WAKA KOTAHI
NZ TRANSPORT AGENCY

PENLINK TOLLING SCHEME PROPOSAL

WAKA KOTAHI NZ TRANSPORT AGENCY

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New Zealand Government

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Contents

EXECUTIVE SUMMARY

The purpose of this document is to present for your consideration a proposed tolling scheme for Penlink. In recent years the National Land Transport (NLTF) has faced increasing pressures through a combination of an ambitious land transport investment programme and revenue impacts as a result of the COVID-19 pandemic.

The New Zealand Upgrade Programme (NZUP) will see significant capital investments of $8.7 billion into the land transport system. While the capital cost of NZUP projects will be fully covered by Crown funding, no provision has been made for the ongoing operating and maintenance costs of these new investments, which will ultimately fall on the NLTF (in the absence of other arrangements).

The Land Transport Management Act 2003 (LTMA) permits the establishment of road tolling schemes to provide funds which may be applied to certain activities associated with the introduction of a new road, including operations and maintenance. As part of NZUP implementation, Waka Kotahi is assessing the suitability of using tolling to fund ongoing maintenance and operating costs, with Penlink being the first of the NZUP projects to be considered. Without tolling revenue, maintenance and operating costs for Penlink will need to be met from the NLTF in the absence of other arrangements. Penlink will serve a very specific set of communities and it will perform a local/arterial road function rather than a national network function, which strongly indicates that a funding contribution to the ongoing costs of the road from those who use the road is appropriate.

Penlink satisfied Waka Kotahi internal assessments which consider whether core legislative requirements can be met (e.g. new road, feasible untolled alternative routes are available) and the extent to which the proposed scheme is efficient, effective and represents value for money. Tolling Penlink is expected to generate sufficient revenue (present value of net revenue is approximately $49 million over a ten-year period) to cover the full costs of ongoing maintenance and operations of the road.[1] This contribution of funding can supplement land transport revenue and thereby help to reduce pressure on the NLTF.

The number of people travelling in private vehicles during peak times has to be reduced to address both congestion on the Whangaparāoa Peninsula and the significant pressure being placed on the Silverdale interchange. Reliable public transport is key to reducing private vehicle travel. While it is not the objective of tolling, differential toll rates at peak and off-peak encourage people to consider when they will travel, by what route and by what mode. The use of differential toll rates to encourage behaviour change to achieve mode shift is consistent with ongoing work to review the land transport revenue system and projects involving transport pricing.[2]

Key transport benefits and outcomes supported by tolling Penlink are:

- reducing journey time variability for public transport, making it a more attractive option and encouraging mode shift (GPS 2021 strategic priority regarding better travel options)
- producing additional carbon savings compared to an untolled Penlink through increased public transport uptake and negating induced demand (GPS 2021 strategic priority regarding climate change)

[1] Net revenue is gross revenue less Goods and Services Tax (15%) and the $0.70 per trip that Waka Kotahi retains to cover the costs of its tolling business.
[2] This includes the Congestion Question in Auckland and the Dynamic Road Pricing project in Tauranga.

- improving the operation of Penlink (travel time savings and trip reliability), but not at the expense of existing routes, and
- better supporting the achievement of the Penlink project objectives compared to not tolling Penlink.

An equitable outcome for road users that choose not to travel on a tolled Penlink is achieved through the provision of safe and untolled alternative routes.

From 17 January to 13 February 2022, Waka Kotahi consulted with the public on a proposed tolling scheme for Penlink. There was a significant level of participation by the community in response to the consultation, resulting in a total of 3,337 submissions being received. Overall, 37% of submitters supported the tolling proposal or offered conditional support if changes were made to the proposal, 60% of submitters did not support the tolling of Penlink, and 3% were unsure. The majority of submitters who offered conditional support were concerned with the level of the proposed toll rates. Since 2006, all engagement with the public on Penlink has consistently positioned the road as being proposed for tolling. This consistent reference to tolling reflects the reality that the local communities, that benefit directly from an expensive Penlink road, need to contribute to its costs.

Feedback from this consultation informed the final Penlink Tolling Scheme Proposal, including efficiency improvements to the scheme and reducing the planned toll points from three to two.

SECTION 1: PURPOSE

Between 17 January and 13 February 2022, Waka Kotahi undertook a public consultation process on a proposed tolling scheme for Penlink (BRI-2330 refers). After careful consideration of the feedback received, a number of improvements to the proposed tolling scheme have been made to make it more efficient and economic, whilst still achieving the outcome of generating sufficient revenue for the maintenance and operations costs of Penlink.

The purpose of this document is to present for your consideration the proposed tolling scheme for Penlink.

The matters covered in this document are intended to assist you in your consideration of whether the proposal meets the legislative requirements for tolling as prescribed in the LTMA. The following information is provided to support your consideration of our proposal:

- brief overview of Penlink and its benefits (Section 2)
- background information on tolling and current tolling schemes (Section 3)
- context around this tolling scheme proposal regarding increasing revenue pressure and achievement of government transport priorities (Section 4)
- a description of the proposed tolling scheme design (Section 5)
- information that may assist your assessment of the proposed tolling scheme against legislative requirements, including its effectiveness and efficiency (Section 6), and
- the process, findings, and decisions following the public consultation process on the proposed tolling scheme (Section 7).

This tolling proposal should be read in conjunction with the Penlink Implementation Business Case, which sets out the case for progressing with the tolled Penlink option and outlines the effects on the project objectives, scope and cost of an untolled option.

This tolling proposal presents you with a tolling scheme for Penlink that has been designed to meet the requirements under the LTMA.

SECTION 2: PENLINK

The purpose of Penlink is to create an alternative access route to the Whangaparāoa Peninsula that will connect to State Highway 1 (SH1) at Redvale[3]. Whangaparāoa Road reached its theoretical capacity of 25,000 vehicle per day in 2009[4].

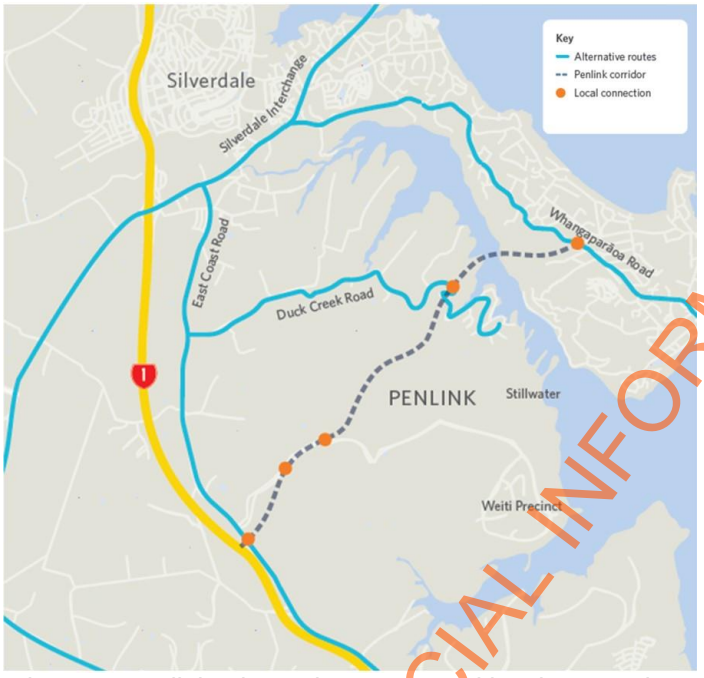


Figure 1: Penlink, alternative routes and local connections

The benefits of Penlink include:

- improving network resilience for the Whangaparāoa Peninsula community
- supporting provision of housing within planned future urban development areas
- supporting jobs and employment opportunities across the northern area of Auckland, and
- achieving comparative travel times for public transport users compared with general traffic
- improving network performance in order to facilitate economic activity, planned growth and transport mode choice in Silverdale, the Whangaparāoa Peninsula and the surrounding area
- improving travel times and journey reliability through the land areas in the vicinity of the Silverdale interchange: Silverdale, Wainui, Dairy Flat, Orewa and the Whangaparāoa Peninsula.

