

BOARD PAPER

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Meeting date:	8 May 2015
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Recommended by:	Dave Brash, Group Manager, Planning & Investment
Board function:	Setting sector and organisational direction
Subject:	2015-18 NLTP development – improvement activities and other programmes



PURPOSE

1. To engage with the Board on proposed improvement activities and the road policing programme for the 2015-18 National Land Transport Programme (NLTP) and to gain feedback and direction on these. This is the critical shaping discussion with the Board and leads into its meeting to consider adoption of the NLTP on 19 June 2015.



SUMMARY

2. Following on from the Board's endorsement in April of around \$4 billion from the National Land Transport Fund (NLTF) as indicative investment levels for programmed activities, we continue to develop the 2015-18 NLTP focussing on the remaining \$6.5 billion investment in improvement activities and other programmes.
3. We focus discussion in this paper on issues that may impact on improvement activities and road policing programming in the 2015-18 NLTP, being:
 - Optimising the NLTP to achieve a balance between economic growth and productivity and safety outcomes. We are intending to invest a similar proportion from the NLTF in the safety outcome of reducing deaths and serious injuries as we did in the 2012-15 NLTP, i.e. around 22% of the spend in operational activity classes. We consider this is consistent with the intent of the 2015 Government Policy Statement on land transport (GPS).
 - Prioritising for value for money in setting investment thresholds based on the prioritisation order under our Investment Assessment Framework, which is a key means of giving effect to the GPS. Our preferred approach is to set investment thresholds by activity class, rather

than have a single threshold across all classes, as this enables NLTF investment within GPS funding ranges and should deliver the outcomes sought by the GPS.

- Managing the impact of constrained local funding, which we anticipate will be felt mostly in the local road improvements activity class. While we will be able to allocate NLTF funding within the GPS funding range, there is a risk that we will not be able to ensure expenditure is within the range. A number of risk mitigation measures are being planned and the recent announcement by Auckland Transport that it will make more funding available for transport should help to ease the pressure.
- Optimising the new Regional Improvements activity class when we prioritise investment amongst roading improvement activity classes. Our recommended approach is to focus investment only in state highway projects, given the expected pressure on local funds, and at a generally lower priority order than for the State Highway Improvements activity class.

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RECOMMENDATION

4. That the New Zealand Transport Agency Board **receives** the Agency's report on issues that may impact on improvement activities and the road policing programme in the 2015-18 NLTP.



BACKGROUND

5. The timeline for development of the 2015-18 NLTP is shown in Attachment 1.
6. At the Board's 2 April 2015 meeting, it endorsed indicative investment levels, totalling around \$4 billion from the National Land Transport Fund (NLTF), for public transport services, road safety promotion, local road and state highway maintenance programmes (Board paper 15/04/0913 refers). This leaves around \$6.5 billion of NLTF funds to invest in improvement activities, road policing, emergency works response, and NLTP planning and management.
7. This paper discusses key investment issues relating mainly to improvement activities and road policing.



OPTIMISING ECONOMIC AND SAFETY OUTCOMES

8. The Government Policy Statement on Land Transport (GPS) sets out three strategic priorities: supporting economic growth and productivity, road safety and value for money.
9. We must give effect to the GPS, and do so by:
 - planning to land activity class investment levels within GPS funding ranges

- assessing and prioritising investment opportunities under our Investment Assessment Framework, which translates GPS priorities and results into an assessment and prioritisation framework
 - optimising the \$14.1b NLTP to deliver the outcomes sought by the GPS at best value for money (the right activities, at the right time and for the right cost).
10. For this discussion, outcomes delivered from our investment in land transport have been compressed into three types linked to GPS-2015 priorities:
- a) Economic growth and productivity – encompasses outcomes of: access to economic growth opportunities, better use of existing capacity, easing of congestion, more efficient freight supply chains, and journey time reliability.
 - b) Safety – outcome is reduction in deaths and serious injuries (DSIs) from road crashes.
 - c) Other outcomes – transport choice, positive health outcomes, reduced environmental effects, and a secure and resilient network.

A fuller discussion of these is provided in Attachment 2.

