Ministry of Transport

Road Safety Strategy – Summary of Reference Group Outcomes

March 2019

PURPOSE

This report provides a preliminary summary of the outcomes from the Road Safety Strategy reference group process. It sets out:
- overarching themes across all reference groups
- the key challenges, strategic priorities and potential approaches identified by each group (including areas of agreement and contention).

CONTEXT

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

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 first 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 and provide buy-in and support for the process
- build a better shared understanding of the challenges and opportunities for the new strategy.

The reference groups were not asked to reach a common position, or required to endorse recommendations or reports given we were trying to understand and highlight the variety of views.

Each group focused on one of the following broad areas:
- Infrastructure, design and planning
- Speed
- Vehicles as a workplace
- Road user behaviour
- Vehicles, vehicle standards and certification.

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

Membership and process

NOT GOVERNMENT POLICY

Reference groups consisted of representatives from across central and local government, key players in the transport sector, and road safety experts and advocates.

Each group was supported by:
- a chair (a senior official from the Ministry of Transport, NZ Transport Agency or Police)
- nominated advisers from relevant agencies including the Ministry of Transport, NZ Transport Agency, WorkSafe, ACC, Police and Auckland Transport (who organised the sessions and prepared background materials)
- an expert adviser (responsible for linking the group with recent research and analysis, and testing the thinking of advisers and other members).

Appendix A outlines membership for each reference group.

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

OVERARCHING THEMES

Areas of commonality and/or broad agreement across all groups are summarised below. Many of these are fundamental system management issues that need to be addressed for the new strategy to succeed.

- ***Broad (but not universal) support for Vision Zero*** – Many members suggested that Vision Zero is the only ethically acceptable approach to road safety. A key theme was the need to clearly articulate what we mean by Vision Zero and how this would differ in practice to our current approach. A small number of members raised concerns about whether people would misunderstand that Vision Zero was an approach rather than a target and this would lead to public scepticism around eliminating all road deaths, which would reduce acceptance of the strategy. Their suggestions were to use other approaches, such as Towards Zero.
- ***Acknowledgement of complexity*** – Over the course of the reference groups' conversations there was increasing acknowledgement of the level of complexity in improving road safety. Exposure to the broad range of issues and evidence helped drive awareness that there is no single "silver bullet" to road safety, and that a broad system-wide approach is needed.

- ***Importance of clear and ambitious outcomes*** – Reference group members highlighted the importance of ensuring that the new strategy sets clear and ambitious outcomes that would substantially reduce the level of harm on New Zealand's roads. Members also discussed the opportunity for road safety to contribute towards broader transport outcomes, such as accessibility and health outcomes.

- ***Need for a systems-based approach*** – While the reference groups were generally focused on discussing the challenges and potential approaches in their particular focus areas, it was clear to all groups that focus areas should not be considered in isolation. The groups identified a number of common issues and interventions across the areas, with particular overlap and linkages between the speed and the infrastructure groups and between the vehicles and vehicles as a workplace groups.

- ***Initiatives need to be supported by appropriate investment and capability*** – There was broad acknowledgment of the importance of robust implementation and delivery capability. Members identified capacity, capability and funding challenges throughout the system, in both local and central government, and within the sector more broadly. Members were clear that a key focus of the new strategy will need to be on addressing these challenges.

- ***Strong national leadership and accountability vs. shifting the public narrative*** – Stakeholders believed stronger leadership was needed from all parts of Government: Ministers, central government agencies and local government. Encouraging a bi-partisan approach like that adopted in Scandinavian countries was also discussed. A number of groups discussed the challenge of making substantial improvements to road safety in an environment where public discussion about road safety is still focused on blaming other drivers for crashes. Members emphasised the importance of bringing the public along. However, groups also noted that in some instances it may be more appropriate for government to take ownership of some risks to achieve desired outcomes, even if there is mixed public support for change. A major problem with *Safer Journeys* was believed to have been an inability to tackle some of the hard issues.

While reference group members were generally committed to an ambitious overall approach to road safety, there were clear differences in the level of priority placed on different road safety issues. While this largely reflects the different perspectives of members, in some instances it may also be due to the lack of a shared understanding of the problem and the likely effectiveness of interventions.

SUMMARY OF GROUP FEEDBACK:
Infrastructure, Design and Planning

Key points

This group focused on the following issues relating to infrastructure, design and planning:
- integrating safety and land use planning (including improving public transport access and walkability in an urban environment)
- the role of multi-modal transport in road safety
- standards and guidelines for design and maintenance of infrastructure
- rural road safety improvements
- road safety in the infrastructure lifecycle
- the engagement challenge
- links to public health impacts, including road dust and noise.