All engagement since 2006 between Road Controlling Authorities (RCA) and the public on Penlink has consistently positioned the road as being proposed for tolling. This consistent reference to tolling reflects the reality that the local communities, that benefit directly from an expensive Penlink road, need to contribute to its costs.

Construction of Penlink is expected to be completed by late 2026.

[3] Auckland Transport, Penlink Detailed Business Case, 2019.
[4] Auckland Transport, Business Case for Implementation, 2013.

SECTION 3: TOLLING LEGISLATION AND USE

3.1 Tolling legislation and your role as Minister of Transport

The LTMA sets out the legal framework for road tolling in New Zealand. Under the LTMA, road tolling schemes can be introduced to provide funds for the planning, design, supervision, construction, maintenance, or operation (or any combination of these activities) of the tolled road.[5] A road can only be tolled if it is a new road.

In determining the appropriate toll rates, the LTMA allows for different levels of tolls to be levied in respect of different classes of person or motor vehicles, different times or days, different directions of travel, or to be levied on any other differential basis.[6]

RCAs may submit tolling proposals to the Minister of Transport for consideration. The Minister of Transport has sole responsibility in recommending to the Governor-General the establishment of a road tolling scheme through an Order in Council. Nonetheless, you may wish to consult with your Cabinet colleagues before making such a recommendation.

In making a recommendation to the Governor-General, the LTMA requires that you must be satisfied:[7]

- that there has been adequate public consultation on the proposed tolling scheme
- with the level of community support for the proposed tolling scheme
- that a feasible, untolled, alternative route is available to road users, and
- that the proposed tolling scheme is efficient and effective.

You have discretion to determine whether the proposal meets legislative requirements and also to decide whether to recommend, modify or decline a road tolling scheme.

3.2 Toll roads currently operating in New Zealand

There are three toll roads currently operating in New Zealand, all of which are on the state highway network operated by Waka Kotahi.

Northern Gateway Toll Road: In 2005, the Crown loaned $158 million to supplement funds available for the project in the NLTF ($180 million) to bring forward the construction of the project by ten years.

Tolling was introduced in 2009 to repay the Crown loan.

The road is 7.5km long and the toll rate is $2.40 for a light vehicle and $4.80 for a heavy vehicle one-way.

[5] LTMA, section 46(1)(a).
[6] LTMA, section 46(3)(b).
[7] LTMA, section 48(1).

Tauranga Eastern Link: In 2010, the Crown loaned $107 million to bring forward construction by around seven years.

Tolling was introduced in 2015 to repay the loan.

The road is 15km long and the toll rate is $2.10 for a light vehicle and $5.20 for a heavy vehicle one-way

Takitimu Drive Toll Road (formerly known as Route K Toll Road): In 2015, around $65 million from the National Land Transport Fund was used to purchase the Route K Toll Road (including implied interest on the purchase) from Tauranga City Council. Revenue from the tolls is reimbursing the NLTF for the purchase of the road.

The road is 5km and the toll rate is $1.90 for a light vehicle and $5.00 for a heavy vehicle one-way.

SECTION 4: REVENUE PRESSURE AND GOVERNMENT TRANSPORT PRIORITIES

4.1 Tolling can generate funding from users of Penlink to pay for ongoing costs

NZUP will see significant capital investments of $8.7 billion into the land transport system. However, no provision has been made to fund the ongoing operating and maintenance costs associated with these new capital projects, which will create additional pressure on the NLTF over the longer-term. While historically tolling has been used to bring projects forward, Waka Kotahi is currently considering the use of tolling to cover the maintenance and operations of capital projects that will be delivered as part of NZUP.

Although only seven kilometres long, Penlink will be built over very difficult geological terrain, with a number of structures including a significant bridge crossing the Weiti River. The ongoing operations and maintenance for the road, and the Weiti bridge crossing in particular, means that it will be more expensive over its life compared to most roads performing this local connection function on our transport network. Penlink will serve a very specific set of communities and it will perform a local/arterial road function rather than a national network function – strongly indicating that a funding contribution to the ongoing costs of the road from those who use and directly benefit from the road is appropriate. This contribution of funding can supplement land transport revenue and thereby help to reduce pressure on the NLTF.

The Government Policy Statement for Land Transport 2021 (GPS 2021) places an expectation on the transport sector to consider alternative funding and financing options to supplement and support the NLTF. Specifically, the GPS 2021 states that consideration should be given to approaches where those who directly and significantly benefit from an infrastructure project pay a greater share of its costs. Tolling satisfies this consideration as a funding mechanism to pay for costs of the new road directly from its users.

4.2 Tolling Penlink supports Government's strategic priorities and project objectives

Tolling can provide additional benefits from generating funding for costs of the new road

To address congestion on the Whangaparāoa Peninsula and the significant pressure being placed on the Silverdale interchange, the number of people travelling in private vehicles during peak times must be reduced. Reliable public transport is key to reducing private vehicle travel.

The proposed use of differential toll rates at peak and off-peak (discussed in Section 5.1) will encourage the mode shift changes needed and support reliable public transport services as a result of reduced peak time traffic congestion. Differential toll rates at peak and off-peak encourage people to consider when they will travel, by what route and by what mode. The use of differential toll rates to encourage behaviour change to achieve mode shift is consistent with ongoing work to review the land transport revenue system and projects involving transport pricing.

Under an untolled scenario private vehicle peak time travel would be relatively more attractive than other modes, meaning the improved access would increase private vehicle travel, resulting in peak time congestion on the new road.

Government's strategic priorities for transport

A tolled Penlink directly supports the GPS 2021 strategic priorities of better travel options and climate change as discussed below. With respect to the other GPS 2021 strategic priorities, our assessments indicate that tolling is not expected to improve, nor negatively impact on, freight connections.[8] Compared to the untolled option, there are fewer expected safety benefits with tolling as less traffic will be using Penlink which has higher safety standards.[9] Both tolled and untolled options improve safety outcomes compared to not building Penlink.

Better travel options priority

The primary focus of the better travel options priority is providing people with better travel options to access places for earning, learning, and participating in society. The GPS 2021 indicates a number of co-benefits associated with this priority:

- people will have better options for low emissions travel modes, including active modes and public transport, and
- mode shift and smoother traffic flows will improve air quality.

As indicated in the Penlink Implementation Business case, public transport usage and uptake will be negatively affected if Penlink is not tolled:[10]

- public transport travel is anticipated to decrease by approximately 150 passengers per day due to the relative attractiveness of car travel, and
- greater variability of journey time is expected for public transport users due to the increase in general traffic on Penlink (unless mitigated by bus shoulder lanes for the full length of Penlink).

The reduction of general traffic on Penlink in response to tolling[11] is expected to reduce journey time variability for public transport, making it a more attractive option and encouraging mode shift.

The uptake of active modes is not expected to be impacted by tolling or not tolling Penlink.

Climate change priority

The focus of the climate change priority is transforming New Zealand to a low carbon transport system that supports emissions reductions aligned with national commitments, while improving safety and inclusive access.

[8] We estimate a relatively low percentage of heavy vehicles will use Penlink (approximately 4% daily if the road is untolled). Freight using Penlink and the free alternative routes will experience less congestion and expected therefore an improved experience.
[9] See Table 18 and Table 26 of the Penlink Implementation Business Case. Our analysis indicates that deaths and serious injuries would be approximately the same regarding tolled and untolled options for Penlink.
[10] Penlink Implementation Business Case, Section 5.7.
[11] Modelled 2028 daily traffic volumes are forecast at 18,100 if tolled compared to 25,500 if untolled.