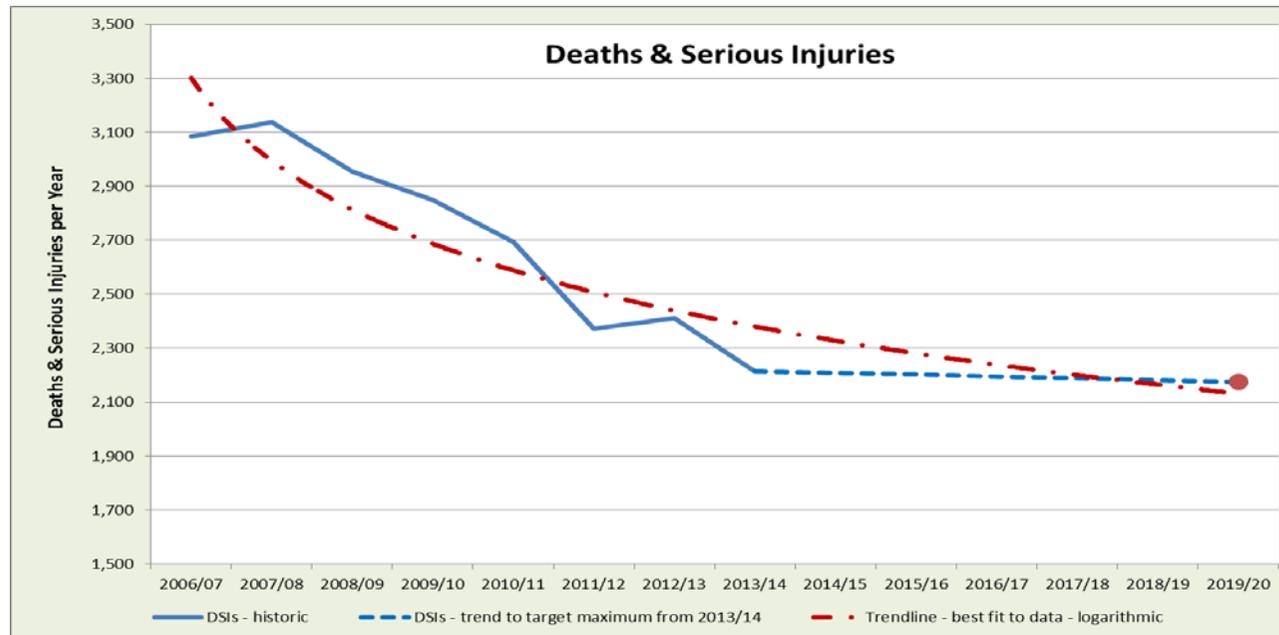
11. In considering our investment to achieve outcomes, we have taken a holistic view across the operational activity classes in the NLTP. We can quantify the contribution of programmes to outcomes, e.g. road maintenance, as well as improvement activities. Quantification of programmed activities is problematic as benefits are not identified in monetised terms as for improvements. There are also issues in quantifying benefits for the other outcomes, much of which arise from delivery of economic and safety outcomes. The diagram below provides a qualitative view of contributions to economic and safety outcomes.

Outcome type	State highway, Local road & Regional Improvements	State highway & Local road Maintenance	Public transport Services & Improvements	Walking & cycling Improvements	Road policing and Road safety promotion
Economic growth & productivity	High contribution	High contribution	High contribution	Moderate contribution	Supports – important in revenue protection
Safety	Moderate contribution, but critical to improving performance	High contribution – critical to holding current performance	Supports	Supports – but cyclists are over-represented in DSI statistics ¹	High contribution – critical to holding and improving performance

12. We have an emerging picture of the outcomes to be delivered by the NLTP. Once optimisation of improvement activities is complete, we will provide a firmer estimate of the proportion of proposed expenditure against safety and economic outcomes. For improvements, this will be mainly based on the split of benefits from project benefit and cost analysis. For programmes, the estimate largely will be based on judgement.
13. We will also provide the Board with quantified estimates of the outcomes generated from investment in improvement activities at its 19 June meeting. This will be in the form of reduced deaths and serious injuries and minutes of travel time saved across the entire programme and within some key journeys such as Auckland to Tauranga.

¹ The number of pedestrian deaths and serious injuries is higher than for cycling, but the DSI rate per hour of travel is much higher for cyclists.

14. A key issue for Board consideration is around the appropriate level of investment in safety versus economic growth and productivity across the NLTP. This is not a black and white trade-off. In many ways the outcomes are complementary; a reduction in DSIs contributes to the economy and while we may invest in a new state highway primarily for economic reasons, we build it in a way that enables safe use of the facility.
15. In our road safety strategy, we have set a target of reducing deaths and serious injuries to fewer than 2,175 by 2020. As shown in the following graph, there has been a reducing trend in DSIs over recent years. The rate of DSIs per billion vehicle kilometres travelled (VKT) has declined by around 29% over the same period. Bettering the target maximum over the next six years requires at least a further 2% reduction in DSIs on the 2013/14 figure, which appears attainable.



