

BOARD PAPER

PREFERRED APPROACH TO SPEED REVIEWS

In confidence

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ELT Sponsor Karen Jones, General Manager Engagement and Partnerships

ELT Co-Sponsor Brett Gliddon, General Manager Transport Services

Prepared By

Tara Macmillan, Road to Zero Portfolio Manager

Fabian Marsh, Canian Manager Band Sefety

Fabian Marsh, Senior Manager Road Safety

Legal Reviewer n/a

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Purpose

This paper provides the Board with options for consideration for a phased approach to the implementation of Safe and Appropriate Speeds for proposed NLTP 2021-24 Speed Reviews.

Recommendations

It is recommended the Board:

- Notes the proposed new Speed Rule and new Speed Rule Guide will provide visibility to stakeholders of the intended Safe and Appropriate Speeds across all local roads and state highways
- Notes the Executive Sub-Committee recommends consideration of Options 3 to 5, including flexibility for the interim use of 90km/h on lower-order/standard and higher-order/standard sections
- Discusses the six options and approves or gives direction on for phase 1 implementation as
 a general approach to planned speed reviews for the NLTP 2021-24 period, with flexibility
 retained on a case-by-case basis depending on local stakeholder risk and feedback on
 specific sections of the state highway
- Notes the application of the six options to the Northland and north Auckland Speed Review as outlined in the attached Workshop Pack
- Notes future phases will be considered as part of future NLTP periods, through 3-yearly Speed Management Plans

Strategic relevance

Road safety is a key priority both within the Government Policy Statement (GPS) on land transport and Te Kāpehu | Our compass. Waka Kotahi has now embedded a Road to Zero Portfolio approach to ensure appropriate governance, leadership, monitoring and reporting in order to deliver on our commitments, set out in New Zealand's Road to Zero Strategy and Action Plan.

The Speed and Infrastructure Programme is one of the key programmes within the Road to Zero Strategy, aiming to contribute 35% (or 600-650 fewer deaths and serious injuries) towards the 40% targeted reduction in deaths and serious injuries by 2030 against 2018 levels.

Background

Within the current NLTP 2021-24, the Speed and Infrastructure delivery programme is intending to review 4,100 kilometres of the State Highway network and assess for potential speed changes. Of this, 3,000km is forecasted to be implemented during this period.

At the March 2022 meeting, the Waka Kotahi Board approved the implementation of a phased approach to Speed Reviews, including consideration of the use of 90 km/h. This approach provides the ability to work towards the same long-term Road to Zero outcomes, section 9(2)(g)(i)

section 9(2)(g)(i)

would see some sections and corridors on the network taking one or more steps to achieve the final Safe and Appropriate Speed as set out in the new Speed Rule (the Rule) and Speed Rule Guide (the Guide). Figure 1 illustrates the relationship between risks and benefits generally, noting this can differ depending on the nature of the proposed change at a local and regional level.

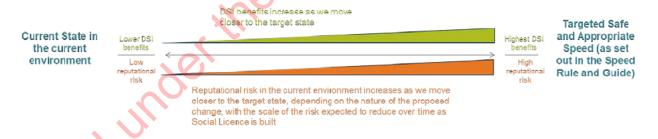


Figure 1 Risks and benefit relationship in the current environment for the delivery of Safe and Appropriate Speeds

Determining and applying appropriate phasing relies on a clear understanding of the:

- Level of public and stakeholder support at a corridor/section level, informed by Regional Speed Review teams and the Speed Review engagement process
- Waka Kotahi reputational risk appetite, informed by the Board

This needs to be determined to inform planned Speed Reviews, which is those speed reviews programmed as part of the current NLTP. Future phases will be considered as part of Speed Management Plans in accordance with the Rule and the Guide and aligned to future NLTP periods.

Timings and impact of the Rule and the Guide

The Rule and the Guide is intended to come into effect in May 2022. In the months following release of the Rule, stakeholders and the public will get full visibility of the intended Safe and Appropriate Speeds for local roads and state highways.

Under the current (2017) Rule approximately 97% of the rural road network has a Safe and Appropriate Speed of 80km/h or lower, due in part to the topography of much of rural New Zealand. Under the new (2022) Rule a similar proportion of rural roads will have a safe and appropriate speed of 80km/h or lower, where 100km/h is deemed too high for the prevailing road environment. Through the new speed management planning process, it will become more visible to the public that 85 – 90 percent of the New Zealand road network currently has a higher speed limit than the safe and appropriate speed. We expect this will create high levels of public interest.

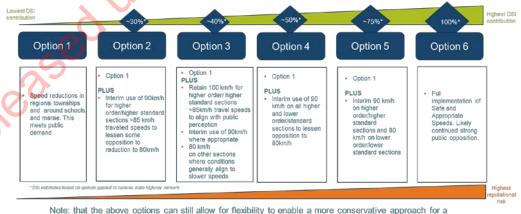
In urban areas, a greater proportion of roads and streets in urban areas will have a recommended safe and appropriate speed of 30km/h or 40km/h, instead of 40km/h or 50km/h. This aligns with the recommendations from the 2020 Global Ministerial Conference on Road Safety that a maximum speed limit of 30km/h be mandated in urban areas in order to protect vulnerable road users, and achieve sustainability goals for liveable cities, health and security. Schools will also move towards 30km/h (or category one schools and 60km/h or less for category two schools.

While the new Rule and Guide drive alignment to Road to Zero strategic outcomes and Safe System, Road Controlling Authorities (RCAs) have flexibility on how they move towards achieving the ideal Safe System "end state", and must consider a whole of system approach, which includes integrating with neighbouring parts of the network. This allows for phased approaches to be justified and applied through Speed Management Plans, which come into effect from 2024.

