis

There are known limitations on the analysis we have been able to undertake:

- NZTA have been unable to complete updated cost-benefit analysis on the overall impact of tolling on this project compared to an untolled scenario, instead only producing updated monetised safety figures for the tolled and NZTA recommended options and indicating a negligible safety impact for other options. This limits our ability to assess the overall efficiency and effectiveness of the tolling scheme in the context of the whole project.
- Alternative options to raise operations and maintenance revenue for this road, other than tolling, have not been assessed as they were considered out of scope.
- The stakeholder engagement focused on eliciting feedback to a single proposed toll rate, rather than a range of options. This reduces our ability to assess alternative toll rates, as the legislation requires the proposed scheme to be consulted on.
- As with all modelling, NZTA's toll revenue modelling of \$365m Net Present Value (NPV) over 35 years is not guaranteed. It is a risk adjusted p50 estimate.

Responsible Manager(s) (completed by relevant manager)

Daniel Cruden Acting Manager Revenue Ministry of Transport 28 November 2024

Quality Assurance (co	inplotou by art parloly				
Reviewing Agency:	Ministry of Transport				
Panel Assessment & Comment:	A panel comprised of members from the Ministry of Transport considered regulatory impact statements for tolling proposals in respect of Takitimu North Link and Ōtaki to North of Levin.				
	The panel considers that the information and analysis summarised in the regulatory impact statements each meets the criteria necessary for Ministers to make informed decisions on the proposals in this paper. The legislative scheme provides the Minister with a level of discretion when determining whether to recommend specific roads should be tolled. In this context, the statements address matters the Minister is required to consider by the statutory scheme and draws defensible conclusions about the reliability of information on those matters. Each statement is clear about the limitations of analysis.				
	SVAT				
	THE SPORT				

Section 1: Diagnosing the policy problem

What is the context behind the policy problem and how is the status quo expected to develop?

NZTA has proposed tolling Takitimu North Link to recover costs

- State Highway 2 Takitimu North Link is a new 13.8km four-lane expressway between Ōmokoroa and Tauranga, as part of improvements to the Waihi to Tauranga corridor. The rationale provided for this new road is to improve safety and access, contribute to more sustainable transport for local communities, and support growth across the region.
- 2. Stage 1 of the Takitimu North Link is a new 6.8km, four-lane, offline expressway connecting SH29 Takitimu Drive in Tauranga through to SH2 west of Te Puna. It is currently under construction, funded by the Crown, and is scheduled to open in 2028.
- 3. Stage 2 extends the expressway a further 7km northwest to the SH2 / Omokoroa Road Intersection. So far Crown funding has been provided for route protection. s 9(2)(ba)
- 4. Both stages have been listed as part of the Government's Roads of National Significance programme. Crown funding allocated through the NZ Upgrade Programme has provided \$933 million for Takitimu North Link Stage 1 construction costs and Stage 2 route protection.



5. Key details of the final form of the road are presented below

- 6. According to the tolling proposal documents, the road's project objectives are to:
 - a. improve safety to reduce deaths and serious injuries

(ii)

¹ Using NZTA's One Network Road Classification framework (see: <u>https://www.nzta.govt.nz/planning-and-investment/planning/road-efficiency-group/</u>)

- b. improve access with more reliable travel times for local people and more efficient supply chains for regional freight to the Port of Tauranga
- c. support economic growth and productivity and population growth in the Western Bay of Plenty
- d. improve resilience to the road network
- e. support greater travel options.
- NZTA has proposed tolling Takitimu North Link to recover the maintenance and tolling infrastructure costs of both roads, as well as a contribution to the construction costs of Stage 2².
- 8. Two of the three existing toll roads in New Zealand are in the Tauranga area. The first is SH29 Takitimu Drive, where the toll was introduced in 2005 (which Stage 1 of the Takitimu North Link connects in to). The current toll is \$2.30 for light vehicles and \$5.60 for heavy vehicles. The second existing toll is the SH2 Tauranga Eastern Link, introduced in 2015. There the toll is \$2.10 for light vehicles, and \$5.40 for heavy vehicles.

