Regulatory Impact Statement
Tauranga Eastern Link: Tolling and borrowing proposal

Agency disclosure statement

1. This Regulatory Impact Statement (RIS) has been prepared by the Ministry of Transport (the Ministry).

2. It provides an analysis of options to advance the construction of the Tauranga Eastern Link (TEL) in order to progress the Roads of National Significance programme (RoNS). The RoNS represent seven routes that the government feels are essential to improve New Zealand's economic productivity and growth.

3. The analysis in this Regulatory Impact Statement is based on cost-benefit analysis that was included in the New Zealand Transport Agency's (NZTA) business case.

4. The direct benefits that were considered as part of the business case included reduced travel times, reduced congestion costs, reduced vehicle operating costs, increased reliability of the new route, increased safety and reduced CO_2 emissions. The base-line analysis also considered agglomeration economies.

5. Other potential indirect benefits were not included as part of the cost-benefit analysis.

6. The costs to road users are toll charges estimated to be $2 for light vehicles and $5 for heavy vehicles (in 2008 dollars plus consumer price index adjustment). Users may be subject to additional administrative charges, dependent on the payment option chosen and how promptly tolls are paid.

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Status quo and problem definition

Status quo

7. The government identified seven routes that it believes require priority treatment as they support continued economic growth in New Zealand. These routes were identified in May 2009 and are known as the Roads of National Significance (RoNS).

8. One of those RoNS is the Tauranga Eastern Link (TEL), a proposed four-lane highway to bypass the current State Highway 2 (SH2), which runs between Te Maunga and Paengaroa, via Te Puke.

9. Currently, 21,000 vehicles use SH2 each day between Baypark Stadium at Te Maunga and Te Puke**.** The New Zealand Road Safety Assessment Programme (KiwiRAP) has ranked SH2 – Te Maunga to Paengaroa – as the second worst in New Zealand, per kilometre of State highway, for fatal and serious injury crashes. Further problems associated with the existing SH2 include:

    9.1. deteriorating freight access
    9.2. growing congestion and travel delays, particularly at peak times
    9.3. restrictions on implementation of the sub region's managed growth strategy
    9.4. inadequate wider network capacity to support land use development in Papamoa East
    9.5. unacceptable impacts of heavy traffic on the communities that SH2 passes through.

Problem definition

10. The Eastern Bay of Plenty sub region is one of the fastest growing regions in New Zealand with population predicted to double in the next 30 years. In addition, the Port of Tauranga is New Zealand's biggest export port. In the coming years, the transport infrastructure in the region will not be adequate to deal with this growth.

11. The construction of TEL will help to cater to the predicted growth and help to solve or alleviate the identified, immediate problems with the existing SH2.

12. The government identified all seven RoNS in its most recent Government Policy Statement (GPS). Under the funding programme for State highway construction, work on the TEL would not begin for 5–7 years if funded from the National Land Transport Fund (NLTF). The next GPS, due for release by 30 June 2012, will signal the government's intentions regarding funding of the RoNS programme.

13. Given that the TEL has been identified as one of the RoNS and will address existing problems with SH2, the advancement of its construction is seen as a priority.

14. If the current levels of NLTF funding remain unchanged, then the advancement of TEL will depend on finding additional funding from an alternative source.

Objectives:

15. The objectives of constructing TEL are to:

- reduce the congestion on and improve the safety characteristics of the existing Eastern Bay of Plenty state highway route; and
- encourage the continued economic development of the Bay of Plenty region.

16. The objectives of advancing the construction are to:

- advance the construction of the RoNS; and
- bring forward the benefits of TEL by 5–7 years.

Background

Prioritisation of projects by the NZTA

17. In May 2009, the government released its Government Policy Statement on Land Transport Funding 2009/10 – 2018/19. This was used to both guide and direct the NZTA in its prioritisation of activities for inclusion in the 2009/12 National Land Transport Programme (NLTP).