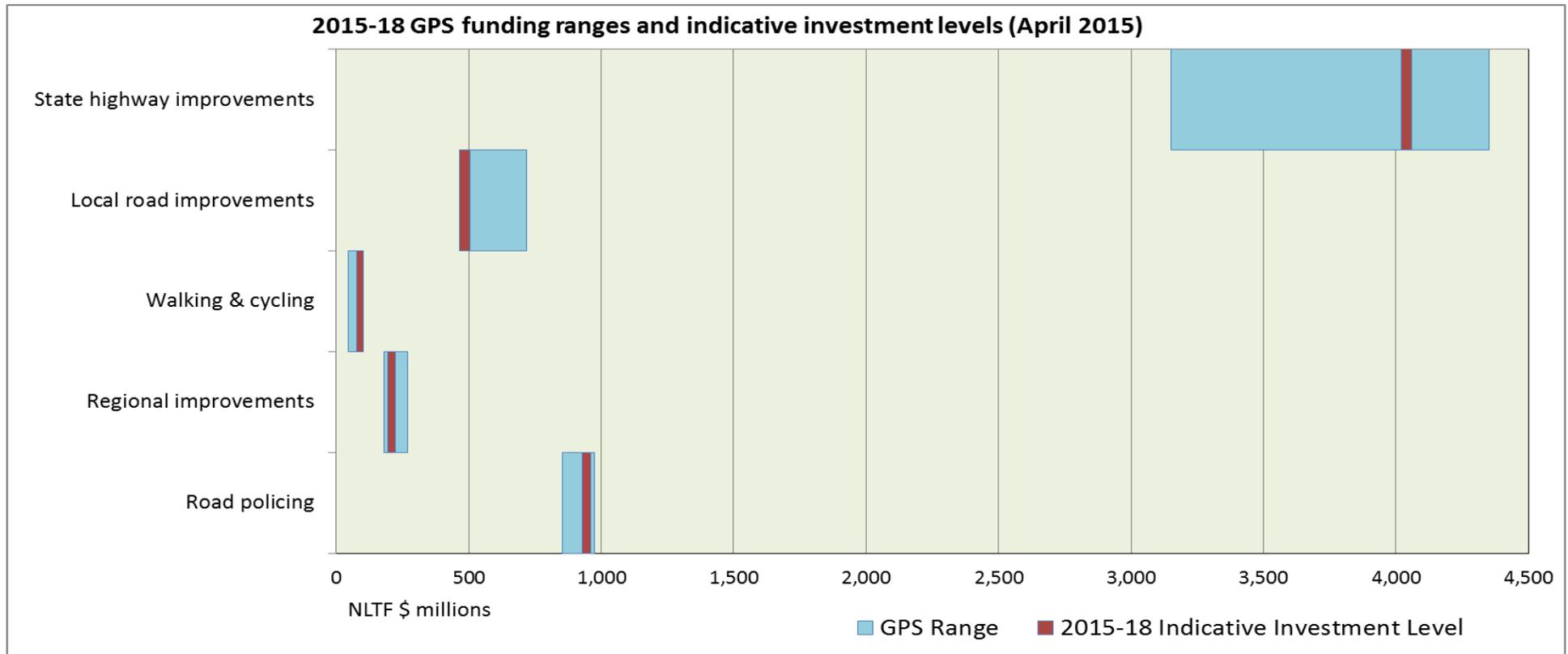
16. In developing the 2012-15 NLTP we were informed by the 2012 GPS, which stipulated ranges for safety-related expenditure for state highways and local roads. We developed scenarios around the balance between economic and safety outcomes for state highway improvements, discussed with the I&O Committee and Board in 2011. The Board endorsed a 'balanced to good safety' focus for investment into the discretionary elements of the state highway improvement programme (Board paper 11/08/0547 refers). This pointed to around 20% of state highway improvement expenditure outside of major commitments, such as the Roads of National Significance, being directed to safety.
17. The 2015 GPS does not stipulate such ranges and the ratio of economic to safety outcomes delivered by the NLTP is left with us to decide. The signals around delivery of outcomes from the current GPS have not changed markedly from those provided for the 2012 GPS. There is a strong push in both GPS documents to support economic growth and productivity, balanced by a need to continue investment in reducing deaths and serious injuries.
18. The midpoints of the expenditure ranges in the 2012 GPS implied that 10% to 15% of expenditure across operational activity classes would be safety related. We estimate that around 23% of NLTF expenditure in these classes will be directed to safety by the end of the current NLTP. Early indications are that roughly 22% in 2015-18 will be directed to safety outcomes.
19. Over time, we expect the balance to shift more to safety as large state highway commitments, focussed primarily, but not exclusively, on economic growth, are completed. The mix of benefits purchased will vary spatially, depending on the transport problems and opportunities we are addressing in a particular region or journey. As noted above, in June we will quantify the split between safety and economic benefits.
20. We do not recommend that you set a specific target proportion or level of spend toward safety for the 2015-18 NLTP. We propose to maintain a reasonably consistent level of spend on safety

between the two NLTPs. This provides an appropriate balance in the NLTP that is consistent with the 2015 GPS.



PRIORITISING FOR VALUE FOR MONEY

21. In August 2014 we engaged with you on the potential positioning of investment from the NLTF within the funding ranges set by the 2015-25 GPS. We also discussed some of the key issues anticipated for development of the 2015-18 NLTP.
22. The following graph focusses on improvement activities and the road policing programme, and shows our current view of the likely investment levels within GPS funding ranges. We will confirm these levels at your meeting of 19 June to adopt the 2015-18 NLTP.
23. Key changes in indicative investment levels from the August 2014 engagement are:
 - local road improvements moved from just below mid-point lower position toward the bottom of the GPS range, reflecting our view during NLTP development that local funding constraints will impact the level of investment in this activity class
 - walking and cycling moved from mid-point toward the top of the GPS range, which reflects the strong response to, and leverage from, the potential for Urban Cycleway Programme funding.



24. In August 2014, you agreed to changes to the Transport Agency's Investment Assessment Framework (IAF) to reflect the priorities and direction of the GPS and to improve its clarity and effectiveness (Board paper 14/08/0854 refers). The IAF is a key means by which we give effect to the GPS and achieve value for money.
25. When we develop an NLTP, we establish investment thresholds for improvement activities, based on the investment priority order under the IAF (see Attachment 3). This ensures we

focus funding on the highest priority projects in each activity class. Any approval to fund an activity with a priority order below the threshold is treated as an exception and the decision must be raised to the next level of delegation and noted in our quarterly report.

26. There are two approaches to setting the threshold:

a) Establish a single threshold across all relevant improvement activity classes:

- all improvements activities proposed for the NLTP are brought together, ranked by priority order, and then available funding is allocated to these starting at the highest priority and ending at the priority order at which the funding runs out, which then becomes the threshold (see example in Attachment 4)
- this threshold is then used to help set the investment level for each activity class, based on the cumulative funding at the threshold
- this was applied for the 2012-15 NLTP, where sufficient projects of high enough priority existed within each activity class to enable the funding to be allocated within the GPS funding range and to the level previously endorsed by the Board.

b) Establish different thresholds in each improvement activity class:

- we first test whether a single threshold, as set out above, is feasible and desirable, i.e. funding can be allocated within the GPS funding range and investment is sufficient to deliver the level of outcomes sought
- if not feasible, then for each activity class we set a target investment level based on the GPS funding range and relative impact of the class on achieving outcomes
- for each activity class, we collate the improvements proposed for the NLTP, rank them by priority order, and then allocate available funding down to the order at which the

funding runs out, which becomes the threshold for the activity class (see example in Attachment 4)

- this was applied for the 2009-12 NLTP, where insufficient projects of high enough priority existed within some activity classes to enable the funding to be allocated to the level previously endorsed by the Board under a single threshold approach.

