

EA to Board to insert

INVESTMENT AND OPERATIONS BOARD COMMITTEE PAPER

Paper no:	[EA to Board to insert]
Meeting date:	2 March 2017
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Committee function:	Significant planning, investment and operational matters
Subject:	Tolling for the <small>Out of scope of this request</small> Transmission Gully, <small>Out of scope of this request</small> projects

This paper reports on the tolling assessments undertaken and indicates the next steps

- The NZ Transport Agency assess all new state highway links to determine their suitability for tolling
- These assessments have found that 4 schemes (the [redacted], Transmission Gully, [redacted]) meet the criteria for tolling as far as can be determined at this stage (as outlined in Attachment One)
- The key issue facing the Transport Agency is understanding how tolling fits with the way forward for land transport pricing and funding, and whether this is an avenue that the Transport Agency should be pursuing
- The next step is to discuss with the Ministry of Transport how tolling would fit with the [redacted] about to commence and clarify the future direction for transport pricing and funding

The NZ Transport Agency Board has previously made a number of key decisions on tolling ...

- In March 2013 the Transport Agency Board agreed that [*Board paper 2013/03/0713 refers*]:
 - The purpose of tolling suitable State highway links can be either (1) to advance the project through toll-funded borrowing (the original purpose) and/or (2) to raise additional land transport revenue
 - From 1 January 2013 all State highway improvements that create new roading links would be evaluated against an agreed set of criteria to determine their suitability for tolling, and, if suitable, would be recommended for tolling
- In October 2014 the Board [*Board paper 2013/10/0868 refers*]:
 - Endorsed toll pricing principles (set out in the following slide), but noted that there is tension between the objectives of the individual principles and that the balance between these needs to be addressed in relation to any specific tolling proposal
 - Noted that these were interim principles and that more work was needed to finalise the principles and ensure they aligned with the wider investment landscape

The Transport Agency's principles for setting toll prices are ...

Principle	Explanation
1. Toll prices should preserve the project's investment outcomes	<p>The diversion of traffic off the road created by a toll price is the key driver of the impacts of the toll on the project outcomes - some level of diversion is an unavoidable consequence of tolling</p> <p>The Transport Agency must decide how consequential the diversion for a particular road is and, based on this, how much diversion is tolerable taking into account the other benefits of tolling (this involves finding a balancing point between principles 1, 2, 3 and 4)</p>
2. Toll prices should reflect the underlying costs	<p>Prices that reflect the cost of provision of the transport service should encourage efficient investment decisions and efficient usage decisions</p> <p>Prices should, as closely as possible and practicable, reflect the cost to the Transport Agency of providing the service, and recover the costs to which they relate</p> <p>Toll prices should maintain their cost-reflectivity over time.</p>
3. Toll prices should reflect the value proposition to the user	<p>Prices should be set according to what customers are willing to pay for the value that they receive, recognising that value can differ by customer, by location and by time</p>
4. Toll prices should consider how they can influence smart travel choices	<p>Efficient pricing is the fundamental tool for influencing efficient consumption choices and this also applies to transport</p> <p>A toll price can also have positive benefits for the surrounding network by influencing travel choices (eg a discounted night toll might lower diversion, reducing the number of heavy commercial vehicles on local roads)</p>

In May 2016 the Board noted the findings of the Tolling System Review ...

... undertaken by Martin Jenkins/Nous Group [*Board paper 2016/05/1017 refers*]

- The review found that, with the recent addition of the Tauranga Eastern Link and Takitimu Drive, the tolling operation was providing significantly better value for money, while the customer experience had also been significantly enhanced
- Increasing volumes were confirmed as a key lever to further improve operating results

In October 2016 the Board discussed the funding implications of the proposed 2019- 28 investment portfolio...

