

Update on the Road Safety Strategy

Reason for this briefing	This briefing provides the strategy component of the draft consultation document on the Road Safety Strategy, and updates you on progress.
Action required	Discuss the contents of this briefing with officials on Tuesday 9 April 2019.
Deadline	9 April 2019
Reason for deadline	For discussion with officials on Tuesday 9 April 2019.

Contact for telephone discussion (if required)

Name	Position	Telephone	First contact
Brent Johnston	Manager, Mobility & Safety	[REDACTED]	✓
[REDACTED]	Programme manager	[REDACTED]	
[REDACTED]	Senior advisor	[REDACTED]	

MINISTER'S COMMENTS:

privacy

Date:	4 April 2019	Briefing number:	OC190287
Attention:	Hon Julie Anne Genter CC: Hon Phil Twyford	Security level:	In confidence

Minister of Transport's office actions

- Noted*
 Seen
 Approved
- Needs change*
 Referred to
- Withdrawn*
 Not seen by Minister
 Overtaken by events

Purpose of report

1. This briefing:
 - 1.1. seeks your initial feedback on the overall framing of the strategy components of the draft Road Safety Strategy consultation document
 - 1.2. seeks your agreement to the proposed approach, content and materials for the next Road Safety Strategy Ministerial Advisory Group (MAG) meeting.

Context

2. The Ministry of Transport, alongside partner agencies, is developing a new Road Safety Strategy and an immediate set of actions. Public consultation is planned for mid-2019.
3. Officials are preparing a draft consultation document. This is being developed according to the milestones agreed with your office (outlined below):

Key milestone	Date
MAG meeting (pre cross-party consultation on the documents) – <i>note this meeting has not yet been scheduled/confirmed in Ministers' diaries</i>	Week of 06/05/2019
Consultation document, briefing and Cabinet paper sent to Ministers seeking commencement of cross-party consultation	09/05/2019
Cross-party consultation on documents commences (10 days)	13/05/2019
Cross-party consultation closes	27/05/2019
Revised documents sent to Minister	30/05/2019
DEV papers lodged – Cabinet paper attaching consultation document	06/06/2019
DEV meeting	12/06/2019
Cabinet agrees to release consultation document	17/06/2019
Public consultation commences	19/06/2019

Working draft of the consultation document

The working draft broadly reflects your agreed structure and narrative.

4. The consultation document is divided into six main sections (after a Minister's Foreword and Executive Summary):
 - 4.1. **Part 1 – Case for change** outlines the role of road safety in New Zealand, the rationale for a new Road Safety Strategy and immediate set of actions, and how the proposals in the document were developed.
 - 4.2. **Part 2 – Vision** sets out the proposed vision statement for road safety.
 - 4.3. **Part 3 – Target for 2030** sets out where we want to be by 2030, as a step towards achieving our overarching vision.
 - 4.4. **Part 4 – Principles** sets out the proposed principles to guide decision-making.
 - 4.5. **Part 5 – Focus areas** outlines the proposed focus areas for the next decade, which together play a part in meeting the significant challenges and opportunities on road

safety facing New Zealand in the years ahead. It also sets out the immediate actions being proposed under each area.

4.6. **Part 6 – Next steps** contains information about the upcoming consultation process, and details the process for developing, finalising and implementing the new Road Safety Strategy.

5. A working draft of the strategy aspects of the consultation document is attached as **Appendix One**. It reflects the proposed structure, content and key messages which you agreed to in-principle, as set out in an earlier briefing [OC190159 refers].

We would like test your comfort with the document's broad direction of travel.

6. Some parts of the document are in near final draft form. This includes the Executive Summary and Part 1 (Case for change), Part 2 (Vision), Part 4 (Principles) and Part 6 (Next steps).

7. Other parts of the document are still in development. Specifically:

7.1. Part 3 (Target for 2030) contains holding text. This is because this section will be informed by the outcomes of modelling and analysis (including the Integrated Intervention Logic Model being developed by the NZ Transport Agency in partnership with other agencies).

7.2. Part 5 (Focus areas) contains draft content on the key issues and strategic directions for each of the focus areas. It does not include draft content on the immediate set of actions. A meeting has been scheduled with you on 9 April 2019 to have a more detailed discussion on the set of actions, including their scope. Following this discussion, we will provide you with further information on the action items as well as proposed text for inclusion in the consultation document.

8. We are still working to refine the messaging and content of the consultation document, and fill in identified gaps. We are also building in NZ Transport Agency feedback (received 1 April 2019) and feedback we are receiving through the transport roadshow regional workshops (which conclude next week).

9. Gaps notwithstanding, we would like to test your comfort with the overall framing and broad direction of travel of the working draft. This will also help ensure that the future versions of the document are fit-for-purpose.

There is a difference in view between the Ministry of Transport and the NZ Transport Agency on the strategy's proposed decision-making principles.

10. A key point of difference between the NZ Transport Agency and the Ministry of Transport is on the framing of the strategy's decision-making principles. As currently drafted, these principles reflect what we presented to you in an earlier briefing [OC190159 refers].

11. From the NZ Transport Agency's perspective, the four 'Safe System' principles (as set out in the current road safety strategy *Safer Journeys*) are well-established, and should be adopted in the new strategy as they are drafted in *Safer Journeys*. Their preference, should additional principles be tagged on, is for a two-tiered approach to be taken.

12. Our view is that it is important for the new strategy to broaden the focus from road design to wider transport outcomes, and that all seven proposed decision-making principles are critical for supporting this shift. We consider this fresh set of proposed principles honour and build on the foundational safe system principles, while presenting a considered new approach.

<i>Safe System principles in Safer Journeys</i>	<i>Proposed decision-making principles for new strategy</i>
<p>(1) People make mistakes that lead to road crashes.</p> <p>(2) The human body has a limited physical ability to tolerate crash forces before harm occurs.</p> <p>(3) All parts of the system must be strengthened so that, if one part fails, road users are still protected.</p> <p>(4) The responsibility for safety is shared amongst those who design, build, manage and use roads and vehicles.</p>	<p>(1) We accommodate people's mistakes.</p> <p>(2) We design for human vulnerability.</p> <p>(3) We strengthen all parts of the road transport system.</p> <p>(4) We have a shared responsibility for improving road safety.</p> <p>(5) Our actions are grounded in evidence and evaluated.</p> <p>(6) Our road safety decisions support wellbeing and liveable places.</p> <p>(7) We make safety is a critical decision-making priority.</p>

The next Road Safety Strategy Ministerial Advisory Group (MAG) meeting

The next MAG meeting is an opportunity to test key components of the strategy with Ministers ahead of Cabinet processes.

13. The next MAG meeting is due to be held (based on current timeframes) in the week of 6 May 2019. We are working with your office to confirm a date.
14. The MAG meeting provides an opportunity to test key components of the strategy with your colleagues ahead of formal cross-party consultation (scheduled for mid-May) and Cabinet Committee (scheduled for mid-June). Specifically, you may wish to seek feedback and/or decisions on:
 - 14.1. the proposed vision, principles, and focus areas
 - 14.2. Ministers' preferred option for the 2030 target
 - 14.3. overall impacts and costs (where applicable) of the immediate set of actions, and any components that are likely to be contentious.
15. To support this meeting, we can provide you with a slidepack (and accompanying talking points) outlining the key components of the consultation document and decisions sought from Ministers. This could contain:
 - 15.1. information on the vision, principles, overarching objectives, focus areas and the immediate set of actions
 - 15.2. options of varying levels of reductions in deaths and serious injuries for 2030 (including type and scale of interventions, and estimated costs and impacts) based on indicative modelling and analysis.

You could also signal some of the other work programmes being progressed in parallel.

16. Based on current timeframes, the Cabinet Economic Development Committee (DEV) will be considering papers on two other safety-related work programmes on the same day as the Road Safety Strategy (i.e. 12 June 2019). These include the **Tackling Unsafe Speeds** package, and the **Accessible Streets** package, which are intended to be part of the immediate set of actions under the Road Safety Strategy.
17. We recommend discussing these proposals at the upcoming MAG meeting as part of the broader discussion on the Road Safety Strategy. Summary material to support this discussion will be provided to you in the MAG pack. We are also considering options for positioning the

Cabinet papers for the Road Safety Strategy, Accessible Streets and Tackling Unsafe Speeds work programmes as a package for DEV.

18. In addition to the three safety-specific papers, DEV will also be considering a paper on the proposed **Regulatory System (Transport) Amendments** on 12 June 2019 (which has a safety interface). This paper seeks Cabinet's permission to consult on the first tranche of the work programme, including proposed changes to the framework for fees and fines across the transport modes.

Recommendations

19. The recommendations are that you:

<p>(a) Discuss the strategy content of the working draft Road Safety Strategy consultation document (<i>Appendix One</i>) and the proposed immediate set of actions with officials on 9 April 2019</p> <p>(b) Note that, following this discussion, we will provide you with further information on the action items as well as proposed text for inclusion in the consultation document</p>	Yes/No
<p>(c) Note we are working with your office to confirm a date for the next Ministerial Advisory Group (MAG) meeting, which is due to be held (based on current timeframes) in the week of 6 May 2019</p>	
<p>(d) Agree that we will work with your office on next steps and timeframes for sending through:</p> <ul style="list-style-type: none"> i. a slidepack and associated talking points for the MAG meeting ii. updated versions of the strategy consultation document 	Yes/No
<p>(e) Note that, based on current timeframes, the Cabinet Economic Development Committee (DEV) will be considering three other transport papers on the same day as the Road Safety Strategy (i.e. 12 June 2019). This includes:</p> <ul style="list-style-type: none"> i. two safety-related work programmes (i.e. Tackling Unsafe Speeds and Accessible Streets) ii. the proposed Regulatory System (Transport) Amendments. 	

Brent Johnston
Manager, Mobility and Safety

MINISTER'S SIGNATURE:

DATE:



Road to Zero

Consultation on the 2020-2030 Road Safety Strategy

MINISTRY OF TRANSPORT

Finding your way around this document

Purpose and structure of this document

This document outlines proposals for a new road safety strategy for New Zealand, to replace *Safer Journeys*, the current road safety strategy which expires at the end of this year. It also sets out a preliminary set of actions under the new Strategy.

Part 1 – Case for change

Outlines the importance of road safety in New Zealand, the reasons for a new Road Safety Strategy, and how the proposals in this document were developed.

Part 2 – Vision

Sets out the proposed vision statement for road safety.

Part 3 – Target for 2030

Sets out where we want to be by 2030, as a step towards achieving our overarching vision.

Part 4 – Principles

Sets out the proposed principles to guide decision-making.

Part 5 – Focus areas

Outlines the **xx** proposed focus areas for the next decade. Together, these play a part in meeting the significant challenges and opportunities of road safety facing New Zealand in the years ahead. Part 5 also sets out some initial actions being proposed under each areas.