There was a strong degree of consensus from members around the key challenges and priorities. There was an appetite for transformational change, particularly around reprioritisation of road space for active modes in urban areas. However, the group also noted challenges around building public support for infrastructure improvements.

The group considered that a range of current guidelines and standards which interact with transport outcomes (including urban design and accessibility standards) are in need of review. There are also opportunities to more systemically embed safety as part of the infrastructure lifecycle and ensure it does not get traded off against other priorities. Certain infrastructure treatments were commonly understood to be effective at improving safety (e.g. median barriers, physical speed management, and roundabouts), but there was also considerable support for more trialling and innovation.

Challenges and opportunities

New Zealand's road network is long and stringy, our population is relatively low and dispersed, and our natural geography is challenging. This makes our road network more difficult to maintain and improve. Most open roads have a speed limit of 100 km/h, and many offer little protection if road users make a mistake. The State Highway network has a higher rate of deaths per km of network compared to local roads, and the crash problem is primarily rural mid-block.

Meanwhile, the local road network has the greater proportion of serious injuries, and the crash problem is largely urban. Urban road networks have been primarily designed for motor vehicles, and land use and transport planning are not well integrated. As a result, other modes of transport (e.g. walking or cycling) are often perceived as unsafe and are thus underutilised. Most high risk urban roads have a 50km/h speed limit and there are many high risk urban intersections and arterials, which pose a significant risk to vulnerable road users at this legal speed.

There is a lack of systems understanding on why road trauma has increased significantly in recent years. Targets and performance measures for infrastructure safety across all modes have been absent. New data sources and tools are required to address this and track future progress.

Population and housing growth are generating demand for transport infrastructure and services. These are both predicted to increase significantly over the next decade, particularly in Auckland. Travel patterns are also likely to change, as are demographics and transport technologies. There is an opportunity to increase greatly the number of urban trips that are taken by public transport, active modes, ride sharing and emerging mobility devices.

Priorities for the new strategy

Standards and guidelines

- The group considered that New Zealand's current standards and guidelines are not always fit-for-purpose. They do not consistently: cater for safety and access for all modes; help establish self-explaining roads through design; or facilitate the creation of safe and liveable urban areas. Interactions between various standards and guidelines (e.g. urban design and accessibility standards) can be challenging. The group also noted that the sector lacks capability and capacity, which is contributing to inconsistent application of standards and guidelines.

- Alongside support for Vision Zero, there was almost universal agreement that the adoption of a standard based on the Healthy Streets design principles, would greatly improve safety in urban areas and deliver health and environmental co-benefits.

- The group considered that current rules and regulations (as well as standards and guidelines) do not incentivise innovation. This makes it difficult to trial safety treatments successfully deployed elsewhere in the world.

Planning

- The group considered that road safety planning should include a multi-modal framework that addresses safety for all modes, and is explicit about conflicts, trade-offs and priorities. Land use planning and transport planning also need to be better integrated and there needs to be better provision for planning at a network level.

- Members noted that the infrastructure lifecycle is not being considered holistically and there are gaps in the road safety auditing process. They expressed concerns that the Safe System approach is not being properly considered and suggested that a sustainable transport hierarchy and assessment framework would better protect vulnerable road users. Improved cross-sector collaboration and a broader range of experts is also needed throughout the lifecycle to inform the specific perspectives of transport planners, designers and engineers.

- Opportunities are being lost to improve safety for all modes, e.g. sealing shoulders. This is partly due to a lack of minimum standards for all modes during maintenance, and a reactive (rather than proactive) approach being taken to maintenance.

Investment

- The group emphasised the need for an overall increase in the road safety budget, as lack of funding was thought to be a major barrier for road controlling authorities. Road safety is perceived to be traded off for other transport objectives, and wider benefits (e.g. regarding access, health or the environment) are not being considered alongside safety. Some members noted that effective investment is not merely about funding volume, but also ensuring decision-making frameworks support investment in safety without trading safety off for efficiency or other objectives.

- Funding needed to be better targeted to evidence-based risk, especially in the case of vulnerable road users. This will require more data, including uncaptured data on perceived risk. Members also highlighted the need for greater investment in research and the development of new road safety treatments, and emerging technologies.

Engagement

- The group considered that the lack of political and public support can be a barrier (particularly where safety improvements reduce local access) and supported more effective community engagement. However, members also acknowledged the tension between building acceptance and making necessary changes without public support. There was also recognition that cross-agency collaboration would be more effective if outcomes were shared.

Ambition / Safe System management

- There was strong support for a transformational approach to reduce New Zealand road trauma, although opinions differed on what this would require in terms of the scale of infrastructure. There was agreement that target setting and safety performance measures are required to introduce greater accountability and monitoring of progress.

