Regulatory Impact Statement: Tolling Ōtaki to North of Levin

Coversheet

Purpose of Document	
Decision sought:	*To place a toll on Ōtaki to North of Levin 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

Ōtaki to North of Levin's construction was originally funded by the Crown through the former New Zealand Upgrade Programme. It is now a Road of National Significance (RoNS) that is being delivered by NZTA. In the absence of any alternative, maintenance and operations costs, alongside any additional construction costs, will be funded from the National Land Transport Fund (NLTF). Tolling has been proposed by the New Zealand Transport Agency (NZTA) to help cover these costs.

Executive Summary

Ōtaki to north of Levin (Ō2NL) is a new 24km highway that will form part of State Highway 1 and connect Wellington to the central and upper North Island. It will also provide an important economic connection to Palmerston North, the largest freight node in central New Zealand. It was originally funded by the Crown through the New Zealand Upgrade Programme (NZUP). However, in 2024 decisions on the scope of all NZUP roading projects and the associated funding was delegated to NZTA.

The project is expected s 9(2)(g)(i) be delivered in 2029. Ō2NL will provide up to 15-minute time savings from Otaki to north of Levin at the evening peak in 2039.

NZTA is seeking a tolling order on Ō2NL to recover maintenance and tolling infrastructure costs alongside any additional construction costs where capital expenditure exceeds Crown funding that has already been made available. NZTA has proposed to declare the full length of Ō2NL as a toll road, but only toll the southern 15km. The northern 9km section would initially be exempt from tolls, with flexibility to toll in the future. Tolling orders are legislated for under section 46 of the Land Transport Management Act 2003.

Traffic modelling for the road indicates NZTA's recommended toll rates of $2.70 for light vehicles and $5.40 for heavy vehicles would collect net present value (NPV) revenue of approximately $127 million over a 35-year period. s 9(2)(j) of total gross revenue would be retained for back-office costs and maintenance/replacement of physical assets, s 9(2)(j)

With NZTA's preferred toll rate, Ō2NL would be used 43% less south of the Tararua Road intersection (which is south of Levin) and 15% less north of the Tararua Road intersection in the 2039 untolled scenario. These high rates of diversion are because approximately 75% of Ō2NL users are expected to be local users who have multiple alternative free

routes to choose from. Modelling also indicates annual crash costs will increase by 32% by 2039 compared to an untolled scenario, equating to an extra 1.7 deaths and serious injuries per year. It is also expected that tolling would have reduced benefits in travel time savings than an untolled scenario due to increased use, but specific estimates of these disbenefits have not been produced in the time available.

NZTA has provided four options which we have assessed as part of this RIS:

- Option 1: Untolled – Proceed with the road with capital costs funded by the Crown, with any overruns, operations and maintenance funding coming from the NLTF (status quo)
- Option 2 – The option consulted on with the public, one toll point south of the Tararua Road intersection and the Northern section untolled ($2.70/$5.40) (NZTA recommended)
- Option 3 – Adds a second gantry for the northern section of the road and has a toll rate of $1.25 per gantry passed for light vehicles and $2.50 for heavy vehicles ($1.25 - $2.50/$2.50 - $5.00)
- Option 4 – An internationally comparable toll rate with the same number of toll points as option 2 ($5/$10).

Option 4 has a higher toll rate than other options, leading to increased diversion onto alternative routes. NZTA's traffic modelling indicates a commensurate reduction in crash costs savings with increased rates of diversion. There would also likely be a reduction in time travel savings benefits and wider economic benefits roughly equivalent to the diversion rate, but these have not been modelled given the time available. Option 3 has a lower rate of diversion south of the Tararua Road intersection than the NZTA recommended option but would have higher diversion north of the intersection as it would be tolled. This option has 12% higher annual monetised crash cost savings, but 14% less in NPV revenue over 35 years.

Public consultation on option 2 was undertaken between 9 September and 7 October 2024. It received 2,907 unique submissions. The majority were opposed to tolling Ō2NL, with 79% of submitters not supporting the scheme. The most predominant themes from those who did not support the proposal were a belief that the toll rate was too high, or a rejection of the user-pays principle. 19% of submitters supported the scheme as is, or with changes. Most submitters who supported the scheme expressed agreement with the user pays principle and some said that the benefits of the new road warrant a toll.