18. All proposed activities are assessed against the criteria of 'strategic fit', 'effectiveness' and 'economic efficiency' to determine their relative priority for funding. Projects with a high rating in each of strategic fit, effectiveness and economic efficiency proceed first in the programme.

19. In the case of TEL it is rated high for strategic fit, medium for effectiveness and low for economic efficiency. As a result it was prioritised 45th in the NLTP.

20. Prioritisation provides both an indication of the importance the activity has relative to other activities within the NLTP, and an indication of those activities that are of insufficient priority to warrant further attention or progress.

Programming of projects by the NZTA

21. Once a priority has been established, the activity is then allocated within the programme. This programming exercise takes into consideration a number of factors including; how well developed is the activity within its life-cycle, what are the resource requirements of the activity, both external and internal, what is the risk profile of the activity and what are the demands of competing activities within the portfolio. Progress of all activities within the portfolio is also constrained by the total funding available to the programme.

22. Projects are thus programmed to ensure higher priority activities are less constrained by available funding than lower priority activities.

23. The programming logic employed is based on the following assumptions:

    - Priorities 1 to 12 are able to progress as dictated by individual project development timeframes and are unconstrained by funding availability.

    - Priorities 12 to 60 are programmed with the activity start determined not just by readiness but by available funding.

    - Priorities 61 to 72 progress as much as they can within the available funding, however this results in only partial achievement of projects.

24. The current NLTP position is that projects 1 to 12, and those projects not requiring funds in the period 2012/13–2014/15, are able to proceed unconstrained within the 10 year period (2009/10 to 2018/19). TEL, at priority 45, requires funds at a point where the NLTF has been exceeded for the year by higher priority activities or those that have already been committed to. This results in a need to defer the construction of the project to a point at which there are sufficient funds within the programme to accommodate it (some 5 years later than the project is ready to proceed).

Advancement of projects by the NZTA

25. The TEL project was tested against the NZTA's Advancement Policy as part of the initial toll investigation work to ensure that the project was viable for further assessment as a tolled project. The advancement test is a theoretical funding test that is carried out to screen potential toll projects to identify those worth investigating further.

26. The advancement test is based on drawing NLTP funding at the amount and time allocated as equity to repay the capital debt. The theoretical advancement test model assumes that full construction costs and interest are drawn as debt to construct the project at its earliest possible start date. This is then repaid by available NLTP funding from the programme at the date available, with the outstanding debt (including interest) being repaid by net toll revenue.

27. The advancement model tests whether the forecast toll revenue can be used to repay the outstanding debt and interest costs within the NZTA's set maximum repayment period of 35 years (that is, by 2050 for TEL). The base case for TEL passed this test, with the model indicating the debt could be repaid by 2044. Detailed financial modelling was therefore undertaken.

28. Although the low revenue scenario and two of the sensitivity test options did not meet the test, the NZTA Board agreed that since this road was listed as a RoNS, it should be progressed for further detailed analysis to determine the viability of tolling to supplement NZTA funding.

Role of tolling

29. Even where project-specific borrowing is not being repaid, there may be reasons to pursue tolling on a case-by-case basis, as it:

- brings additional revenue into the system (albeit at some cost);
- is a way of having some users more directly pay for the infrastructure they use than under the current system;
- gets road users used to paying for roads in different ways;
- spreads the cost of the tolling system over a wider group of users; and
- helps with demand management.

Regulatory Impact Analysis

30. The two options that were available to the NZTA are as follows:

- An untolled road with construction starting in 2017.
- A tolled road with construction starting in 2010/11.

Non–regulatory option: An untolled road with construction starting in 2017

31. If the project followed the normal prioritisation as set out in the NZTA's State Highway Plan, construction of the TEL will not begin for an estimated 5–7 years. In the NZTA business case this sees construction beginning in 2017.

32. As with other State highways, all funding would come from the NLTF. Therefore there would be no need to borrow additional funds.

33. While this would be the cheaper option (due to discounting of the cost over the period of the delay), and would have no impact on other transport priorities, it was not considered the best option as it would not help to advance the construction of the RoNS and it would result in the potential benefits of TEL being delayed 5–7 years.

