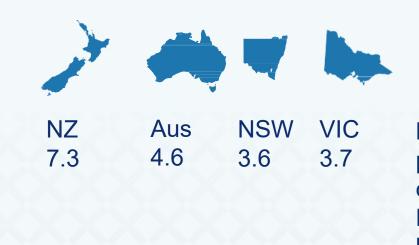


Road to Zero Trafinz Conference 2023

Bryan Sherritt – Director Road to Zero 6 September 2023

The Size of our Road Safety Problem





performing countries in Europe less than 2

ROAD DEATHS PER 100,000 POPULATION AUSTRALASIAN JURISDICTIONS 2022





Annual Social Cost of Road Death and Serious Injury in New Zealand

Social costs of road trauma have recently been updated as part of a review of the value of statistical life as follows

> Road Death = \$13.4 million Road Serious Injury = \$1.3 million

Social costs measures the total cost of road crashes to the nation, including loss of life and life quality, loss of productivity, medical, legal, court and vehicle damage costs.

- We have calculated the social cost of road related death and serious injury on New Zealand roads for the 12 month period between October 2021 and September 2022.
- Over this period there were 348 road deaths, and 2317 serious injuries recorded
- This equates to a road death and serious injury social cost over this 12 month period of

\$7.7 billion*

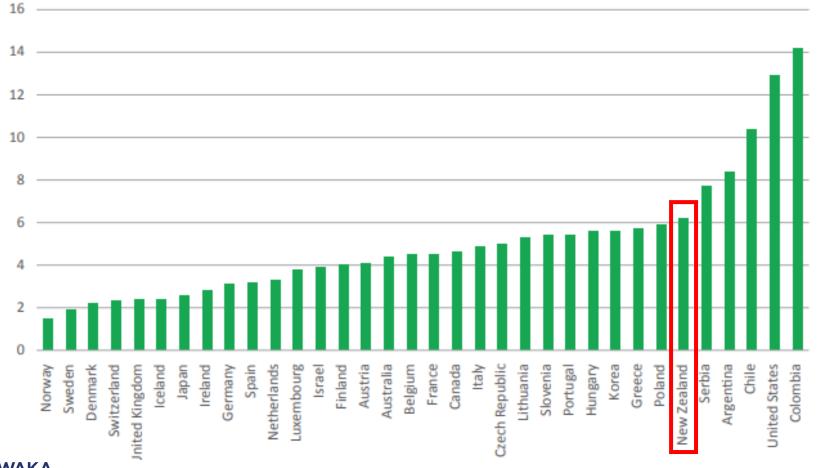
*subject to change as the underlying injury data hasn't been finalised. Please note this figure does not include minor injury crashes and as such this should not be mistaken for a social cost figure for all road trauma in New Zealand





How New Zealand Stacks Up

Figure 3. Road fatalities per 100 000 inhabitants, 2021





What does Zero mean in Road to Zero

We have zero tolerance that death and serious injury as that price that we must pay to simply use New Zealand Roads

It is a **human centred** strategy based on the safe system approach to road safety.

Humans are fallible - in that we make mistakes, and make poor choices

Humans are vulnerable - in that there is a finite amount of force that human body can withstand in a crash before death and serious injury is the result.

The system must be designed and operated such that humans are protected – this means all parts of the system operating together.

The focus of Road to Zero is the ultimate elimination of death and serious injury due to road trauma

it is about reducing as much as we can the likelihood of crashes that result in Death and Serious Injury,

but importantly it is about managing the consequence of all crashes such that we have every chance of zero death and serious injuries





New Zealand's Road to Zero Partner Agencies









He Kaupare. He Manaaki. He Whakaora. prevention.care.recovery.









MANATU HAUORA.





