

Ministry of Transport

Road Safety Strategy – Road User Behaviour Reference Group Outcomes Report

March 2019

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PURPOSE

This report sets out the key challenges, strategic priorities and potential approaches identified by the Road User Behaviour reference group on the Road Safety Strategy.

CONTEXT

The Ministry of Transport is leading the development of a new road safety strategy and action plan

The Government has agreed to the development of a new road safety strategy for New Zealand, replacing the current Safer Journeys strategy, which ends in 2020. It will outline the steps New Zealand will take to meaningfully reduce deaths and serious injuries over the coming decade.

As part of the development of the strategy, the Ministry of Transport is investigating adopting the 'Vision Zero' approach to road safety thinking. This would set a long-term objective of eliminating deaths and serious injuries on our roads.

Reference groups were established to provide early input on the strategy and action plan

Intent and scope of reference groups

Five reference groups were established to discuss key road safety issues, and identify priorities and potential interventions. The purpose of the groups was to:

- provide key stakeholders with an opportunity to influence the development of the strategy at a relatively early stage
- build a better shared understanding of the challenges and opportunities for the new strategy.

However, the reference groups were not asked to reach a common position, or required to endorse recommendations or reports.

Each group focused on one of the following broad areas:

- Speed
- Infrastructure, design and planning
- Vehicles, vehicle standards and certification
- Road user behaviour
- Vehicles as a workplace.

All reference groups also considered a range of cross-cutting factors including the safety of vulnerable users, equity, technology, and rural and urban perspectives. They also considered links to broader health harms and social impacts.

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The Road User Behaviour reference group examined risk behaviours on roads

Scope

The Road User Behaviour reference group (the group) was focused on cross-cutting behavioural risks, risks faced by particular users that result from behaviour, and the types of interventions that could influence these behaviours. The risk behaviours to be considered included impairment from alcohol, drugs and fatigue, driver distraction, and use of restraints. Particular users included pedestrians, cyclists, motorcyclists, young and novice drivers.

Membership and process

The reference group consisted of representatives from across central and local government, key players in the transport sector, and road safety experts and advocates. **Appendix A** outlines membership for the reference group.

The group held four half-day meetings between September and November 2018. The first meeting included a facilitated workshop to identify the opportunities and challenges that the group wanted to focus on in subsequent sessions.

The group was supported by:

- Chair: Sandra Venables – NZ Police
- Acting Chair: Virginia Welch – NZ Police
- Advisers from the Ministry of Transport and NZ Police
- Expert adviser: Professor Samuel Charlton, University of Waikato

The meetings were structured as follows:

- Meeting 1: Identifying the problem, the level of ambition required, the short and medium term outcomes required, and the barriers and opportunities to achieving these outcomes.
- Meeting 2: Identifying behavioural risks and potential interventions for distraction, impairment, restraints and for cyclists, pedestrians and motorcyclists.
- Meeting 3: Cross-cutting interventions – road safety promotion, fees and penalties for road user behaviour, and alternative approaches to compliance (supported resolutions).
- Meeting 4: Discussions on automated compliance, the role and setting of demerit points for different offences, and identifying priorities and responding to hypothetical initiatives for the strategy.

CURRENT STATE

Overview of risks and trends

Road safety trends in New Zealand show a worrying increase in deaths and serious injuries. Although user behaviour is identified as a contributing factor to almost all crashes, almost all crashes have multiple contributing factors. An overview of some key behavioural risks, risks for particular users, and trends is provided below.

- *Restraints* – Restraint use in New Zealand is very high, with approximately 97 percent of vehicle occupants using seat belts. However, the small number of people who don't wear seat belts are over-represented in fatal crashes. In 2016, 29 percent of vehicle occupants killed were not wearing seat belts.