Regulatory option: A tolled road with construction starting in 2010/11

34. Borrowing to be repaid by tolling has been identified as a way of generating sufficient revenue to advance the construction of the TEL by 5–7 years. TEL is the only State highway suitable for tolling that is at a stage where it could make use of tolling to allow the road to proceed quickly[1].

35. Following consultation with its community, the Bay of Plenty Regional Transport Committee requested that the NZTA investigate the possibility

[1] While the Cabinet paper recommends that the framework for considering future toll roads should be reconsidered, future projects that the NZTA has identified as potential candidates for tolling include the Wellington Northern Corridor (including Transmission Gully) and Puhoi to Wellsford.

of advancing the construction of the TEL through borrowing to be repaid by tolling.

36. If the road is to proceed as a toll road, it will be necessary for the Minister of Transport to recommend that the Governor-General make an Order in Council (OIC), allowing the proposed TEL project to be tolled pursuant to the Land Transport Management Act 2003 (the Act).

37. Section 48 of the Act specifies the matters that the Minister of Transport must take into account, or be satisfied about, before recommending an OIC. These matters include:

- how the project assists economic development, assists safety and personal security, and improves access and mobility;
- how the project protects and promotes public health and ensures environmental sustainability;
- the alternatives to the toll road proposal that were considered;
- any current national land transport strategy and the current Government Policy Statement;
- the relevant Regional Land Transport Strategy and the National Energy Efficiency and Conservation Strategy.

38. The analysis of these matters is included in the NZTA's toll proposal. This analysis has been examined by Ministry of Transport officials who are satisfied that it is robust.

39. The costs to road users are toll charges estimated to be $2 for light vehicles and $5 for heavy vehicles (in 2008 dollars plus consumer price index adjustment). Users may be subject to additional administrative charges, dependent on the payment option chosen and whether tolls are paid on time.

40. The NZTA will be responsible for construction of the new road, including the tolling system. In addition the NZTA will be responsible for operating and maintaining the tolling system.

41. The TEL will make use of the existing centrally managed electronic toll collection system that was put in place following the decision to toll the Northern Gateway Toll Road. The new TEL toll road will help to contribute to the costs of this system.

42. One of the major risks of the tolling proposal is the possibility of a shortfall in TEL debt repayment due to lower than expected toll revenue. In that event, the NZTA would be responsible for meeting the shortfall through planned risk mitigation measures or through additional funding from the NLTF.

Cost-benefit analysis

43. The following is based on cost-benefit analysis that was included in the NZTA's business case.

44. The direct benefits that were considered included reduced travel times, reduced congestion costs, reduced vehicle operating costs, increased reliability of the new route, increased safety and reduced CO_2 emissions. The base-line analysis also considers agglomeration economies[2].

45. While the analysis that the NZTA carried out focused on the direct benefits of the project, possible indirect benefits which were omitted include:

    - the reduced prices and increased output that accrue to the customers of the firms affected by the transport improvement;
    - wider labour market effects, including:
        - more people joining the labour market
        - more people moving or working in more productive (higher paying) jobs, and
        - working longer hours in current job;
    - increased competition from a transport improvement as better transport can, at least in theory, break down elements of monopoly or oligopoly.

46. The costs that were taken into account included the construction cost and operating costs of the road. In the case of the toll road, the TEL will be subject to additional tolling infrastructure costs.

[2] Agglomeration benefits are the benefits that firms obtain when locating near each other ('agglomerating').

47. The table below sets out the costs and direct benefits that were taken into account when calculating the benefit cost ratio (BCR). In general, the benefits are greater if the road is advanced through tolling, while the costs of the delayed road are lower due to discounting rates over the delay period.