Tolling Penlink produces the following additional carbon savings over an untolled Penlink:[12]

- 6,000 tonnes/year CO2 in 2028 modelled year
- 2,500 tonnes/year CO2 in 2038 modelled year
- 1,250 tonnes/year CO2 in 2048 modelled year.

Modelling assumes that due to fleet changes such as an increase in electric vehicle fleet share and increased efficiencies of internal combustion engines, the differential impact reduces over time.

As noted above, tolling of Penlink also helps to support mode shift, which is a co-benefit associated with this priority as it further reduces emissions.

Tolling improves operation of Penlink and the wider network

The following sections summarise key findings from the Penlink Implementation Business Case regarding network benefits of tolling Penlink.

Tolling improves the operation of Penlink, but not at the expense of existing routes

The economic analysis shows that at a macro level, overall travel times across the network are similar in the tolled and untolled scenarios. However, tolling has been shown to improve the overall travel time management of traffic on Penlink and the existing routes (Whangaparāoa Road, Hibiscus Coast Highway, SH1). Despite some traffic being diverted from Penlink due to tolling, the travel times on the existing routes are not significantly affected as there is sufficient capacity to cater for this diversion.

Tolling negates induced demand created by having Penlink

Applying a toll reduces the effect of induced demand as road users need to make a choice about the value of the toll compared to the benefit gained in time. If Penlink is not tolled, traffic volumes will likely increase around the Peninsula and on Penlink itself. This is due to more longer trips being taken to and from Whangaparāoa and Albany/South of Albany due to the enhanced accessibility. A reduction in some local trips, such as travel within Whangaparāoa, may occur in response to these longer journeys.

Tolling better supports achievement of the Penlink project objectives

Waka Kotahi undertook a Multiple Criteria Analysis (MCA) of the tolled and untolled options for Penlink against the project objectives.[13] Overall, a tolled Penlink was assessed as better than an 'Untolled Penlink' in supporting the project objectives. While the tolled Penlink option scored slightly lower in relation to one project objective,[14] tolling of Penlink performed much better in relation to the project objective focused on significantly improving public transport services between Whangaparāoa-Silverdale, Whangaparāoa-Albany with more reliable journey times by 2028.

Resilience benefits of Penlink are not affected by the road being tolled or untolled

[12] An untolled Penlink is estimated to generate 1,000 tonnes/year CO2 in 2028 modelled year.
[13] Penlink Implementation Business Case, Section 5.8.
[14] Project objective: reducing traffic volumes through the Silverdale interchange, providing transport capacity for housing developments in Wainui, Stillwater West, Silverdale West, and approved development on the Whangaparāoa Peninsula by 2028

Resilience is a transport outcome that is associated with all four strategic priorities of GPS 2021 and is a Penlink project objective. Tolling is not expected to negate the improved resilience benefits of Penlink because it is possible to respond to situations that prevent the use of the alternative untolled routes by temporarily reducing toll rates to zero.

SECTION 5: PROPOSED TOLLING SCHEME

5.1 Proposed design of tolling scheme for Penlink

As a Road Controlling Authority, Waka Kotahi assesses the potential suitability for tolling of all new roads that it is responsible for. Waka Kotahi has completed in-depth tolling assessments for Penlink and has determined that it is a suitable road for tolling. Waka Kotahi has undertaken public consultation (discussed in Section 7) and the following information describes the proposed tolling scheme.

Toll points

With six different access points to Penlink (including the eastern and western ends), a number of options were considered in the development of the tolling strategy for Penlink. The following factors were considered in determining the location of toll points:

- Equity / Fairness - the toll charges are equitable / fair for users of Penlink
- Revenue – potential revenue generation to pay for operations and maintenance costs of Penlink
- Efficiency - revenue vs. transaction costs and capital costs
- Capital cost – level of investment needed in the tolling infrastructure.

After careful consideration and balancing of the above factors, and in response to feedback received during the public consultation process (discussed in Section 7.3 below), Waka Kotahi proposes a tolling scheme with two toll points for Penlink:

- a bi-directional full gantry between Duck Creek Road and Whangaparāoa Road - this location is referred to as “A”, and
- separate ground mounted cameras at each of the SH1 off and on-ramps - this location is referred to as “R1”.

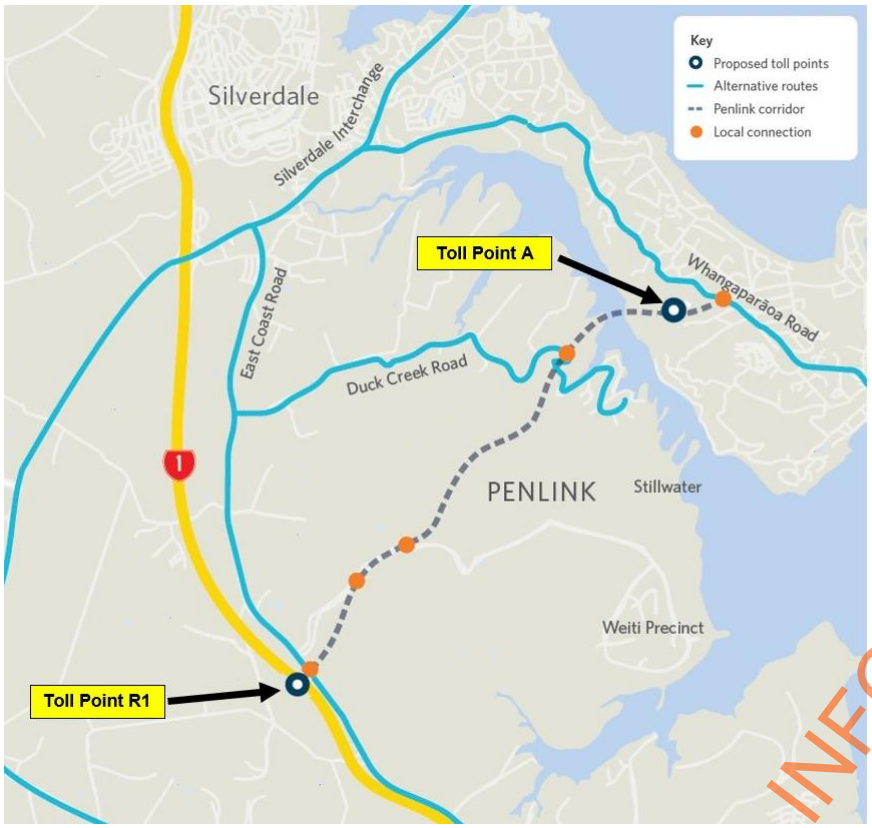


Figure 2: Proposed toll points on Penlink

Drivers would be charged each time they pass through a toll point – if both toll points are crossed, then two toll rates would be aggregated for the road user. A consistent approach is provided for those communities located along the corridor in that they will only pay when passing through either end of Penlink.

It is acknowledged that there will be increased development along the Penlink corridor over time, and that this may necessitate reconsideration of the design of the tolling scheme in the future, including toll point locations and toll rates. While Waka Kotahi expects to undertake public consultation before any changes to toll point locations are implemented, it is considered prudent that the Order in Council permit implementation of such changes.

Variable toll prices for peak and off-peak travel

Section 46(3)(b) of the LTMA allows for differential tolls to be applied, including different amounts for different times of day. Variable tolls provide road users with choices for when they travel and how much they pay, and provides Waka Kotahi with the ability to manage travel times and operating conditions, not only in relation to Penlink, but also the other existing routes of Whangaparāoa Road, Hibiscus Coast Highway and part of SH1.