Tolls are an established way of raising additional transport revenue under existing settings 9. Under the LTMA, to toll a new road, the Minister must be satisfied:

- a. that there has been adequate public consultation on the proposed tolling scheme
- b. with the level of community support for the proposed tolling scheme in the relevant region or regions
- c. that a feasible, untolled, alternative route is available to road users
- d. that the proposed tolling is efficient and effective
- e. that it is not an existing road unless they are satisfied that the existing road is located near and is physically or operationally integral to the new toll road.
- 10. The statutory criteria provide the Minister with broad discretion in recommending an Order in Council for tolling. Toll revenue can only be applied to costs associated with the toll road and the implementation of the tolling scheme itself.
- 11. The statutory criteria for tolling are currently under review, however the tolling scheme for Takitimu North Link and any other schemes that will be considered before reforms are implemented are being considered under existing tolling settings.
- 12. Our dedicated (hypothecated) land transport revenue system raises revenue from road users. The majority of this revenue is used to maintain existing levels of service. The three major levers are:

a. Distance and weight-based Road User Charges (RUC) for non-petrol heavy vehicles. The RUC system raises about \$1.9 billion (44%) of the gross revenue of the NLTF and costs about 1% of the revenue collected for its administration

- b. Fuel Excise Duty (FED) applied on the on imported petrol (and non-diesel vehicle fuels). FED raises about \$2 billion (49%) of the NLTF and costs a negligible amount to administer
- Motor Vehicle Registrations (MVR) and licensing fees applied at the point of import and annually to every vehicle on the road. MVR raises about \$230 million (6%) of the NLTF.

 $^{^{2}}$ As permitted under section 46(1)(a) and section 46(3)(g) of the LTMA.

- 13. Tolling makes a relatively minor revenue contribution to the land transport system. Approximately \$41.3 million p.a in gross revenue was raised in 2023/24 from the three existing toll roads in the State Highway network: Tauranga Eastern Link; the Northern Gateway; and Takitimu Drive. The Ministry has recommended against several tolling schemes in the past because of their modest revenue raising ability, the relatively high costs to operate the tolling business (34% of overall tolling revenue), and the traffic diversion tolls cause. Despite this, tolling can provide a useful alternative source of revenue that is significant at a project level and specific to the users of a particular road. It is also a useful revenue tool for accelerating the delivery of a specific project.
- 14. Tauranga Eastern Link and the Northern Gateway Toll Road aim to repay capital funding provided by the Crown that meets about 23% and 42% of their construction cost respectively. Maintenance costs on these tolling schemes are being met by the NLTF.

Takitimu North Link was considered for tolling due to Government policy

15. The Government Policy Statement on land transport 2024 (GPS 2024) includes an expectation that NZTA should consider tolling to construct and maintain all new roads to protect existing funding in the NLTF for maintaining existing roads. Takitimu North Link was considered for tolling by NZTA due to this expectation.

What is the policy problem or opportunity?

16. The Crown will fund the capital costs for Takitimu North Link Stage 1 and the route protection for Stage 2, with the NLTF covering all of Stage 2's construction costs. In the absence of tolling, the operations and maintenance costs, as well as all of Stage 2 construction costs will be met by future NLTF revenue. Generally, it is prudent to give maintaining existing assets priority over investment in new assets. Any increase in maintenance or service costs, including from the Takitimu North Link, reduces the discretionary funding available for improving the network. Without tolling, Takitimu North Link's maintenance and Stage 2 construction costs will reduce the NLTF's ability to meet expenditure ambitions over the current NLTP period which, in turn, has a minor effect on the new capital projects able to be funded from the NLTF.

What objectives are sought in relation to the policy problem?

- 17. The primary objective of the tolling scheme is to collect an additional source of revenue, within the current legislative settings, that can contribute to the cost of tolling infrastructure, road maintenance, operations, and the notional debt that has accrued to the NLTF during construction.
- 18. In addition, the secondary objectives of the tolling scheme are:



to ensure users of the roading network pay for what they use, in line with the expectation in GPS 2024 for NZTA to supplement revenue with contributions from beneficiaries and users of infrastructure, and₃

b. to maintain project benefits as much as possible while raising toll revenue.