Part 6 – Next steps

Contains information about the upcoming consultation meetings and hui, and details the process for developing, finalising and implementing the new road safety strategy.

Consultation questions and feedback

You are invited to provide feedback on the proposals. Consultation questions are included in the text at the end of every section. A summary of the questions is also provided in **xx**.

Submissions must be lodged by **xx on xx.**

Submissions can be completed online at **xx**.

Alternatively, a written form can be downloaded at **xx**, and:

- emailed to **xx**
- posted to **xx**.

For more information

View the road safety strategy webpages at **xx**

Ask the road safety strategy team at **xx**

Attend one of the public meetings/hui being held around the country.

Minister's Foreword

DRAFT

Executive Summary

New Zealanders use our roads every day. Our highways, streets, footpaths and cycleways connect us to each other and to the places we love.

People should be able to travel safely on our roads, yet on average, one person is killed every day on New Zealand roads, and another is injured every hour. The ripple effect of these tragedies on families, survivors, colleagues, and communities, as well as the economy and health system is devastating and it is unacceptable.

Other countries similar to New Zealand do not have the same rates of road deaths and serious injuries. We can and should do better.

Safe roads are a foundation of a safe New Zealand, a nation that values the places we live and protects both movement and place. Road safety goes beyond the imperative of preventing deaths to improving lives and lifestyles too. It ensures people feel safe riding their bikes and letting their children walk, bike or scooter to school. It creates road networks that connect people rather than dividing them. It is part of making New Zealand, our towns and our cities, places we want to be.

Traditionally, we have focused most of our efforts to achieve safe roads on trying to improve driving skills, and addressing risk-taking behaviours. While this is important, it will not solve the road safety problem by itself. No one expects to crash, but people make mistakes – including those of us who are usually careful and responsible drivers.

We need to build a safe road system that is designed for people. This means doing our best to reduce crashes, but acknowledging that crashes will continue to happen. When crashes occur, we can prevent serious harm through safe vehicles, safe speeds and forgiving design.

This kind of approach has dramatically improved road safety in some countries, and we know it works. It was also introduced in our current road safety strategy *Safer Journeys*. In the instances where we have applied this approach, it has proved to save lives on our roads. But we haven't done enough.

Safer Journeys has not been implemented as intended. Although it was based on sound evidence and approach, it did not have the sufficient buy-in, investment, leadership and accountability to achieve a significant reduction in deaths and injuries. Most critically it did not have the buy-in from all New Zealanders that it is unacceptable for people to be killed or injured on our roads.

Safer Journeys is expiring at the end of the year. We now have the opportunity to do more and to go further. As a country, we have the opportunity to commit to a bolder vision about what is possible – no longer regarding fewer deaths and serious injuries as an aspiration but as necessary and achievable.

Adopting this vision for road safety represents a commitment to embed road safety in transport design, regulation, planning and funding. Safety should be a critical investment priority and should not be traded off against other priorities. Every death or serious injury on our roads is a call to act, investigate, diagnose and address.

Over the last year, the Ministry of Transport have engaged with representatives from central and local government, key players in the transport sector, and road safety experts and advocates through a series of reference group workshops. We have also held regional workshops with stakeholders from across New Zealand on their road safety concerns and priorities for their communities and regions, and to gauge their level of support for a new road safety vision.

These discussions have helped shape the content and proposals in this document.

This document articulates a proposed vision statement, guiding principles for how we design the network and how we make road safety decisions, as well as targets and outcomes for 2030. It also sets out the five areas we want to focus on over the next decade, and some immediate actions we will take to drive change in each of these areas.

Our proposed vision is: a New Zealand where no one is killed or seriously injured in road crashes. This means that no death or serious injury while travelling on our roads is acceptable.

Underpinning this vision are seven proposed guiding principles:

- (1) *We accommodate people's mistakes.*
- (2) *We design for human vulnerability.*
- (3) *We strengthen all parts of the road transport system.*
- (4) *We have a shared responsibility for improving road safety.*
- (5) *Our actions are grounded in evidence and evaluated.*
- (6) *Our road safety decisions support wellbeing and liveable places.*
- (7) *We make safety is a critical decision-making priority.*

As a step towards achieving this vision, we propose a target of **xx reduction in DSI by 2030.**

This will be achieved through action in **xx key areas:**

1. *Improve the safety of our roads and roadsides through infrastructure improvements and speed management*
2. *Significantly improve the safety performance of the vehicle fleet*
3. *Treat road safety as a critical health and safety at work issue*
4. *Encourage safe and healthy travel choices and safer behaviour on roads*
5. *Drive action through effective system management.*

Our proposed immediate set of actions are:

1. *Introduce a new approach to tackling unsafe speeds*
2. *Invest in safety treatments and infrastructure improvements*
3. *Review infrastructure standards and guidelines*
4. *Raise safety standards for vehicles entering the fleet*
5. *Implement mandatory ABS for motorcycles*
6. *Support best practice for work-related driving*
7. *Strengthen the regulation of commercial transport services*
8. *Enhance drug driver testing*
9. *Support motorcycle safety*
10. *Enhance safety and accessibility of footpaths, bike lanes and cycleways*
11. *Introduce a new approach to road policing investment*
12. *Elevate road safety in decision-making frameworks*
13. *Strengthen system leadership, support and co-ordination*

We want to know what you think.

We want to hear from you on our proposed vision and principles, our target for 2030, the key focus areas for the 10 years, and the immediate actions we want to take in 2020 and 2021. The public submission process from **xx to xx** is intended to formally capture your views. The questions highlighted in the orange boxes in this document can be answered at **[insert website]**.

We invite you to be part of this conversation.

Summary of key consultation questions

To what extent do you support the proposed vision?

- *[Insert scale from strongly oppose to strongly support]*
- *Is there anything more you would like to share on this?*

To what extent do you support the proposed target for 2030?

- *[Insert scale from strongly oppose to strongly support]*
- *Is there anything more you would like to share on this?*

To what extent do you support the proposed target for 2030?

- *[Insert scale from strongly oppose to strongly support]*
- *Is there anything more you would like to share on this?*

To what extent do you support the following proposed decision-making principles?

- *[on a scale from strongly oppose to strongly support for each]:*
 - (1) We accommodate people's mistakes.*
 - (2) We design for human vulnerability.*
 - (3) We strengthen all parts of the road transport system.*
 - (4) We have a shared responsibility for improving road safety.*
 - (5) Our actions are grounded in evidence and evaluated.*
 - (6) Our road safety decisions support wellbeing and liveable places.*
 - (7) We make safety is a critical decision-making priority.*
- *Is there anything more you would like to share on this?*

To what extent do you support the focus areas?

- *[on a scale from strongly oppose to strongly support for each]*
- *For each area:*
 - (1) What do you think of the proposed immediate actions?*
 - (2) Are there others we should consider for the future?*
 - (3) Do you have comments about the way that we intend to measure our performance in this area?*
 - (4) Is there anything more you would like to share on this?*

Any other comments?

PART ONE: CASE FOR CHANGE

Summary

New Zealanders travel on our roads every day for work and leisure. The road network, including our streets, footpaths, cycleways and state highways, shapes how we get around, and how we use and interact around public spaces. Last year, 378 people were killed on our roads, the highest since 2009.

Deaths or serious injuries should not be an inevitable cost of travelling around. We can and should do better. We need to commit to taking ambitious action towards a New Zealand where no one is killed or seriously injured in road crashes.

By placing safety at the foundation of our transport decisions, we open up opportunities to New Zealanders and our visitors to choose different modes of travel, to think carefully about how we want to shape our towns and cities, and how we want to connect to each other.

The new road safety strategy will chart a bold course for the next decade. It will help us build the safest road system we can, and work towards zero death and serious injuries on New Zealand roads. The new strategy will set out priority focus areas to drive national road safety performance to the end of 2030. It will also lay the groundwork for longer-term goals and aspirations, and hold us accountable through clear and measurable outcomes.

Safe roads are a foundation of a safe and healthy New Zealand.

The purpose of our transport system is to improve people's wellbeing, and to make the places where we live and work more vibrant and more liveable. Our road network shapes how people and products move around, the shape of our towns and cities, and how communities interact at a street level. It plays an important role in connecting people, and gives New Zealanders access to work, education, recreation, and communities. It also supports economic activity through movements of freight, and by connecting businesses with their employees, customers, and other goods and services.

The safety of our roads is a critical part of ensuring the road network delivers on these purposes. A safe road network not only prevents needless deaths and serious injuries. It can also support healthier lifestyles if people are safe, and feel safe, to travel around locally by walking, cycling, or other forms of micro-mobility (e.g. skateboarding and scootering). It also reduces pressure on our health and hospital systems, and supports more productive economic activity and workplace efficiency resulting from fewer crashes and reliable travel times.

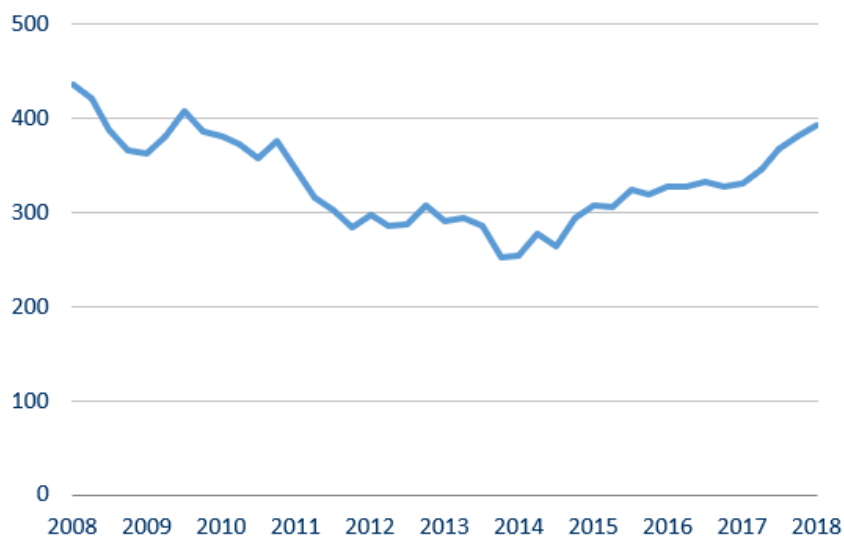
Key facts [turn into infographic]

- There are 94,000 kilometres of road on the network: 11,000 kilometres of State Highways and 83,000 kilometres of local roads.
- People in New Zealand spend an average of one hour per day travelling.
- Over half of all household travel time is spent driving. We spend 83% of all our time travelling as a driver or a passenger in a car or van.
- New Zealand has one of the highest rates of vehicle ownership in the world, and one of the oldest vehicle fleets. There were xx million vehicles in 2018.
- 31% of people aged 15+ in New Zealand have cycled in the past year.
- 37% of people aged 15+ in New Zealand have used public transport in the past year – but it varies depending on where you live and what is available near you. Public transport is the safest form of travel in New Zealand.