27. Based on the proposals in draft Regional Land Transport Plans and GPS funding ranges, we consider that the second approach, (b) above, will need to be applied to give effect to the GPS and achieve value for money. A single threshold is likely to result in the improvement component of the NLTP being even more heavily weighted to state highway improvements, with a substantial risk of undershooting GPS funding ranges or not achieving desired outcomes in other activity classes. We will confirm this in our final optimisation of improvements in May.
28. The preferred approach (b) requires setting investment levels by activity classes in advance to ascertain thresholds, which is not as ideologically pure as applying a single threshold and deriving the investment levels from this. Pragmatically, we consider it the appropriate approach for the 2015-18 NLTP, and it does use the single threshold approach as a starting/reference point for setting activity class investment levels.
29. A key point of difference from the 2012-15 NLTP is that the IAF now excludes projects from prioritisation that are not well aligned to the GPS, or are not effective in achieving GPS results. Apart from a small number required to utilise remaining R funds in some regions, these projects will not be included in the NLTP. This means that nearly all projects included in the 2015-18 NLTP will be of reasonable priority. A lower investment threshold for an activity class that is under pressure to achieve the GPS funding range minimum will not mean investment in poor value for money projects.



LOCAL AND REGIONAL FUNDING PRESSURES

30. As discussed in Board paper 15/04/0913 on NLTP development decisions, an increase in the level of co-invested activities in the 2015-18 NLTP is required from 2012-15. Local authorities will need to find about \$350 million² (14%) more local share than in the previous NLTP to meet desired investment levels and give effect to the GPS. We believe this may be difficult to achieve and poses a risk that the NLTP may not be able to be delivered as planned.
31. Local authorities, in general, apply an investment hierarchy that is similar to ours; to invest to maintain and operate the existing network ahead of investing in new and improved infrastructure and services. This is based on sensible activity management principles.
32. We think it likely that they will prioritise road maintenance and public transport operations. We also consider that larger urban local authorities will prioritise public transport improvements and walking and cycling projects, especially given the opportunity presented by the Urban Cycleways Programme. This suggests that the local funding issue will come to a head in the Local Road Improvements activity class.
33. The 2015 GPS requires us to both allocate funding and achieve expenditure in a \$465 million to \$720 million range for local road improvements in the 2015-18 NLTP. Current bids received in Regional Land Transport Plans total around \$800 million, most of which will be included in the NLTP. Historically, between 50% and 60% of these bids will actually be brought forward as funding applications and spent in the three years, which equates to between \$400 million and

² This estimate takes a view that the Auckland Transport FAR adjustment arrangement, which spans the 2009-12 and 2012-15 NLTPs, is neutral, i.e. the increase in Auckland Transport's renewals FAR for 2012-15 under the arrangement is ignored. If the increase is included in the 2012-15 amounts, the extra local share to be found for the 2015-18 NLTP grows from around \$350 million to around \$400 million.

\$480 million. There is a risk that, while we can allocate sufficient funding to the activity class, we could undershoot the GPS minimum in expenditure.

34. The issue is exacerbated in the 2015-18 NLTP by:
- competing priorities for Auckland Transport diverting funds away from local road projects – 60% of the bids for the NLTP come from its programme. Following consultation on its long term plan, Auckland Council has announced a substantial increase in the funding it will make available to transport in 2015-18 (around \$223 million in NLTF terms). While not all of this relates to local road improvements, and will depend on Auckland Transport funding applications being progressed in a timely manner, we think it should go a long way to ease the pressure on the activity class
 - constraints on local funding as councils seek to limit rate increases, reduce debt or fund other priorities such as water infrastructure, already being evidenced in 2012-15 spend – typically, local road improvements spend has been around \$160 million per year, but in 2012-15, once the one-off Route K payment and Auckland Transport front-loading arrangement are deducted, expenditure is averaging only around \$120 million
 - an impact of the FAR Review to reduce the funding assistance rate for improvement activities, requiring an extra 8% of total expenditure in the NLTP to achieve the same level of NLTF spend as in 2012-15 – conversely, the higher FAR received for local road maintenance provides Approved Organisations more NLTF funds that can be used to offset the higher local share required for road improvements.
35. Apart from Auckland Transport advancing projects to utilise the additional Auckland Council funding during the NLTP, ways of mitigating the impact of constrained local funding include:
- having a lower investment threshold for Local Road Improvements than other activity classes