³ Government Policy Statement on Land Transport 2024, page 38

Section 2: Deciding upon an option to address the policy problem

What criteria will be used to compare options to the status quo?

- 19. The following criteria will be used to evaluate options for achieving the policy objective. They draw on the LTMA's purpose of contributing to an effective, efficient, and safe land transport system:
 - a. **Effective**: the extent to which the option is likely to contribute to meeting the objective, as well as broader Government policy such as GPS 2024.
 - b. Efficient: the scale of impacts associated with implementing the toll on project objectives, benefits, and the wider road network.
 - c. Safe: the impact of the proposal on the safety benefits of the project.
- 20. We have selected these criteria in order to provide a holistic view of the proposal's efficiency and effectiveness, rather than some of the more descriptive tolling criteria in the LTMA (the new road and alternative route requirement) which leave relatively little room for judgement.

What scope will options be considered within?

- 21. For the purposes of this RIS, the particulars of the tolling options are limited to those described in the tolling proposal. This includes the placement of the tolling infrastructure (gantries) and the toll pricing or structure. However, it is worth noting that NZTA assessed more options than just those shortlisted in the proposal.
- 22. Timeframes have limited our ability to request more information from NZTA to support our analysis (such as updated cost-benefit analysis) or to request additional modelling due to the time-constraints resulting from the need to deliver these tolling proposals to Cabinet before the end of the year.
- 23. For the purposes of this section, a comparison is made between Takitimu North Link in its tolled and untolled (status quo) forms.

What options are being considered?

Public consultation was limited to one proposal

- 24. From 9 September to 7 October 2024, NZTA undertook public consultation on a tolling proposal for Takitimu North Link. The public consultation included details of the tolling infrastructure, the roading details, travel time savings and the variable toll prices. The toll prices consulted on for travelling on either Stage 1 or Stage 2 of the road were \$3.10 for light vehicles and \$6.20 for heavy vehicles at peak travel times, and \$2.10 for light vehicles and \$4.20 for heavy vehicles at off-peak travel times. For those travelling the whole length of the Takitimu North Link (both stages), the prices consulted on were \$4.10 for light vehicles and \$8.20 for heavy vehicles at peak travel times, and \$3.10 for light vehicles and \$6.20 for heavy vehicles at off-peak travel times.
- 25. NZTA received 2,317 unique responses from the community and a range of key stakeholders. The following points are a high-level summary of the feedback received:
 - a. the majority of submitters did not support the proposed tolling of SH2 Takitimu North Link or tolling in general (71%) with 27% supporting tolling SH2 Takitimu North Link either completely or on the condition that suggested changes were incorporated
 - b. a minority of submitters (27%) supported the scheme either as proposed or with amendments.

- Suggestions were made by respondents about what kind of tolling they would support. 15% (350 submissions) expressed conditional support if changes were made that include:
 - a. Reduction of toll rates to encourage use, simplify the rates through rounding, or remove the peak charges.
 - b. Provide discounts/concessions for high volume users, or provide residents, ratepayers and/or health shuttle exemptions.
 - c. Only charge heavy vehicles.
 - d. Remove the toll when costs are paid or after a set limit, and/or ringfence revenue for maintenance on this road or within the region.
 - e. Remove one of the existing tolls in Tauranga.
- 27. NZTA advise they took this feedback into consideration and, informed by updated modelling, proposed an exemption for users of both SH2 Takitimu North Link and SH29 Takitimu Drive to the latter's toll. NZTA advises this is cost neutral across both toll schemes.

Six options have been identified

28. The Minister received advice on a range of toll prices as part of NZTA's request to him to consult. However, some of the below options differ significantly from the tolling scheme that was consulted on. Some options have a higher toll price or have a structure that varies from the toll as consulted on, such as adding distance-based pricing. This would need to be considered when the Minister assesses whether he is satisfied that NZTA has carried out "adequate consultation on the proposed tolling scheme," as is required under the LTMA⁴.

