

ACRS Submission on Draft NZ Government Policy Statement on Land Transport 2024-34



About the Australasian College of Road Safety

The Australasian College of Road Safety was established in 1988 and is the region's peak organisation for road safety professionals and members of the public who are focused on saving lives and serious injuries on our roads.

The College Patron is His Excellency General the Honourable David John Hurley AC DSC (Retd), Governor-General of the Commonwealth of Australia.

To:

Te Manatū Waka, Ministry of Transport
gps@transport.govt.nz

For further information please contact:

Prof Ann Williamson: President, Australasian College of Road Safety

Dr Ingrid Johnston: Chief Executive Officer, Australasian College of Road Safety

Australasian College of Road Safety

PO Box 198 Mawson ACT 2607

e: ceo@acrs.org.au

p: (02) 6290 2509

w: www.acrs.org.au

28 March 2024

Table of Contents

Introduction	3
ACRS response to the Consultation Draft	4
Areas of Support	4
Areas of Concern	4
Areas of Significant Concern	6
Conclusion and Recommendations	8
References.....	9

Introduction

The Australasian College of Road Safety is the region's peak membership association for road safety with a vision of eliminating death and serious injury on the road. Our members include experts from all areas of road safety including policy makers, health and transport professionals, academics, community organisations, researchers, federal, state and local government agencies, private companies and members of the public. The purpose of the College is to support our members in their efforts to eliminate serious road trauma through knowledge sharing, professional development, networking and advocacy. Our objectives include the promotion of road safety as a critical organisational objective within government, business and the community; the promotion and advocacy of policies and practices that support harm elimination; the improvement of relative safety outcomes for vulnerable demographic and user groups within the community; the promotion of post-crash policies and practices; and the promotion of a collegiate climate amongst all those with responsibilities for and working in road safety.

The College believes that we should prevent all fatal and serious injuries on our roads; the road traffic system must be made safe for all road users; system designers should aim to prevent human error and mitigate its consequences; life and health are not exchangeable for other benefits in society; and that all College policy positions must be evidence based.

The College's submission acknowledges that the draft NZ Government Policy Statement on Land Transport 2024-34 (draft GPS) includes some initiatives that can be expected to have a positive influence on road trauma, particularly the enacting of legislation around roadside oral fluid drug testing, increased police enforcement, increased funding for maintenance activities, and certain Roads of National Significance that will see dangerous sections of highway upgraded to a high infrastructure standard. However, the College has several significant concerns about other aspects of the draft GPS, including prohibition of proven road safety countermeasures (such as raised safety platforms), requiring lives to be traded off against travel time when considering speed limit reviews, significant cuts to walking and cycling funding, removal of road safety targets, and many more.

Our overall summation of the draft GPS is that it signals prioritisation of one particular solution which has high financial and resourcing costs, and will come at the expense of other, less costly and more impactful road safety solutions, addressing the whole system.

Road trauma rates in New Zealand have been improving recently. The number of fatalities to 27 March for 2024 is the lowest since at least 2019.(1) This stands in stark contrast to Australia, where the number of fatalities to the end of February for 2024 is the highest since 2019.(2)

Rather than changing course, now is the time in New Zealand to be asking what has been working to make these reductions and how can we build on those successes by addressing areas for further improvement.

ACRS response to the Consultation Draft

Areas of Support

The College supports (in full or part) the following aspects of the draft GPS:

- Identifying 'Safety' as one of the four strategic priorities that the GPS will deliver against.
- The intention to enact legislation to rollout roadside oral fluid drug testing and the setting of targets for testing numbers once the provisions come into force. This is long overdue and fully supported.
- Increasing the focus on drink driving and setting targets for roadside alcohol breath tests. This is long overdue and fully supported although the target of at least 3 million alcohol breath tests should be lifted if the government is serious about targeting drink driving, as more than 3 million breath tests were conducted in 2023.(3)
- Reviewing fines and penalties for traffic offences. This is long overdue and fully supported.
- Some of the Roads of National Significance, which will be four-lane, grade-separated highways. Some of these roads will see dangerous sections of highway replaced or upgraded to a high infrastructure standard and significantly enhance road safety outcomes for the users of those facilities. However, the cost of the Roads of National Significance is enormous – meaning most infrastructure funding is directed to a very small portion of the network, while other high-risk parts of the network will inevitably remain untreated.
- Establishment of the State Highway Pothole Prevention and Local Road Pothole Prevention activity classes. Heavy rainfall and subsequent floods can cause long term damage to transport infrastructure which both contributes to road crashes and diverts resources from safety upgrades.(4, 5) The College supports an uplift in maintaining our current assets to a serviceable level that maximises safety outcomes rather than contributes to worse safety outcomes.
- Level Crossings – improved funding for level crossing improvements will result in reduced serious harm at these high-risk sites. However, greater balance in safety funding is needed against all high-risk sites on the network.

Areas of Concern

- The scale of investment directed to the Roads of National Significance relative to the scale of the issue being addressed is not representative of value for money, which is one of four key strategic priorities of the draft GPS.
- The College notes the challenges faced with funding the transport network. The College suggests that the NZ government should explore the idea of hypothecating fine revenue to fund road safety initiatives as is common practice in many Australian jurisdictions.(6-10) This would incentivise increased enforcement and enhance safety outcomes.

- The College opposes the indication that Land Transport Rule: Setting of Speed Limits 2022 will be changed “...to enable Road Controlling Authorities to reverse blanket speed limit reductions where it is safe to do so and to require Road Controlling Authorities to determine speed limits using consistent benefit-cost analysis criteria.” The College has several concerns with this, as follows:
 - a. The College disputes that New Zealand uses a “blanket approach to reducing speed limits”. The only blanket approach that currently exists is the use of default speed limits of 100 km/h in rural areas and 50 km/h in built-up areas. The current guidance that is informing speed limit changes in New Zealand is based on extensive national and international research on the survivability in crashes for different road users in different crash configurations at different speeds.(11) It is being applied by Road Controlling Authorities in a targeted manner at high-risk locations and in areas where communities are demanding safer outcomes – noting all speed limit changes are subject to exhaustive consultation and community engagement requirements.
 - b. The College believes that safety and health are more important outcomes of the road traffic system than efficiency or cost.(12) It has consistently been demonstrated that speed limit reductions commonly deliver negligible increases in travel time, especially in urban areas where journey time is primarily governed by intersections and congestion,(13) yet routinely deliver significant decreases in road trauma.(14, 15) Travel time increases from speed limit reductions, even on rural roads, are less than anticipated.(16, 17) Increased crashes from higher speeds also greatly affect travel time, and road users value travel time reliability. The limited available evidence suggests that the value of reducing travel time variability is greater than that of reducing mean travel time.(18)

The College is concerned that current benefit-cost practices, which assign a monetary value to any change in travel time (even a couple of seconds), falsely represent collective cost savings when applied to all users where the value of time saved is barely noticeably as part of a trip e.g. a few seconds. That practice cannot be balanced against the value of life and health. If travel time is to be accounted for, then changes must be meaningful and able to be linked to economic productivity based on evidence. Time and productivity lost in road crashes must also be considered in such an equation,(19) which will show that small economic losses from increased travel times are far outweighed by the larger economic gains from decreased road crashes.

- c. The College is concerned around the lack of definition around the words “where it is safe to do so”. Based on current accepted practice and evidence, there would be very few locations where speed limit reductions could be safely reversed. The exceptions being where infrastructure has been introduced to support travel at higher speeds, such as median barrier on a previously undivided highway.