Potential approaches and initiatives for the first action plan

Some potential initiatives discussed by the group include:

- introduce or improve standards and guidelines (e.g. around road markings and delineation to create more self-explaining roads; intersection and roundabout treatments that help manage speeds; pedestrian facilities, in particular for the less-abled; whole-of-corridor standards; and parking supply and how it is valued)

- explore ways to increase priority for active mode safety (including a sustainable transport hierarchy which gives active mode safety top priority, similar to the Roads and Streets framework)

- adopt the Healthy Streets design principles for urban environments

- review levels of investment in road safety, particularly for active modes

- introduce targets and safety performance measures for infrastructure as part of a more accountable safety management system.

SUMMARY OF GROUP FEEDBACK:
Speed

Key points

This group focused on the following issues relating to speed:
- the contribution of speed to Vision Zero
- options to simplify the speed limit setting process
- appropriate speeds for different urban and rural environments, including around schools
- how speed management can contribute to safety, health, economic and environmental outcomes
- approaches to improving speed compliance, including use of the safety camera network, incentives and in-vehicle technologies
- the importance of engineering and the roading environment to speed management
- public engagement on speed.

There was significant overall ambition in the group to implement speed management changes more efficiently and effectively and ensure New Zealand roads had appropriate speeds for the road, using a scientific approach which learns from other jurisdictions. However, views around the scale and pace of change that is appropriate and achievable differed.

The group broadly agreed that improvements could be made to the current speed setting process and that speed limits should be reduced in areas with a high number of active road users (e.g. schools, CBDs and town centres). Opinions were mixed on how best to implement these changes. The group also noted that speed limit changes should be considered alongside other interventions (such as engineering changes). A new approach to the safety camera network was also considered.

Current challenges

Speed continues to be a major contributing factor to deaths and serious injuries on New Zealand roads. In 2016, travelling too fast for the conditions was the second highest contributing factor to fatal and serious injury crashes in New Zealand. In the event of a crash, regardless of its cause, the speed of impact is the most important determinant of the severity of injuries sustained and the probability of death. According to the NZ Transport Agency's analysis, 87 percent of New Zealand's roads do not have a safe and appropriate speed limit. The majority of the misalignment of speed limits is on rural roads without median protection that are not safe at 100 km/h and on residential streets that are not safe at 50 km/h. There is also insufficient resourcing in the system to support road controlling authorities to deliver on the current expectations in the Government Policy Statement on Land Transport, both in terms of reviewing speed limits and engineering roads to support safe limits.

The current process for setting speed limits was identified as a major challenge. The group considered that the current approach does not effectively support regional collaboration and network-based approaches, is prone to political interference, and may over-represent a small but vocal minority. This raises questions about whether speed limit setting should be a political decision for councils or a different type of decision-making function.

In addition, there is mixed interpretation around the approach and interaction of the bylaw process, Speed Management Guide and local government legislation. This contributes to the inconsistent application of the speed limit setting process, including different interpretations of consultation requirements and decision-making processes, leading to cumbersome and inefficient processes.

The group also considered that the current public dialogue around speed is overly focused on potential impacts on travel times, which are often overstated. Speed changes, particularly in urban environments, can contribute to broader community liveability, health and environmental outcomes. There is also potential to take advantage of developing technologies to incentivise speed compliance, including both in-vehicle technology and changing our approach to the use of safety cameras.

Priorities for the new strategy

Establishing new ambitious outcomes and measures for speed management changes

- There was a collective ambition and a sense of urgency to ensure safe speeds on the network, and for Vision Zero. There was also support for measures that hold government and road controlling authorities to account for implementing changes. However, there were different views on the scale and pace of change that was appropriate or achievable, and opinions on specific targets and performance measures for setting out levels of ambition varied.

- There was general agreement to address the highest risk parts of the network, where the greatest potential road safety improvements lie. Views were mixed on how to achieve this, how quickly, and how to factor-in community views on speed limits. In addition, there was agreement that the level of ambition needed to be backed by sufficient resourcing, both for community engagement and for infrastructure treatments. It was noted that addressing the top 10 percent highest risk roads would be unachievable for many road controlling authorities in the current three year national land transport programme, especially given their limited resources and the current regulatory framework.

- There was consensus that the new strategy and first action plan should have clear, justifiable and ambitious outcomes and measures in relation to speed management. The group's view was that the outcomes should also show how reductions in speed contribute to broader community liveability, health and environmental objectives.

Establishing a new approach to speed management

- There was a wide range of views on the potential options for changing the current regulatory framework. While there were no simple agreed solutions, it was generally acknowledged that the speed limit setting process and priorities for speed management need to be substantially reset.