Option One – Untolled [Status Quo]

- 29. The construction of Takitimu North Link will be completed in stages as planned, without a toll implemented. On completion, future maintenance costs (\$35m) and all of the construction costs of Stage 2 would have to be met by the NLTF.
- 30. Without a toll, traffic modelling indicates approximately 40,400 vehicles on average per day will travel the Takitimu North Link Stage 1, and 37,000 vehicles on Stage 2 (projected for 2048). In this scenario, only 11,400 vehicles would use the feasible alternative to Stage 1 (the existing SH2 a Wairoa River), and 4,700 vehicles a day would use the SH2 alternative to Stage 2, west of Minden Interchange.
- 31. SH2 Takitimu North Link Stage 2 bypasses a section of SH2 which has a high collective risk and medium personal risk. Between March 2018 and March 2023 there were a total of 91 crashes of which 12 were death and serious injury (DSI) crashes. Takitimu North Link Stage 2 is anticipated to reduce DSIs by 16 per five years. It is anticipated that in 2031 annual crash costs would be \$162.6 million in an untolled scenario.

⁴ Land Transport Management Act 2003 section 48(1)(a)

Option Two – Light vehicles tolled at \$3.10 for peak and \$2.10 off peak, heavy vehicles double these prices [recommended by NZTA, and consulted on]

- 32. The Takitimu North Link would be declared one road for the purposes of tolling, but the tolling infrastructure would be implemented in two stages as these are built.
- 33. NZTA's preferred option is a differential toll rate depending on the time of day. Peak hours would be weekdays 6am to 9am and 3pm to 6pm. The same prices will apply across both stages of the road, with a slightly higher rate for those travelling the full length between Tauranga and Ōmokoroa once both stages are complete. Heavy vehicles (weighing over 3.5 tonnes) pay double what light vehicles will pay, in line most existing toll roads.
- 34. The toll prices proposed under this option are as follows:
 - a. For Stage 1, the toll prices are proposed at \$3.105 for light vehicles and \$6.20 for heavy vehicles during peak hours and \$2.10 for light vehicles and \$4.20 for heavy vehicles in the off-peak.
 - b. When Stage 2 opens ^{s 9(2)(ba)(ii)} the prices above apply to both the Stage 1 toll point and the Stage 2 toll point when only passing one point.
 - c. When travelling the full length of the new road through both toll points, prices are proposed at \$4.10 for light vehicles and \$8.20 for heavy vehicles in peak hours and \$3.10 for light vehicles and \$6.20 for heavy vehicles in the off-peak.
- 35. Traffic modelling indicates that NZTA's recommended toll rates would collect Present Value gross revenue of approximately \$365 million over a 35-year period (p50)⁶. Revenue from the proposed tolling scheme would be used to repay construction costs for Stage 2, and ongoing maintenance and operating costs of the entirety of the Takitimu North Link. Toll rates would be adjusted every three years by the same percentage of the Consumers Price Index (CPI).
- 36.

; 9(2)(j)

maintenance of the toll scheme will also be paid for from the revenue collected. These costs would represent an estimated ^{\$9(20)} of total gross toll revenue.

- 37. According to traffic modelling, in 2031, a toll would result in 27% less traffic on Stage 1 of the road versus an untolled scenario. For efficiency and safety considerations, NZTA advise it is desirable to limit annual average daily traffic across the Wairoa River Bridge (the feasible alternative to Stage 1 of the Takitimu North Link) to under 20,000. The modelling for 2048 traffic flows indicates an average of 18,400 vehicles per day would use the feasible alternative of the existing SH2 at Wairoa River which achieves this goal.
- 38. Modeling suggests that there is a small safety benefit of tolling SH2 Takitimu North Link with annual crash costs reducing from \$162.6m per annum to \$161.0 million in 2031, with similar savings of \$1.5 million per annum forecast in 2048. However, we consider this difference to be statistically negligible as it is less than 1%. An impact of tolling is to reduce the number of trips (trip suppression / change of mode) as well as change of routes. Both of these reduce safety disbenefits because there are fewer vehicles travelling shorter distances. Due to this interaction, the safety impacts of tolling across all toll rates are considered small with less than 1% variance from an untolled scenario. As a result of diversion, there would also likely be a travel time savings

⁵ All toll prices quoted are in 2024 dollars

⁶ P50 estimate, NZTA estimates that there is a 90% probability that 35-year NPV revenue will be between \$307-\$418 million

benefits and wider economic benefits roughly equivalent to the diversion rate, but these have not been modelled due to the limited time available.