However, thousands of people are killed or seriously injured on our roads every year.

Last year, 378 people were killed on our roads, the highest number of road deaths since 2009. Over the past six years we have seen an unprecedented rise in the number of deaths on our roads. On average, one person is killed every day on New Zealand roads, and another seven are seriously injured.

Figure x. New Zealand road fatalities 2008-2018¹ [to be updated]



We know the rate of increase is partly due to an increase of people travelling on our roads. But this isn't the only factor. The number of fatalities and serious injuries are increasing at a much faster rate than can be explained by simple traffic growth. This is also at a time when countries similar to New Zealand have seen significant reductions in their death and serious injury rates, and there are increasing advancements in relation to safety technologies in relation to cars and infrastructure.

About half of the people who are harmed on our roads did not contribute to the crash. They were harmed by others' misjudgements and mistakes, and importantly, were let down by a system that failed to protect them from those mistakes.

¹ NZ Transport Agency (2018) Crash Analysis System <https://opendata-nzta.opendata.arcgis.com/datasets?t=CAS>

Stats breakdown [turn into infographic]

- 236 people driving
- 63 people who were passengers
- 18 people who were cycling
- 46 people who were motorcycling
- 39 people walking

- % of 1-2 star cars in the fleet
- % of travel on 1-2 star roads
- % of speed limits not safe and appropriate

Data indicates that over half of road deaths, and nearly three quarters of serious injuries, are caused by system failures on our roads. These include roads with speed limits that are inappropriate for their form and function, and vehicles that inadequately protect occupants in what would otherwise be survivable crashes. In other words – everyone makes mistakes, but we currently have a road system, and many vehicles on our road, that are unforgiving of human error.



About the photo: In July 2010 a husband and wife were driving from Napier to Taupo in their four wheel drive. The husband was driving. It was mid-morning and a bright, sunny day – ideal driving conditions. But they never got to Taupo. A car going in the opposite direction suddenly crossed the centre line. There was no time for anyone to brake, and this was the result. Both drivers were killed. The wife was seriously injured.

The Coroners' report was unable to determine the reason that the driver crossed the centre line so sharply. Neither driver was speeding, neither driver was using a cell phone, neither driver had been drinking alcohol. They were both belted in. They had been obeying the law.

But it was clear that the road had no median barrier, which would have prevented a head-on collision; the vehicles involved did not protect the occupants from the crash forces; and the posted speed limit was too high for the nature of the road.

We do not have to accept this. We can and should do better.

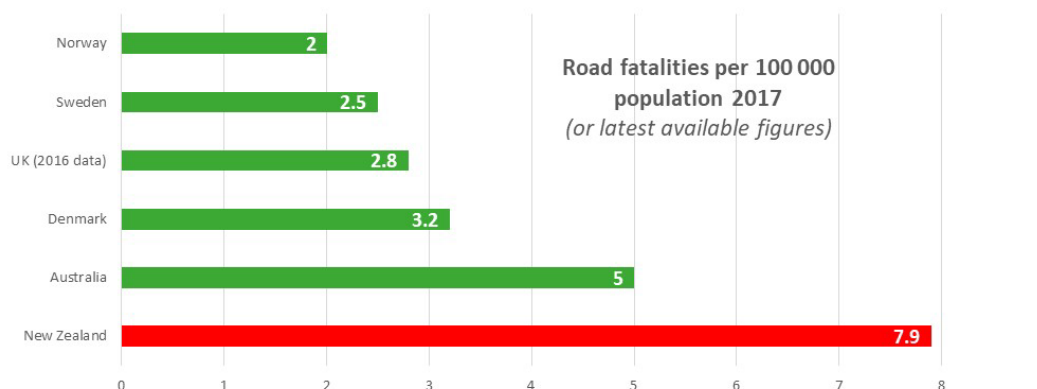
Deaths and serious injuries should not be an inevitable cost of travelling around.

Most other developed countries have far lower rates of death on their roads. Our current death rate is 7.9 deaths per 100,000 population, while countries with good safety performance have death rates more than half that, at well under 4 deaths per 100,000 population. Norway, which has a similar population, geography and length of roads to New Zealand, has a death rate of 2 per 100,000.

NOT GOVT POLICY – NOT INTENDED FOR WIDER CIRCULATION

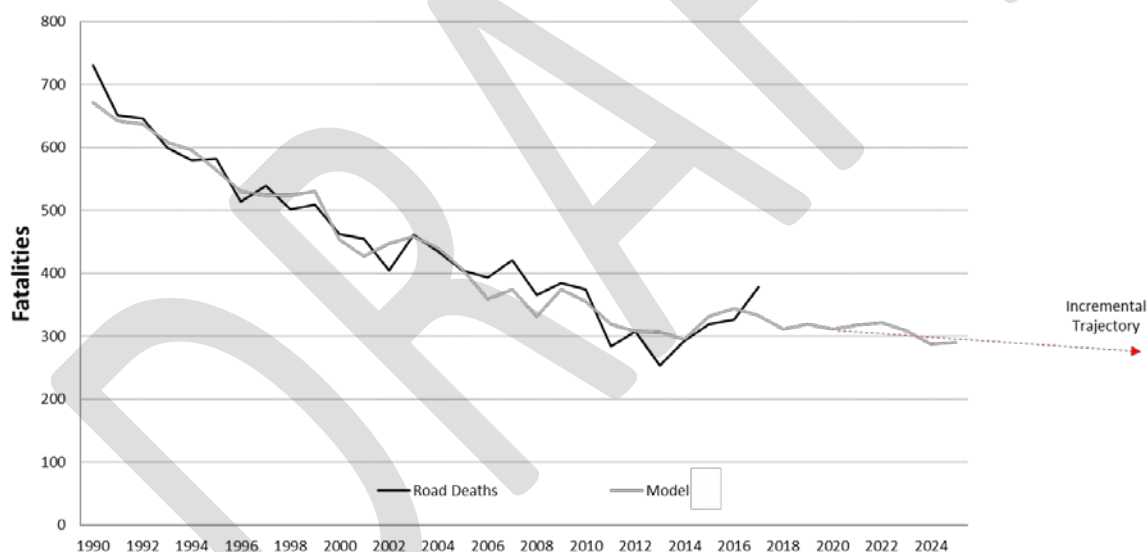
If New Zealand's roads were as safe as Norway's, approximately 260 of the 378 people who were killed last year would still be alive. If we performed even as well as Australia, 150 people would still be alive.

Figure x: International comparisons of road fatalities per 100 000 population



If we continue as we are, we estimate that by 2030 around xx people will have lost their lives and more than xx people will have been seriously injured with ongoing or lifelong consequences.

Figure x: Modelling road deaths, baseline to 2025² [to be updated]



The social cost of these tragedies is about \$45 billion [TBC] in today's dollars – that's about three times the amount we spend on health care for all New Zealanders every year. This social cost is not just the cost on individuals, our health system and the disruption and delay on our road network. It reflects the permanent and profound devastation that deaths and serious injuries have on loved ones, families and whānau, and communities.

² **Locate reference.** Chart uses autoregressive distributive lag (ARDL) models to forecast probable road fatalities in New Zealand to 2025 under current settings. The model uses economic variables combined with a demographic variable.

[Insert infographic on annual social cost of road crashes, including costs to health, ACC, justice, property/infrastructure]

Alongside these horrifying numbers are the thousands of whānau, friends, colleagues and workplaces, the emergency services crew who turn up to these devastating accidents, and many other professionals involved in responding to these tragedies.

[Insert case study, quotes, or victims' stories]

Beyond deaths and serious injuries, New Zealand's unsafe road system also has other costs and consequences. Safety considerations, and the look and feel of our roads and streets, can play a big part in whether people choose to travel by healthy, active modes of transport. For example, we know that children are much less likely to use active modes of transport to get to school now compared to twenty years ago. A recent study from the University of Otago reported that 40 percent of adolescents in urban areas and 23 percent in semi-rural areas surveyed felt it was unsafe to cycle to school.

We need a safe system which recognises crashes are inevitable but deaths and serious injuries are not.

Traditional approaches to road safety assume that the crux of the road safety problem is crashes. As a result, individual road users – who are blamed for being “bad drivers”, “careless cyclists”, or “distracted pedestrians” – have historically been presented as the problem, and the cause of collisions. Consequently, solutions have focused on improving human behaviours to prevent crashes from happening, through strategies like licensing, testing, education, training and media campaigns.

Perception: It doesn't matter what the speed limit is, or how good our roads and vehicles are – the real problem are drivers who have not been taught properly, with bad attitudes.

Research findings: International evidence shows that only about 30 percent of serious crashes are caused by deliberate violations and risk-taking behaviour, while the majority result from simple errors of perception or judgement by otherwise compliant persons. Research from Scandinavia and South Australia shows that even if all road users complied with road rules, fatalities would only fall by around 50 percent and injuries by 30 percent. So if everyone obeyed the road rules, New Zealand would still have more than 130 deaths on the road each year. Therefore, the capabilities and limitations of human beings must be taken into consideration when designing and operating a safe road transport system.

Instead of asking: “Why did that person crash?”, what if we asked: “Why was that person killed or seriously injured in the crash?”

In redefining the problem, we’re required to develop solutions that target a different culprit: an unforgiving system that doesn’t take into account the fact that even responsible people sometimes make mistakes when travelling on our roads. While measures to improve road user behaviour are still important, this alone will not fix the problem. Solutions must shift from focussing on perfecting individual behaviour to focussing on perfecting a transport system that fails to protect people.

	Traditional approach	Safe System approach
What is the problem?	<i>Try to prevent all crashes</i>	<i>Prevent crashes from resulting in fatal and serious casualties</i>
What causes the problem?	<i>Non-compliant road users</i>	<i>People make mistakes and are physically vulnerable to crashes. Infrastructure and operating speeds provide inconsistent guidance to users about what is safe user behaviour.</i>
Who is ultimately responsible?	<i>Individual road users</i>	<i>Everyone – system designers also need to take responsibility</i>
How do we fix the problem?	<i>Focus on perfecting human behaviour and preventing crashes</i>	<i>Create a Safe System so that if one part of the system fails other parts provide protection.</i>
What is the appropriate goal?	<i>Reduce fatalities and serious injuries</i>	<i>Eliminate fatalities and serious injuries</i>

This kind of ‘Safe System’ thinking has dramatically improved road safety in some countries, and underpins approaches adopted in other fields like aviation, shipping, and workplace health and safety. It was also introduced in our current road safety strategy *Safer Journeys*.

The Safe System approach

The Safe System differs from traditional approaches to road safety. Rather than always blaming the road user for causing a crash, it acknowledges that even responsible people sometimes make mistakes in their use of the roads. Given that mistakes are inevitable, we need the system to protect people from death or serious injury. The four fundamental and non-negotiable principles of a Safe System are:

1. People make mistakes that lead to road crashes.
2. The human body has a limited physical ability to tolerate crash forces before harm occurs.
3. The responsibility for safety is shared amongst those who design, build, manage and use roads and vehicles.
4. All parts of the system must be strengthened so that, if one part fails, road users are still protected.