- maximising the opportunity for investment in local road improvements by avoiding diversion of local road projects to other activity classes, e.g. our plan for the new Regional Improvements activity class is that it comprises 100% state highway projects
 - continuing to encourage local authorities to advance road projects that provide value for money in the NLTP period, e.g. accelerated LED lighting renewals
 - enabling larger authorities to apply for advanced property purchases, where they have bought land for designated roading projects, e.g. Auckland Transport for its AMETI projects
 - front load NLTF funds for larger projects that represent good value for money by funding initially at a higher FAR, balanced by a higher local contribution later on – as put in place for the final stage of the Hamilton Ring Road programme.
36. Should we fail to achieve expenditure within the GPS range, we would need to approach the Minister during the NLTP to adjust the GPS range to a more realistic level. Provided we have used our best endeavours to allocate and spend within the GPS range, this is not bad from an investment perspective. It provides the opportunity for funds to be directed to investments in other activity classes that will make a good return and deliver GPS outcomes.
37. With the Auckland Council announcement, there is now a reasonable possibility that local funding will be more plentiful than we have been anticipating. Our response would be to target expenditure in Local Road Improvements above the bottom of the GPS funding range, e.g. \$20 million to \$40 million above, to provide some freeboard and reduce the risk of undershooting. If considerably more local funding became available, investment in the Regional Improvements activity class could become an option.
38. More local funding, and a higher spend in Local Roads and/or Regional Improvements activity classes, will reduce the amount of funding available for state highway improvements

investment, although the impact will be relatively small, e.g. \$20 million is 0.5% of the likely state highway expenditure in 2015-18.

IMPACT OF REGIONAL IMPROVEMENTS

39. Inclusion of the new Regional Improvements activity class in the GPS has created a more dynamic investment system. Roothing projects that meet the criteria, (non-metro, targeted to safety, freight, resilience and tourism outcomes), and were previously in state highway and local road activity classes, may be funded under this activity class. Each of the activity classes will likely have a different investment threshold, and our planning for this is illustrated in Attachment 5.
40. An alternative to that shown in Attachment 5 would be to invest in Regional Improvements of very high priority, e.g. RoNS projects in Kapiti and Manawatu. While not precluded by the GPS, we believe this would be contrary to the reasoning behind the establishment of this activity class. Instead, we recommend that investment be focussed on non-metro areas that do not have substantial national priority roading projects, such as RoNS.

ROAD POLICING PROGRAMME

Outcomes sought

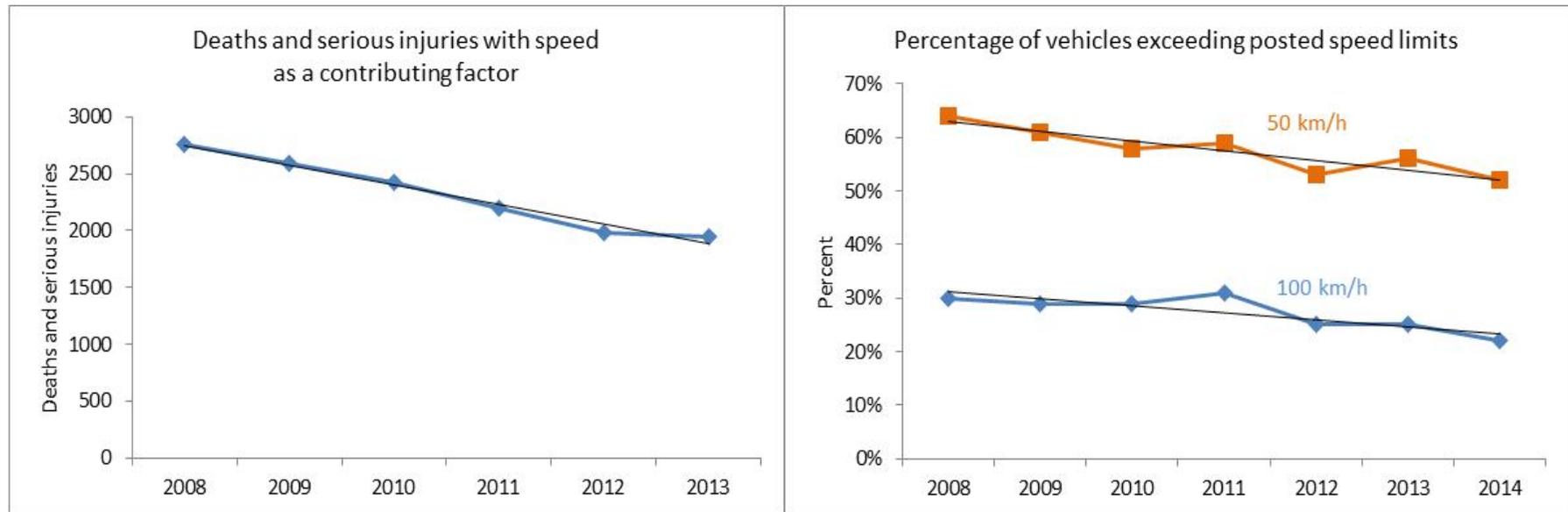
41. The investment priorities signalled through our Road Policing Investment Framework (RPIF) align with the government's Safer Journeys strategy and action plan, and are intended to give effect to the GPS road safety priority and results. As shown in Attachment 2, our investment in

the Road Policing Programme (RPP) contributes significantly to the first order outcome of a reduction in deaths and serious injuries. It also contributes to a secure and resilient network and more efficient freight supply chains, and supports the achievement of other outcomes.