- The group agreed any solutions should include the following key components:

  o address confusion and inconsistency of application of bylaw requirements, the Land Transport Rule: Setting of Speed Limits 2017, and Speed Management Guide

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- encourage greater accountability, transparency, and consistency around decision making and also more transparency around local and national speed management plans
- enable more effective regional approaches
- is supported by sufficient funding and resources to support implementation of speed management changes, both undertaking speed limit reviews, as well as making engineering and other physical changes to the road
- encourage an evidence-based approach that supports public understanding and engagement
- involve the road controlling authorities' local knowledge to support effective implementation and engineering of roads
- provide more efficient ways of undertaking change that still engages with communities and other road users.

Improve the safety of active road users by reducing speed limits around schools, CBDs and town centres

- Overall there was broad support for prioritising speed limit changes to schools and urban centres both for safety and access. Members considered that these changes are likely to meet with less public resistance and would thus shift the public discussion on speed.

- There was broad support for 30-40 km/h speed limits outside urban schools. However, there was no consensus about whether a 30 or 40 km/h speed limit was more appropriate, or whether permanent or variable speed limits were more suitable. Some members were supportive of the application of 40 km/h speed limits outside urban schools with the discretion to use variable 30 km/h speed limits in peak times. There was also support for permanent 30-40 km/h speed limits in CBDs and town centres where there are high numbers of interactions between road users. There were questions about how to implement these changes, including whether addressing roads outside schools and in CBDs and town centres should be prioritised over addressing the highest risk roads within a region.

- There was also considerable support for lower variable speed limits outside rural schools during times when children are travelling to and from school. There were concerns that if lower permanent speed limits were implemented outside rural schools, sudden reductions from 100 km/h to 80, 60 or 40 km/h would lead to people travelling at a variety of speeds and cause greater safety issues. Some members highlighted the importance of providing infrastructure investment so schools did not open out on to busy roads. Other members were of the view that it was more important to focus on changing the culture of how people drive around schools. Some thought this could be achieved through consistent speed limits outside all schools, whether urban or rural, and ensuring that roads outside are 'self-explaining'. There were also suggestions that higher penalties should apply to drivers exceeding the speed limit outside urban and rural schools.

A new approach to the safety camera network and other compliance mechanisms

- The use of safety cameras has seen significant reductions in deaths and injuries in other jurisdictions. In New Zealand there has been minimal use of cameras, and problems with back office processing capability. Increasing the use of cameras as part of a suite of tools for speed management was considered a key priority for any safety strategy.

- There was broad in-principle support for shifting to the Swedish approach to safety cameras, which has resulted (in Sweden) in significant reductions in death and serious injury, greater public acceptance of cameras, less back office processing and less impact on the justice pipeline. However, some members raised questions about how this would be implemented in practice, especially as it would involve significant investment in the safety camera network and processing.

    o The Swedish approach recognises that on a large portion of the network, average travel speeds exceed the speed limit that roads are designed for. The Swedish approach assumes that road safety is an important priority for most road users, and that inattention and a lack of information regarding the risks of speeding are the main reasons why some motorists exceed the speed limit. Under the Swedish approach, safety cameras are well sign-posted, there is advanced warning, and they are used more in rural areas (but also in urban areas). Communication/advertising is focused on explaining purpose of the cameras and how they work.

    o There is significantly greater coverage of the road network in terms of the number of cameras in operation, but cameras are only switched on a proportion of the time. As drivers are given greater warning of where cameras are, penalties are higher if people get caught. However, the number of people caught is smaller than in other countries where the approach taken is that people can get caught anytime anywhere. In Sweden it is the equivalent of the NZ Transport Agency, rather than the Police, that operates the speed camera network. This facilitates greater alignment between infrastructure planning and improvements and the placement of the speed camera network.

- There were also some questions about whether some elements of the Victorian approach to safety cameras should be maintained or introduced. One element includes maintaining the policy that the owner of the vehicle is held liable (as opposed to the driver of the vehicle), with the owner having the option of being able to transfer liability to the driver of the vehicle. It was noted that issuing camera notices to the owner, with them being able to transfer liability to the driver, is a more cost- and resource-effective mechanism for issuing camera notices than trying to identify the driver first. It also informs the vehicle owners of how their vehicles are being driven, enabling them to manage the associated risks that they would otherwise not be aware of.

- There was support from the group for exploring increased use of other technologies, such as average safe speed cameras and red light cameras. Some members also thought considering elements from other jurisdictions' approaches to safety cameras would beneficial, rather than limiting it to just consideration of the Swedish and Victorian approaches.