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- *Alcohol and Drugs* – The number of fatal crashes involving alcohol alone has been trending down since 2007. However, the number of fatal crashes involving only drugs, and both drugs and alcohol have both been increasing. In 2017 drugs (including both legal and illicit drugs), and not alcohol, were a factor in 13 percent of fatal crashes, which was higher than alcohol alone at 12 percent.
- *Distraction* – The proportion of deaths and serious injuries in crashes with driver attention diverted has predominantly followed a decreasing trend since 2010. The proportion with driver attention diverted was approximately 11 percent in 2010 compared to 9 percent in 2017. However, international research¹ suggests that the contribution of diverted attention to crashes may be underrepresented in police-reported crash systems.
- *Fatigue* – Between 2014 and 2016 fatigue was identified as a contributing factor in around 12 percent of fatal crashes, but only around six percent of minor and serious crashes. Over the same period fatigued drivers involved in fatal crashes were primarily driving cars and vans. As with distraction above, fatigue is also likely underrepresented in police-reported crash systems.
- *Vulnerable Users* – Vulnerable users, including motorcyclists, cyclists and pedestrians, have the highest number of deaths and serious injuries per km travelled. Motorcycling is by far the riskiest, and motorcyclist deaths and injuries are predominantly male. Cyclists had primary responsibility for 19 percent of collisions with vehicles from 2012-2016.

Overview of approach to date

Enforcement

The NZ Police are focused on enforcing restraints, speed, impairment (alcohol, drugs, and fatigue), and distraction as part of delivering road policing activities. However, evidence suggests general deterrence through enforcement and infringement fees may not be effective interventions for some road users. NZ Police are looking at opportunities to enhance the effectiveness of interventions for some drivers through the use of supported resolutions. This approach recognises that road safety outcomes can be improved if drivers can be supported to address the underlying cause of offending, rather than responding solely to the behaviour itself.

¹ Gordon, C. (2009). Reviewing how distraction involvement is coded in the New Zealand crash analysis system. In Proceedings of the 4th IRTAD International Traffic Safety Data and Analysis Group conference, Seoul, Korea, 16-17th September.

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Regulation

Safer Journeys regulatory actions to date related to road user behaviour include:

- Competency-based motorcycle licence testing
- raised minimum driving age to 16 years
- implemented zero blood alcohol concentration (BAC) for drivers under 20 years old
- lowered BAC for drivers over 20 years to 0.05
- implemented the alcohol interlock programme
- investigating changes to road rules to increase cycling safety.

Awareness and promotion

The NZ Transport Agency (NZTA) runs various advertising campaigns relating to road user behaviour. Recent and current campaigns are targeted at driver distraction, drink-driving, fatigue, drugged driving, and seatbelts. These campaigns are targeted at specific demographics.

The Visiting Drivers Project includes education and awareness-based initiatives aimed at improving the road safety of visiting drivers. This includes an online training module, road safety leaflets provided with some visitor visas, and steering wheel tags in rental vehicles.

Local and regional governments also deliver road safety awareness and promotion initiatives. For example, Auckland Transport promotes safer road user behaviour by Maori with the campaign Te Ara Haepapa – The Journey.

Education

The Share the Road campaign seeks to encourage positive behaviour change in drivers of heavy vehicles and people on bicycles. The Accident Compensation Corporation (ACC) provides subsidised 'Ride Forever' training for riders of mopeds, motorcycles, and scooters to improve skills and confidence. The Behind the Wheel Signature Project supports young people who face multiple barriers to becoming safe, fully licensed drivers.

Trends for 2020-2030

Technology and trends

Increasing levels of automation in new vehicles may change the importance of road user behaviour over time. However, the impact of automation on road user behaviour is likely to be limited in the next decade because of the age of our vehicle fleet.

New technologies and trends for personal transport could pose new behavioural challenges for the system. For example, transport devices such as electric powered skateboards, segways, and scooters could grow in popularity. Our transport regulations, infrastructure and other road users may not be well placed to cater to users of these devices.

Social Norms

Changes to social norms could impact road user behaviour. For example, reduced vehicle ownership, reduced driver licensing or people getting their licences later, and increased use of active modes such as walking and cycling.

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Tourism growth

Tourist numbers are forecast to continue growing to reach 5.1 million per year by 2024. This will mean continual increases in the number of visiting road users. This may mean a relative increase in the proportion of crashes involving visiting drivers. However, over the last 10 years the proportion of crashes involving visiting drivers has remained relatively steady despite increasing visitor numbers.