Phasing Options

As the RCA for state highways, Waka Kotahi can apply a phased approach to speed reviews now, and as part of future Speed Management Plans, as long as it remains on an appropriate path to achieving the Safe System outcomes set out in the Guide and the Rule. It is recommended in the short term, while social licence is being built, that a pragmatic approach be applied to the pace at which Safe and Appropriate Speeds are achieved.

A small number of initial Phase 1 options for state highway speed reviews have been identified. These vary in terms of deaths and serious injury (DSI) reduction benefits and reputational risk and are set out in Figure 2 below, with Option 6 not recommended in the current environment due to the high risk of loss of stakeholder trust and support.



Note: that the above options can still allow for flexibility to enable a more conservative approach for a specific roading corridor/section. Similarly, where there is minimal push-back, a move direct to the SaAS can be achieved.

It is also important to note, if extrapolated over the full decade of proposed speed changes, Option 2 represents approximately 3,000 kms of speed limit changes compared to approximately 7,000 kms of speed limit changes under Option 3. This highlights the proportionally greater DSI reduction potential on the higher order / higher volume roads.

Regardless of the Option selected to inform Speed Reviews in the current stakeholder environment, exceptions can still be managed on a case-by-case basis. In this way a more conservative approach can be applied to specific roading corridors/sections within a preferred option. This allows for further flexibility and pragmatism within the general risk appetite settings.

Key issues

One of the key issues that the phased approach aims to address is the perception, as reflected in media, that Waka Kotahi intends to roll out blanket 80km/h speed limits across the state highway network. Whilst this is not the case, road infrastructure improvements necessary to sustain higher speed limits, in reality apply to only a relatively small proportion of the network and take time. The use of 90 km/h speed limits on higher order roads and more significant freight routes as part of a phased approach recognises that we need to be pragmatic about the pace of change, directly addresses the perception of blanket 80km/h speed limits, and takes a great deal of heat out of the economic discussion by aligning speed limits to the maximum open road speed limit for all heavy vehicles.

Evidence tells us that speed is our most cost-effective intervention and the implementation of Safe and Appropriate Speeds alongside infrastructure has a key role to play. However, many of our public and stakeholders either don't think we have a problem, with 79% of New Zealanders considering our roads to be fairly safe¹, or don't agree with how the problem should be treated. This is evidenced by strong push-back on speed reductions implemented on SH5 and during the engagement phase for the regional Northland and north Auckland speed review, with a call for greater infrastructure investment, and a resistance to 'blanket' speed reductions.

For regions, where infrastructure investment is limited, such as for median barriers to deliver physical separation, higher speeds are difficult to justify in the longer term. In the shorter term, the use of interim speeds, such as use of 90km/h or continued use of 100km/h are considered while support from the public and stakeholders is sought over time.

Given Options 1 through 5 will retain a higher DSI risk as compared with a shift directly to the Safe and Appropriate Speed, increasing the use of other interventions have been considered, but are not without their limitations, as follows:

- Increased Police enforcement Police are still some way from meeting current required levels of enforcement, however some opportunities may exist at a District Command operational level;
- Increased Safety Camera presence Cameras and their operation are currently at capacity
 within the current operating model, with the new operating model and programme still being
 developed, likely still a couple of years away from starting to substantially increase network
 coverage, and may also potentially be subject to some social license challenges;
- Use of low cost/low risk improvements increased use of ATP (rumble strips) and interim
 use of 'safe-hit posts' where appropriate noting that with significant rollout of ATP in past
 years (under Boost for example) we are approaching diminishing returns on such treatments
 that will incur higher initial costs compared to speed limits as well as an ongoing
 maintenance burden.

¹ Public attitudes to road safety report published February 2022

Regardless of these limitations, as part of a phased approach, Waka Kotahi will consider the increased and/or alternative use of interventions to maximise DSI reduction benefits until such time as Safe and Appropriate Speeds can be achieved, acknowledging some of these measures (such an enforcement) will lack popularity also.

It is also important to note that while the scale of reputational risk is expected to reduce over time as social license is built, this actual time to move current perceptions and sentiment is difficult to gauge or measure.

Options and recommendations

The Road to Zero Portfolio recommended Option 5 to the Road to Zero Executive Sub Committee (the ESC), which would enable the implementation of 80km/h on lower order/lower standard sections, with the interim use of 90km/h on higher order sections, delivering an estimated 75% of the full SaAS implementation DSI benefits (see Figure 3). As part of this option, it is also recommended to retain flexibility to consider interim use of 90km/h or some lower order/ lower standard sections on a case-by-case basis where there is a high risk of loss of stakeholder trust and support.

The ESC retains concerns associated with the perceived blanket use of 80km/h at this time on the state highway network in light of current social licence environment. The ESC recommends to the Board consideration of Options 3 to 5, with all options seeking approval for the interim use of 90km/h, while recognising the varying level of risks and benefits associated with the continued use of 100km/h and reduction to 80km/h.



Figure 3 Options risk and benefits assessment

In recommending this option, the ESC also recommends for planned NLTP 2021-24 speed reviews:

- Where there is stakeholder support, speed reviews should proceed directly to the Safe and Appropriate Speed
- Flexibility is applied to maintain 100km/h on sections or corridors where there is a high risk of loss of stakeholder trust and support.
- Future phases to be considered in conjunction with the implementation of Speed Management Plans from 2024.

It is recommended the Board approves or gives direction on a preferred phase 1 option, to provide direction for the adoption of a pragmatic general approach towards achieving long term road safety outcomes, with flexibility retained to apply judgement on a case-by-case basis where there is a high risk of loss of stakeholder trust and support.

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