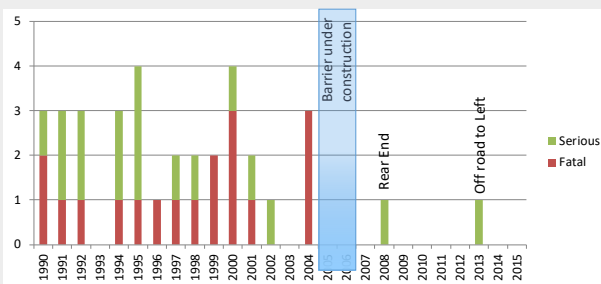
The four pillars of the Safe System are:

- **Safe Roads** – that are predictable and forgiving of mistakes. They are self-explaining in that their design encourages safe travel speeds.
- **Safe Speeds** – travel speeds suit the function and level of safety on the road. People understand and comply with the speed limits and drive to the conditions.
- **Safe Vehicles** – that prevent crashes and protect road users, including pedestrians and cyclists, in the event of a crash.
- **Safe Road Use** – road users that are skilled and competent, alert and unimpaired. They comply with road rules, take steps to improve safety, and demand and expect safety improvements.

Under a Safe System, road safety is everyone's responsibility. The Safe System approach requires shared responsibility between road users and system designers. It says that if road users are alert, comply with the road rules and travel at safe speeds, they should be able to rely on the road and roadside features, and the vehicle to protect them from death and serious injury.

In cases where we have successfully adopted this approach, it has proved to save lives on our roads.

Safe System in action: Centennial Highway



SH1 Centennial Highway, a 3.5 km stretch of road just north of Wellington, was once particularly treacherous. On average, at least one person died and another seriously injured here every year.

A flexible median safety barrier was installed in 2005, and the speed limit was lowered to 80kph. Since then, there have been no fatal and no major injury crashes. The barrier is hit around twice per month without a single death.

We now have the opportunity to do more and to go further.

The Safe System approach remains the gold standard in road safety and is used across the world. However, New Zealand has had mixed results in embedding this approach.

Other countries have embedded the Safe System approach successfully, and obtained good results in reducing deaths and injury over many decades. They achieved this through building on the Safe System by adopting a Vision Zero approach, or variations of this approach. These approaches had used a galvanising vision and purpose statement that articulates the scale and trajectory of the ambition to eliminate road trauma, along with a strong commitment to make changes and actions to back them up.

Safer Journeys is expiring at the end of the year. As a country, we have the opportunity to commit to a bolder vision about what is possible – no longer regarding fewer deaths and serious injuries as an aspiration but as necessary and achievable. We have the opportunity to learn from what did, and did not, work in relation to *Safer Journeys* and take more ambitious action to reduce death and serious injuries on New Zealand roads.

What can we learn from *Safer Journeys*?

An independent interim evaluation of the effectiveness of *Safer Journeys* in 2015 found that while its approach was sound, it had limited impact in embedding a true safe system approach. While early traction was made, action plans were too focussed on addressing driver error and less on the system changes needed to drive outcomes. There was also insufficient sector capacity and capability necessary for successful implementation. Greater collective and sustainable leadership, coordination and participation from Ministers and Government agencies was needed.

In addition, *Safer Journeys* lacked a vision, measurable outcomes and a robust system of accountability. This has allowed the focus to shift away from road safety. It has also meant there has been limited ability to track the impacts of interventions and the overall impact of the strategy over time. Importantly, it did not achieve buy-in to the needed change by the New Zealand public.

The purpose of our new road safety strategy for 2020-2030 is to articulate a shared vision for New Zealand, and the key principles to guide decision-making across the system. It will also outline our approach to the road safety challenges of the next decade and the steps we need to take to meaningfully reduce road trauma.

Importantly – learning from *Safer Journeys* – this strategy should also hold a broader range of people accountable through clear outcomes and measurable targets. Our new strategy needs to be broad in scope, with a focus on all road transport users. It should consider the role of all participants and decision-makers. It should also take into account more than safety and consider the wider contribution road safety can make to broader transport outcomes which improve New Zealanders' wellbeing and the liveability of places.

Road safety improvements will have co-benefits for health, access, and sustainability

Although the primary purpose of the strategy is to make our roads safe for people and products to travel on, road safety improvements will also have wider benefits. The overall purpose of our transport system is to improve people's wellbeing, and to make the places where we live and work more vibrant and more liveable. The government's transport outcomes framework identifies five key outcomes for government to deliver on through its involvement in the transport system. These are summarised in Figure xx below.

Figure xx: Transport Outcomes Framework (Ministry of Transport, 2018)



This strategy will directly contribute to the Healthy and Safe people outcome, by protecting people from transport-related injuries and deaths. This will avoid costs to our health system.

Improvements in road safety will also:

- **Make active travel a more attractive option:** by making it safer and more enjoyable for people to travel by active modes such as walking and cycling. A shift towards greater walking and cycling could improve public health and reduce healthcare costs. For example, a five percent increase in cycling and walking for trips of two kilometres or less in Auckland would not only reduce traffic congestion, but also bring health benefits of \$225 million per year.
- **Make our town and cities more accessible and liveable:** through safer speeds, and urban planning and infrastructure design that connects communities. Ensuring that our roads are safe places for all types of road users to both travel on and live and work around has benefits in enabling greater choices for how we travel and in supporting vibrant and liveable communities.
- **Support environmental sustainability:** the transport sector currently produces approximately one-fifth of New Zealand's domestic greenhouse gas emissions. Greater uptake of public transport and alternative modes of travel can contribute to reducing New Zealand's greenhouse gas emissions and achieving Government's climate change goals. Reducing speeds has also been proven to reduce transport emissions, and infrastructure planning and design can reduce the impacts of noise and dust on communities.

The strategy will be supported by several action plans. These will set out the key interventions that will support progress towards each of the focus areas.

PART TWO: VISION

Summary

Our vision is a New Zealand where no one is killed or seriously injured in road crashes. It is based on Vision Zero – a global movement that has seen significant decreases in road trauma in places like Sweden, New York and Victoria.

Adopting this vision for road safety means we need to make concerted efforts towards building a road transport system that protects us from road trauma. It represents a commitment to embed road safety principles and harm reduction in transport design, regulation, planning and funding.

Our vision is a New Zealand where no one is killed or seriously injured in road crashes.

Adopting this vision means acknowledging that:

- no loss of life is acceptable
- deaths and serious injuries on our roads are preventable
- we all make mistakes, but these mistakes should not cost us our lives.

This means while the road system needs to keep people and products moving, it must be designed to protect us. We need to design the road system for people, instead of blaming people for failing to survive in the system we have designed.

The Vision Zero approach

Our vision is based on Vision Zero, first launched in Sweden in 1997. Vision Zero provided a common mission that brought together stakeholders, changed public attitudes and raised public expectations. Over the years this vision has led to infrastructure improvements (e.g. road barriers that separate cars from bikes and oncoming traffic, and safer pedestrian crossings), lower urban speed limits, and an emphasis on safe vehicles. In the 20 years since launching the strategy, road deaths in Sweden have halved.

Vision Zero has become a global movement. It has been adopted by places like Norway, New York and London and has led to significant decreases in road trauma. Vision Zero is sometimes framed as 'Towards Zero' in some jurisdictions, such as Victoria and New South Wales in Australia, as well as Canada and the European Union).

Vision Zero in action: Sweden

As the pioneer of Vision Zero and the Safe System approach, Sweden completed 20 years of Vision Zero in 2017. During this time total road deaths more than halved (from 541 in 1997 to 259 in 2015; or 6.1 per 100,000 population in 1997 to 2.8 per 100,000 in 2015).

The success of Sweden's 'Vision Zero' initiative relied heavily on engaging road users, the public and the business sector as agents of change. Comparisons were made between road safety and other safety-critical areas, such as the electrical system in private homes, which are considered to be extremely tolerant of human mistakes, or legislation on safety in work places, which squarely puts responsibility for employee safety on the employer. Such comparisons highlighted how holding the road user responsible for safety in the road traffic system is inconsistent with how safety is managed in other systems.

[insert photo of a 2+1 road (check copyright)]

Vision Zero in action: New York City

Since introducing a Vision Zero approach to road safety in 2014, New York City has experienced a 28 percent decline in road deaths (including a 45 percent reduction in pedestrian deaths) at a time when road deaths in the United States increased by xx percent. Fewer people now die on New York's streets than at any time since records began. This progress has been credited to the focussed and coordinated Vision Zero approach, which has strongly prioritised safety, built strong community buy-in and effectively used data to target investment.

New York City's approach has prioritised improvements aimed at improving pedestrian and cyclist safety, such as changes pedestrian crossings and protected bike lanes, alongside strengthened enforcement and education. Speed limits were also been reduced across the city, from 30 m/h (48km/h) to 25 m/h (40km/h). These changes have been paired with widespread use of speed cameras and increased enforcement focussed on the offences most likely to cause a death or injury.

[insert photo of a street transformation (check copyright)]

Adopting a more ambitious vision means doing things differently. It represents a commitment for New Zealand to make some courageous changes. It requires stronger leadership and a new level of commitment by everyone, underpinned by a shift in the national conversation on road safety. Adopting Vision Zero means committing to safety as a critical priority for investment and decision-making, and a greater focus on system changes rather than on addressing driver error alone. It requires us to set clear goals and measure our progress against them.

This vision can be achieved if, as a country, we fundamentally shift the way we think about road safety and what we are prepared to accept. Achieving lasting change in road safety will require government, industry and the broader community to work together. It will also require significant improvements in the way we manage the safety of our road transport system. Our collective task is to build a culture where safety is an integral part of all decision-making that affects the road system, its operation and its use.

A Vision Zero New Zealand?

[A short descriptive section of what Vision Zero could look like for NZ]

What do you think?

To what extent do you support the proposed vision?

- *[Insert scale from strongly oppose to strongly support]*

Is there anything more you would like to share on the proposed vision?

PART THREE: WHERE DO WE WANT TO BE BY 2030?

Summary

TBA

As a step towards achieving our vision, we propose a target of xx reduction of deaths and serious injuries by 2030.

We recognise that we have a long way to go, and that zero deaths and serious injuries on our roads is not achievable in the next 10 to 20 years. We have a road network that hasn't always been designed with the safety of all users as a priority. We have a large number of less safe vehicles on our roads, and a vehicle fleet that is slow to turn over. We have a culture that has not always made road safety a priority.

Change will not happen overnight.

However, if we are truly committed to this vision, we need to set an ambitious target of reductions in deaths and serious injuries that is backed up by evidence, and to rigorously monitor and evaluate our progress.