- Amongst other things the discussion paper noted that, prima facie, the Transport Agency's proposed programme exceeded the forecast revenue in the 2019-28 decade by close to \$3 billion (around 7% of forecast revenue) [*Board paper 2016/10/1071 refers*]
- Within this context tolling provides an extra source of raising land transport revenue, which can be reinvested in priority projects and outcomes
- Tolling can also be seen as step towards a modern road pricing system: it gets people used to paying as they travel, and paying extra for certain benefits
- Tolling does shape demand and can play a valuable transition role outside Auckland as New Zealand moves in the longer term to a customer centric responsive pricing system

Based on the toll policy there are currently three State Highway toll roads



The **Northern Gateway toll road** is a 7.5km motorway north of Auckland between Silverdale and Pūhoi, part of State Highway 1 - heading north, the toll road begins just before Ōrewa and ends after the Johnstone Hills near Pūhoi



Annual toll revenue
(incl. GST)
\$16.4m



The **Tauranga Eastern Link toll road** is a 15km tolled section of State Highway 2 running between the Domain Road interchange, near Pāpāmoa, and the Paengaroa roundabout (State Highway 2 and State Highway 33 to Whakatāne and Rotorua)



Annual toll revenue
(incl. GST)
\$7.0m



The **Takitimu Drive toll road**, formerly known as Route K Toll Road, is a 5km road that bypasses the Tauranga city centre and takes traffic from State Highway 29 to State Highway 2 in the direction of the Port of Tauranga and Mt Maunganui



Annual toll revenue
(incl. GST)
\$6.7m

The Transport Agency continues to screen new projects to identify further candidate tolling schemes

- In line with the Transport Agency's tolling policy, all new State highway projects are assessed, during development of the business case, against the toll criteria in the following slides to determine their suitability for tolling
- If the initial assessment identifies a project as suitable for tolling, a more comprehensive tolling proposal is developed, as well as a debt proposal if additional funding is required
- Once the candidate tolling scheme is fully developed, the Transport Agency can submit a request to the Ministers of Transport and Finance to seek an Order in Council to establish the new toll road

The criteria for recommending tolling of a State highway link are ...

	Criterion
1	<ul style="list-style-type: none">• Toll revenue must be used to contribute to the cost of planning, design, supervision, construction, maintenance, or operation of the new road (s 46(1) Land Transport Management Act)• An existing road can only be tolled if the section of existing road to be tolled is located near, and is physically and operationally integral to, the new road that tolling will be applied to, meaning only new roading connections can be tolled; this includes new additional lanes on an existing road (s48(2) Land Transport Management Act)• Toll revenues must be collected for use only to cover the costs of the new road
2	<ul style="list-style-type: none">• There must be a feasible, un-tolled, alternative route available to road users (s48(1)(d) Land Transport Management Act)
3	<ul style="list-style-type: none">• Adequate consultation has been carried out and there is likely to be an acceptable degree of support for a tolled road from affected communities in the region or regions (s48(1)(a)&(b) Land Transport Management Act)
4	<ul style="list-style-type: none">• The application of tolling is consistent with key project outcomes – this means tolling supports the key project outcomes (eg safety, network optimisation and/or travel time) that contribute to the value for money assessment of the project (compared to the project without a toll)• The requirement in s48(1)(e) of Land Transport Management Act is that the proposed tolling scheme must be acceptably efficient and effective <p style="text-align: right;">Continued ...</p>

The criteria for recommending tolling of a State highway link are ... continued

	Criterion
5	<ul style="list-style-type: none">Tolling should be able to provide net financial benefits and not result in the project's benefit-cost ratio falling below 1
6	<ul style="list-style-type: none">Tolling must be implemented in a cost-effective manner that is convenient to users. It is convenient and efficient for users to pay tolls. It is cost effective for the operator to collect tolls
7	<ul style="list-style-type: none">The tolling scheme would achieve the Government's priorities as set out in the Government Policy Statement on Land Transport
8	<ul style="list-style-type: none">The project is large enough in scale to be able to support the fixed costs of tolling
9	<ul style="list-style-type: none">The number of vehicles expected to use the road (and therefore pay the toll) more than covers the toll-collection costs
10	<ul style="list-style-type: none">The toll revenue makes a meaningful contribution to the road's construction costs (after deducting the operating and maintenance costs of the road and the tolling mechanisms)
11	<ul style="list-style-type: none">It is physically or practically possible to charge tolls