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 estimates about safety indicate 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 has 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. 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.
- The policy decision to seek to recover costs for the Crown from the initial NZUP investment, rather than just NLTF costs used to supplement the project has been treated as out of scope as it wasn't an option assessed by NZTA.
- As with all modelling, NZTA's toll revenue modelling of $127m 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 (completed by QA panel)

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.

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 Ōtaki to north of Levin to recover costs

1. Ōtaki to north of Levin (Ō2NL) is a new road that is expected to begin construction in 2025.

2. The need for a new road to replace the existing State Highway 1 from Ōtaki to North of Levin has firstly been highlighted by the existing road's poor safety record. In the five years to 2021, there were 72 deaths and serious injuries along SH1 and SH57 within the Ō2NL project area[1]. Secondly, there is a lack of resilience in the transport system along this corridor. Journeys are regularly disrupted by crashes and the route is at high risk of closure due to regular flooding, which is likely to increase due to climate change impacts[2]. Lastly, population growth in Horowhenua is occurring at the fastest rate in a generation, outpacing many Stats NZ growth projections, meaning that the demand for the route is growing rapidly.

3. The road will be an off-line four-lane road and have a design speed of 100 km/h. Construction of the new highway is due to start in 2025 and be completed in 2029. Ō2NL's project objectives are to:

    a. enhance safety of travel on the state highway network

    b. enhance the resilience of the state highway network

    c. provide appropriate connections that integrate the state highway and local road network to serve urban areas

    d. support inter and intra-regional growth and productivity through improved movement of people and freight on the state highway network, and

    e. enable mode choice for journeys between local communities by providing a walking and cycling facility.

4. Ō2NL was initially provided funding from the Crown of $817m from the New Zealand Upgrade Plan in 2020. Additional funding from the project was provided during the reprioritisation and re-baselining of NZUP during 2021[3]. In 2024, NZTA was made responsible for all NZUP roading projects, including Ō2NL.

5. Key details of the final form of the road are presented in Annex 1. NZTA has proposed tolling Ō2NL to recover maintenance, tolling infrastructure costs, and to reimburse the NLTF for a portion of the notional debt accrued where capital costs of Ō2NL exceed Crown funding. The tolling scheme design NZTA proposed is summarised in the route map in annex 2.

Tolls are an established way of raising additional transport revenue under existing settings

6. 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

[1] Ōtaki to North of Levin Detailed Business Case, https://www.nzta.govt.nz/assets/projects/o2nl-new-highway/technical-reports/O2NL-Final-DBC-board-endorsed-August-2022.pdf, page V.

[2] Ibid.

[3] Ibid, page i.

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.

7. The statutory criteria provides 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.

8. The statutory criteria for tolling are currently under review, however the tolling scheme for Ō2NL and any other schemes that will be considered before reforms are implemented are being considered under existing tolling settings.

9. 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 revenue levers are:

a. Distance and weight-based Road User Charges (RUC) for non-petrol and 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 imported petrol (and non-diesel vehicle fuels). FED raises about $2 billion (49%) of the NLTF and costs a negligible amount to administer

c. 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.

10. 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.

11. 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 toll roads are being met by the NLTF.

Ō2NL was considered for tolling due to Government policy

12. The 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. According to the tolling proposal, all previous engagement with the public on Ō2NL has positioned the road as possibly being proposed for tolling. A tolling study on the road was undertaken in July 2022.

What is the policy problem or opportunity?

13. Ō2NL has been funded by the Crown s 9(2)(g)(i) . In the absence of tolling, its maintenance and operations costs, as well as any notional debt accrued during construction costs where capital costs exceed the

Crown funding allocation, will be met by future NLTF revenue. Generally, it is prudent to give maintaining existing assets priority over investment in new assets. Without tolling, Ō2NL's maintenance, operations and construction costs will reduce the NLTF's ability to meet expenditure ambitions over the current NLTP period. This 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?

14. 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 a portion of the notional debt that may accrue to the NLTF during construction (over the Crown contribution).
15. In addition, the secondary objectives of the tolling scheme are:
    a. 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, and
    b. to maintain project benefits as much as possible while raising toll revenue.

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

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

16. The following criteria will be used to evaluate options for achieving the policy objective. These criteria 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 policy 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.

17. 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?

18. 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.

19. Timeframes have limited our ability to request more information from NZTA to support our analysis (such as updated benefit-cost analysis) or to request additional modelling. There are time-constraints around delivery of these tolling proposals to Cabinet before the end of the year.