This is why we proposing setting a target of reducing annual deaths and serious injuries on our roads by xx percent by 2030 (from 2018 levels). Compared to projections based on current trends, steady progress towards this target would mean approximately xx fewer New Zealanders would be killed or serious injured on our roads over the next ten years.

This is a challenging but achievable target, based on modelling of an ambitious programme of road safety improvements over the next ten years. [Outline broad level of ambition and types of changes needed over the next 10 years that modelling suggests will be required to achieve the target]

Road safety outcomes in New Zealand will be affected by many factors including population growth, levels of economic activity, and advances in technology. We will need to be flexible in responding to the challenges and opportunities that the next decade will present. This target will ensure that we continue to prioritise ambitious road safety interventions and allow us to be held to account on overall outcomes.

What do you think?

To what extent do you support the proposed target for 2030?

- *[Insert scale from strongly oppose to strongly support]*

Is there anything more you would like to share on the proposed target for 2030?

PART FOUR: PRINCIPLES

Clear and transparent guiding principles are integral to how we design the network and how we make road safety decisions.

Our vision is grounded in the Safe System. We have built on its principles³ to create a broader set of guiding principles for the new strategy. These guiding principles are integral to how we design the network and how we make road safety decisions. They are intended to guide participation and decision-making across the system by providing a shared understanding of how we will work and the values that will guide our activities.

Proposed guiding principles for our road safety strategy

- (1) We accommodate people's mistakes.*
- (2) We design for human vulnerability.*
- (3) We strengthen all parts of the road transport system.*
- (4) We have a shared responsibility for improving road safety.*
- (5) Our actions are grounded in evidence and evaluated.*
- (6) Our road safety decisions support wellbeing and liveable places.*
- (7) We make safety is a critical decision-making priority.*

(1) We accommodate people's mistakes.

People make mistakes and many will take risks. This will sometimes eventuate in crashes. Most serious crashes are not caused by people deliberately breaking the law, but rather the result of simple mistake. The most common crash is by an average driver (or motorcycle rider) who makes an error of judgement. Even really well-trained drivers and riders can make a mistake. These mistakes should not result in loss of life or serious injury.

(2) We design for human vulnerability.

In the event of a crash, there are physical limits to the amount of force our bodies can take before we are injured. In designing our road system, we must acknowledge the limits of our capabilities and accommodate human error, so that the impact of a collision is does not cause fatal or serious injuries.

Table x: Impact speeds above which chances of survival or avoiding serious injury decrease rapidly

Crash type	Impact speed
Car/pedestrian or cyclist	30 km/h
Car/motorcyclist	
Car/car (side impact)	50 km/h
Car/car (head-on)	70 km/h

(3) We have a shared responsibility for improving road safety.

The responsibility for safety needs to be shared amongst those who design, build, manage and use the road transport system. Many organisations – the 'system managers' – have a primary responsibility to provide a safe operating environment for road users. This includes

³ The four Safe System principles are: (1) People make mistakes that lead to road crashes. (2) The human body has a limited physical ability to tolerate crash forces before harm occurs. (3) The responsibility for safety is shared amongst those who design, build, manage and use roads and vehicles. (4) All parts of the system must be strengthened so that, if one part fails, road users are still protected.

government, local government and industry organisations that design, build, maintain and regulate roads and vehicles, as well as those who are part of post-crash responses, rehabilitation and care. Businesses and organisations need to provide a safe workplace and actively manage for a safety-focussed environment. Individuals and communities also need to play a part and use our roads with care, but the burden of road safety responsibility cannot rest on the individual road user alone. Our strategy and interventions need to ensure that there is appropriate collective responsibility and accountability.

(4) We strengthen all parts of the road transport system.

We need to improve the safety of all parts of the system – roads and roadsides, speeds, vehicles, and road use – so that if one part fails, other parts will still protect the people involved. This means that when crashes do happen, death and serious injuries can be avoided through safe vehicles, forgiving infrastructure design, and safe and appropriate speeds. We also need to understand and make roads safer for unprotected road users such as pedestrians, cyclists, motorcyclists and scooter riders.

Principle in action: What could this look like in practice?

If a distracted parent driving a car turns their head for a second to see why their child is crying in the back, tactile edge lines on the road or a lane departure warning device in their vehicle could alert them in time to recover. Where there is no time to recover, a roadside barrier could prevent them from hitting another vehicle head-on or running off the road, hitting a tree and being killed.

(5) Our actions are grounded in evidence and evaluated.

Decision-making should be informed by the best available science and information, and needs to operate in an environment of continuous learning and system improvement. We need to keep abreast of emerging road safety issues, changing trends, and new solutions over the life of this strategy. We expect, for example, that some technology-based solutions to road safety will develop within the next decade. New problems may also emerge. This is why it is critical that we invest in research, robust analytics and modelling to inform key interventions and decisions. This also needs to be supported by regular process and outcome evaluation so we can see what works, doesn't work or needs altered, so we can maximise effort and also achieve ongoing buy-in to change.

(6) Our road safety decisions support wellbeing and liveable places.

Roads and streets do not just help people and goods to move from one point to another – they can also perform a key public open space role, particularly in our urban and residential areas. Roads and streets, including our footpaths, can be places where people meet, shop and where children play, rather than just a means of moving people and freight between destinations. These functions should be central to how we think about safety on different roads. This means that where a road plays a key role as a place for a community, our road safety focus should be broader – seeking to leverage safety to improve urban access and liveability. In contrast where a road is key to part of the freight network, ensuring good road infrastructure and maintaining appropriate higher speeds will be important.

(7) We make safety a critical decision-making priority.

In the past, when considering safety investment, or policy and regulatory safety changes in New Zealand, greater priority has often been given to individual users than collective community or national outcomes. Increased weight has often been placed on efficiency over safety, and a narrow approach has been taken to consideration of safety benefits. Taking more ambitious action means that safety objectives must be prioritised in our investment and regulatory frameworks, rather than being optional or nice-to-have add-ons. The extent to which

safety is prioritised depends on how quickly we want to act and how ambitious we want to be. This does not mean that other objectives, such as increased efficiency, are not important. However, they should not be achieved at the cost of safety.

Principle in action: What could this look like in practice?

In relation to an infrastructure project, for example, this means faster travel speeds should only be implemented if accompanied by the safety improvements needed to enable safe travel at those speeds. Safety should also be considered at all stages of the infrastructure lifecycle, including maintenance. Similarly, we should treat safety as a fundamental requirement for new vehicles entering the fleet.

What do you think?

To what extent do you support the following proposed decision-making principles? [on a scale from strongly oppose to strongly support for each]:

- (1) We accommodate people's mistakes.*
- (2) We design for human vulnerability.*
- (3) We strengthen all parts of the road transport system.*
- (4) We have a shared responsibility for improving road safety.*
- (5) Our actions are grounded in evidence and evaluated.*
- (6) Our road safety decisions support wellbeing and liveable places.*
- (7) We make safety is a critical decision-making priority.*

Is there anything more you would like to share on the proposed decision-making principles?

PART FIVE: FOCUS AREAS

The journey towards our vision will require significant effort to enhance the quality of our roads, to strengthen regulation and social expectations for safer vehicles, to improve road user compliance with traffic laws and to create a safety culture through all levels of our society.

We propose that the new strategy highlight areas that will require sustained focus over the next decade if we are going to achieve our objectives. These focus areas would outline the key challenges and opportunities in each area and the strategic directions that we will need to take to address them.

By examining how and why crashes occur, and what interventions have been proven to be most effective, we have identified the following **xx** proposed focus areas. Under each focus area, we have also identified an immediate set of actions to support our objectives and targets.

Our **xx focus areas**

- Improve the safety of our roads and roadsides through safety treatments and speed management
- Significantly improve the safety performance of the vehicle fleet
- Treat road safety as a critical health and safety at work issue
- Encourage safe and healthy travel choices and safer behaviour on roads
- Drive action through effective system management

These proposed key areas would focus – but not limit – action under the new road safety strategy. This is because, over the next 10 years, there will be things we won't have foreseen. There are also issues that may be prioritised under other programmes of work that would have road safety implications. For example, improvements in trauma care and rehabilitation are important issues for the health system, and can have significant impacts on overall outcomes for crash victims. We will also continue to take action in areas where we identify the potential to make improvements to road safety outcomes.

Focus Area 1: Infrastructure improvements and speed management

Infrastructure improvements, combined with managing speeds so they are safe for the road and survivable, would greatly reduce the most common crash types. Initial analysis indicates that taking action in this area could reduce deaths and serious injuries by xx over the next decade.

Why is this area important?

Our roads are unique and reflect our natural landscape. Our roads are windy, hilly and often narrow. They give us access to extraordinary places. However, they can also be challenging and demanding to travel on. Not all risks are visible, and often our roads aren't easy to read. This means the wrong speed could result in an unforeseen tragedy. Improving our road infrastructure, combined with managing speeds so they are safe for the road, can have a major influence in preventing crashes or minimising the consequences of a crash.

The way we design our roads and roadsides can have a significant impact on road safety outcomes. Infrastructure treatments such as rumble strips can alert drivers when they are leaving the roadway, roundabouts can help reduce crashes at intersections, and safety barriers can help reduce serious trauma in head-on and run-off-road crashes. When fitted along the side and centre of the road, flexible barriers can reduce the number of people killed by up to 90 percent.⁴ Other types of infrastructure treatments (such as improved roadside separation, lighting and path definition, and traffic calming in areas where there are lots of pedestrians) benefit all road users.

It is also important for speed limits to match the form, function, use and risk of different roads. Roads can either be engineered up to support existing or higher travel speeds, or speeds can be lowered to reflect the quality and risk of the road and surrounding environment. Engineering changes can also be made to calm traffic and make the network safer in certain environments (e.g. around schools). This can be supported by other tools, such as the use of safety cameras, to encourage people to comply with safe speeds.

What are the key issues?

An unforgiving road network

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. The population densities of many of our major urban centres is relatively low and private motor vehicle traffic is still by far the main mode of travel. Urban roads have been primarily designed for motor vehicles and there are many high-risk roads and intersections (particularly for pedestrians, cyclists and other vulnerable road users).

Currently, 56 percent of the road network (i.e. 52,640 km) has a high or high-medium infrastructure risk rating, offering little protection if road users make a mistake. The local road network has a greater proportion of serious injuries, while the State Highway network has a higher rate of deaths per kilometre of network. Head on and loss of control crashes account for over two-thirds of all fatal crashes and 41 percent of all injury crashes.

⁴ Johansson, R. (2009). *Vision Zero – Implementing a policy for traffic safety*. Safety Science. 47(6), 826-831. doi: 10.1016/j.ssci.2008.10.023

Unsafe speeds

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. In 2016, travelling too fast for the conditions was the second highest contributing factor to fatal and serious injury crashes in New Zealand.