Links to other reference groups

Road user behaviour is strongly related to the subject matter of the other reference groups and this was reflected in the group's discussions. Some members suggested that a Safe System approach should move away from penalising individuals, and move towards making the system safe for all users.

Members suggested interventions relating to other reference groups to address behavioural risks. For example, to improve pedestrian and cyclist safety, members suggested lower speed limits (e.g. 30km/h) in urban or high pedestrian environments and segregated cycleway infrastructure.

Members also noted opportunities to leverage off workplaces to achieve changes in road user behaviour, particularly in the areas of driver fatigue and impairment from alcohol and drugs and reducing driver distraction.

The reference group was also interested in the use of vehicle technology to reduce the potential for and consequences of driver mistakes and increasing the safety of our fleet, particularly the safety of vehicles driven by young and novice drivers.

FEEDBACK FOR THE STRATEGY

Level of ambition required

Members were supportive of a high level of ambition for road safety in New Zealand. Generally, members supported a Vision Zero-type approach, and particularly the ethics behind Vision Zero – that any number of deaths on our roads is unacceptable. However, members wanted a clear understanding of what a Vision Zero approach would mean in practice and what actions and changes would accompany it.

The group believed this would require a significant change in culture, requiring social acceptance and political will for road safety interventions. Suggested approaches and ambitions include:

- outcomes need to be broader (e.g. reduced harm, healthier and liveable communities, and encourage employment closer to home)
- all road users fit into a 'generally compliant' category – all road users are trying to behave safely
- adopting mode neutrality for the safe systems approach
- including a greater focus on equity in the approach to road safety
- reverse the outcomes hierarchy of vulnerable road users – focus on pedestrians, cyclists, and public transport users first – then vehicle drivers
- stop debating efficiency versus road safety and make safety paramount.

Some members highlighted the difficulty in delivering big changes in people's behaviour and choices and the long-term nature of the challenge. There was some division in the group about the role of enforcement and penalties to achieve these changes, with equity concerns being prominent.

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Some members saw individual responsibility as being key to changing road user behaviour, acknowledging that some road users knowingly take risks. Meanwhile, others saw an opportunity to reframe the issue from 'bad drivers' to a focus on the system itself, and thereby take a less punitive approach.

Members also identified gaps in the data and evidence relating to road user behaviour and possible interventions. For example, some members wanted to understand more about who commits certain traffic offences and why they do it.

Priority issues for the new strategy

The following areas were identified by a large proportion of members as critical areas for future focus:

Training and driver licensing, including for young drivers

Some members suggested driver training should be a more prominent component of the driver licensing system and that some driving offences indicate a training need, rather than a need for punishment. Members also suggested driver training should be focused on decision-making and hazard perception.

Suggested metrics included the number of:

- crashes involving learner, restricted, unlicensed, and young drivers
- people obtaining their full driver licence, including those previously driving unlicensed
- secondary school students who complete driving training.

Education and promotion

Members identified changing social norms as a priority for the strategy, particularly around drug impaired driving (including prescription drugs) and use of mobile phones while driving. Members also suggested there should be a stronger focus on road safety in the school curriculum.

Suggested metrics included:

- the number of people committing traffic offences – including drug driving and using a mobile phone while driving
- labelling of prescription drugs that cause driver impairment.

Mode shift

Mode shift was identified as a key mechanism to reduce risk exposure, both by reducing the amount of time people spend in cars and by reducing the risk to vulnerable users. Members suggested investment in public transport, walking and cycling should be priorities to encourage people to change the way they travel.

Mode shift would be measured by the number and the percentage of people travelling by public transport, walking and cycling – including for journeys to work and school. In addition, measuring investment in these modes would show the extent this priority is being supported.

Safety of vulnerable road users

Improving the safety of vulnerable road users was seen as a priority, with particular focus on changing the behaviour of drivers around vulnerable road users. The safety of motorcyclists was also identified as a focus area.