The Road to Zero Focus Areas





in evidence and evaluated

Delivering Road to Zero

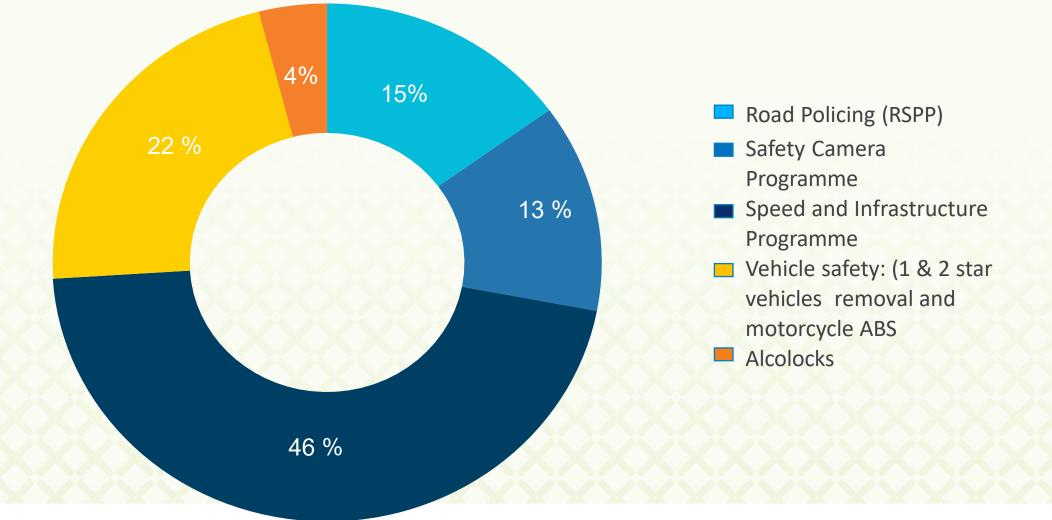
A transport system where no one should be killed or seriously injured

While there are numerous actions that will need to all come together under Road to Zero, there are five critical interventions that must be delivered to ensure our success in achieving the 40% reduction in death and serious injuries by 2030. By achieving these intervention targets along with others by 2030, we would expect 1270 less people to be killed or seriously injured on our roads and streets each year.



Source Data Mexico Structure Us Medicions - Integrated Intervention Logic Model. Delivery at August 2023 – Road to Zero Dashboard. Intervention 2030 targets – Road to Zero Performance Indicators

Major Death and Serious Injury Reducing Initiatives - the modelling





Infrastructure – Median Barriers

1000 km of median barriers installed across the New Zealand Road network by 2030





Centennial Highway





Speed Management

Speed management applied to at least 10,000 km of the highest risk roads on the network to align speed limits with safe and appropriate speeds by 2030.





Speed Management – SH6 Blenheim to Nelson

Effectiveness

~80% reduction in deaths and serious injuries, noting only two (2) years post-implementation

average journey time has increased by appropriately 4 minutes over the 110 km length, i.e. 2 seconds per kilometre.







Auckland Speed Management

Speed Limits

24 month interim evaluation of Auckland Transport Tranche 1 speed limit changes

Effectiveness

- 33.7% reduction in fatal crashes (compared to control)
- 12.6% reduction in DSI crashes (compared to control)

The overall objective was to reduce the number of death and serious injury (DSI) crashes on roads subject to a speed limit change by at least 30% within 5-years of implementation. The postanalysis period of 24-months is still relatively short.

Supporting treatment

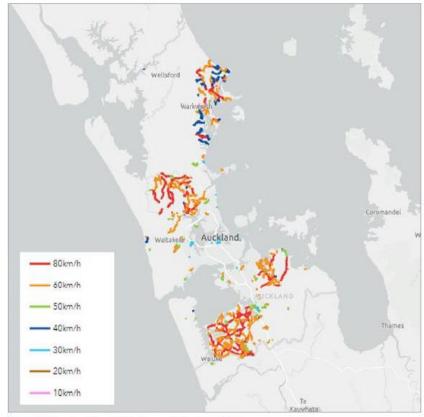


Figure 1.1 Tranche 1 Speed limit changes in Auckland (2020)

After the first 24-months, the Tranche 1 roads have experienced a reduction in DSI crashes of 22.3%, a decrease in fatal crashes of 27.4% and a reduction in serious injuries crashes of 21.8%.

Rural roads have seen the most significant reduction in road trauma, with a reduction in rural road DSIs crashes of 26.9%. Urban roads have seen a DSI crashes reduction of 18.1%.