However, most of our roads are either posted at 100 km/h or 50 km/h, irrespective of how risky they are. This means that describing crashes as ‘too fast for the conditions’ does not paint the full picture. Analysis by the NZ Transport Agency indicates that 87 percent of New Zealand’s roads do not have a safe and appropriate speed limit. Last year over 50 percent of all crashes occurred on roads where the posted speed limit was higher than the safe and appropriate speed.

What will we do differently?

Increasing investment in proven safety improvements

Over the next decade, we will need to invest in more infrastructure safety improvements across New Zealand to achieve our proposed 2030 target. As infrastructure investment is expensive, the greatest share in the short-to-medium term needs to be allocated to where the greatest potential trauma and risk reductions are possible, focussed on the most effective treatments to address key crash types.

Ensuring our roads have safe and appropriate speed limits

In the long term, greater consistency in the road network will support better compliance with speed limits, which should match the function and design standard of the road. During the life of the strategy we will need to move closer to consistent speed limits for roads with similar functions, design standards and risk.

Improving infrastructure design and planning

This will be supported by a review of relevant standards and guidelines to better embed our road safety principles into infrastructure planning, design and maintenance decision-making. In particular, the safety and accessibility of all road users should be taken into account right through the infrastructure lifecycle and in key investment assessment frameworks. This will help us invest in the right interventions, at the right scale and to ensure that we are improving safety for all modes.

We will also encourage and incentivise greater use of frameworks that classify roads and streets according to their functions and use, so that greater priority is given to public transport and active modes. This includes the adoption of specific design principles among developers and land use and transport planners so that safety and good design are in-built into new subdivisions and significant land use change.

What outcomes do we want by 2030?

Our objective is to improve the safety of our roads and roadsides through infrastructure improvements and speed management so that, by 2030...

How will we measure progress?

We will progress through the following proposed indicators [TBA – draft measures]:

- Proportion of the traffic volume within safe and appropriate speed
- Proportion of traffic volume on roads with speed limit above 80km/h that have median barriers
- Proportion of urban network with speed under 50 km/h
- Proportion of road network treated with automated speed enforcement
- Perceived likelihood of being caught when driving over the posted speed limit
- Public acceptability of speeding.

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Focus area 2: Vehicle safety

Safer vehicles have enormous potential to help drivers avoid crashes and to protect both vehicle occupants and other road users when crashes do happen. Initial analysis indicates that taking action in this area could reduce deaths and serious injuries by xx over the next decade.

Why is this area important?

Safer vehicles have an enormous potential to both reduce the number of crashes on New Zealand's roads, and the chances of people being killed or seriously injured when crashes do occur.

The design of a vehicle and its passive safety features, such as airbags and seatbelts, have a significant impact on the likelihood of deaths or serious injuries in the event of a crash. Safer cars are designed to absorb the impacts of a crash and to protect both the occupant and other road users from crash forces. Research suggests that these types of improvements resulted in over 1000 fewer road deaths between 1990 and 2012.⁵ However, there are still significant differences in the safety features offered by different types of vehicles, even among new cars.

Developments in active safety measures increasingly provide an opportunity to reduce the chances of a crash occurring in the first place. In addition to established technologies such as electronic stability control, many safer vehicles now include technologies such as lane departure warnings, lane keep assistance, collision warning systems and autonomous emergency braking. Emerging technologies, such as those that connect vehicles to each other and surrounding infrastructure, and longer-term developments in vehicle automation provide further opportunities in this area. Austroads report found that the full adoption of automatic driving and connected vehicle safety applications in the light vehicle fleet has the potential to prevent between 310-485 fatal and serious injury crashes in New Zealand each year.⁶

What are the key issues?

A high proportion of less safe vehicles

New Zealand's vehicle fleet consists of a high proportion of less safe vehicles. Approximately 45 percent of the light vehicles in New Zealand's fleet in 2017 had a safety rating of 1- or 2-stars out of five. These vehicles generally lack the structural integrity, safety features or technologies that can either help prevent a crash happening or lessen the severity of injury to the occupants in the event of a crash.

Crashes involving less safe vehicles account for approximately 65 percent of all deaths and serious injuries in New Zealand. 81 percent of all deaths and serious injuries involving young people (16-24 years old) were in 1- or 2-star safety rated vehicles. Data from the NZ Transport Agency indicates that if every light vehicle had a 5-star safety performance rating, this would result in 930 fewer deaths and serious injuries annually.⁷

Most new light vehicles entering the New Zealand vehicle fleet (around 145,000 per year) have very high safety performance ratings. However, compared to most other countries, New

⁵ <https://www.transport.govt.nz/assets/Uploads/Research/Documents/0a6ad9106c/Long-Term-Trend-in-Roadtoll.pdf>

⁶ Austroads reference

⁷ NZTA data reference

Zealand has a much higher proportion of imported used vehicles entering the country (around 160,000 per year) which vary greatly in their safety performance. The number of these vehicles entering the market, combined with the number already in-service and relatively slow rate at which they exit the fleet, means that the light vehicle fleet has more vehicles with a low safety performance than some other countries. It also means that the advanced safety features in new light vehicles will take longer to become commonplace in New Zealand.

Some vehicle types (motorcycles in particular) are also overrepresented in death and serious injury numbers. Due to their lack of protection from injury in the event of collision and the inherent instability of motorcycles, the risk of being killed or injured in road crashes is 21 times higher for motorcyclists than for car drivers over the same distance.

Emerging vehicle safety challenges and opportunities

New and emerging technologies are continuing to make our transport system safer. Vehicle functions are likely to become increasingly automated over time. While fully-autonomous self-driving vehicles may play a role in our future, the greatest technological safety benefits during the term of this strategy are likely to come from the continued adoption of active safety features or driver-assistance technologies, such as automated emergency braking, lane keep assistance, and other crash avoidance systems in new vehicles. Connected vehicle-to-road infrastructure technologies will continue to develop and will assist people – and eventually vehicles – to drive more safely, providing drivers with real-time information about road risks, speed limits, and road conditions.

Between 2020 and 2030, we expect to face some transitional challenges as people become accustomed to vehicles with increasingly automated functions. Drivers could face difficulties switching between vehicles with safety features that they rely on (e.g. rear-view cameras and collision avoidance systems) and older vehicles without these features. Self-driving vehicles could also become more common in the 2020s, bringing both benefits and risks for safety.

What will we do differently?

Lifting the safety performance of our vehicle fleet

Over the next ten years, we will lift the safety performance of the vehicle fleet, especially used light vehicles. A particular focus will be on progressively lifting minimum standards for vehicles coming into the fleet. While New Zealand currently mandates a range of safety standards for vehicles, we have not moved as quickly as other jurisdictions. For example, the European Union is in the process of updating its list of mandated safety standards, and intend to introduce fifteen new standards by 2021. There may also be opportunities to adopt standards that improve both safety and emissions outcomes.

We also need to accelerate the exit of less safe vehicles from the fleet. There are benefits for both safety and environmental outcomes if we can find effective, sustainable and equitable ways of increasing the number of unsafe vehicles that are removed from the fleet.

While we can take some actions to quickly progress towards this goal, improving the overall safety of the fleet is expected to be a longer-term process as there is likely to be a long lead-in time before the impacts any regulatory interventions in this area will be seen. However, key players in the vehicle sector (including insurers, manufacturers, and vehicle testing and inspection providers) have indicated their desire and willingness to help the Government's efforts to improve road safety. Their support is critical to lifting the safety performance of our fleet.

Building public demand for safer vehicles

We will build public demand for safer vehicles – especially for used light vehicles sold or traded within New Zealand. We know that there is a low level of consumer awareness of the role vehicles play in road safety, which presents an opportunity to increase awareness and encourage greater demand for safer light vehicles. There are opportunities to build on existing initiatives (e.g. RightCar), as well as investigate ways to ensure vehicle safety ratings are consistent, accurately applied and communicated to consumers.

Taking a responsive approach to new technologies

New Zealanders' attitudes towards new transport technologies and services will affect the speed of any transitions. The widespread availability of shared vehicle fleets could accelerate the modernisation of vehicles, but only if attitudes towards vehicle ownership also change. New standards will be required to ensure that different systems are compatible. Some of our existing infrastructure will need to be modernised. Data privacy and cyber-security issues will become increasingly important. Accessibility issues will also need to be addressed, with technologies creating both opportunities and barriers to people who find it difficult to travel due to disabilities, age or financial hardship. Our policy and regulatory settings need to be responsive and ready to deal with technological change if and when it starts to happen.

What outcomes do we want by 2030?

Our objective is to significantly improve the safety performance of the vehicle fleet, so that, by 2030...

How will we measure progress?

We will progress through the following proposed indicators [TBA – draft measures]:

- Proportion of light vehicle fleet that have a 5-star rating or better
- Proportion of light vehicle fleet that have a 3-star rating or better
- Perceived importance of having a vehicle that has a high safety rating
- Proportion of motorcycles with ABS or CBS
- Proportion of vehicles that pass WOF/ COF assessment on first attempt.

Focus area 3: Work-related road travel

Businesses and other organisations have a responsibility to ensure that work-related road travel is safe for their staff and the public. Approximately 25 percent of the deaths on our roads involve someone driving for work, whether that be as a commercial driver or as a secondary part of their main role. Ensuring that work-related road safety is treated as a critical health and safety issue has the potential to significantly reduce this harm.

Why is this area important?

Every day, thousands of New Zealanders travel on our road network while at work. Some of these people are professional drivers, moving people and goods around the country. Others drive as a secondary part of their main role, such as a tradesperson moving between jobs or a salesperson visiting clients. All of these people have the right to come home from work healthy and safe.

However, far too many workers are involved in crashes that result in deaths and serious injuries. While we do not have perfect data on the number of work-related crashes, recent studies suggest that around 25% of road fatalities involve a person driving for work. This makes road crashes by far the single largest cause of work-related fatalities. Given the large mass of many commercial vehicles, it is often other road users who are killed in these crashes.

Work-related road safety is a critical issue for the new strategy, not only because of the size of the problem, but also because there is a real opportunity for businesses across the supply chain to take steps to significantly improve the safety of their workers and the public on the road. These organisations already have broad obligations under the Health and Safety at Work Act 2015 to ensure the safety of workers and the public. In addition, commercial transport services have specific obligations under the Land Transport Act 1998, including rules relating to work-time and vehicle operations. We need to ensure that these obligations are taken seriously and that businesses and operators understand what they need to do.

Work-related road safety is a critical issue across a number of agencies and sectors. In particular it is an important part of WorkSafe's developing focus on working in and around vehicles, as well as delivering on the Government's recently published *Health and Safety at Work Strategy 2018-2028*. Sustained focus on this area through the road safety strategy is important for establishing a clear framework to ensure that agencies work together with businesses and other organisations to effectively drive change.

What are the key issues?