- There was support from the group for getting a better understanding of the demographic that is currently receiving the majority of speed-related infringement offences in New Zealand. There were mixed views around applying demerit points to safety camera offences. Some members were concerned that the absence of demerit points may limit the ability to influence motorists' compliance with speed limits.

- The group noted that the process of notifying drivers that they have been caught exceeding the speed limit needs to be quicker. There was also some support for recycling revenue from safety camera infringements into road safety improvements, but others were cautious about the perceived or real incentives this could create around revenue gathering. Views were mixed about introducing higher infringement fees for speed-related offences.

Use of in-vehicle technologies and incentive-based schemes

- The group discussed the potential benefits of in-vehicle technologies to support speed compliance. There was significant discussion and support for the potential benefits of intelligent speed assistance, both advisory and active assistance.

- The group also discussed the potential of incentive-based schemes to improve speed compliance and improve road safety. The group generally thought that incentive schemes have potential, but also highlighted the importance of targeting the right techniques to the right target markets. However, they also acknowledged the difficulties in scaling such programmes.

Managing speed as a system

- Members noted a clear need to develop a more holistic approach to speed management, which considered speed limits, engineering changes, and technology (in particular the use of safety cameras). There was strong support for developing a better understanding of how to manage speed using low-cost engineering changes, particularly in urban environments.

- There was a suggestion that all speed limits should be variable and take into account local conditions (i.e. traffic volumes and the weather). This could ensure that speed limits are appropriate for the conditions, which will likely increase compliance levels. However, it was noted that this proposal would be expensive to implement across the network.

- There was support for the need to ensure mechanisms to influence behaviour changes (e.g. penalties, signage such as speed activated warning signs, and communication strategies) are considered in conjunction with investing in safety camera technology, to help encourage motorists to comply with speed limits.

Potential approaches and early initiatives

Members discussed a wide range of potential interventions to respond to these priorities. Some are intended to form part of the Tackling Unsafe Speeds programme being progressed as a priority alongside the development of the new road safety strategy. These include:

- developing new, clear, justifiable and ambitious outcomes and measures in relation to speed management (taking a system-based approach to managing speed) which will make a significant contribution to safety as well as community liveability, health, economic and environmental objectives
- establishing a new regulatory approach to speed limit setting, which could consider regional speed management plans or policies
- reviewing speed limits around schools and in urban areas to support both safety and access, and help open the door to speed management changes in communities.
- revising funding in the Government Policy Statement for Land Transport for speed management initiatives to ensure there is sufficient funding to support investment in priority speed management initiatives
- exploring adoption of an adapted Swedish approach to safety cameras.

Other initiatives that could be progressed include:
- Reviewing whether demerit points should be applied to safety cameras, as well as higher monetary penalties, as part of a broader review of land transport offences and penalties
- Exploring opportunities to maximise the potential of in-car intelligent speed assistance technology, including incentive-based and mandatory schemes (potentially for the heavy vehicle fleet or recidivist offenders)
- Community-based incentive schemes to encourage speed compliance, potentially through recycling safety camera revenue.

Three particular areas for future research to inform early actions were also discussed:
- Reviewing the evidence base for crash survivability of pedestrians when hit at low speeds.
- Investigating recidivism rates for speed offences and identifying what might help to change patterns of repeated risky behaviours.
- Developing a greater understanding of who is currently receiving safety camera infringements, recidivist or one time offenders.

SUMMARY OF GROUP FEEDBACK:
Vehicles as a Workplace

Key points

This group examined road safety issues associated with driving for work, including both commercial transport services (such as freight and passenger services) and driving as part of work more generally. These issues were considered from both a road safety and a health and safety at work perspective.

The group identified opportunities for both businesses and the government to drive change in this area, and the potential for work-related road safety to lead to improvements in road safety more broadly. Key areas of discussion included the need to think about the broader organisational factors affecting work-related road safety, the importance of the whole supply chain in lifting our road safety performance, and the potential offered by vehicle monitoring technology (i.e. telematics).

Challenges and opportunities

Work-related road safety has been identified as a significant issue in New Zealand and internationally, both as a substantial part of overall road safety outcomes and as a leading cause of work-related deaths. However, there is a lack of comprehensive data on the proportion of road crashes that involve work-related driving. A review of coronial files being undertaken by the University of Otago suggests that around 25 percent of road deaths involve someone driving for work (including commuting), with around half of these involving commercial transport services. This is broadly consistent with experience in other jurisdictions.

The group discussed the key safety challenges for three broad types of workplace driving:

- *Goods transport:* Key challenges identified in the goods transport sector (e.g. freight and courier operators) included constraints caused by commercial pressures, driver hours and fatigue, the difficultly of providing effective remote supervision, the number of owner-drivers, and limited compliance and enforcement resource and mechanisms.