42. NZ Police contributes to the GPS safety priority by encouraging compliance, deterring non-compliance, helping to change the road safety conversation, and maintaining a high profile for NZ Police as a lead agent for road safety. It works across the four elements of the safe system – speeds, safe road use, safe vehicles, and roads and roadsides. Road policing activities target behaviours such as inappropriate speed, drink/drug impaired driving, the wearing of restraints, high-risk drivers, dangerous and careless driving, and commercial vehicle enforcement.
43. Our RPIF sets out the indicative RPP investment range with the GPS funding range, along with investment priorities and associated intermediate outcomes. Under our ‘planning and investing for outcomes’ approach, we do not specify exactly what and how NZ Police delivers to achieve outcomes. Rather, we expect NZ Police to develop the most appropriate and cost effective delivery strategies and intervention logic, which forms the basis for programme discussion and negotiation.
44. A large component of the RPP comprises ‘maintenance’ activities, required to hold the current safety performance on the network. There is also an improvement component aimed at further reducing deaths and serious injuries.
45. Research cited in the Safer Journeys strategy shows that moderating both mean and excessive speeds significantly reduces road deaths and serious injuries. The modelling shows that:
 - a) If open road mean speeds drop by 5km/h, 60 lives per year would be saved
 - b) If urban mean speeds drop by 5km/h, 30 lives per year would be saved
 - c) If all vehicles currently travelling above the speed limit were to travel at the limit, 60-70 lives would be saved per year

d) If all drivers drove at speeds fit for the conditions, more lives would also be saved, although it is difficult to estimate how many.

46. The graph on the left below shows that the number of crashes on the open road involving speed is trending down. The graph on the right below shows that the percentage of vehicles exceeding speed limits in 100 km/h and urban 50 km/h speed limit areas, is also trending down.



47. Implementation of the expanded speed camera project has the potential to improve the intermediate outcomes around speed reduction, resulting in fewer deaths and serious injuries. Evidence indicates that the number of fatal and serious injury crashes reduces by between 9% and 50% at camera sites, with an average reduction of 33%.



RISKS

65. The main risk of the outcomes and local funding issues is an adverse perception around the Transport Agency's investment policy relating to safety and local roading projects. The Agency could be perceived as not investing enough to reduce deaths and serious injuries on the country's roads and/or not providing sufficient funding to progress reasonable value for money local roading improvements.
66. There is also a risk that, despite investment in the new Regional Improvements activity class and a lack (potentially) of Local Road Improvements funding applications coming forward during the NLTP, the NLTP will be seen as underinvesting in rural/provincial New Zealand.



COMMUNICATION AND ENGAGEMENT

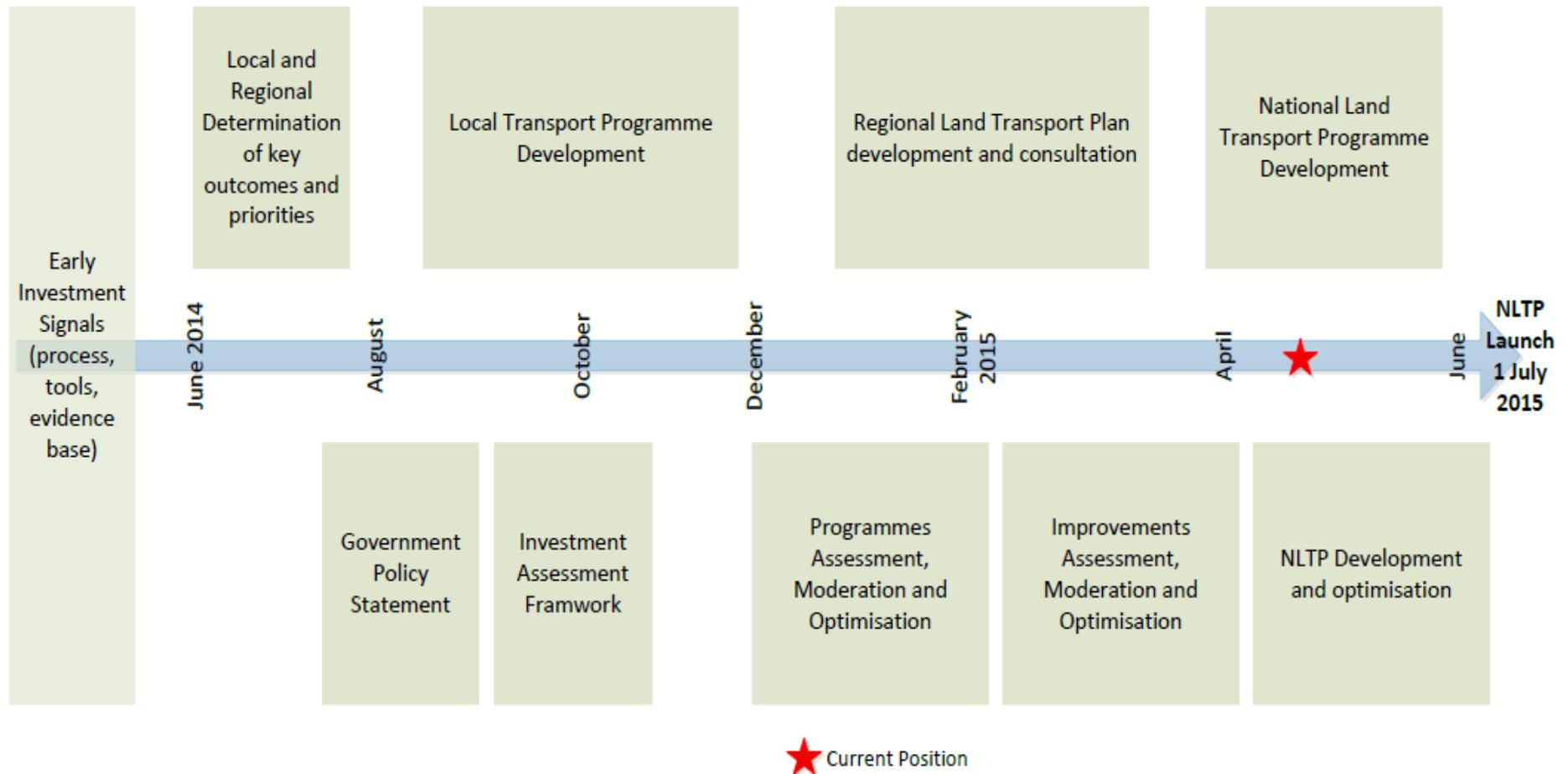
68. Apart from raising these issues in ongoing discussions with relevant Approved Organisations to finalise development of the 2015-18 NLTP, we do not intend to communicate formally on these matters until the NLTP is adopted in late June.
69. Our approach to engaging and communicating with stakeholders about the NLTP was outlined to the Board last month (Board paper 15/04/0910 refers). The same principles continue to underpin our approach to improvement activities and the road policing programme. We will monitor how the component parts of the NLTP are being received by stakeholders, and make any adjustments to our approach that might be required.