Four projects are currently being assessed for suitability of tolling

- Out of scope of this request
[Redacted]
- **Transmission Gully** – The Wellington Gateway Partnership is a public private partnership that is building a 27km four-lane median-divided motorway from MacKays to Linden through Transmission Gully near Wellington (the aim is to have the motorway open for traffic by 2020)
- Out of scope of this request
[Redacted]
- Out of scope of this request
[Redacted]

An analysis of each of these projects against the tolling criteria is contained in Attachment One to this paper, which supports further consideration being given to tolling each project

Early analysis shows an estimated \$28m annual revenue could be raised by the candidate tolling schemes

- Early analysis against the toll criteria suggests that:
 - As far as can be determined at this stage, all four candidate tolling schemes comply with the tolling criteria
 - Tolling all four projects could raise more than \$28 million additional land transport revenue per year
 - The revenue is anticipated to increase over time given expected traffic and economic growth
 - This additional revenue is comparable to the total revenue generated by the three currently operational toll roads
- Further investigations are required to confirm how best to hypothecate funding for each project, the details of each tolling scheme and the level of community support
- It is recommended that the Transport Agency continues with further investigations into potentially tolling these four State highway links

The reason for tolling the candidate schemes is to raise additional revenue

- The three existing toll roads were all advanced through toll-funded borrowing and tolls will be removed on repayment of the debt
- With the exception of Out of scope of this request (which is still at the detailed business case stage), the remaining three potential tolling schemes have funding approved for implementation via the National Land Transport Programme
- This means the reasons for tolling these candidate schemes would be to raise additional land transport revenue, as per the Transport Agency's current tolling policy
- This additional revenue stream would increase the likelihood of these projects being completed successfully, especially given risks around decreasing revenues from existing funding streams such as fuel excise duty and road user charges
- The challenge would be how to hypothecate the revenue to each project

Further investigations would confirm how best to hypothecate the revenue to each project

- For the two projects being progressed Out of Scope (Transmission Gully Out of scope of this request)
 - Tolling could reduce the impact of the availability payments on the National Land Transport Programme over 25 years
 - Those payments are unaffected by changes in the use of the roads and the Transport Agency would be entitled to all the toll revenue
- Out of scope of this request
 - Out of scope of this request
 - Out of scope of this request
- Further investigation is needed to confirm the exact contribution tolling would make to each project, as well as how long any tolls should be levied for

Further investigations are required to confirm the details of each tolling scheme

- Further investigations are required to confirm the toll prices and revenue forecasts for each project, including any proposed discounts or reduced tolls for on/off-ramps
- These investigations would involve talking to a selection of the public and key stakeholders about potentially tolling the projects
- **Out of scope of this request** Transmission Gully **Out of scope of this request** projects are currently under construction, meaning that delays with further investigations might risk the Transport Agency forgoing the opportunity to toll those links
- In relation to the Transmission Gully project's current construction schedule, it has been identified that an initial study would need to proceed between March 2017 and June 2017, to allow for public consultation after the general election and (if it was decided to toll the route) sufficient time to design and construct the tolling points ahead of the project's scheduled opening
- **Out of scope of this request**
Out of scope of this request study being undertaken for Transmission Gully

Further investigations would confirm the level of public support for each tolling scheme

- If further investigations continued to support tolling, then broader public consultation on each tolling proposal might be required in order to confirm an acceptable level of support from the affected community (the legal requirement)
- Public consultation is one of the last steps and would only be undertaken once a tolling proposal had been finalised and the public messages and reasons for the proposing tolling had been agreed by the Board
- Assuming that public consultation confirmed an acceptable level of support for tolling, the Transport Agency might then request the Ministers of Transport and Finance to seek an Order in Council for the new toll road(s)
- The Ministers might decide to recommend to the Governor General that additional conditions be imposed on any road tolling schemes, such as specific Transport Agency reporting requirements, as they have for the three of existing toll roads

Risks include public support and alignment with future strategy

- Further investigations might raise stakeholder and wider public awareness around tolling



Section 9(2)(g)(i)



- To mitigate this the communications plans for the candidate schemes would identify that:
 - No decision on tolling has been made
 - Further investigations are needed to collect valuable information
 - The public would have an opportunity to get involved during consultation

There is one attachment ...