- *Passenger transport:* Key challenges identified in the passenger transport sector (e.g. small passengers services and buses) included pressures caused by the operating environment, the age of parts of the bus fleet, driver skills and experience, driving hours, fatigue and personal safety risks for both drivers and passengers. The impact of new business models on driving hours and fatigue was also raised as a concern.

- *General workplace driving:* Key challenges identified in relation to general workplace driving (e.g. where driving is incidental to a worker's main role) included poor understanding of driving risks as part of wider health and safety responsibilities, the use of personal vehicles for work trips, distraction risks associated with trying to run a business from a vehicle and a limited understanding of current workplace driving practices and risks in some sectors.

The group identified a number of potential trends that may impact on work-related road safety over the next 10 years, including the increased casualisation of employment, workforce challenges, changes to freight patterns, the immediacy of delivery times, and shifts towards vehicle automation.

Priorities for the new strategy

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

Ensuring businesses treat road safety as a critical health and safety risk

A number of reference group members suggested that businesses often do not treat road safety as a critical health and safety risk to their workers and rely solely on the minimum requirements under the Land Transport Act 1998 as sufficient to manage this risk. There was broad agreement from the group that businesses in all sectors need better information about how to meet their obligations under the Health and Safety at Work Act 2015.

Government leadership on work-related road safety

Members identified opportunities for both central and local government to show leadership by exhibiting best practice on work-related road safety. In particular, the group noted that a focus on safety in government's procurement of vehicles and transport services would help lift health and safety standards in the transport sector more broadly.

Focussing on fatigue, distraction and vehicle safety as priority issues for work-related road safety

A large proportion of members identified driver fatigue and distraction as areas of particular concern for work-related road safety that should be focused on as part of the new strategy. Issues relating to driving hours and the use of mobile phones in work vehicles were highlighted. The wholesale use of subcontracted labour in the transport sector who face significant pressure to conform to tight schedules was also seen as a contributing factor of stress and fatigue. Concerns were also raised by members about the safety of vehicles used in the workplace, both those owned by the business and personal vehicles used for work travel.

Ensuring that drivers have the skills and knowledge appropriate to their roles

A number of members emphasised that a priority issue for the new strategy should be improving the training and knowledge of those driving for work, highlighting concerns with existing training in the workplace, regulatory requirements for commercial drivers and driver licensing requirements more generally.

Using chain of responsibility obligations to drive change

The reference group discussed examples of where purchasers of transport services have used their procurement processes to drive safety improvements among their suppliers. Members highlighted opportunities to leverage existing obligations under the Health and Safety at Work Act 2015, including in the tendering and procurement of public transport services.

Lifting standards for commercial transport services

A number of reference group members raised concerns that while some commercial transport service operators take road safety very seriously, commercial pressures and a lack of understanding of risks mean that this is not necessarily the case across the board. Some members supported lifting minimum safety standards for commercial transport services, while others considered these measures should be targeted to the highest risk services.

Promoting the uptake of technology

The potential of transport technology, particularly telematics (vehicle tracking and driver behaviour feedback) and fatigue monitoring technology, to improve road safety outcomes was a key theme of discussions. The reference group broadly agreed that promoting the uptake of these and future technologies at work should be a priority for the new strategy.

Other suggested priorities

Other suggested priorities, such as shifting freight modes away from road to rail and coastal shipping, and addressing the real and perceived personal safety risks to passenger service drivers and passengers, were also identified by members.

Potential approaches and initiatives for the first action plan

Reference group members identified a range of potential interventions to respond these priorities. The following initiatives were broadly supported by reference group members:

- improve work-related road safety data to build a clearer understanding of the overall level of harm and the key risk factors involved

- use regulatory levers to promote the uptake of telematics systems (which track vehicles and safety)

- strengthen the NZ Transport Agency's regulatory tools in relation to licensed commercial transport operators, including consideration of designating the NZ Transport Agency as a health and safety regulator

- improve coordination between safety regulators, particularly between the NZ Transport Agency and WorkSafe

- amend the Work Time Rule to reduce maximum driving hours for commercial drivers

- introduce best practice guidelines on managing work-related road safety in different sectors.

There was a wider range of views on the merits of:

- shifting transport services licensing towards a safety case-based system where operators are required to identify and address critical safety risks associated with their operation

- establishing a network or forum for businesses to share and promote best practice on work-related road safety.

SUMMARY OF GROUP FEEDBACK:
Road User Behaviour

Key points

This group focused on the following issues with regard to road user behaviour:
- the role of road users in a Safe System
- addressing risks associated with restraints, distraction and impairment
- behavior of and in relation to vulnerable users – including pedestrians, cyclists, and motorcyclists
- effectiveness of road safety promotion activity
- penalties for infringement offences
- supported resolution approaches to addressing offending
- demerit points for driving offences.