20. For the purposes of this section, a comparison is made between Ō2NL in its tolled and untolled (status quo) forms.

What options are being considered?

Public consultation was limited to one proposal

21. From 9 September to 7 October 2024, NZTA undertook a public consultation on a tolling proposal for Ō2NL. The public consultation included details of the tolling infrastructure, the road, travel time savings, and the proposed toll rates of $2.70 for light vehicles and $5.40 for heavy vehicles, and no toll rate for the 9km northernmost section of the road. It received 2,907 unique responses from the community and a range of key stakeholders. The following points are a high-level summary of the feedback received:

    a. 19% (565 submissions) support tolling Ō2NL. 12% (366 submissions) support is as proposed and 7% (199 people) support tolling but with changes.

    b. 79% (2,294 submissions) of respondents do not support the tolling scheme. 52% (1501 submissions) do not support the tolling of the road and 27% (793 submissions) do not support the tolling of any road.

22. Suggestions were made by respondents about what kind of tolling they would support. 7% (199 submissions) expressed conditional support if changes were made that include:

    a. lower toll rates

    b. providing discounts or concessions for high volume users

c. only charging heavy vehicles

23. NZTA has not recommended any changes to its proposed tolling scheme from that which was consulted on.

Four options have been identified

24. 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 LTMA[4].

25. Across all options, even a very small toll creates quite high levels of diversion. This is because approximately 75% of Ō2NL users are expected to be local users who have multiple alternative routes to choose from to avoid the tolled route.

Option One – Untolled [Status Quo]

26. The construction of Ō2NL is expected to begin in 2025 and to open in 2029. On completion, future maintenance costs ($49m) and any capital costs that exceed the Crown funding would have to be met by the NLTF.

27. According to traffic modelling, approximately 19,200 vehicles will use Ō2NL south of the Tararua Road interchange per day (which is just south of Levin) and 24,300 north of the interchange but before it intersects with State Highway 57 (the main road between SH1 at Levin and Palmerston North). In this scenario, only 6,400 vehicles would use the old SH1 south of Levin per day and between 8,900 and 9,700 would use SH1 through Levin. In 2039, annual crash cost savings versus no Ō2NL will be $7.4 million and there would be 5.2 fewer DSIs, the highest savings of any option.

Option Two – Tolled at $2.70 (recommended by NZTA)

28. Construction would be completed, and tolling infrastructure would be introduced between the on/off ramps at Taylors Road and the Tararua Road interchange. s 9(2)(j) s 9(2)(j) The toll rate for light vehicles would be $2.70. Heavy vehicles would pay double, in line with most existing toll roads.

29. NZTA would declare the entire road a toll road but rate the northernmost 9km at zero dollars. This would create future flexibility to toll this section of road should traffic demand or travel patterns change.

30. Once established, the operating costs of the scheme would require approximately s 9(2)(j) of gross tolling revenue over the life of the tolling scheme. This is to meet the NZTA standard for tolling and to deliver an "end-to-end" technology solution that would support the delivery of a back-office verification, processing and issuance of toll charges, and associated customer interface.

31. Travel on the existing SH1 and the local road network through Levin would remain untolled. The current SH1 and SH57 in the project are classified as high-risk rural roads and have a lower safety profile than Ō2NL, which will have a rating of 4 stars or above on the KiwiRAP safety rating, versus 2 stars for the existing SH1[5].

32. Revenue raised through tolling, estimated to be $127 million NPV over 35 years, would

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

[5] Ōtaki to North of Levin Detailed Business Case, https://www.nzta.govt.nz/assets/projects/o2nl-new-highway/technical-reports/O2NL-Final-DBC-board-endorsed-August-2022.pdf, page 19.

be ring-fenced for the maintenance and operations of the road and to pay for a portion of the notional debt if the road's cost exceeds its Crown funding. Toll rates would be adjusted every three years by the same percentage as the total percentage increase of the Consumers Price Index (all groups) (CPI) as published by Stats NZ, rounded to the nearest 10 cents.

33. According to traffic modelling, the proposed toll rates will result in 15% less traffic north of the Tararua Road interchange and the State Highway 57 intersection and 43% less traffic south of the Tararua Road interchange in 2039 relative to an untolled scenario. This will result in 15,300 vehicles per day using the SH1 between Ōtaki and Levin and between 11,200-12,400 vehicles per day driving on the main road through Levin. For this option, the annual crash cost savings of the new road are forecast to be $5 million in 2039. There would also likely be a reduction in travel time savings benefits and wider economic benefits roughly equivalent to the diversion rate, but these have not been modelled due to the time available.