Goods transport

Most freight in New Zealand is moved by road. The Transport Outlook suggests road freight (trucking) volumes could increase from 217 million tonnes in 2012/13 to 315 million tonnes by 2032/33 – and to 340 million tonnes by 2042/43. That's a 98 percent increase in 20 years. While heavy trucks make up only xx percent of the vehicle fleet, they account for six percent of the total kilometres travelled on New Zealand's roads, and around 20 percent of road deaths involve a truck. This number could rise as freight movements on New Zealand roads continue to grow. Nearly 90 percent of those killed are not the truck driver, but other road users involved. This reflects the fact that light vehicles and vulnerable users will almost always come off second best in a collision with a heavy vehicle.

While truck drivers are responsible for less than half of the fatal and serious injury crashes they are involved in, recent research has highlighted a range of pressures facing this sector

that are impacting on road safety. In particular, precarious work arrangements that allow for the top of the supply chain to establish contractual demands that promote hazardous work practices have been linked to unsafe driving hours and fatigue.

Passenger services

Both small passenger services (e.g. taxis and ride-sharing services) and large passenger services (e.g. buses) present particular safety challenges. While buses are a comparatively very safe form of transport, it is still important that we focus on ensuring the safety of bus passengers, both because of the potentially catastrophic consequences if something does go wrong, and because the perceived safety of these service is an important part of promoting uptake of public transport. As heavy vehicles, buses also present a much higher risk to other road users, particularly pedestrians and cyclists.

Small passenger services are also involved in a very small proportion of deaths and serious injuries on the road. Concerns have, however, been raised about dynamics in the 'gig economy', where self-employed transport workers may feel pressured to engage in high-risk driving behaviour, with limited support from the service provider.

General workplace driving

A much broader range of people drive for work as a secondary part of their role, some occasionally and some every day. We know less about the amount of harm in this area, although coronial data suggests that around xx percent of work-related road deaths involve people who do not identify as a professional driver. Our engagement to date has identified particular concerns about work related fatigue and distraction when driving, as well as risks associated with individuals using their own cars (potentially with fewer safety features) for work purposes.

Anecdotal evidence suggests that the introduction of Health and Safety at Work Act 2015 has already begun to shift behaviour, for example by encouraging employers to purchase safer vehicles. However, for this to be fully effective, we need to improve awareness of the scope of these obligations and ensure that there are clear consequences for those who ignore them.

What will we do differently?

Improving information and data on work-related road safety

In order to better target our efforts on work-related road safety, we need better data about the full extent of harm involving vehicles travelling for work. This will give us a better understanding of the causes of work-related crashes, the types of vehicles involved and the industries and sectors that are causing the most harm. There are also opportunities to work with the private sector to better share and coordinate work-related road safety information.

Encouraging the sector to take ownership

There is significant further scope for organisations drive improvements to road safety within their organisations – especially as safety risks can be caused or driven by broader organisational factors, such as incentives, employment arrangements and scheduling. While some organisations are focussed on improving road safety as a key safety risk, others do not treat safety risks on the road the same way that they would treat similar risks on the worksite.

Businesses and other organisations have clear legal obligations in relation to work-related road safety, and need to take ownership of this issue. Organisations should identify the particular road safety risks that apply to their workers, and implement policies and requirements that are specifically aimed at addressing those risks. These obligations extend to organisations higher up the supply chain who purchase transport services. These

organisations can help to drive change by setting clear safety standards in their procurement practices and by maintaining appropriate oversight over the services they contract. These types of changes higher up the supply chain can promote the uptake of key safety practices and technologies, while avoiding creating a competitive dynamic that encourages service providers to cut corners on safety. For example, central and local government agencies are among the largest employers in New Zealand, employing thousands of New Zealanders, many of whom drive for work. These agencies can play an important role in improving road safety outcomes for their employees and in setting a best practice example for other organisations.

Safer vehicles, new technologies and alternative freight movements

Businesses purchase the bulk of vehicles that enter the New Zealand fleet new. These vehicles are typically sold on after xx years, usually staying on New Zealand's roads for around another 15 years before they are eventually scrapped. This means that lifting business demand for safer vehicles can improve not only the safety of those driving for work, but can help to lift the overall safety of New Zealand's fleet in the longer term.

Organisations also increasingly have the opportunity to install aftermarket technologies that can help them to improve their understanding of road safety risks and that actively reduce the chances of serious crashes occurring. For example, the increasing uptake of telematics devices to record and transmit information about vehicle travel, can enable businesses to better identify, manage and monitor key safety risks, such as speed and hours travelled.

There may be opportunities to reduce the number of trucks on New Zealand's road, as well as improving freight productivity. We will also explore opportunities to shift some freight movements onto rail and coastal shipping, where viable. Having fewer trucks on the road would help to reduce vehicle emissions as well as reducing risk for other road users.

Modern and responsive commercial transport regulation

We need to make sure that the regulatory framework, particularly for commercial transport services, incentivises the right sort of behaviours, applies obligations at the right level and is enforced in a responsive and risk-based manner. While the overlap between specific requirements under the LTA and the broader requirements of HSWA is not necessarily problematic, we need to make sure that the two frameworks work in a complementary and consistent manner. A coherent and coordinated approach by health and safety and land transport regulators will be critical to the effective functioning of these regulatory frameworks.

What outcomes do we want by 2030?

Our objective is to ensure that businesses and other organisations treat road safety a critical health and safety issue so that, by 2030...

How will we measure progress?

We will progress through the following proposed indicators [TBA – draft measures]:

- Proportion of businesses that identify road safety as a critical health and safety risk
- Proportion of businesses that take actions (to be defined) to address road safety issues
- Amount of data on road safety issues at work available to the transport sector.

Focus area 4: Road user choices

We make choices on our roads every day – including how we travel, and the attitude and actions we take. Influencing these decisions, not only through education, training and enforcement, but also through good land use planning and design, will continue to be an important part of improving road safety outcomes.

Why is this priority important?

While the road system needs to accommodate the fact that people make mistakes, there is still potential to make significant reductions in deaths and serious injuries by influencing the decisions that road users make every day. This ranges from decisions on how we choose to travel, to the attitude we take when on the roads, through to deliberate risk-taking behaviour that puts everyone on the road at risk.

We know that one of the factors that has contributed to the increase in road deaths and serious injuries has been increasing movements of people in private cars. While we need to continue to improve the safety of motor vehicle travel on our roads, we also need to change the way we move around.

We also know that unsafe road use continues to be a major factor contributing to deaths and serious injuries. Some serious crashes are caused by risk taking behaviours or deliberate violations of rules (e.g. running a red light). However, many crashes are also caused by the mistakes drivers and riders make, such as errors of judgement, slips or momentary lapses of concentration (e.g. forgetting to check mirrors before changing lanes, or turning on the wipers instead of indicators). To make substantial reductions in crashes, we need to continue to target deliberate violations, but we also need to address these inadvertent road user errors that contribute up to xx percent of all serious crashes. This needs to be supported by training, education and a range of compliance and enforcement measures.

What are the key issues?

Safety risks of different travel modes

How people choose to travel on our roads has a significant impact on their likelihood to be killed or seriously injured. At the moment, many of our towns and cities are planned and built in ways that encourage private motor vehicle trips. Many of these trips are between two and five kilometres, which could be walked or cycled. However, safety risks posed to less protected users on our roads can discourage travel by these modes. In 2018, xx cyclists and xx pedestrians were killed, and xx cyclists and xx pedestrians seriously injured.

Other modes, such as motorcycling, have their own risks. Crashes involving motorcyclists are a disproportionate contributor to deaths and serious injuries on our roads. In 2017, 45 motorcyclists died and a further 1,283 were injured in road crashes. This is 12 percent of all deaths and 10 percent of all reported injuries, while motorcycling accounts for just two percent of total vehicle kilometres travelled by all modes.

Distraction

Driving is a complicated task that requires the driver's dedicated and constant attention. Anything that diverts a driver's attention for more than two seconds can significantly increase the likelihood of a crash. Driver distraction can occur voluntarily (e.g. making a phone call) or involuntarily (e.g. diverting attention to a passenger). In 2017, distraction was identified as a contributing factor in xx fatal crashes and xx serious injury crashes.

Fatigue

Between 2014 and 2016, fatigue was identified as a contributing factor in approximately 12 percent of fatal crashes and approximately six percent of injury crashes. Because fatigue is difficult to identify or recognise as contributing to a crash, it is likely that fatigue is under-recorded, and contributes to more crashes than we realise. The most common effects of fatigue on driving including drifting off the road, unnecessary changes in speed, and not reacting in time to avoid a dangerous situation. These effects lead to a high number of single vehicle crashes involving a car striking a tree or other rigid object, and severe head-on collisions.

Speed

Speed has a direct influence on crash occurrence and severity. In 2017, speed was a contributing factor in **xx** fatal crashes (resulting in 93 deaths) and **xx** serious injury crashes. With higher driving speeds, the number of crashes and the crash severity increase disproportionately. Thus, reducing speed by a few kilometres per hour can greatly reduce the risks of and severity of crashes, particularly the likelihood of fatal crashes on open or rural roads.

Drugs and alcohol

Alcohol and drug use seriously impair driving ability by slowing reaction times and affecting awareness and judgement. While crashes involving alcohol have declined since 2012, it remains a significant contributing factor to road crashes along with drug driving. In 2017, alcohol or drugs were a contributing factor in 123 fatal crashes, 448 serious injury crashes and 973 minor injury crashes. Impaired drivers are also more likely to not be wearing a seatbelt when they crash.

Restraints

Studies have established that wearing a seatbelt during a crash increases the wearer's chances of survival by approximately 60 percent in the front seats and 44 percent in the rear seats. While surveys indicate that most people in New Zealand wear seatbelts, since 2015 the number of people killed in road crashes not wearing a seatbelt has increased to around 100 a year.

Recidivist drivers

Data suggests there is a small cohort of high-risk drivers that take part in deliberate, high-end and repeat offending and risk taking. These drivers make up a very small part of the population but are highly overrepresented in fatal or serious injury crashes. High risk drivers include unlicensed and disqualified drivers, high-end alcohol offenders, high end speeding offenders, repeat offenders, drug impaired drivers, fleeing drivers, and drivers involved in illegal street racing. Many of these drivers do not respond well to traditional enforcement measures and deterrence-based initiatives.

What will we do differently?

Supporting a shift in how we travel

Most people will tend to use the mode of transport that is most convenient (i.e. fast, reliable, safe, and comfortable), provided they can afford it. Therefore, if we want to achieve a significant shift in how people travel, we need to make public and active modes of transport more convenient and/or affordable than travelling by private vehicle. Experience both internationally and in New Zealand highlights that, when provided with safe and high-quality travel choices, people will change their travel mode. For example, the significant increase in

investment for public transport services and walking and cycling infrastructure in the major urban centres in New Zealand (e.g. Auckland and Wellington) and growing regional centres (e.g. Nelson) is starting to see an increase in active and alternative modes of travel.