- 39. Travel time modelling also indicates the preferred option for tolling Takitimu North Link makes no change (as compared to an untolled road) to State highway travel times between the Tauranga central building district and Ōmokoroa. Tolling the new road does have a small negative impact on the free alternative route (compared to leaving the new road untolled) by up to around 2 minutes. However, this is only in certain directions of travel at particular peaks, not throughout the day.
- 40. Another element of NZTA's preferred option is to exempt travellers from the toll on the adjacent SH29 Takitimu Drive if they're travelling directly from the SH2 Takitimu North Link in the same trip. The current toll on SH29 Takitimu Drive is \$2.10 for light vehicles and \$5.40 for heavy vehicles. NZTA modelling indicates this proposed exemption is cost neutral across both toll schemes given SH2 Takitimu North Link would attract higher levels of demand, offsetting the SH29 Takitimu Drive toll revenue foregone. An exemption responds to local concerns about the number of tolls in the area. Given the proposed exemption relates to the existing toll road, we have not considered it as part of the options for this proposal.

Options Three to Six

41. For options three to six, tolling would proceed on Takitimu North Link as noted in option two, but with changes to the toll rates, which has commensurate impacts on revenue and diversion rates. These options have been provided for Stage 1 only.

Takitimu North Link Road (Stage 1 Only)*									
Scenario	Light v toll	/ehicle rate	Heavy vehicle toll rate		Forecas Traffic Flov TNL @ Wairoa River Bridge	t Daily vs (2031) Existing SH2 @ Wairoa River Bridge	% Diversion from Takitimu North Link	2031 annual net revenue (\$m)	Impact on crash costs versus untolled scenario (%) (2048)
Option 1 (untolled)	\$;0	7	0	40,400	11,400	-	-	-
Option 2 (NZTA preferred & consulted)	Peak \$3.10	Off- Peak \$2.10	Peak \$6.20	Off- Peak \$4.20	21,000	18,100	27%	\$12.7m	+-<1%
Option 3 (status quo toll)	\$2	80	\$5.60		20,500	21,200	37%	\$12.7m	+-<1%
Option 4 (Higher rate)	\$3	.40	\$6.80		18,000	21,000	37%	\$11.7m	+-<1%
Option 5 (International comparison)	\$4	\$4.75 \$9.50		14,000	23,600	45%	\$13.4m	+-<1%	
Option 6 (Revenue Maximising)	Peak \$6.20	Off- Peak \$4.20	Peak \$8.20	Off- Peak \$6.20	11,700	25,600	51%	\$15.6m	+-<1%

* as part of an overall tolling strategy including tolling of Stage 2 on opening.