Options Three to Four

34. For options three to four, tolling would proceed on Ōtaki to north of Levin as noted in option two, but with changes to the toll rate, which have commensurate impacts on diversion and safety benefits as noted below.

35. Option 3 would implement an additional toll point north of the Tararua Road interchange and charge based on how many tolling points a vehicle passes, constraining the free part of the road to North-east of the roundabout at the intersection with SH57. This has the effect of offering a discount to some local traffic travelling only on one portion of the road.

36. Options 3 and 4 only include traffic volumes at a single point on the road, south of Levin as these were the only figures available in the tolling proposal.

Scenario	Light vehicle toll rate		Heavy vehicle toll rate		Ō2NL South of Levin (2039)	Daily traffic flow existing SH1 south of Levin (2039)	% Diversion from Ō2NL (South of Levin)	Ō2NL North of Tararua Rd Intersection (2039)	% Diversion from Ō2NL (North of Tararua Road Interchange)	2039 Annual Crash cost savings ($m)	NPV net revenue, 35-years toll scheme at 6% discount rate
Option 1 (untolled)	$0		$0		24,300	6,400	-	19,300	-	7.5	-
Option 2 (NZTA recommended)	$2.70		$5.40		13,800	15,300	43%	16,300	15%	5.0	$127m
Option 3	Both toll points $2.50	Single toll point $1.25	Both toll points $5.00	Single toll point $2.50	17,800	11,500	27%	11,200	41%	5.6	$109m
Option 4 (International comparison and single toll point on southern section)	$5.00		$10.00		7,000	21,500	71%	14,400	25%	3.0	$178m

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

	Option 1 Untolled	Option 2 Tolled ($2.70/$5.40) (NZTA recommended)	Option 3 Tolled ($1.25-$2.50/$2.50-$5)	Option 4 Tolled ($5.00/$10.00)
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 $**127m** NPV over 35 years. ✓ The net revenue raised by the scheme would save NLTF revenue for other uses. ✓ Users of the road south of the Tararua Road intersection contribute a small amount to construction costs. ✗ Tolling does not influence when the infrastructure or its benefits will be delivered or deliver any direct further benefit to users. ✗ Users on the northern 9km of the road do not contribute to construction or operations and maintenance costs.	+ Same as option 2, but: ✓ Raises $**109m** ✓ Users north of the Tararua Road intersection contribute to the costs of the road.	+ Same as option 2, but: ✓ Raises **$178m** ✓ Users contribute a greater share of the road's costs, reflecting the benefits they receive.
Efficient the scale of impacts associated with implementing the toll on project objectives, benefits, and the wider road network	0	- ✓ 11-15 minutes of travel time savings between Ōtaki to North of Levin relative to the alternative route offers good value for money for the light vehicle toll. ✓ Providing the 9km northern section of the road untolled increases the use of the northern section of the road, with corresponding benefits to productivity and some travel time savings. ✗ Users on the southern portion of the road who pay a toll will pay for the maintenance and operations of the northern portion of the road who won't. ✗ A toll will see between 13-28% more traffic (including heavy vehicles) on the existing SH1 through Levin than an untolled scenario in 2039, resulting in an impact to the urban amenity in Levin town centre and the project objective to provide appropriate connections that integrate the SH and local network to serve urban areas. ɵ Tolling does not affect the resiliency project objective, as the toll can be zero-rated if alternative routes become unavailable. ✗ Tolling impacts the productivity and growth objectives project benefit as with tolling the road is used 15-43% less - with corresponding disbenefits in travel time savings and efficiency. ✗ s 9(2)(j) of gross tolling revenue would be maintained to operate the tolling back-office which is inefficient compared to FED/RUC.	- Same as option 2, but: ✓ Lower cost for only using one section of the road means time travel savings offer good value for money for the toll ✗ 27-41% less traffic south of Levin reduces productivity project objective ? Will likely increase traffic in Levin town centre impacting roading integration objective, but modelling for this has not been provided ✗ The use of two gantries would create higher infrastructure and administrative costs than a single gantry.	-- Same as option 2 +3, but: ✗ Time savings offer less value for the money for the toll than options 2 and 3 ? Will likely increase traffic in Levin town centre impacting roading integration objective, but modelling for this has not been provided ✗ 25-71% less traffic reduces productivity project objective ✗ Motorists would pay a toll nearly double the current highest toll in the country.