When taking into account control sites, consisting of the balance of the Auckland Road network not subject to a speed limit change, the analysis found:

- 33.7% reduction in fatal crashes;
- 12.6% reduction in DSI crashes;
- 19.1% reduction in Minor injury crashes; and
- 17.8% reduction in all injuries.



Evaluation report link - https://at.govt.nz/media/1990901/aukland-transport-report-24-month-safe-speeds-tranche-1-monitoring



Safety Cameras

Introducing new safety camera technology will translate into lives saved by reducing speeds and enforcing safer driver behaviour





Safety Camera Density

Jurisdiction	Safety Cameras per 100,000 population
Sweden	>11
Netherlands	9.4
France	7.5
Victoria (Australia)	6.6
New South Wales (Australia)	4.7
United Kingdom	4.2
New Zealand	2.3



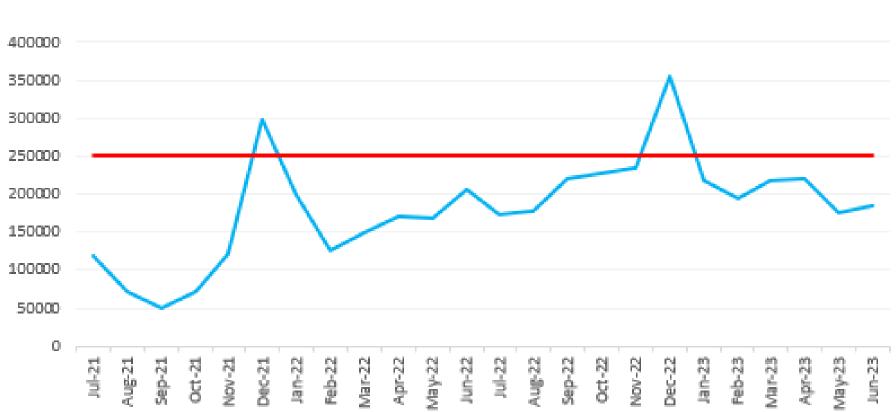
Police Enforcement

Police continues to partner with Waka Kotahi and Te Manatū Waka Ministry of Transport to meet shared road safety commitments under the Road Safety Partnership Programme (RSPP), which supports Road to Zero.





Breath Testing – rolling 12-month totals



Breath Tests Performed - By month



Vehicle Safety

Raise safety standards of vehicles entering New Zealand

Raise safety standards of vehicles currently in the fleet



AUTONOMOUS EMERGENCY BRAKING (AEB) systems start braking automatically if a collision is imminent and the driver is not taking any action (or is not doing so fast enough).

AEB is able to detect a potential collision and activate the braking system to decelerate the vehicle with the purpose of avoiding a collision, or at least mitigating its impact.

LANE KEEPING ASSISTANCE

(LKA) systems monitor the position of the vehicle with respect to the lane boundary and apply torque to the steering wheel, or pressure to the brakes, when a lane departure is about to occur.





Images sourced from the ADAS Knowledge Hub







Work Related Road Safety

About 25 percent of the deaths on our roads involve someone driving for work, whether as a commercial driver or as a secondary part of their main role. Fatigue, distraction and vehicle safety are important issues.









WRRS Programme Elements



Action Plan 2023-2025

Te Mahere ki Te Ara ki te Ora | Road to Zero Action Plan 2023 – 2025









ROAD TO ZERO TEMATTEMA

Annual Monitoring Report 2022

Te Ara Ki Te Ora – Te Rīpoata Aroturuki Ā-Tau 2022 | Road to Zero Annual Monitoring Report 2022









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What does all this mean?

Each of these Highly Effective initiatives builds on the next – they are all interrelated – all part of the safe system. The total system outcome is greater than the sum of the individual interventions – we will save more lives and prevent more serious injury if we deliver these interventions together.

There is no silver bullet – delivering only one or two of these interventions will not provide the outcome we are seeking.

It is incumbent on us that we manage the system responsibly and take practical steps that are for the greater public good. We must be equitable and inclusive. We must protect the people that we love. Our Children will be ultimate benefactors of our work.

We know what to do.



Ngā mihi Thank you