Areas of Significant Concern

- The College fully opposes the renewed focus on the old fashioned 3xEs of Engineering, Enforcement and Education. This is a very outdated approach; one which was superseded over 10 years ago with the internationally adopted Safe System approach to road safety.(20) The Safe System approach is derived from an understanding that people make mistakes, and from an ethical standpoint no-one should be killed or seriously injured on roads.(21) The Safe System approach demands a holistic approach to the safety of the road system and the interactions among roads and roadsides, travel speeds, vehicles and road users. It is an inclusive approach that caters for all groups using the road system, including drivers, motorcyclists, passengers, pedestrians, cyclists, and commercial and heavy vehicle drivers. The Safe System approach operates on the following guiding principles:
 - a. People make mistakes: Humans will continue to make mistakes, and the transport system must accommodate these. The transport system should not result in death or serious injury because of errors on the roads.
 - b. People are vulnerable and the system should be managed within human biomechanical injury limit: Our bodies have a limited ability to withstand crash forces without being killed or seriously injured. A Safe System ensures that the forces in collisions do not exceed the limits of human tolerance. Speeds must be managed so that humans are not exposed to impact forces beyond their physical tolerance. System designers and operators need to consider the limits of the human body in designing and maintaining roads, vehicles and speeds.
 - c. Shared responsibility: The burden of road safety responsibility no longer rests solely with the individual road user. System managers have a primary responsibility to provide a safe operating environment for road users and ensuring that the system is forgiving when people make mistakes.
 - d. Strengthening all parts of the system: All pillars of the road system need to be strengthened so that if one part fails, other parts will protect the people involved from serious harm.

The latest Global Status Report on Road Safety from the World Health Organization found that the most gains in road safety have been made in countries adopting a Safe System approach.(22)

Central to the Safe System approach is human tolerance to crash impacts and the management of kinetic energy transfer so these are within survivable limits.(23) Moving away from the so-called “blanket approach to reducing speed limits” is directly contrary to the Safe System approach, and will undermine the efforts of other initiatives included in the draft GPS, just as a lack of roadside drug testing, weak fines and penalties and a lacklustre focus on drink driving have undermined the potential road trauma reductions of speed limit reductions.

- The draft GPS lacks evidence to support the outcomes it is seeking. Of particular concern for the College is the lack of detail on the scale of safety benefits the draft GPS will deliver. The College advocates for evidence-based decision making at all levels,(12) and this is especially critical at the highest levels of government.

- There are nearly 100,000 km of public roads in New Zealand managed by the NZ Transport Agency and local government. A very small proportion of the road network is designed to the highest infrastructure standard that can support travel at the highest legal speed limit in New Zealand (110 km/h).(24) The Roads of National Significance will address <1% of the road network, meaning most roads will not be upgraded and retain high-risk elements that could result in severe road trauma outcomes. Speed management is an internationally proven low-cost measure which can significantly reduce harm on roads with only minimal effect on travel time.(25) This can be a temporary measure until roads are upgraded so that the infrastructure matches the safe speed for all users.
- The College is concerned that the draft GPS is dictating what types of intervention the industry should and should not be delivering, rather than relying on experts to deliver on the safety outcomes the draft GPS seeks. Specifically, the draft GPS signals that the improvement activity class will not be used to fund the likes of traffic calming measures (such as speed bumps or raised pedestrian crossings), preventing vehicles ‘rat-running’ through residential neighbourhoods, or cycleways despite these measures being highly effective at protecting the most vulnerable users of the road network from harm.(26-28) These tools need to remain in the toolbox for Road Controlling Authorities to deploy in locations where they are needed, perhaps with approval from regional journey managers or local councils. Singling them out as being excluded from funding is not based on evidence and will ultimately increase harm in the system.
- There is a need to fundamentally assess the benefits and costs of various transport investments to objectively select the projects that will give the greatest return on investment. The exclusions suggested in the draft GPS are inconsistent with the principle of choosing the road safety interventions with the best benefit cost ratios (BCRs):(29-31)

Road Safety Measure	BCRs
Speed humps and area-wide traffic calming	2.8-3:1
Speed enforcement	4:1
Cycling infrastructure and promotion	4.7-6.1:1
Lowering speed limits at hazardous locations	14:1
Penlink (estimated with tolling)	1.3:1

This should include proactive consideration of those benefits and costs that are likely to be significant but are not routinely included in all BCR calculations. For example, CO2 emissions production or reduction, and wider public health benefits or disbenefits should be actively considered.