For toll point A, toll prices are proposed at $2 during peak hours (weekdays 6am to 9am and 4pm to 7pm) and $1 in the off-peak (including Saturdays, Sundays and Public Holidays). Most of the Penlink traffic volume will travel to and from Whangaparāoa during the peak periods and so toll point A is an effective location to utilise variable toll rates. Toll point R1 is proposed to be set at $1 during both peak and off-peak – there are very low volumes of traffic interacting with toll point R1 only (i.e. vehicles that do not also pass through toll point A).

The combination of the two toll points and use of variable toll rates mean that the amount payable will depend on where road users enter and exit Penlink as well as when they travel (i.e. if travelling from Whangaparāoa to State Highway 1 during peak hours then the road user will pay $3 ($2 +$1), but if travelling at the same time from Whangaparāoa to East Coast Road, the toll will only be $2. The proposed toll charges (aggregated) for light vehicles[15] travelling on Penlink during peak and off-peak are indicated in following tables.

Table 1: Proposed peak toll prices for light vehicles

From \ To	SH1	East Coast Road	Future Urban Zone connection	Access Road to Weiti Precinct	Stillwater	Whangaparāoa Road
SH1	-	$1.00	$1.00	$1.00	$1.00	$3.00
East Coast Road	$1.00	-	-	-	-	$2.00
Future Urban Zone connection	$1.00	-	-	-	-	$2.00
Access Road to Weiti Precinct	$1.00	-	-	-	-	$2.00
Stillwater	$1.00	-	-	-	-	$2.00
Whangaparāoa Road	$3.00	$2.00	$2.00	$2.00	$2.00	-

Table 2: Proposed off-peak toll prices for light vehicles

From \ To	SH1	East Coast Road	Future Urban Zone connection	Access Road to Weiti Precinct	Stillwater	Whangaparāoa Road
SH1	-	$1.00	$1.00	$1.00	$1.00	$2.00
East Coast Road	$1.00	-	-	-	-	$1.00
Future Urban Zone connection	$1.00	-	-	-	-	$1.00
Access Road to Weiti Precinct	$1.00	-	-	-	-	$1.00
Stillwater	$1.00	-	-	-	-	$1.00
Whangaparāoa Road	$2.00	$1.00	$1.00	$1.00	$1.00	-

Heavy vehicles[16] would be tolled at a rate that is double the proposed toll prices indicated above for light vehicles at peak and off-peak times on Penlink.

We expect that forecast traffic volumes at these proposed toll rates would generate the revenue required to pay for the full costs of ongoing maintenance and operations costs of Penlink (see Section 6.4). Comprehensive modelling has been undertaken in setting the peak and off-peak rates, and we are confident that we have also struck the right balance between achieving network benefits whilst still ensuring equity for users of Penlink.

Exemption for public transport buses using Penlink

Public transport is one of the key options for travellers to avoid the impact of the proposed tolling of Penlink, but still receive all the benefits of the new road. Encouraging mode shift

[15] Light vehicles are vehicles weighing less than 3.5 tonnes, and include motorcycles.
[16] Heavy vehicles are vehicles weighing over 3.5 tonnes.

and uptake of public transport are central to key Government strategic priorities for transport, including better travel options and climate change. Waka Kotahi also does not want to place a burden on local government to fund a local share contribution to cover a toll for Penlink given the clear benefits associated with public transport.

For these reasons, Waka Kotahi proposes an exemption for public transport buses using Penlink to deliver this important service (e.g. exempting buses operating scheduled public transport services specified in the Auckland Regional Public Transport Plan). Should the Penlink tolling scheme proposal be approved, Waka Kotahi would assess whether a similar exemption might be appropriate for other existing toll roads and future toll roads as a matter of policy.

Conclusion on the tolling scheme design and proposed toll rates

The proposed toll scheme and toll rates have been designed to generate sufficient revenue to cover the full cost of operations and maintenance for Penlink and the capital costs of tolling infrastructure (discussed in Section 6 below). In addition, the proposed use of differential peak and off-peak toll rates will support reliable public transport services, encourage mode shift and means that the network impact on Penlink, the existing routes, and the wider network are able to be managed effectively. Tolling also supports other key transport priorities, including reducing carbon emissions.

SECTION 6: LEGISLATIVE REQUIREMENTS REGARDING THE TOLLING SCHEME

6.1 New road requirement

In order to meet the requirement set out in section 48(1)(c) of the LTMA, it is proposed that the tolling scheme commence on the day that Penlink opens for public use.

6.2 Toll revenue is for operations and maintenance costs of Penlink

The proposed tolling scheme would be used to provide funds that will be applied for the purposes of maintaining and operating Penlink as permitted under section 46(1)(a) of the LTMA. The types of costs include (not an exhaustive list) regular and periodic road maintenance, bridge inspections, road resurfacing, periodic bridge maintenance and repairs, contract management, road signage and markings, road lighting, litter removal, mowing and vegetation management, crash repairs, technology upgrades, graffiti removal and stormwater runoff.

We are proposing that the Order in Council does not specify an end date (or end point)[17] given that the operations and maintenance costs with Penlink will be ongoing costs.[18]

6.3 A feasible, untolled alternative route is available to road users

Section 48(1)(d) of the LTMA requires that a feasible, untolled route is available to road users.

An equitable outcome for road users that choose not to travel on a tolled Penlink is achieved through the provision of safe and untolled alternative routes. For most road users, the existing roads (Whangaparāoa Road and Duck Creek Road) would act as the feasible, untolled routes:

- people in the Whangaparāoa Peninsula can use Whangaparāoa Road to access SH1 via the Silverdale Interchange, and
- Stillwater residents can access Duck Creek Road as an alternative route.

In the case of Weiti Bay, a development south-west of Stillwater, its current access road from East Coast Road is built on the Penlink alignment and no other access roads currently exist. The proposed location of toll points has been specifically designed to ensure Weiti Bay residents have the equivalent of a feasible untolled alternative route on Penlink itself through to East Coast Road in order to meet this LTMA requirement (no tolls are payable for use of Penlink between Link Road 2 and the East Coast Road access roundabout).

6.4 Effectiveness and efficiency of the proposed tolling scheme

Section 48(1) of the LTMA requires that you are satisfied that the proposed tolling scheme for Penlink is effective and efficient. This section provides information that Waka Kotahi considers is relevant for your consideration regarding:

[17] LTMA, section 47(3)(b).

[18] This can be contrasted with the other three tolled roads where Waka Kotahi is committed to making payments for a required period of time or until the principal loan and interest is fully paid, and so in these situations an end date or point is appropriate.

- the effectiveness of the proposed tolling scheme, and
- the efficiency of the proposed tolling scheme.

Effectiveness of the proposed tolling scheme

Revenue projections and contribution to operations and maintenance costs

Waka Kotahi estimates Present Value (PV) of net revenue will total $49 million over a 10-year period (2027 to 2036).[19]

We have made provision for some revenue leakage resulting from road users evading payment and also exemptions (emergency vehicles are exempted by law and Waka Kotahi is also proposing an exemption for buses operating scheduled public transport services on Penlink). Based on our experience with current toll roads, we have factored the following levels of revenue leakage:

- 10 percent of motorcycles
- 3 percent of cars and light trucks
- 2 percent of heavy trucks and buses.

The estimated PV of operations and maintenance costs of Penlink will total $47 million over 10 years (2027 to 2036). This includes repayment of financing that will be needed for the estimated $20 million of capital costs for the tolling infrastructure (including tolling gantry, ramp cameras, software systems) and also an opportunity cost charge of 4 percent.[20]

The operations and maintenance costs will vary from year to year, and given the actual revenue collected will vary from the forecast based on the modelling, Waka Kotahi will assess the toll rates regularly and review appropriate toll rates based on the revenue collected against the expected ongoing expenses for maintaining and operating the road to ensure that the revenue and costs balance over time.