The group supported ambitious change in this area, including general support for interventions to reduce impaired and distracted driving, and a strong focus on improving the safety of vulnerable users. The group saw key roles for training, education and promotion to change social norms and improve road user behaviour.

There was some division in the group about the role of enforcement and penalties, with equity concerns being prominent. Some members saw individual responsibility as being key to changing road user behaviour, while others were more in favour of a systems-based approach. The group identified different interventions for different users. For example, recidivists and high-end offenders were seen as requiring a different approach to the general population.

Challenges and opportunities

The group identified the following key challenges with respect to road user behaviour:

- *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.

- *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 illicit and legal drugs), and not alcohol, were a factor in 13 percent of fatal crashes, which was higher than alcohol alone at 12 percent.

- *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.

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- *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 research suggests that the contribution of diverted attention to crashes may be 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.

Priorities 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* – 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.

- *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.

- *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 mode shift.

- *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.

- *Incentives* – Some members of the group considered that incentives, including insurance premiums, ACC levies and vehicle registration costs, could be used to incentivise changes to road user behaviour.

Members also identified some potentially conflicting priorities aimed at motivating behaviour change, which reflects the differences in views among stakeholders. It also reflects an acknowledgement from members that different approaches to behaviour change are needed for different users. These priorities were:

- *Enforcement and penalties for priority offences* – Some members suggested increasing enforcement and reviewing infringement fees and demerit points should be a priority, with a

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NOT GOVERNMENT POLICY

particular focus on priority offences. The priority offences identified were use of restraints, impairment, distraction and speed.

- *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 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 also identified as a priority. This was focused on moving away from a punitive/justice system approach and looking at 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.

Potential approaches and initiatives for the first action plan

Reference group members identified a range of potential interventions to respond to these priorities.

The following initiatives were broadly supported by reference group members:
- introducing additional drug driving enforcement measures, such as roadside drug testing
- introducing mandatory training for riders of high-powered (or all) motorcycles.

There was a wider range of views on the merits of:
- increasing the age up to which children are required to use a child restraint (booster seat)
- introducing a minimum overtaking gap for cyclists
- increasing infringement fees for priority offences relating to restraints, impairment, distraction and speeding
- requiring turning traffic to give way to pedestrians at intersections.

There was less support from most reference group members for:
- raising the driving age from 16 to 17 years old
- regularly retesting drivers or requiring drivers to undertake an approved training course.

SUMMARY OF GROUP FEEDBACK:
Vehicles, Vehicle Standards and Certification

Key points

This group focused on the following issues relating to vehicles, vehicle standards and certification:
- accelerating the uptake of safer (and cleaner) vehicles
- minimum vehicle standards at entry, including certification processes
- in-service safety – vehicle maintenance requirements
- removing less-safe vehicles from the fleet
- promoting greater uptake of safety technology
- passive safety systems
- advanced driver assistance systems
- connected vehicle technology.

The group noted that the potential benefits to road safety of increasing the safety of the fleet is considerable because vehicle safety standards affect the outcomes from a crash. However, while some action to improve the safety of the fleet could be taken relatively quickly, improving the overall safety of the fleet would be a long-term process.

There was overall support for adopting a Vision Zero approach for the new road safety strategy, but no clear agreement on specific targets. The group expressed strong support for regulatory intervention to improve the safety standards of vehicles entering the fleet. Other methods for incentivising the uptake of new technologies (for example financial incentives) received less support. There was also some support for better use of technology to assess the safety of vehicles in-service, and for retrofitting new technologies, especially into heavy vehicles. Areas of disagreement centred on whether used vehicles should be regulated separately from new vehicles, and whether motorcycle safety should be addressed separately from other vehicle types.

The group discussed in-service vehicle testing and maintenance, including the Warrant of Fitness (WOF) and Certificate of Fitness (COF) procedures. There was general acknowledgement that the WOF and COF systems, from a technical point of view, had not been substantively reviewed. There was broad (but not unanimous) support for these systems to be assessed to ensure they are fit for purpose.

Challenges and opportunities

Key challenges and opportunities discussed by the group are set out below.

- For its population, New Zealand has a large vehicle fleet and this includes a large number of less-safe vehicles. As of 2017, approximately 45 percent of cars in New Zealand's fleet have a crash worthiness rating of one or two stars. These vehicles are over-represented in New Zealand's annual road deaths, and account for approximately 65 percent of deaths or serious injuries (DSIs). One- and two-star cars are overrepresented in DSIs as they lack the safety features which prevent occupants from being killed or injured in the event of a crash. These

vehicles are typically driven by younger drivers, who are also among New Zealand's most high-risk drivers. While one- and two-star cars are typically older, vehicle age is not, on its own, a good indication of vehicle safety or the likelihood of a road crash. Older vehicles tend to travel less than newer vehicles which lessens the comparative likelihood of being in a crash.