- **Attachment One** – The current assessment of candidate tolling schemes against the tolling criteria

Attachment One: Current assessment of candidate tolling schemes against the tolling criteria

State highway link	1. Is it a new road, or new lane?	2. Is there a free alternative available?	3. Is there community support?	4. Does tolling support the project outcomes?
Out of scope of this request	[Redacted]	[Redacted]	To be confirmed as part of further investigations through public consultation	This would need to be confirmed as part of further investigations
Transmission Gully	A new road connection	Yes, existing SH1 coastal route		
Out of scope of this request	[Redacted]	[Redacted]		
Out of scope of this request	[Redacted]	[Redacted]		

Continued ...

Current assessment of candidate tolling schemes against the tolling criteria continued

State highway link	5. Does the project's BCR remain above 1 after tolling?	6. Can tolling be implemented in a cost effective manner?
Out of scope of this request	[Redacted]	<p>Yes, the current toll operating system was set up to process transactions from all New Zealand toll roads</p> <p>The recent Martin Jenkins/ Nous Group review confirmed the system can include these potential tolling schemes with minimal investment in tolling software and back office systems</p> <p style="text-align: right;">Continued ...</p>
Transmission Gully	Un-tolled BCR: 1.6 Tolled BCR: 1.1	
Out of scope of this request	[Redacted]	
Out of scope of this request	[Redacted]	

Current assessment of candidate tolling schemes against the tolling criteria continued

State highway link	7. Is the tolling scheme aligned to the Government Policy statement ?	8. Is the project large enough to support tolling?	9. Do the number of vehicles cover the toll-collection costs?
Out of scope of this request	Out of scope of this request	Out of scope of this request	<p>To cover the costs of the on-going administration of toll trips, 70c per trip is charged as part of each toll (the transaction charge)</p> <p>The recent Martin Jenkins/ Nous Group review identified that adding more toll roads would likely reduce the per trip cost to between 66c - 37c (depending on toll roads implemented)</p> <p style="text-align: right;">Continued ...</p>
Transmission Gully	Public private partnership awarded in July 2014 <i>[Board paper 2014/07/0833 refers]</i>	\$852 million project	<p>To cover the costs of the on-going administration of toll trips, 70c per trip is charged as part of each toll (the transaction charge)</p> <p>The recent Martin Jenkins/ Nous Group review identified that adding more toll roads would likely reduce the per trip cost to between 66c - 37c (depending on toll roads implemented)</p> <p style="text-align: right;">Continued ...</p>
Out of scope of this request	Out of scope of this request	Out of scope of this request	<p>To cover the costs of the on-going administration of toll trips, 70c per trip is charged as part of each toll (the transaction charge)</p> <p>The recent Martin Jenkins/ Nous Group review identified that adding more toll roads would likely reduce the per trip cost to between 66c - 37c (depending on toll roads implemented)</p> <p style="text-align: right;">Continued ...</p>

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Current assessment of candidate tolling schemes against tolling criteria continued

State Highway Link	10. Does toll revenue make a meaningful contribution?		11. Is it practically possible to charge tolls?
	Possible tolls (\$2016)	Possible revenue at opening (\$2016)	
Out of scope of this request	Out of scope of this request		Yes, implementing a toll road similar to Takitimu Drive toll road would cost approx. \$8.5 million, which could be included in the capital cost of each project
Transmission Gully	 \$1.50  \$1.50  \$3.00 <small>One way</small>	About \$3.5 million per year	
Out of scope of this request	Out of scope of this request		