Summary: The proposed tolling scheme is expected to generate sufficient revenue to pay for the full operations and maintenance costs of Penlink. This contribution of funding can supplement land transport revenue and thereby help reduce pressure on the NLTF.

Efficiency of the proposed tolling scheme

The following information is considered by Waka Kotahi to be relevant to the efficiency of the proposed tolling scheme.

(i) Cost Benefit Analysis

The Penlink Implementation Business Case presented the costs and benefits associated with the tolled and untolled options.[21] That analysis calculated that the tolled option has a

[19] Net revenue is gross revenue less Goods and Services Tax (15%) and the $0.70 per trip that Waka Kotahi retains to cover the costs of its tolling business.
[20] We would seek the necessary funding from the NLTF and pay back the principal and an opportunity cost charge – this is currently 4% but may change depending on prevailing interest rates.
[21] Penlink Implementation Business Case, Section 6.2.

BCR of 1.3, which represents a positive return on investment.[22] While the BCR of the untolled option was calculated at 1.5, it is not preferred by Waka Kotahi given that tolling better supports the Government's strategic transport priorities, network operations, Penlink project objectives and enables an alternative funding source for Penlink's ongoing operations and maintenance costs.

(ii) Value for money investment

The capital cost of the tolling infrastructure for the proposed tolling scheme is estimated at $20 million and would be recovered through toll rates. Waka Kotahi has assessed this investment in tolling infrastructure against three value for money tests that we apply to all proposed tolling schemes:

- Infrastructure generates sufficient revenue - Waka Kotahi estimates that the cost of the tolling infrastructure represents 14 percent of the anticipated revenue from the proposed toll scheme. Waka Kotahi considers that a threshold of no more than 20 percent indicates the investment in tolling infrastructure represents a value for money investment.
- Payback period is reasonable - Based on our revenue forecasts, we estimate that the costs of the tolling infrastructure will be covered within the first 7-10 years of the tolling scheme (the payback period). The life of the physical tolling infrastructure is expected to be 25 or more years.
- Internal rate of return is sufficient – Waka Kotahi calculates that the investment in the capital cost of tolling infrastructure represents a 6 percent return. This is above the 4 percent discount rate that Waka Kotahi uses for the cost of financing capital investments (exceeding this threshold too much would generate a surplus). We consider the IRR sufficient given some of the modelled uncertainties and in order to meet the slightly unique tolling aspects of this road.

Waka Kotahi considers that these results indicate that the investment in tolling infrastructure will make a positive return, that it is proportional to the amount of revenue anticipated, and that it can be paid back within a reasonable timeframe.

(iii) Revenue retained for costs of the Waka Kotahi tolling business

Section 51(4) of the LTMA permits Waka Kotahi to impose reasonable charges in connection with the administration of any form of payment.

Waka Kotahi has a single back-office system that manages all three existing toll roads. Waka Kotahi currently retains 70 cents from each trip (each of existing toll roads has a single toll point) to operate its toll business, including:

- operating/maintaining/replacing/upgrading the physical assets and technology used to collect tolls from roadside gantries and cameras to back-office systems
- payment systems
- tolling related staff costs, and
- tolling related continuous improvement activities.

With respect to the proposed Penlink tolling scheme, these costs would represent 37% of the toll revenue.

[22] National BCR (excluding Wider Economic Benefits).

Summary: Our assessment of the capital tolling infrastructure and the revenue expected to be generated indicates that this investment represents value for money. We consider that the capital costs are proportionate to the revenue generated and can be paid back within a reasonable timeframe. As with other current toll roads, Waka Kotahi retains $0.70 per trip for administration of its tolling business. The tolled option has a BCR of 1.3, which represents a positive return on investment. While the BCR of the untolled option was calculated at 1.5, it is not preferred by Waka Kotahi given that tolling better supports the Government's strategic transport priorities, network operations, and Penlink project objectives and enables an alternative funding source for Penlink's ongoing operations and maintenance costs.

SECTION 7: PUBLIC CONSULTATION

7.1 Legislative requirements regarding consultation

Section 48(1) of the LTMA requires that you be satisfied:

- that there has been adequate public consultation on the proposed tolling scheme, and
- with the level of community support for the proposed tolling scheme.

The following information is intended to help you formulate a view as to the adequacy of the public consultation (Section 7.2) and the level of support for the proposed tolling scheme (Section 7.3).

7.2 Overview of consultation process and level of engagement

Public consultation process

Waka Kotahi undertook public consultation on the proposed tolling scheme from 17 January through to 13 February 2022.

A comprehensive range of communication and engagement channels were utilised during the public consultation process, enabling all affected communities and stakeholders the opportunity to participate:

- engaging key stakeholders ahead of and/or during the public consultation period, including:
  - Mana whenua (Central/Northern Iwi Integration Group)
  - Hibiscus and Bays and Rodney Local Boards
  - Auckland Council councillors (Albany Ward)
  - Stillwater Community Association Board Chairs
  - Whangaparāoa Community Trust
  - Business Whangaparāoa
  - Business Silverdale
  - Penlink Now
  - Developers in the area
  - Bike Auckland.
- hosting public engagement events to share information and answer questions:
  - Open day at New World Whangaparāoa on Thursday 20 January 2022
  - Face to face at Whangaparāoa library drop-in session on Friday 21 January 2022
  - Open day at Coast Plaza Whangaparāoa on Sunday 23 January 2022
  - Online information sessions throughout the public consultation process
  - A face-to-face workshop with the Stillwater Community Association on Sunday 23 January 2022.
- posting 28,000 consultation flyers to households in Whangaparāoa and North Auckland
- delivering copies of the consultation flyer to local cafés along and nearby the Penlink route

- digital and print advertising with metropolitan and local newspapers and the Chinese Herald
- radio advertising targeting Whangaparāoa and North Auckland
- promoting posts on the Waka Kotahi Auckland/Northland Facebook page, geo-targeting local communities and people in other areas near the Penlink route, and
- project webpage on the Waka Kotahi NZ Transport Agency website – including documents relevant to this consultation and a dedicated FAQs page for tolling consultation.

Response rate and demographic information

There was significant level of participation from the community in the consultation process resulting in 3,337 submissions being received via Survey Monkey, email and calls to the project team on 0800 PENLINK. Submissions were received from the general public and a range of key stakeholders reflecting a highly engaged community.

The following tables show responses to two questions in the consultation which asked submitters their interest in Penlink and also how they would use Penlink (note that submitters could select more than one response to these questions).

What interest did submitters have in Penlink?

Response	Count	% of responses
I live along/near the Penlink route	1,962	59%
I own property or a business along/near the Penlink route	735	22%
I visit friends in the area	599	18%
I visit the area for recreation	546	16%
I work in the area	394	12%
I have no transport link to the area	125	4%
I study in the area	18	0.5%

How would submitters use Penlink?

Response	Count	% of responses
I will use Penlink for recreation and visit family/friends	1,372	41%
I will use Penlink to get to/from work	1,093	33%
I will not use it if it's tolled	866	26%
I will use the shared path to bike or walk along Penlink	471	14%
I will use Penlink to take children to school and/or after school activities	283	9%
I will not use this road at all	65	2%
Other (with a prompt to specify in a comment box)	272	-

The data indicates that the consultation was successful in engaging with local communities affected by the Penlink tolling proposal.

7.3: Responses to proposed tolling scheme and key themes

Summary of what was proposed and feedback sought

The public consultation sought feedback on two key questions regarding the proposed tolling scheme for Penlink:

- whether they thought the proposed tolling scheme for Penlink was fair and equitable?
- if they had any suggestions for consideration before the Government makes its decision on whether to toll Penlink?