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Suggested metrics included the number of vulnerable road users killed or seriously injured, the availability of facilities for vulnerable users, and public attitudes towards vulnerable road users.

Enforcement and penalties for priority offences

Some members suggested increasing enforcement and reviewing infringement fees and demerit points should be a priority, with a particular focus on priority offences. It was also suggested that penalties could include temporary confiscation (of vehicles or mobile phones). Priority offences identified were use of restraints, impairment, distraction, and speed.

The metrics identified included the number of crashes involving alcohol or drugs and the percentage of drivers who expect to get caught for relevant offences (e.g. from a user survey).

System-based approach to influencing user behaviour

Some members suggested the focus needs to shift towards ensuring the system supports improving driving behaviour, rather than just punishing those that make mistakes. The system should also minimise the consequences of those mistakes.

Alternative/supported resolutions

Increasing the use of alternative pathways for recidivist offenders was identified as a priority. This was focused on moving away from a punitive/justice system approach and using supported resolutions to reduce recidivism. In doing so, it would be necessary to improve our understanding of what motivates reoffending and to tailor interventions to address these motivations. This would be part of a systems-based approach and would require social support services to be positioned to help these drivers address the underlying issues behind the offending.

Members suggested this priority could be measured by looking at reoffending rates and the number of people referred to the justice system.

Incentives

The group considered that incentives, including insurance premiums, ACC levies and vehicle registration costs, could be used to encourage changes to road user behaviour.

Potential approaches and initiatives for consideration

Members identified a range of potential interventions to respond to these priorities. Eight of these interventions were selected and developed into hypothetical interventions for discussion.

Drug driving legislation and enforcement

The group discussed introducing additional drug driving enforcement measures, such as roadside drug testing. Members were generally supportive of an initiative to reduce drug driving. However, there was less agreement on what form it should take. Members had concerns, including that:

- the presence of drugs is not conclusive evidence of impairment
- saliva-based testing is too costly and time consuming for high-volume random roadside screening.

Members suggested alternative measures such as compulsory screening where drivers have committed another offence, or where there is reasonable cause to suspect a driver is impaired by

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drugs. Some members also suggested enforcement could be focused on the level of drugs present, rather than proving impairment.

Mandatory training for riders of high-powered motorcycles

Members discussed making training (e.g. the Ride Forever training) mandatory for riders of high-powered motorcycles using a separate driver licence class. Most members were supportive of such an initiative, however the cost to motorcycle riders was identified as the main barrier. Some members suggested this should apply to all motorcycle riders, since the power of motorcycles is not necessarily the safety issue.

Increasing the age requirement for child restraints

Members discussed increasing the age up to which children are required to use a child restraint (booster seat) from 7 years to 11 years. There was mixed support for this intervention, with some members noting the potential costs to parents and questioning whether there was a significant road safety issue to address with this change. Others saw a significant issue to address since adult seatbelts are not designed to fit children, so will not protect them effectively in the case of a crash.

Some members saw correct fitment and use of child restraints as an important issue, and suggested a focus on this issue instead. Other members suggested moving to a height-based regulation of 148cm, following international best practice.

Minimum overtaking gap for cyclists

The group discussed introducing a minimum overtaking gap for cyclists of 1 metre at or under 60km/h and 1.5 metres at speeds over 60km/h. There was mixed support for this intervention, with members raising concerns about infrastructure limitations and the difficulty with enforcing such a rule. However, most members saw benefits in signalling what a safe passing gap should be and thought it would improve cyclist safety.

Increasing penalties for priority offences

Members discussed the possibility of increasing infringement fees and demerit points for offences relating to use of restraints, driver impairment and distraction, and speeding offences. There was mixed support for this intervention. Some members expressed concerns that increased penalties would disproportionately impact lower-socio economic road users, and would have limited impact on recidivist drivers. Others thought increased penalties would have a deterrent effect for some road users.

Turning traffic to give way to pedestrians at intersections

Members discussed a rule to require turning traffic to give way to pedestrians at intersections. There was mixed support for this intervention. Some members were concerned it would lead to safety impacts for both pedestrians being hit by drivers and drivers being hit by vehicles behind them if they have to stop unexpectedly to give way to a pedestrian. Other members thought it was an existing rule or viewed it as common sense.