Conclusion and Recommendations

The College supports some elements of the draft GPS, such as including safety as a strategic priority, improved emphasis on alcohol and drugs, reviewing fines and penalties, some Highway upgrades, maintenance and level crossings, as potentially providing significant road safety benefits.

However, we are very concerned that there are other areas of the GPS which will significantly add to road trauma. We would like to emphasise that:

- Road safety interventions must be evidence-based
- Safety must be prioritised over productivity
- The interventions with the highest BCRs should be implemented, with all options included
- Speeds must be appropriate to the roads and infrastructure
- Focusing on a small proportion of the network with expensive infrastructure means many more interventions which are less expensive, and address far larger areas are unable to be commenced.

The College appreciates the opportunity to comment on this draft GPS and contribute to improved road safety in New Zealand. Please do not hesitate to contact us should you require further information.



Paul Durdin
New Zealand Chapter Co-Chair
ACRS



Dr Ingrid Johnston
Chief Executive Officer
ACRS

References

1. Te Manatu Waka Ministry of Transport. te Marutau - Ngā mate i ngā rori: Safety - road deaths [updated 27 March 2024; cited 2024 27 March]. Available from: <https://www.transport.govt.nz/statistics-and-insights/safety-road-deaths/sheet/year-to-date-road-deaths>.
2. Bureau of Infrastructure Transport and Regional Economics (BITRE). Road Deaths Australia-Monthly Bulletins https://www.bitre.gov.au/publications/ongoing/road_deaths_australia_monthly_bulletins: Department of Infrastructure, Transport, Regional Development, Communications and the Arts; [updated 15 March 2024; cited 2024 15 March].
3. Breath screening tests exceed 3 million in 2023 [press release]. <https://www.police.govt.nz/news/release/breath-screening-tests-exceed-3-million-2023#:~:text=Police%20across%20New%20Zealand%20performed,the%20most%20in%20a%20decade.:> New Zealand Police, 25 January 2024.
4. Koetse MJ, Rietveld P. The impact of climate change and weather on transport: An overview of empirical findings. Transportation Research Part D: Transport and Environment. 2009;14(3):205-21.
5. Papadimitriou E, Filtness A, Theofilatos A, Ziakopoulos A, Quigley C, Yannis G. Review and ranking of crash risk factors related to the road infrastructure. Accid Anal Prev. 2019;125:85-97.
6. Transport Administration Act 1988 No 109 Division 3B Community Road Safety Fund <https://legislation.nsw.gov.au/view/html/inforce/current/act-1988-109#pt.8-div.3B>, (2023).
7. Business Franchise (Petroleum Products) Act 1979 Section 13 <https://www.legislation.vic.gov.au/in-force/acts/business-franchise-petroleum-products-act-1979/052>, (2020).
8. Transport Operations (Road Use Management) Act 1995 <https://www.legislation.qld.gov.au/view/html/inforce/current/act-1995-009>, (2024).
9. Road Traffic Act 1961 Section 79D https://www.legislation.sa.gov.au/_legislation/lz/c/a/road%20traffic%20act%201961/current/1961.50.a.htm, (2024).
10. Road Safety Council Act 2002 https://www.legislation.wa.gov.au/legislation/statutes.nsf/main_mrtitle_847_homepage.html, (2017).
11. Small M, McTiernan D, Williamson A. Peer review of New Zealand Speed Management Guide 2022. A review completed for Waka Kotahi NZ Transport Agency. <https://www.nzta.govt.nz/assets/resources/speed-management-guide-road-to-zero-edition/acrs-peer-review-nz-speed-management-guide-2022.pdf>: Australasian College of Road Safety; 2022.
12. Australasian College of Road Safety. Australasian College of Road Safety Policy Principles. <https://acrs.org.au/wp-content/uploads/Policy-Principles-2022.pdf>: ACRS; 2022.
13. Austroads. Impact of Lower Speed Limits for Road Safety on Network Operations. Austroads Technical Report AP-T143/10. <https://austroads.com.au/publications/network/ap-t143-10>: Austroads; 2010.
14. Tate F. The impact of change in speed limit at three sites. Project Number:5-C4024.00. <https://www.nzta.govt.nz/assets/resources/speed-management-guide-road-to-zero-edition/wsp-the-impact-of-change-in-speed-limit-of-three-sites-report.pdf>: WSP; 2022.
15. Kingham S. Lower speed limits don't just save lives - they make NZ towns and cities better places to live. The Conversation. 2022 17 November.
16. Dutschke J, Woolley J. Simulation of rural travel times to quantify the impact of lower speed limits. Journal of the Australasian College of Road Safety. 2010;21(1):46-56.
17. Koorey G. Does speed greatly affect travel time? : ViaStrada; 2020 [Available from: <https://viastrada.nz/pub/2020/speed-travel-time>].
18. Brennand AW. Incorporating travel time reliability in the estimation of assignment models. NZ Transport Agency research report 464. <https://www.nzta.govt.nz/assets/resources/research/reports/464/docs/464.pdf>: New Zealand Government; 2011.