	Option 1 Untolled	Option 2 Tolled Peak-Off-Peak Stage 1: (\$2.10-\$3.10/\$4.20-\$6.20) Stage 2: (\$4.20-\$5.20/\$9.60-\$11.60)	Option 3 Tolled Stage 1: (\$2.80/\$5.60)	Option 4 Tolled Stage 1: (\$3.40/\$6.80)	Option 5 Tolled (international Comparison) Stage 1: (\$4.75/\$9.50)	Option 6 Tolled Peak-Off-Peak (Revenue Maximising) Stage 1: (\$4.20- \$6.20/\$6.20/\$8.20)
Effective the extent to which the option is likely to contribute to meeting the policy objective, as well as broader Government priorities	0	 Tolling is expected to raise approximately \$12.7m annually in 2031 (\$365m NPV over 35 years) The net revenue raised by the scheme would save NLTF revenue for other uses. Users of the road contribute to construction costs. Tolling does not influence when the infrastructure or its benefits will be delivered or deliver any direct further benefit to users for stage 1, and it is unclear whether it accelerates the delivery of stage 2. Users of both Takitimu Drive and Takitimu North Link do not pay a toll for Takitimu Drive, which does not align with user/beneficiary pays. However, it does not decrease revenue projections for Takitimu Drive and increases the expected traffic on Takitimu North Link. 	+ Same as option 2, but: Raises \$12.7m annually in 2031 ? Stage 2 tolling rates have not been included by NZTA	 + Same as option 2, but: Raises \$11.7m annually in 2031 Stage 2 tolling rates have not been included by NZTA 	 + Same as option 2, but: ✓ Raises \$13.4m annually in 2031 ✓ Users contribute a greater share of the road's costs, reflecting the benefits they receive ? Stage 2 tolling rates have not been included by NZTA 	 + Same as option 2, but: ✓ Raises \$15.6m annually in 2031 ✓ Users contribute a greater share of the road's costs, reflecting the benefits they receive ? Stage 2 tolling rates have not been included by NZTA
Efficient the scale of impacts associated with implementing the toll on project objectives, benefits, and the wider road network	0	 Exempting users of Takitimu North Link from the Takitimu Drive toll increases the use of Takitimu North Link, reducing diversion and with corresponding benefits to productivity and travel ^{\$9(2)(i)} of gross tolling revenue would be maintained to operate the tolling back-office which is inefficient compared to FED/RUC but efficient compared to other tolling schemes. Users would pay for operations and maintenance costs through their toll, despite paying RUC or FED 	 -/? Same as option 2, but: ✓ Flat toll rate offers more fairness to people who can't choose when to travel. x 37% less traffic on stage 1 in 2031 will likely decrease travel time, supply chain and 	 -/? Same as option 2, but: ✓ Flat toll rate offers more fairness to people who can't choose when to travel. x 37% less traffic on stage 1 in 2031 will likely decrease travel time, supply chain and 	 -/? Same as option 2, but: ✓ Flat toll rate offers more fairness to people who can't choose when to travel. × 45% less traffic on stage 1 in 2031 will likely decrease travel time, supply chain and 	 -/? Same as option 2, but: \$1% less traffic on stage 1 in 2031 will likely decrease project benefits, as well as travel time, supply chain and economic growth project objectives.

How do the options compare to the status quo/counterfactual?

		 Before stage 2 opens, users on stage 1 pay a toll which contributes to the construction costs of stage 2, despite not using it at that time Tolling will likely impact the efficient supply chains, and supporting economic growth project objectives as with tolling the road is used approximately 27% less in 2031 however an increased in diversion will likely negatively impact these objectives. Tolling does not affect the resiliency project objective, as the toll can be zero-rated if alternative routes become unavailable 	economic growth project objectives. ? Diversion and disbenefit effects of the toll on stage 2 have not been noted.	economic growth project objectives. Diversion and disbenefit effects of the toll on stage 2 have not been noted.	economic growth project objectives. ? Diversion and disbenefit effects of the toll on stage 2 have not been noted.	 Peak toll is much higher than tolls in the rest of the country. Diversion and disbenefit effects of the toll on stage 2 have not been noted.
Safe the impact of the proposal on the safety benefits of the project.	0	 A toll will create a marginal safety benefit versus an untolled scenario, with crash cost savings savings of \$1.5m (less than 1% difference from the tolled version) per annum forecast in 2048, but this marginal difference is likely not statistically significant. Peak and off-peak pricing incentivises enough traffic on the toll road to keep the daily traffic on the current SH2 Wairoa Bridge under 20,000 per day, supporting safety objectives. However, an untolled option has even less traffic on the Wairoa River bridge. 	O ← Less than 1% impact on crash costs versus an untolled scenario (likely not statistically significant). Traffic flows on Wairoa River Bridge are modelled to be greater than 20,000.	Less than 1% impact on crash costs versus an untolled scenario (likely not statistically significant). Traffic flows on Wairoa River Bridge are modelled to be greater than 20,000.	 ⊖ Less than 1% impact on crash costs versus an untolled scenario (likely not statistically significant). × Traffic flows on Wairoa River Bridge are modelled to be greater than 20,000. 	 ⊖ Less than 1% impact on crash costs versus an untolled scenario (likely not statistically significant). × Traffic flows on Wairoa River Bridge are modelled to be greater than 20,000.
Key for qualitative judgements:						
+ better th	an an untoll	ed option				