		✖ Users would pay for operations and maintenance costs through their toll; despite paying RUC and FED.		
Safe the impact of the proposal on the safety benefits of the project.	**0**	**-** ✖ Traffic modelling indicates a 32% reduction in annual crash cost savings in 2039 versus an untolled scenario, with 19% higher DSI's in 2039 (equivalent to 1.7 increase in annual DSI). ✖ The project objective of providing enhanced safety would be achieved to a lesser extent than an untolled scenario which has more monetised crash cost savings.	**-** Same as option 2, but: ✖ 24% reduction in safety benefits.	**--** Same as option 2, but: ✖ 59% reduction in safety benefits.
Overall assessment	**0**	**-**	**-**	**--**

Key for qualitative judgements:

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

37. 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. **Tolling does not influence when the infrastructure will be delivered**. Whether or not tolling is implemented, the road will be delivered at the same time, meaning users will gain no direct benefits from the road being tolled.

    b. **Diversion reduces project benefits, such as travel time and safety.** With 15-43% fewer users on Ō2NL, its travel time savings, travel time reliability, health emission reduction benefits, crash cost savings, and wider economic benefits would be reduced versus the status quo. The available evidence about safety, which is the only area where these impacts have been quantified, suggests they could be significant.

    c. **An untolled option incurs fewer collection costs.** Compared to other land transport revenue streams, tolling Ō2NL is inefficient, with s 9(2)(j) of gross revenue going towards collection costs. However, this scheme is more efficient than previous tolling schemes.

    d. **A tolled option will impact the supporting urban areas objective.** All tolled options will likely increase the number of vehicles using the current SH1 through Levin town centre, including heavy vehicles, versus an untolled option.

38. Our analysis has also been limited in assessing this tolling scheme's efficiency and effectiveness as **NZTA has been unable to complete updated benefit-cost-analysis** comparing the tolled version of the project with the untolled version of the project and 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. For example, the 2020 detailed business case indicates over $1.2 billion in benefits from vehicle travel time savings and crash cost benefits[6]. Any diversion away from Ō2NL would reduce these benefits and the overall benefit-cost ratio.

What are the marginal costs and benefits of the option?

39. The section below sets out an analysis of option 2, NZTA's preferred tolling option.

40. **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, carbon emission reductions 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 15-43% diversion rate when compared with an untolled scenario.

[6] Ōtaki to North of Levin Detailed Business Case, https://www.nzta.govt.nz/assets/projects/o2nl-new-highway/technical-reports/O2NL-Final-DBC-board-endorsed-August-2022.pdf, page 107.

b. Toll road users (south of the Tararua Road Interchange) would also pay s 9(2)(j) s 9(2)(j) and the costs of collection which make up s 9(2)(j) of total gross revenue.

41. **Users of alternative routes**: Modelling also shows that in 2039 annual crash cost savings would decrease by 32% versus an untolled scenario due to a 15-43% diversion rate onto the less safe existing SH1 route.

42. **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 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.

43. **Levin residents/local businesses:** Local residents and businesses would see an increase in vehicle traffic versus an untolled scenario, decreasing the benefit of Ō2NL in moving state-highway traffic, including many heavy vehicles, off of the main street.

44. **Horowhenua District Council/Alternative Route RCA**: In the absence of alternative arrangements, once the current SH1 returns to Horowhenua District Council as the RCA, the road will face increased traffic. The 15-43% of vehicles that will choose not not to use Ō2NL will use the current SH1 (where trips are not avoided as a result of a toll). This will result in increased maintenance costs to keep the roads to an appropriate standard.

45. **NZTA/NLTF/Wider road network**: The $127m 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?

46. If a tolling order is imposed on Ō2NL, it needs to be in place before the road is opened. Currently, project completion is estimated to be in 2029. If more time is requested for NZTA to formulate additional analysis on the tolling proposal, there is enough time to do this before the road is opened. However, Cabinet timeframes may have to shift. No further action will need to be taken if the Minister chooses not to proceed with the tolling proposal, apart from communication of this decision.

47. 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 to implement this.