Raising the driving age from 16 to 17 years old

Members were generally less supportive of raising the driving age. Most members were concerned about a loss of employment opportunities for young people and potential mobility issues in regional areas. Some were concerned it would remove an opportunity to include driver licensing in

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secondary school education and questioned whether it would simply move the problem to novice drivers one year older. However, members did suggest it would save lives and increase road safety.

Regularly retesting or retraining drivers

There was limited support for regular retesting or retraining drivers. Some saw potential benefits in helping identify and address bad driving habits. However, most members saw little value in applying this initiative to all drivers, but some suggested it could be used as a response to certain offences or could be a requirement for elderly drivers. Some members also suggested that drivers should be encouraged to keep up-to-date with changes to vehicle technology, road rules, and road conditions.

Issues requiring further consideration

Visiting drivers

The group did not discuss visiting driver issues specifically at any of the reference group meetings. While members were free to identify visiting driver issues, it was not a particular theme in the early workshops and the group prioritised discussions on other risk factors.

Personal safety in the road environment

The group did not specifically consider personal safety other than risk factors for vulnerable users when interacting with other road users. Issues such as the safety of pedestrians interacting with others in public spaces or the safety of people travelling by public transport were not considered.

Appendix A: Membership of Reference Groups

Focus area	Speed	Infrastructure, design and planning	Vehicles, vehicle standards and certification	Road user behaviour	Vehicles as a workplace
Chair	Kirstie Hewlett, MoT	Harry Wilson, NZTA	Brent Johnston, MoT	Sandra Venables, Police	Robert Brodnax, NZTA
Advisers	MoT, NZTA, ACC	Auckland Transport, NZTA, MoT, ACC	MoT, NZTA	MoT, Police	MBIE, WorkSafe, MoT, NZTA
Expert Advisers	Dr Hamish Mackie	Dr Simon Kingham	Dr Kim Dirks	Dr Samuel Charlton	Dr Felicity Lamm
Other members	<ul style="list-style-type: none"> • Police • Ministry of Education • Auckland Transport • Hamilton City Council • Christchurch City Council • Automobile Association • Road Transport Forum • NZ School Speeds • Cycling Action Network • Rural Women NZ • NZ Institute of Driver Educators • Living Streets Aotearoa • Sport New Zealand • ACC • Transportation Group New Zealand • Students Against Dangerous Driving 	<ul style="list-style-type: none"> • Police • Ministry of Health • Wellington City Council • Dunedin City Council • Timaru District Council • Automobile Association • Living Streets Aotearoa • Disabled Persons Assembly • Greater Auckland • New Zealand Planning Institute • Bike Auckland • Road Transport Forum • Civil Contractors NZ • Generation Zero • Transportation Group New Zealand 	<ul style="list-style-type: none"> • Police • ACC • Ministry of Business, Innovation and Employment • Ministry of Health • NZTA • Automobile Association • IAG Insurance • Brake • Motor Trade Association • Motor Industry Association • VIA • Motorcycle Safety Advisory Council • Bus and Coach • Uber • Vehicle Inspection NZ • Institute of Road Transport Engineers 	<ul style="list-style-type: none"> • Police • NZTA • ACC • Ministry of Education • Ministry of Justice • Auckland Transport • Waikato Regional Council • Safe and Sustainable Transport Association • Motorcycle Safety Advisory Council • Automobile Association • Health Promotion Agency • Plunket • Brake • NZ Institute of Driver Educators • Cycling Action Network • Rental Vehicle Association • Disabled Persons Assembly • Living Streets Aotearoa 	<ul style="list-style-type: none"> • Police • WorkSafe • NZTA • Ministry of Business, Innovation and Employment • Automobile Association • Road Transport Forum • Bus and Coach • Business NZ • Business Leaders' Health and Safety Forum • FIRST Union • NZ Professional Firefighters Union • NZ Tramways & Public Transport Employees Union • E Tu • IAG Insurance • Taxi Federation • Uber • ERoad