Key for qualitative judgements:

- much better than an untolled option ++
- better than an untolled option +
- about the same as an untolled option 0
- worse than an untolled option -
- much worse than an untolled option - -

What option is likely to best address the problem, meet the policy objectives, and deliver the highest net benefits?

- 42. We are satisfied that this tolling proposal meets the statutory criteria in the LTMA (it is a new road and has a feasible, untolled alternative route), provided the Minister of Transport is satisfied with the adequacy of consultation, the level of community support and the effectiveness and efficiency of the scheme. The preferred option depends on the priority placed on the relative benefit of additional revenue produced by the proposal against the potential for project disbenefits. This a matter of judgement for the Minister of Transport, and further information about the extent of these disbenefits would help clarify that judgement, but the following could be considered:
 - a. The scheme is expected to raise \$365m NPV over 35 years. \$9(2)(ba)(ii
 - **b.** Diversion reduces project benefits such as travel time savings. With 27% fewer users on Takitimu North Link stage 1 in 2031, travel time savings and wider economic benefits would likely be reduced versus the status quo. For stage 2, the reduced benefits may be offset to some degree if the project can be delivered sooner because of the toll.
 - **c.** An untolled option incurs fewer collection costs. Compared to other land transport revenue streams like FED and RUC, tolling Takitimu North Link is inefficient, with ^{\$9(2)()} of gross revenue going towards collection costs. However, this scheme is more efficient than previous tolling schemes.
- 43. Our analysis has been limited in assessing the validity of all options and the tolling scheme's efficiency and effectiveness because:
 - a. It is unclear how the tolling revenue impacts the delivery of Stage 2 of the project. Although the tolling revenue will fund the construction costs of Stage 2, NZTA has not yet quantified whether this will make any difference to the timelines for project delivery versus an untolled scenario.
 - b. NZTA has been unable to complete updated cost-benefit analysis comparing the tolled version of the project with the untolled version of the project, considering the most up-to-date project costs, due to the time constraints. This analysis is essential to the Ministry's ability to assess the economic efficiency of the tolling scheme, as any diversion could lead to losses in travel time and wider economic benefits.
 - c. In the tolling proposal, Options 3-6 do not include what pursuing them would mean for the structure of toll rates for stage 2. Although each option assumes there would some form of toll on stage 2, the absence of any information about what Options 3 to 6 would do to the toll rate for Stage 2 means the Ministry cannot meaningfully assess them.

What are the marginal costs and benefits of the option?

- 44. The section below sets out an analysis of Option 2, NZTA's preferred tolling option.
- 45. Toll Road Users:
 - a. Our ability to measure the overall costs and benefits of the tolled option on toll road users is limited, because the impact on travel time savings and wider economic benefits (reduced agglomeration) have not been calculated in the time available. However, we would expect a reduction in these benefits roughly commensurate with the 31-32% diversion rate (2048) when compared with an untolled scenario.