The public was consulted on a three-point tolling scheme for Penlink which was our preferred option at the time:

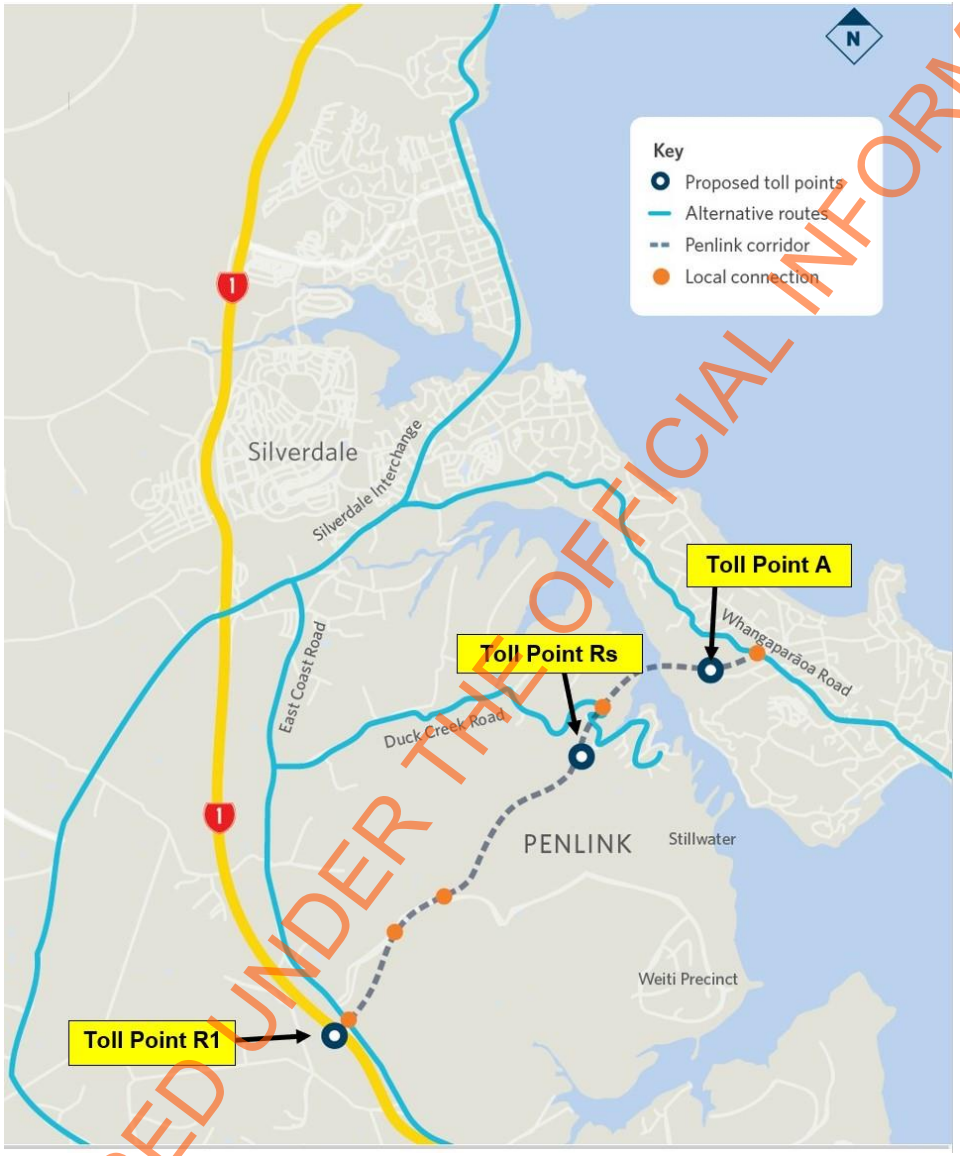


Figure 3: Three toll points that were consulted on with the public

The rationale for the location of toll points A and R1, and use of variable pricing for A, are described in Section 5.1 above. Importantly the toll rates consulted on with the public for toll point A were higher than what is now proposed (a peak toll rate of $3 and off-peak rate of $2 was consulted on, and is now proposed to be reduced to $2 and $1 respectively). Toll

point Rs, which was part of the preferred tolling strategy at the time of public consultation, involved west-facing ramp cameras near Stillwater. The effect of using ramp cameras at this location was that other users of Penlink on the mainline would not pass through this particular toll point (i.e. only traffic to and from Stillwater direction west would pass through the toll point). For toll point Rs, the toll rates we consulted on were $2 during peak hours and $1 in the off-peak.

The aggregated toll rates for travel on Penlink that were consulted on with the public are indicated in following tables and are noticeably higher for people travelling to and from Whangaparāoa as well as Stillwater compared to what is now being proposed (compare to Section 5.1 above).

Table 3: Proposed peak toll prices for light vehicles used in consultation

From \ To	SH1	East Coast Road	Future Urban Zone connection	Access Road to Weiti Precinct	Stillwater	Whangaparāoa Road
SH1	-	$1.00	$1.00	$1.00	$3.00	$4.00
East Coast Road	$1.00	-	-	-	$2.00	$3.00
Future Urban Zone connection	$1.00	-	-	-	$2.00	$3.00
Access Road to Weiti Precinct	$1.00	-	-	-	$2.00	$3.00
Stillwater	$3.00	$2.00	$2.00	$2.00	-	$3.00
Whangaparāoa Road	$4.00	$3.00	$3.00	$3.00	$3.00	-

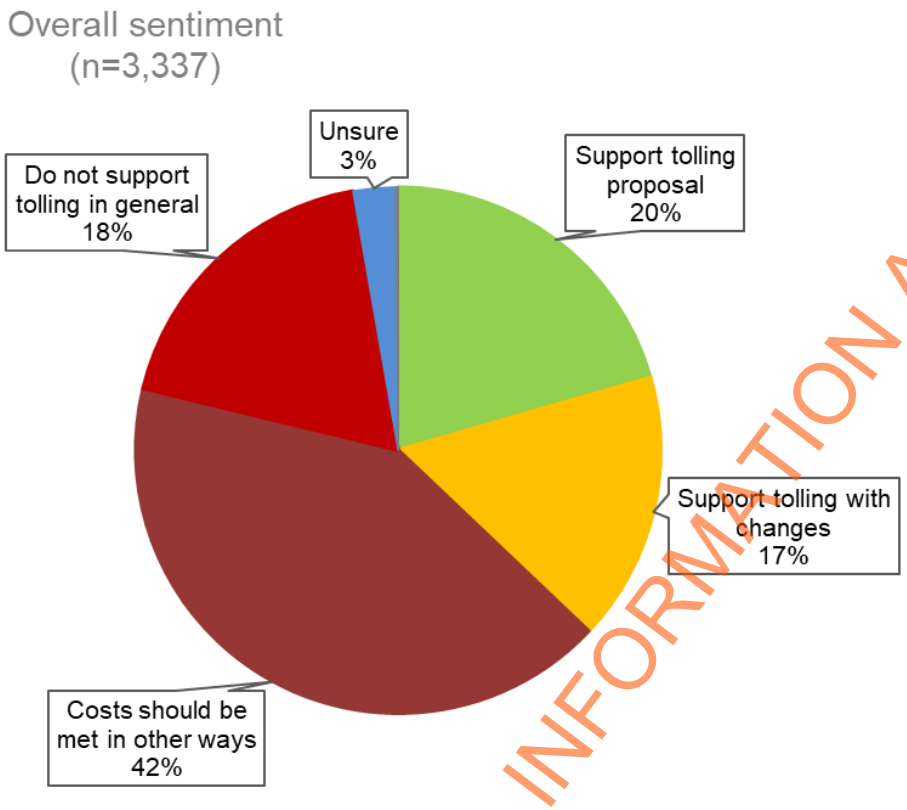
Table 4: Proposed off-peak toll prices for light vehicles used in consultation

From \ To	SH1	East Coast Road	Future Urban Zone connection	Access Road to Weiti Precinct	Stillwater	Whangaparāoa Road
SH1	-	$1.00	$1.00	$1.00	$2.00	$3.00
East Coast Road	$1.00	-	-	-	$1.00	$2.00
Future Urban Zone connection	$1.00	-	-	-	$1.00	$2.00
Access Road to Weiti Precinct	$1.00	-	-	-	$1.00	$2.00
Stillwater	$2.00	$1.00	$1.00	$1.00	-	$2.00
Whangaparāoa Road	$3.00	$2.00	$2.00	$2.00	$2.00	-

The toll rates for heavy vehicles were proposed at a rate that is double light vehicles at peak and off-peak times on Penlink (this remains our position for heavy vehicles).