19. Cameron M. Economic analysis of optimum speeds on rural state highways in New Zealand. Camcomp Partners Pty. Ltd. report to New Zealand Transport Agency.
<https://www.nzta.govt.nz/assets/resources/economic-analysis-of-optimum-speeds-on-rural-state-highways-in-nz/Economic-analysis-of-optimum-speeds-on-rural-state-highways-in-nz.pdf>: Waka Kotahi NZ Transport Agency; 2022.
20. World Health Organization. Global plan for the Decade of Action for Road Safety 2011-2020.
https://www.who.int/roadsafety/decade_of_action/plan/en/: WHO; 2010.
21. Towards Zero Foundation. The Safe System: Towards Zero Foundation; [cited 2022 1 April]. Available from: <https://www.towardszerofoundation.org/the-safe-system>.
22. World Health Organization. Global status report on road safety 2023.
<https://iris.who.int/bitstream/handle/10665/375016/9789240086517-eng.pdf?sequence=1>: WHO; 2023.
23. International Transport Forum. Towards Zero: Ambitious road safety targets and the safe system approach. <https://www.oecd-ilibrary.org/content/publication/9789282101964-en>: OECD; 2008.
24. Land Transport Rule: Setting of Speed Limits 2022, (2022).
25. World Health Organization. Managing Speed. WHO/NMH/NVI/17.7.
<https://www.who.int/publications/i/item/managing-speed>: WHO; 2017.
26. Cleland CL, McComb K, Kee F, Jepson R, Kelly MP, Milton K, et al. Effects of 20 mph interventions on a range of public health outcomes: A meta-narrative evidence synthesis. *Journal of Transport & Health*. 2020;17:100633.
27. World Health Organization. Cyclist safety: an information resource for decision makers and practitioners. <https://www.who.int/publications/i/item/cyclist-safety-an-information-resource-for-decision-makers-and-practitioners>: WHO; 2020.
28. Marshall WE, Ferenchak NN. Why cities with high bicycling rates are safer for all road users. *Journal of Transport & Health*. 2019;13:100539.
29. Department for Transport. Investing in Cycling and Walking: The Economic Case for Action.
<https://assets.publishing.service.gov.uk/media/5e84d69e86650c743f1a9466/cycling-and-walking-business-case-summary.pdf>: UK Government; 2015.
30. Job RFS, Mbugua LW. Road crash trauma, climate change, pollution and the Total Costs of Speed: Six graphs that tell the story. GRSF Note 2020.1. Washington D.C.: Global Road Safety Facility, World Bank; 2020.
31. Waka Kotahi NZ Transport Agency. MIN-3871 NZUP Penlink - Additional follow up questions to BRI-2454 Penlink Tolling Scheme. New Zealand Government; 2022.