- b. Toll road users would also face and the costs of collection which will likely make up so(2)(i) of total gross revenue.
- 46. **Users of alternative routes:** Modelling also shows a small safety benefit of tolling with annual crash costs reducing from \$162.6 million per annum to \$161.0 million in 2031 with similar savings of \$1.5 million per annum forecast in 2048. These savings are less than 1% so we consider that they are unlikely to be statistically significant.
- 47. **Frequent and/or local users:** Frequent users of the road or people that would use the road regularly in the absence of a toll will face either an increased cost of living if they choose to pay the toll regularly, or a decrease in benefits associated with the road if they choose to use one of the alternative routes. As the alternative route takes slightly longer, motorists may need to avoid some shorter trips, which has participation disbenefits for society (in relation to employment, social, cultural related travel), especially for low-income people.
- 48. **Tauranga City Council/Western Bay of Plenty District Council/Alternative Route RCA**: In the absence of alternative arrangements, once the current SH2 returns to the local RCA's, the road will face increased traffic per day versus an untolled scenario. This is because vehicles that divert from Takitimu North Link, such as the 27% of vehicles diverting from Stage 1 in 2031, will use the current SH2 (where trips are not avoided due to the toll). In 2048, SH2 at Wairoa River (on Stage 1) will face 7,000 more vehicles and SH2, west of Minden Interchange, will face 5,900 more vehicles versus an untolled scenario. This will result in increased maintenance costs to keep the roads to an appropriate standard.
- 49. NZTA/NLTF/Wider road network: The \$365m NPV toll that would be raised to cover maintenance, operations, and a portion of construction costs will allow an equivalent amount to be retained by the NLTF and re-invested in the wider road network.

Section 3: Delivering an option

How will the new arrangements be implemented?

- 50. If a tolling order is imposed on the Takitimu North Link, it needs to be in place before the road is opened. Currently, project completion is estimated to be by 2028 for Stage 1 s 9(2)(ba)(ii) If more time is requested for NZTA to formulate additional analysis on the tolling proposal, as is recommended, there is plenty of time to do this before the road is opened. However, Cabinet timeframes may have to shift. No further action would need to be taken if the Minister chooses not to proceed with the tolling proposal, apart from communication of this decision.
- 51. Project teams may also reassess the design of the road based on the differing requirements and traffic demand created by the tolling scheme. NZTA will make the operational decisions (if any are needed) to implement this.

How the toll order would be implemented

- 52. The toll order will be brought into effect via an Order in Council. The toll order will contain some preconditions that need to be satisfied prior to the commencement of tolling.
- 53. The Ministry will work with NZTA on the form of these preconditions and the mechanism by which they will be satisfied. Based on previous tolling orders and the requirements of this toll road, we envisage the preconditions will stipulate that NZTA sets out in a report to the Minister details of the following matters at least 10 weeks prior to tolling commencing:
 - a. That for the purposes of the LTMA, Takitimu North Link Stages 1 and 2 are considered a single road (allowing Stage 1 toll revenue to be spent on Stage 2 construction).
 - b. That tolling be implemented for both stages of the Takitimu North Link, starting with Stage 1 when that opens. Once both sections are built, the toll will apply separately to both sections, and/or as one continuous road (with one toll) if travelling across both toll points.
 - c. The service standard obligation to road users.
 - d. The method of publicising the toll in advance of the road opening.
 - e. The signage and other information that will be used to inform drivers approaching the road, of the toll and options for paying.
 - f. A technical description of the proposed components of the toll collection system and key performance indicators, inclusive of error rates, revenue levels and health and safety issues.

The structure of the administration fees for all payment methods and all penalty fees.

- h. The continued existence of a feasible alternative route.
- 54. Preconditions will also include clauses relating to the ongoing function of the toll road, including:
 - a. Setting toll tariffs within a maximum limit and with adjustments being made threeyearly or possibly more regularly based on the results of tolling reform.
 - b. The ability to set different rates for different vehicles and travel during different times of day. The ability to provide exemptions and toll-free days.
 - c. toll collection mechanisms.

How will the new arrangements be monitored, evaluated, and reviewed?

- 55. The Toll Order will also contain on-going conditions to ensure the intent of the tolling remains and that the public aren't disadvantaged by the toll. As with the preconditions, will include regular public disclosure and reporting to the Minister on:
 - Actual traffic volumes compared to forecast traffic volumes for each class of a. vehicle.
 - b. Actual toll revenue compared to forecast toll revenue.
 - The ongoing status of the alternative route. C.
 - d. A network utilisation performance report to include an analysis of the response of traffic to tolling, and any traffic management method used to vary the responses
 - If there has been a significant change to that method of payment since the e. previous annual report to the Minister, a description of the new method.
- These reports will be closely monitored by the Ministry as part of our regulatory and