Overall sentiments regarding the Penlink Tolling proposal

Public sentiments towards the Penlink tolling proposal were varied. The majority of submitters did not support the proposed tolling of Penlink or tolling in general (60%). However, there was a substantial proportion of submitters that supported tolling Penlink (37%), either completely or on the condition that suggested changes were incorporated. The graph below shows the spread of sentiment.



Summary of reasons in support of proposal (20% of submitters)

Tolling aligns with the user pays principle:

- Most submitters that supported the tolling Penlink expressed agreement with the user pays principle (based on the rationale that those who use or benefit from something should pay for it).
- Some submitters considered that users of the new road received benefits of reduced commuting times and distances. They also noted that users of the road are generating the need for the maintenance and operations services.
- Some submitters stated that it would be a more equitable outcome if those who are using Penlink pay for its ongoing costs.

Tolling reduces vehicles using Penlink, congestion and carbon emissions:

- Some submitters pointed out the operational benefits of reducing the number of vehicles using Penlink and that tolling encourages mode shift into public transport or car-pooling.
- Submitters acknowledged that tolling would enable effective network and congestion management through use of peak and off-peak rates (making the most of the capacity of the road).
- Submitters also acknowledged the emissions reductions benefits of tolling Penlink.

Waka Kotahi position regarding these responses – We agree with the views from submitters that support the tolling proposal for Penlink. The user pays principle underpins our proposed approach to tolling and the design of the tolling scheme for Penlink. There are clear benefits for users of Penlink (i.e. a well maintained and operating road) and it is reasonable in our view that users should pay for these benefits. We also agree that applying variable toll rates in the tolling of Penlink promotes mode shift as well as reduces congestion and carbon emissions. These are all important secondary benefits (with the primary purpose of tolling being to generate sufficient revenue to cover the relatively high costs of maintaining and operating the new road).

Suggested changes from those offering conditional support (17% of submitters)

The submitters that offered conditional support for the proposed tolling scheme provided suggestion changes that can be grouped into two categories:

1. suggested changes to the proposed tolling scheme
2. suggested changes to the design or operation of Penlink.

Suggested changes to the proposed tolling scheme

Theme	Waka Kotahi position
Reduce the tolling scheme to a single toll point (preferably on Weiti Bridge as vehicles enter/exit the Peninsula) or two toll charging points	- Waka Kotahi explored a broad range of tolling strategies, including the use of a single toll point near Weiti Bridge. We consider that a single toll point would not be in keeping with the user pays principle as there would be too many opportunities for road users to benefit from the road without needing to make a contribution to the costs by not paying a toll. - Upon further consideration, Waka Kotahi considers that the toll point at Rs is not economically viable (low traffic volumes at toll point Rs mean the toll revenue is only around 10% of the capital cost of installing tolling infrastructure at that location ([redacted])). We have therefore revised our tolling proposal to reduce the number of toll points to two by removing toll point Rs. Having toll points at both ends of Penlink still means that most users of Penlink will be charged a toll for their use of Penlink. Reducing the tolling infrastructure has helped us to reduce the proposed toll rates.
Reduction of toll rates - Single, flat toll price for any use of Penlink for light vehicles. (suggestions range from 50c to $3) - Lower the toll price to match the Northern Gateway toll ($2.40 each way)	- If the toll rates are set too low for light vehicles there would be insufficient revenue generated to fund the operation and maintenance costs of Penlink. - The proposed toll rates have been reduced for most users of Penlink from those that were indicated in the tolling consultation process. This has been achievable due to reducing the number of toll points from three to two, and also changing the way Waka Kotahi retains some of the revenue to cover the costs of its tolling business (retaining $0.70 per trip

	rather than per toll point as was originally factored into the rates). - The majority of submitters who offered conditional support were concerned with the level of the proposed toll rates. We have made some efficiency improvements to the proposal and have reduced the proposed tolling rates. - The proposed rates still generate sufficient funding to cover the costs of operations and maintenance of Penlink.
No toll charges for Stillwater residents to access SH1 or East Coast Road via Penlink	- We do not consider that there is any basis for Stillwater residents to be exempt from the tolling scheme. - By removing toll point Rs, Stillwater residents will face lower toll rates when heading west than was indicated through public consultation. Most of the traffic from Stillwater towards the west is expected to access SH1 and so will pay a toll at R1.
Only apply tolls at certain times or directions - Apply the tolls for travel along Penlink in one direction only - Apply tolls on weekends only	- Waka Kotahi considers that applying tolls in only one direction or only at particular times would involve too significant a shift away from the user pays principle. - All users of Penlink, regardless of when they use it or which direction they are travelling, receive the benefits of a well maintained and operated road.
Have a single toll rate (i.e. no differentiation between peak and inter peak toll rates)	- Waka Kotahi has considered a flat toll charge but variable toll rates provide significant additional benefits (network management), whilst still achieving the primary objective of generating sufficient revenue to cover the costs of maintenance and operations of Penlink.
Increase or decrease toll prices throughout the day to manage demand and to encourage travel outside of peak	- Waka Kotahi considers that this suggested change is more in line with a congestion charge rather than tolling. The toll rates proposed for Penlink are underpinned by the maintenance and operations costs that need to be recovered – it is not permissible under the LTMA to set toll rates to solely manage demand.
Reduced toll rates for higher vehicle occupancy.	- Vehicles with higher occupancy rates receive the same benefits as single occupant vehicles and likewise generate the need for the services funded through the tolls. We do not consider there is a basis to deviate from the user pays principle to accommodate this suggested change.
Heavy vehicles - Increase heavy vehicle toll prices to decrease toll prices for light vehicles - Charge heavy vehicles peak toll prices at all times	- We do not agree that the toll rates for heavy vehicles should be increased in order to decrease prices for light vehicles. - Waka Kotahi has determined a toll rate for light vehicles in the first instance, and proposes that heavy vehicles pay twice the toll rate of light vehicles. This is consistent other tolling schemes

- Do not have any variation between light and heavy vehicles	being operated by Waka Kotahi (i.e. Northern Gateway).
Reduce toll prices or no tolls for motorcycles (given less 'wear and tear' impact on road) and/or EVs (given lower carbon emissions)	- EVs and motorcycles receive the same benefits from a well maintained and operated Penlink. - We do not consider that there is any basis to treat EVs and motorcyclists differently from any other light vehicles given the user pays principle. - This position is consistent with the other three tolling schemes currently in operation.

Waka Kotahi position regarding these responses – After further consideration of the different tolling strategies available for Penlink, we agree with the responses that suggested the scheme could be simplified by reducing the number of toll points. We consider it is important that the design of the tolling scheme for Penlink is as efficient and economic as we can make it, whilst still achieving the objective of generating sufficient revenue for the maintenance and operations costs of Penlink. To achieve this, we have reduced the tolling scheme in our proposal to two toll points (from the three toll points that were publicly consulted on). In addition, a change has been made to the Penlink tolling scheme proposal regarding how Waka Kotahi retains some of the revenue to cover costs relating to its tolling business ($0.70 per trip rather than $0.70 per toll point). Both of these changes have enabled Waka Kotahi to reduce the proposed toll rates from the levels we consulted with the public on.