How will the toll order be implemented if the Minister wishes

48. 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 commencement.

49. 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 the entire road would be declared a toll road, but tolling would be only carried out south of the Tararua Road interchange, with the northern 9km of the road zero-rated

    b. the service standard obligation to road users

    c. the method of publicising the toll in advance of the road opening

    d. the signage and other information that will be used to inform drivers approaching the road of the toll and options for paying

    e. 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

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

    g. the continued existence of a feasible alternative route.

50. 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 three-yearly or possibly more regularly based on the results of tolling reform

    b. the ability to provide exemptions and toll-free days

    c. toll collection mechanisms.

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

51. 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, this is a work in progress, but we envisage it will include regular public disclosure and reporting to the Minister of:

    a. actual traffic volumes compared to forecast traffic volumes for each class of vehicle

    b. actual toll revenue compared to forecast toll revenues

c. the ongoing status of the alternative route

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 response

e. if there has been a significant change to that method of payment since the previous annual report to the Minister, a description of the new method.

52. These reports will be closely monitored by the Ministry as part of our regulatory and system stewardship function.

How a toll would be implemented north of the Tararua Interchange at a future date

53. In future, traffic patterns may change to a point where NZTA believes that the northern section of the road that is currently untolled should be tolled in order to make a contribution to the project. The preferred option includes the entirety of the road as a toll road, but just zero-rated for the northernmost 9 kilometres.

54. If as part of the regular monitoring and evaluation of this toll road, NZTA observe that this section of road can make a meaningful contribution to project costs, they could propose to increase the zero-rated toll with the written permission of the Minister. This flexibility is included in the Cabinet paper attached to this RIS.

55. The Ministry would offer advice to the Minister about the effects of such a toll on the efficiency and effectiveness of the whole scheme if this scenario arises. In addition, the Minister would need to be satisfied in the context of the updated scheme, whether NZTA has carried out "adequate consultation on the proposed tolling scheme," as is required under the LTMA[7].

[7] Land Transport Management Act 2003 section 48(1)(a)

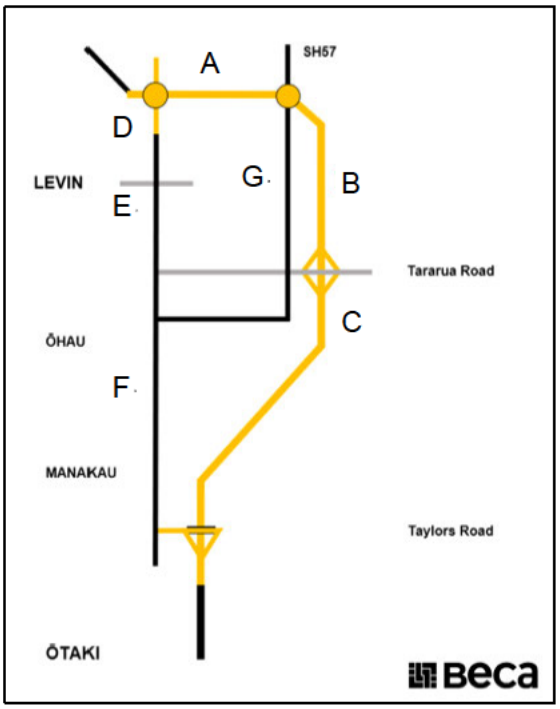
Annex One: Route map of proposed tolling scheme

Road details		Route
Length	24km	
s 9(2)(g)(I)		
Road Classification[8]	National road	
Projected usage	15,200 southern end 19,700 northern end (average per day, untolled)	
Design fly-through video	https://www.youtube.com/watch?v=x9x-0imCfaU	

[8] Using NZTA's One Network Road Classification framework (see: https://www.nzta.govt.nz/roads-and-rail/road-efficiency-group/projects/onrc)

Annex Two – Full diversionary effects of the NZTA recommended toll on Ō2NL

Forecast daily traffic volumes (2039)



Key:

Location	No Ōtaki to north of Levin	With Ōtaki to north of Levin (no toll)	With Ōtaki to north of Levin (tolled)	Diversion (%)
A	0	13,200	10,900	17%
B	0	19,300	16,300	16%
C	0	24,300	13,800	43%
D	16,100	9,700	11,100	
E	16,300	8,800	12,300	
F	27,600	6,400	15,300	
G	15,700	8,100	7,900	