ATTACHMENTS

70. There are seven attachments:
 - Attachment 1: 2015-18 NLTP development timeline
 - Attachment 2: Outcomes delivered from investment in the NLTP
 - Attachment 3: Priority order of improvement profiles
 - Attachment 4: Examples of setting investment thresholds
 - Attachment 5: Potential roading investment thresholds – illustrative only
 - Attachment 6: Road policing future
 - Attachment 7: General duties police

Attachment 1 – 2015-18 NLTP development timeline



Attachment 2 – Outcomes delivered from investment in the NLTP

The table below describes the outcomes delivered from our investment in the NLTP and how the activity class groupings contribute to these.

Some of the outcomes are clearly first order, e.g. the improved access to economic growth opportunities as a result of investment in state highway improvements is often the primary outcome targeted.

Others, more often, are second order, e.g. transport choice, positive health outcomes, reduced environmental effects, and secure and resilient network. While they may not be the primary focus of the activity, these outcomes often arise from its delivery. Network resilience, for instance, is an outcome that results from appropriate road drainage maintenance practice.

Quantification of predicted outcomes from investment

a) Economic growth and development outcomes:

- maintenance and existing public transport service activities by and large **hold** the current outcomes performance. While changes in the level or focus of investment impacts levels of service and therefore outcomes delivered, it is very difficult to quantify these in a meaningful way. In some cases, investment is reduced to manage the service down to its appropriate level, and the reduction in outcomes on the affected network is an accepted consequence.
- some improvement activity outcomes can be quantified reasonably readily. The increase in monetised benefits from the improvement is determined from a predicted change in outcomes, typically involving a reduction in travel time against a do-minimum scenario. While travel time savings do not apply to all outcomes, they are the right measure, or at least the most suitable proxy, in most cases for the first order outcomes of access to

economic growth opportunities, better use of existing capacity, easing of congestion, more efficient freight supply chains and journey time reliability.

b) Safety outcomes:

- maintenance and existing road policing activities by and large **hold** the current outcomes performance. The same difficulties as described for economic growth and productivity outcomes apply here as well.
- for improvements, generally, these are the most readily quantified outcomes and involve a prediction of deaths and serious injuries saved as a result of investment in improvements.

c) Other outcomes:

- other outcomes associated with improvements, (transport choice, positive health outcomes, reduced environmental effects and a secure and resilient network), often arise as second order outcomes, and are less readily quantifiable in outcome terms .

We will provide the Board with estimates of the outcomes expected from investment in improvement activities in the 2015-18 NLTP at its June NLTP adoption meeting.

Relative contribution to outcomes:

The relative contribution to the outcomes from each activity class grouping is shown in the following table, as:

	High
	Moderate
	Supports

Outcome	State Highway, Local Road & Regional Improvements	State Highway & Local Road Maintenance	Public Transport Services & Improvements	Walking & Cycling Improvements	Road Policing & Road Safety Promotion
Economic growth & productivity					
Access to economic growth opportunities	Improved access to markets, employment & business areas	Maintains access to markets, employment & business areas	Maintains & improves access to markets, employment & business areas	Maintains & improves access to markets, employment & business areas	
Better use of existing capacity	Network operation optimisation	Network operation optimisation	Increases capacity in congested networks	Increases capacity in congested networks	Deterrent impact – use of network & speed.
Easing of congestion	Increases capacity of network. Network operation optimisation	Network operation optimisation	Increases capacity in congested networks	Increases capacity in congested networks	Supports network operation optimisation
More efficient freight supply chains	Increases capacity of network. Network operation optimisation. More efficient travel.	Network operation optimisation.	Increases capacity in congested networks.	Increases capacity in congested networks.	Deterrent impact – supports fair market competition & protects NLTF revenue.
Journey time reliability	Increases capacity of network. Network operation optimisation.	Network operation optimisation	Increases capacity in congested networks	Increases capacity in congested networks	Deterrent impact – reducing excessive speeds to support network operation optimisation.