The majority of submitters who offered conditional support were concerned with the level of the proposed toll rates. We have made some efficiency improvements to the proposal and have reduced the proposed tolling rates. We do not consider any other suggested changes to the tolling proposal are appropriate for the reasons given in the table above.

Suggested changes to the design and operation of Penlink

Some of the suggested changes from submitters that offered conditional support was on the design and operation of Penlink itself. These suggested changes are outside the scope of our consultation (i.e. not in relation to the proposed tolling scheme), but it is still important for Waka Kotahi to inform you of the reasons why these stakeholders were not fully supportive of the proposal.

The main themes of the responses from these stakeholders included:

- making Penlink a 3 or 4 lane road
- reducing connections to Penlink to aid the flow of traffic
- installing a bus/T2 transit lane along the shoulder lane, and
- alternative design suggestions to better address safety and congestion.

Waka Kotahi has considered the feedback provided from these submitters and our position is explained in Annex 1.

Reasons from submitters that did not support tolling of Penlink (60% of submitters)

Around 60% of submitters did not support Penlink being tolled. The predominant theme from these submitters was a rejection of the user pays principle for the tolling of Penlink. The main themes from the responses for not supporting the tolling of Penlink and the Waka Kotahi positions are set out in the following table.

Theme	Waka Kotahi position
The maintenance and operations costs of Penlink should be funded by other revenue sources (e.g. Auckland Regional Fuel Tax, NLTF)	- Waka Kotahi policy is to consider the suitability of tolling for all new roads it is responsible for. Based on our assessments, Penlink is a suitable road for tolling to be used to generate revenue to cover the costs associated with the maintenance and operation of the road. - As directed by Government through GPS 2021, Waka Kotahi has considered alternative funding options for transport projects. Tolling enables the costs to be placed on users who benefit from the road. - The Auckland Regional Fuel Tax was only intended to be used for the capital costs of Penlink as indicated in the associated Order in Council.
Tolling represents an unfair cost on the community	- Road users can choose whether they would like to pay a toll to use Penlink or take a feasible untolled alternative route. - The proposed toll rates are based on the amounts needed to cover the maintenance and operations costs of Penlink.
Tolling could negate the benefits of Penlink	- Our assessment of tolling for Penlink indicates that it can generate sufficient revenue to cover the costs of operations and maintenance and also better supports the achievement of project objectives. There are also other benefits that are created by tolling, including supporting mode shift and reducing carbon emissions.
Insufficient public transport options	- At the time the current Regional Public Transport Plan for Auckland was finalised when it was not clear whether Penlink would be completed before 2028 – and it therefore does not indicate services using Penlink. With construction timeframes now confirmed, Auckland Transport proposes to operate the NX2 service on Penlink for new services and develop a bus interchange (subject to funding being obtained).
Penlink is an essential road and should not be tolled	- Free untolled alternative routes will be available to all road users.
Tolling trucks is costly for both the roading agency and the industry due to the cost of electronic pay-by-plate systems and back-office administration supporting tolling. Concern that back-office administration will draw significant funding away from maintenance of the road itself	- Toll rates are set to recover the amount of funding needed to cover the operations and maintenance costs for Penlink. The amount that is needed to be retained to contribute to the tolling business is also factored into the toll rates ($0.70 per trip).
The tolling technologies create management difficulties for trucking companies when using leased vehicles and may lead to perverse unintended	- Leased vehicles can currently cause some issues for non-payment of tolls, but these are manageable and not significant. It is anticipated that a new back-office system which we are currently in a procurement process for will help alleviate a lot of

outcomes such as the non-payment of tolls.	these issues, but it will always be dependent on the arrangement between the lease company and the hirer. - If vehicles are registered to a toll account then there are no unpaid tolls, it only comes down to a matter of whose account ends up paying for them - whether by the lease company or the company/person who has leased the vehicle.

Waka Kotahi position regarding these responses – Waka Kotahi policy is to consider the suitability of tolling for all new roads it is responsible for. Based on our assessments, Penlink is a suitable road for tolling to be used to generate revenue to cover the costs associated with the maintenance and operation of the road. While a large proportion of submitters do not support our proposal to toll Penlink (or tolling in general), we consider there is a strong user pays basis for tolling of Penlink. Tolling Penlink would help to reduce pressure on the NLTF. The secondary benefits that tolling offers to the Government's strategic priorities for transport (i.e. better travel options and climate changes) as well as the network benefits for Penlink and existing roads are additional reasons in support of tolling.

Annex 1: Changes to the design and operation of Penlink:

Theme	Waka Kotahi response
Make Penlink a 3 or 4 lane road	- Traffic modelling shows that, with tolling applied, the demand only justifies building 2 lanes. - The project is future proofed to provide additional capacity if required, particularly for public transport.
Consider providing less connections to Penlink to aid the flow of traffic	- Fewer connections do not improve the traffic flow. Connections for Penlink have been set out in Notice of Requirements and Environment Court decision.
Install a bus/T2 transit lane along the shoulder lane	- With tolling, we are providing for bus/T2 transit at each end of Penlink as they are the only places where there would be any benefit for these vehicles (i.e. speeds along Penlink will be good for all vehicles)
Consider design mitigations to reduce congestion where Penlink and Whangaparāoa Road meet, such as installing a roundabout	- The Notice of Requirements requires traffic signals at this location and they have been designed to reduce congestion as much as possible.
Incorporate safety mechanisms such as speed cameras and central and side barriers	- Central and side barriers are included in the design.
Investigate a northern on-ramp from Redvale to mitigate further congestion at Silverdale	- North facing ramps at Redvale will be incorporated as Dairy Flat develops. The main flows are between Whangaparāoa and the south, not Whangaparāoa and the north.
Engage developers and Auckland Transport to ensure Penlink's construction does not delay Dairy Flat/Pine Valley intersection road corridor improvements	- Noted.
Consider providing a connection to Penlink to/from Wilks Road	- Development of Dairy Flats supporting growth area includes consideration of ramps between Wilks Road and SH1
Nearby developments (i.e. Silverdale, Millwater, Milldale) will benefit from Penlink and be able to access SH1 with less congestion and those road users do not have to pay a toll	- Noted. Tolls only apply to new roads.
Inequity in making the Redvale ramps the only tolled motorway ramps in New Zealand, particularly given they will be used by many motorists who do not wish to travel on Penlink. (NZAA)	- There will be appropriate signage to identify that tolls will be payable on the off-ramp (those approaching the on ramp will already be on Penlink so should be aware of the toll point approaching with supporting signage). - There is the opportunity to reverse the charge when there is a mistake (i.e. system

	recognises that someone gets off and then on again in short period of time).
Consider design changes to avoid congestion when the road opens, particularly at the western end where Silverdale, Milldale and Millwater developments contribute significantly to current congestion issues. Believes this congestion is due solely to growth in these development areas rather than demand for Penlink.	- Penlink will be reducing traffic through Silverdale and along Hibiscus Coast Highway which provides for growth in those surrounding areas.
Would like to see the tolling system designed to maximise the number of trips that can be made safely and efficiently on Penlink	- Primary objective is to recover the operations and maintenance costs for Penlink. The tolling system is being designed to maximise the number of trips that can be made safely and efficiently on Penlink.
Waka Kotahi should bring forward construction of a full diamond interchange with State Highway (from 2038) together with completed access from the interchange to the Dairy Flat area to help alleviate these congestion issues from the start of this project	- Construction of a full diamond interchange with the State highway will be undertaken in the supporting growth alliance when required

Waka Kotahi position regarding these responses – These suggested changes are outside the scope of our consultation (i.e. not in relation to the proposed tolling scheme).