A particular focus of the strategy will be to promote the uptake of active modes by making them safer. We need to support people to make safe travel choices that improve health and environmental outcomes. Improving safety and access in urban areas and growing regional centres, and investing in walking, cycling and public transport infrastructure, can help create safe and attractive environments where we rely less on private motor vehicle travel, and where walking and cycling activity can grow.

Electric bikes, scooters and skateboards have become popular over the last five years and we are likely to see more in the future. They are a part of a modern multi-modal transport system that provide mobility and health benefits for users and emissions reductions. Our transport regulations, road rules and infrastructure will need to keep up to ensure these new modes are safely catered for and integrated into the system.

Shifting public attitudes and understanding of road safety

Over the next ten years, we will continue to build on our advertising and education programmes to shift what is considered publicly acceptable and increase demand for road safety among road users. We will continue to ensure that our driver licencing system equips road users with the skills required to be safe, alert and compliant, and focus our efforts on making it easier for users to behave safely on our roads (e.g. through clear road design and a new approach to safety cameras). We will also incentivise and encourage the uptake of emerging in-vehicle technologies, such as intelligent speed assistance, which have considerable potential to help simplify the driving task and reduce user error.

An effective enforcement regime targeted towards risk

Enforcement will continue to be an important part of improving road safety, in particular where additional deterrence for deliberate high-risk behaviours is needed. We want road users to understand and support the use of enforcement and better appreciate its role is to keep people safe and not to punish them. We will ensure that offences have effective penalties that reflect the relative seriousness of the road safety risk. Importantly, our approach needs to address the underlying issues which lead to some peoples' offending, rather than responding solely to the behaviour itself. We will take a new approach to dealing with the highest risk drivers, and provide for alternative resolutions to reduce recidivist high-risk behaviours in a fair and equitable way.

What outcomes do we want by 2030?

Our objective is to encourage safe and healthy travel choices and safer behaviour on roads, so that, by 2030...

How will we measure progress?

We will progress through the following proposed indicators [TBA – draft measures]:

- Proportion of BST that result in a driving infringement or charge
- Perceived chances of being caught for undertaking risky behaviours
- Public acceptability of risky behaviours
- Proportion of motorcyclists with improved safety knowledge
- Proportion of motorcyclists having undertaken an approved training course.

Focus area 5: System management

Once developed, the new strategy has the potential to achieve large and lasting road safety benefits for all New Zealanders. If we are to realise that potential then we must make changes to system management and governance ensure we implement it effectively. Evidence from other jurisdictions highlights the importance of strong leadership, accountability for results and coordinated action across government agencies. It also emphasises the need to gather, analyse, utilise and share reliable data to understand road safety issues and prioritise resources efficiently.

Why is this area important?

System management is the foundation of an effective road safety strategy and is critical for successful implementation.

The road safety system is complex and involves many agencies at both national and local level. Employers, fleet managers and stakeholder organisations also have a role. This means that a coordinated approach with strong leadership at every level is essential, including ensuring a joined-up approach to the way we respond to fatal and serious injury crashes. It is also vital to embed Safe System thinking across and within agencies and to ensure alignment of relevant decision-making and investment processes. Interventions must be underpinned by high-quality evidence, so research and analysis is critical, as is ensuring that knowledge is transferred throughout the road safety system.

We know that change is often most effective and long lasting when it is driven by communities that have a deep understanding of the challenges and opportunities in their own area. Because of this, it is important that communities are empowered to address local road safety priorities.

What are the key issues?

International studies highlight the importance of leadership and inter-agency coordination in the delivery of an effective road safety strategy. Jurisdictions that have been successful in delivering ambitious improvements to road safety have had leaders at a national and a local level who have been prepared to make the case for change and to bring communities with them.

Effective leadership, however, must be accompanied by effective coordination between everybody responsible for making our roads safer, as well as by the healthcare and emergency service professionals who respond to crashes. Research carried out in New Zealand, including an interim evaluation of Safer Journeys and a business improvement review of Auckland Transport, along with feedback from local government, members of reference groups and other stakeholders, tells us that there is room for improvement.

There are many central and local government agencies who play an important role in road safety. The National Road Safety Committee brings together representatives of central government agencies to coordinate road safety policy. The new strategy offers an opportunity for it to strengthen its leadership and play a more effective coordination role.

At a local level, the most successful regions bring together a wide range of stakeholders, including businesses and community groups, to tackle road safety issues. Sharing knowledge and best practices around road safety performance and governance through bodies such as the Regional Transport Committees and Road Controlling Authorities Forum is a critical component of a successful road safety strategy.

To some extent, New Zealand's road safety performance has also been hampered by a failure to secure the level of public buy-in needed to make the changes to reduce significantly the number of people killed and seriously injured on our roads. Actions to increase public understanding of road risk and how it can be reduced will need investment and coordination. Without political support at all levels, it is more difficult to propose and manage what can sometimes be controversial changes.

Decision makers need access to sound data and a strong evidence base about the effectiveness of road safety interventions if they are to take action with confidence. It is vital, therefore, that we collect accurate and carefully targeted data about fatal and serious crashes and how they can be prevented or their impact lessened. It is also important that data and analysis is shared with local and national decision makers.

What will we do differently?

Strong leadership

Effectively implementing our strategic objectives will require significant commitment and strong leadership from all levels of Government, stakeholders, private industry and the community. We need to ensure that everyone with responsibility for road safety understands our shared vision and has the confidence to make change happen.

Effective coordination

The way that different parts of Government work together at national and local level will be important. The Ministry of Transport is the lead agency for road safety. It requires the resources to ensure that the agencies represented on the National Road Safety Committee are fully engaged with road safety issues. This will enable them to play a comprehensive role in the delivery of the overall strategy. Local government also has an important role to play, both because of its significant responsibilities for safety on its road networks but also as an advocate for road safety in the community.

Greater community engagement

Shared responsibility for road safety starts with building collective understanding. We need to develop a greater level of awareness of road safety within the community, key decision makers and community and business leaders to bring about a shift in thinking. Our strategic vision and objectives will need to be clearly explained and promoted to the community to encourage public discussion and understanding.

Building capacity and sharing knowledge

Better information and tools will be provided to local councils, community road safety groups, businesses and other groups which have major roles to play in identifying and increasing the understanding of road safety issues in their communities. We also need to focus our efforts on building capacity and capability within the agencies that contribute to road safety outcomes in order to deliver effectively on key interventions and strategic directions.

Developing an evidence base

We need to keep abreast of emerging road safety issues, changing trends, and new solutions over the life of this strategy. We expect, for example, that some technology-based solutions to road safety problems will develop within the next decade. New problems may also emerge. Disruptive technologies are changing the way that people travel, particularly in cities. It is important that we monitor developments and that information is shared in a timely and effective way with all those responsible for road safety so that effective responses can be developed. Work is currently underway on an intervention model. This will strengthen our statistical

capabilities and allow us to model and analyse the effectiveness of particular interventions with greater accuracy. Data provided by the intervention model will underpin future action plans.

Strengthening monitoring and evaluation

Introducing a results management framework to highlight critical intermediate outcome and output measures will enable effective monitoring and evaluation. Regular public monitoring and reporting of performance indicators will assist government and organisations to evaluate which of their programmes are working and where modifications or changes may be required.

Elevate road safety in decision making frameworks

[To come]

Improve post-crash response

[To come]

What outcomes do we want by 2030?

System management is the foundation of an effective road safety strategy. Our objective is to improve road safety management such that by 2030 the system-wide changes we have made have facilitated a significant reduction in the number of deaths and serious injuries on New Zealand's roads.

How will we measure progress?

We will progress through the following proposed indicators **[TBA – draft measures]**:

- Outcomes and indicators are tracked and released to public at least annually
- Dollars invested in safety improvement activities (across all activity classes) through GPS
- Perception about the level of road trauma and the progress being made to reduce it
- Public acceptance and understanding of Vision Zero and the Safe System Approach
- Sector's satisfaction with the amount and quality of information received around road safety issues, changing trends and potential solutions

What do you think?

To what extent do you support the focus areas and proposed immediate actions?

Are there others we should consider?

Do you have comments about the way that we intend to measure our performance in our focus areas?

Draft Outcomes Framework

Our vision: A New Zealand where no one is killed or seriously injured in road crashes					
2030 target: A [xx%] reduction in deaths and serious injuries on New Zealand roads (from 2018 levels)					
Overall outcome measures	Number of road deaths (by mode) Number of overall serious injuries (by mode) Perceived safety of travel (by mode)				
Focus area	Infrastructure and speed	Vehicles	Workplace	User choices	System management
Objective	Improve the safety of our roads and roadsides through infrastructure improvements and speed management	Improve the safety performance of the vehicle fleet to prevent crashes or mitigate their consequences	Treat road safety as a critical health and safety at work issue	Encourage safe and healthy travel choices and safer behaviour on roads	Drive action through effective system management
Focus area indicators	<ul style="list-style-type: none"> Proportion of the traffic volume within safe and appropriate speed Proportion of traffic volume on roads with speed limit above 80km/h that have median barriers Proportion of urban network with speed under 50 km/h Proportion of road network treated with automated speed enforcement Perceived likelihood of being caught when driving over the posted speed limit Public acceptability of speeding 	<ul style="list-style-type: none"> Proportion of light vehicle fleet that have a 5-star rating or better Proportion of light vehicle fleet that have a 3-star rating or better Perceived importance of having a vehicle that has a high safety rating Proportion of motorcycles with ABS or CBS Proportion of vehicles that pass WOF/ COF assessment on first attempt 	<ul style="list-style-type: none"> Proportion of businesses that identify road safety as a critical health and safety risk Proportion of businesses that take actions (to be defined) to address road safety issues Amount of data on road safety issues at work available to the transport sector <p>Note: additional indicators will be developed after further defining problems relating to road safety in workplaces and identifying potential ways to address this problem.</p>	<ul style="list-style-type: none"> Proportion of BST that result in a driving infringement or charge Perceived chances of being caught for undertaking risky behaviours Public acceptability of risky behaviors Proportion of motorcyclists with improved safety knowledge Proportion of motorcyclists having undertaken an approved training course <p>Note: speed related indicators are captured elsewhere</p>	<ul style="list-style-type: none"> Outcomes and indicators are tracked and released to public at least annually Dollars invested in safety improvement activities (across all activity classes) through GPS Perception about the level of road trauma and the progress being made to reduce it Public acceptance and understanding of Vision Zero and the Safe System Approach Sector's satisfaction with the amount and quality of information received around road safety issues, changing trends and potential solutions

PART SIX: NEXT STEPS

Your feedback on the proposals contained in this document will inform policy development and shape what will become the 2020-2030 road safety strategy and immediate set of actions.

We invite you to make a formal submission on the proposals. The submission form can be found at **xx**, and we encourage you to complete your submission online. **Submissions must be lodged by xx on xx.**

The Ministry of Transport will consider all feedback received during the public consultation process. This will inform the 2020-2030 road safety strategy and initial actions. After Cabinet approval, the strategy will be publicly released by the Associate Minister of Transport.