Outcome	State Highway, Local Road & Regional Improvements	State Highway & Local Road Maintenance	Public Transport Services & Improvements	Walking & Cycling Improvements	Road Policing & Road Safety Promotion
Safety					
Reduction in deaths & serious injuries	Addresses deficiencies in network. Critical to improving performance.	Maintain to standard appropriate for the network to hold current performance.	Supports by providing a safer travel choice.	Cyclists over represented in DSI statistics per hour of travel – safety is a key outcome sought from investment.	Deterrent impact – driver behaviour, speed, heavy vehicle safety, alcohol & drug enforcement. Road user behaviour, information & skills building.
Other					
Transport choice	Improved choice of route and timing	Maintains choice of route and timing	Provides alternative mode. Caters for users with limited access to private vehicles.	Provides alternative mode.	Deterrent impact - helps to protect vulnerable users. Information provision and skills building.
Positive health outcomes	Lower emissions from more efficient travel.	Lower emissions from more efficient travel.	Lower emissions from more efficient travel.	Lower emissions. Physical wellbeing improved.	Deterrent impact - remove excessive emission vehicles from roads. Information provision and skills building.

Outcome	State Highway, Local Road & Regional Improvements	State Highway & Local Road Maintenance	Public Transport Services & Improvements	Walking & Cycling Improvements	Road Policing & Road Safety Promotion
Reduced environmental effects	Lower emissions from more efficient travel. Resource Management Act requirements met.	Lower emissions from more efficient travel. Maintains environmental mitigation infrastructure.	Lower emissions from more efficient travel.	Lower emissions.	Deterrent impacts – reduce excessive speeds (improve travel efficiency) & remove excessive emission vehicles from roads.
Secure and resilient network	Provision of alternative routes for high volume/priority journeys. Construction to standard appropriate for the network.	Maintain to standard appropriate for the network. Respond to crashes and other network emergencies. Emergency works insurance.	Provide and maintain to standard appropriate for the network.	Provide and maintain to standard appropriate for the network.	Deterrent impact – heavy vehicle axle weights. Response to crashes & other network emergencies.

Attachment 3 – Priority order of improvement profiles

Strategic fit	Effectiveness	Strategic fit and Effectiveness	Benefit cost appraisal		
			1 to 2.9	3 to 4.9	5+
H	H	HH	Priority 3	Priority 2	Priority 1
H	M	HM	Priority 4	Priority 3	Priority 2
M	H	MH	Priority 6	Priority 5	Priority 4
M	M	MM	Priority 7	Priority 6	Priority 5
H	L	HL	Low strategic fit does not progress beyond strategic business case. Low effectiveness does not progress beyond programme business case.		
M	L	ML			
L	H	LH			
L	M	LM			
L	L	LL			

Activities with these profiles progress to activity business cases.

A decision gate that integrates with the business case approach.

Attachment 4 – Examples of setting investment thresholds

a) Establish single investment threshold - example									
Activity classes - proposed projects for NLTP									
Priority order	Activity Class A NLTF cost \$000	Cumulative A Allocation \$000	Activity Class B NLTF cost \$000	Cumulative B Allocation \$000	Activity Class C NLTF cost \$000	Cumulative C Allocation \$000	Total NLTF cost \$000	Total Cum. Allocation \$000	
Committed	1,000,000	1,000,000	150,000	150,000	500,000	500,000	1,650,000	1,650,000	
1	200,000	1,200,000	50,000	200,000	200,000	700,000	450,000	2,100,000	
2	300,000	1,500,000	75,000	275,000	200,000	900,000	575,000	2,675,000	
3	600,000	2,100,000	100,000	375,000	350,000	1,250,000	1,050,000	3,725,000	
4	500,000	2,600,000	100,000	475,000	175,000	1,425,000	775,000	4,500,000	
5	600,000	3,200,000	50,000	525,000	100,000	1,525,000	750,000	5,250,000	
6	500,000	3,700,000	50,000	575,000	50,000	1,575,000	600,000	5,850,000	
7	100,000	3,800,000	20,000	595,000	20,000	1,595,000	140,000	5,990,000	
Target funding for improvements across all activity classes							5,000,000		
Allocations derived from single threshold	3,000,000		500,000		1,500,000		5,000,000		
b) Establish differential investment thresholds by activity class - example									
Activity classes - proposed projects for NLTP									
Priority order	Activity Class A NLTF cost \$000	Cumulative A Allocation \$000	Activity Class B NLTF cost \$000	Cumulative B Allocation \$000	Activity Class C NLTF cost \$000	Cumulative C Allocation \$000	Total NLTF cost \$000	Total Cum. Allocation \$000	
Committed	1,000,000	1,000,000	150,000	150,000	500,000	500,000	1,650,000	1,650,000	
1	200,000	1,200,000	50,000	200,000	200,000	700,000	450,000	2,100,000	
2	300,000	1,500,000	100,000	300,000	200,000	900,000	600,000	2,700,000	
3	600,000	2,100,000	150,000	450,000	250,000	1,150,000	1,000,000	3,700,000	
4	500,000	2,600,000	100,000	550,000	175,000	1,325,000	775,000	4,475,000	
5	600,000	3,200,000	50,000	600,000	100,000	1,425,000	750,000	5,225,000	
6	500,000	3,700,000	50,000	650,000	50,000	1,475,000	600,000	5,825,000	
7	100,000	3,800,000	20,000	670,000	20,000	1,495,000	140,000	5,965,000	
Target funding set by activity class	3,500,000		500,000		1,000,000				
Allocations same as target funding	3,500,000		500,000		1,000,000		5,000,000		

Threshold at which target funding is fully allocated

Threshold priority orders within which target funding for each activity class is fully allocated

Attachment 5 – Potential roading investment thresholds – illustrative only