- The majority of new cars entering the fleet are already five-star safety rated. The introduction of recent health and safety legislation has caused businesses to purchase higher safety rated vehicles and changed demand in the new car market. Five-star cars are more likely to be equipped with active safety features such as autonomous emergency braking, lane keep (which can help drivers avoid crashes), as well as passive safety features that protect the occupants if a crash occurs. In contrast, used vehicles, which are primarily bought by private citizens, are made to a wide range of safety standards.

- Heavy vehicles and motorcycles are important for road safety as they are over-represented in crashes compared to the number in the fleet and distances travelled.

Priorities for the new strategy

Taking a Vision Zero approach to vehicle safety

- The group as a whole agreed that the new road safety strategy should adopt a Vision Zero approach. There was also a consensus that the new strategy needed to look beyond light vehicles to consider other road users and especially vulnerable road users such as motorcyclists, cyclists and pedestrians. It also needed to consider the wider impacts vehicles have on wellbeing through health and environmental issues.

- While agreeing in principle to targets, the group did not reach consensus on a set target for vehicles outside of a general improvement in the safety of the fleet, and for a reduction in road deaths. The group cited the influence other factors (e.g. infrastructure and speed limits) would have on any vehicle-specific targets set.

Regulatory intervention

- There was a strong preference for Government to take the lead by mandating safety standards to improve the safety of the fleet. The group considered that regulatory intervention, particularly at vehicle entry, would create a level playing field for the industry to operate in. The group recommended consideration of mandating new safety technologies for all types of vehicles, modelled on a package of new standards being considered in Europe and recommendations in the New Zealand-developed Vehicle Standards Map.

- The group also discussed options for retrofitting safety technology, especially to heavy vehicles, where fitting of telematics devices is already common and provides an opportunity to add additional features. These retrofits are especially appropriate for managing speed. As well as considering regulations for safety standards, the group discussed options to require motorcycle safety clothing and improved helmets to improve outcomes for this group.

- There was a high degree of interest in reviewing whether the current WoF and CoF regime is still fit for purpose. In particular the group wanted to ensure current tests are relevant for recent, highly computerised vehicles and questioned whether more comprehensive tests using new equipment were required (including the need for fully independent inspections, separated from repairs).

- The group noted there would likely be a time lag before the impacts of new standards on vehicles could be seen. Regulation could also create additional costs for New Zealand consumers, and this could have equity impacts.

Other types of intervention

- There was interest (though no consensus) in exploring how incentives, especially financial incentives such as reduced fees or ACC levies, could be used to encourage safer vehicles at all stages of the vehicle's life, from entry to exit.

- There was also interest in exploring how to use private sector organisations to improve safety. Suggestions included using contracts to require the use of safe vehicles for deliveries and greater advocacy for safe vehicles and safe vehicle use.

Potential approaches and initiatives for the first action plan

The top five interventions prioritised by the group are set out below:

- preventing unsafe light vehicles from entering the fleet by banning one- and two-star vehicles or by raising standards

- actively promoting and enabling the adoption of vehicle features that help protect vulnerable users (especially vulnerable road users such as pedestrians, cyclists, motorcyclists, and scooter riders) from death or serious injury if hit by a vehicle

- accelerating the removal of unsafe vehicles from the fleet

- implementing new (increased) safety standards for heavy vehicles, including promoting retrofitting of safety technologies where appropriate

- introducing an enabling regulatory framework that enables faster uptake of new standards and technologies

The other interventions included:

- actively promoting and enabling the adoption of vehicle types (e.g. hybrid/electric) that help protect people in the community from the adverse effects of air pollution, environmental noise and DSI

- influencing organisations or businesses that purchase transport services (such as supermarkets, councils and other government agencies) to require the provision of safe vehicles through procurement or contract conditions

- using financial incentives for interventions (e.g. reduced ACC, insurance or RUC, or direct subsidies)

- requiring a reassessment of the WoF/CoF regime to ensure it is fit for purpose

- introducing vehicle inspection of vehicle safety in addition to the WoF/CoF inspection process (e.g. roadside inspections, sensors)

- banning the re-registration of insurance write-off and other damaged vehicles (from both New Zealand and overseas) and registration of vehicles more than 20 years old from overseas

- coordinating greater collection and sharing of data on vehicle equipment as a contributor to road safety.

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	- 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	- 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	- 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	- 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	- 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