	Untolled (construction delayed)	Tolled
Benefit	$M	$M
Travel time	$320.9	$417.6
Congestion costs	$99.2	$135.7
Reliability	$19.3	$25.1
Vehicle operating costs	$31.2	$31.2
Safety benefits	$2.3	$13.9
CO_2	$1.2	$1.2
Total direct benefits	$474.1	$624.8
Costs		
Construction and operating costs	$250.0	$431.2
Toll infrastructure costs	$0.0	$11.9
Toll operating costs	$0.0	$14.8
Total Costs	$250.0[3]	$457.9

48. As well as taking into account agglomeration impacts (estimated at $29.5 million in the untolled/delayed case and $50.5 million in the tolled case), the NZTA is undertaking more research and investigation on understanding and attributing wider economic activity and development impacts to major capital works projects. In the case of TEL, work undertaken by Beca Consultants estimated these benefits as having a net present value of $74.0 million in the case of construction commencing in 7 years untolled, and $126.9 million in the tolled case.

[3] This figure is less than the cost of construction through advancement due to an assumed discounting rate of 8 percent over 6 years.

49. The table below summarises the results of the cost-benefit analysis that was carried out by the NZTA.

		Untolled (delayed)	Tolled (no delay)
Excluding agglomeration benefits	BCR_N[4]	1.9	1.4
	BCR_G[5]	2.0	1.6
Including agglomeration benefits	BCR_N	2.0	1.5
	BCR_G	2.2	1.7
Including wider economic benefits	BCR_N	2.3	1.8
	BCR_N	2.5	2.1

Conclusions and recommendations

50. The major benefits of the road include travel time savings, congestion reduction, vehicle operating savings, and reduced CO_2 emissions. The major benefit of tolling is to bring forward the delivery of these benefits by 5–7 years.

51. The existing SH2 route will remain as a free, feasible alternative route. Lower traffic volumes on SH2 will create further opportunities to improve the safety characteristics of this route, so that even those who choose not to use the TEL will benefit from its existence.

52. One risk of the tolling proposal is the possibility of a shortfall in TEL debt repayment due to lower than expected toll revenue. The NZTA would need to address the situation through planned risk mitigation measures or additional funding from the NLTF. This could potentially compromise the programming and prioritisation of the NZTA's other projects and, in turn, impact on the government's transport objectives.

53. While the option to advance the TEL on the basis of tolling to repay borrowing had a lower benefit cost ratio than delaying the construction, the NZTA considered the indirect benefits not included in the benefit cost ratio provide a sufficient justification for advancing the project through the use of tolling. In addition, advancement of the TEL will help to progress the construction of the RoNS.

54. In announcing the first tranche of RoNS, the Minister of Transport singled out the Tauranga Eastern Corridor as crucial to supporting growth in the Bay of Plenty – one of New Zealand's fastest growing regions – and providing freight access from across the region to Tauranga.

55. The Ministry of Transport therefore recommends that the construction of the TEL be advanced through the use of tolling as a way to repay associated borrowing.

[4] BCR_N represents a national benefit cost ratio, which indicates the project's Net Present Value is positive if the BCR exceeds 1.

[5] BCR_G is a leverage-adjusted BCR that represents the ratio of the social value of the project to the governments constrained funding resources.

Consultation

56. Extensive public consultation (including with local government and iwi) has been completed by the NZTA on the project. Consultation was undertaken through public and targeted mail-outs, media advertising, public information, manned and unmanned displays, stakeholder presentations and meetings with local iwi. A total of 3,539 submissions were received. Of these, 94 percent expressed support or conditional support, while 6 percent did not support the proposal.

57. In terms of policy development, the NZTA, Treasury and the Ministry of Transport are working collaboratively. The Department of the Prime Minister and Cabinet will also be consulted prior to finalising the Cabinet Paper.

Implementation and Monitoring

58. Subject to Cabinet agreement, the Minister of Transport will recommend that the Governor-General make an Order in Council (OIC), allowing the proposed TEL project to be tolled pursuant to the Land Transport Management Act 2003.

59. The NZTA is the public road controlling authority, the toll operator, and the enforcement authority for the road tolling scheme and as such will be responsible for the implementation of the tolling scheme.

60. In order to monitor the performance of the TEL, the OIC will allow the Minister of Transport to determine the level of reporting that the NZTA will be required to meet.