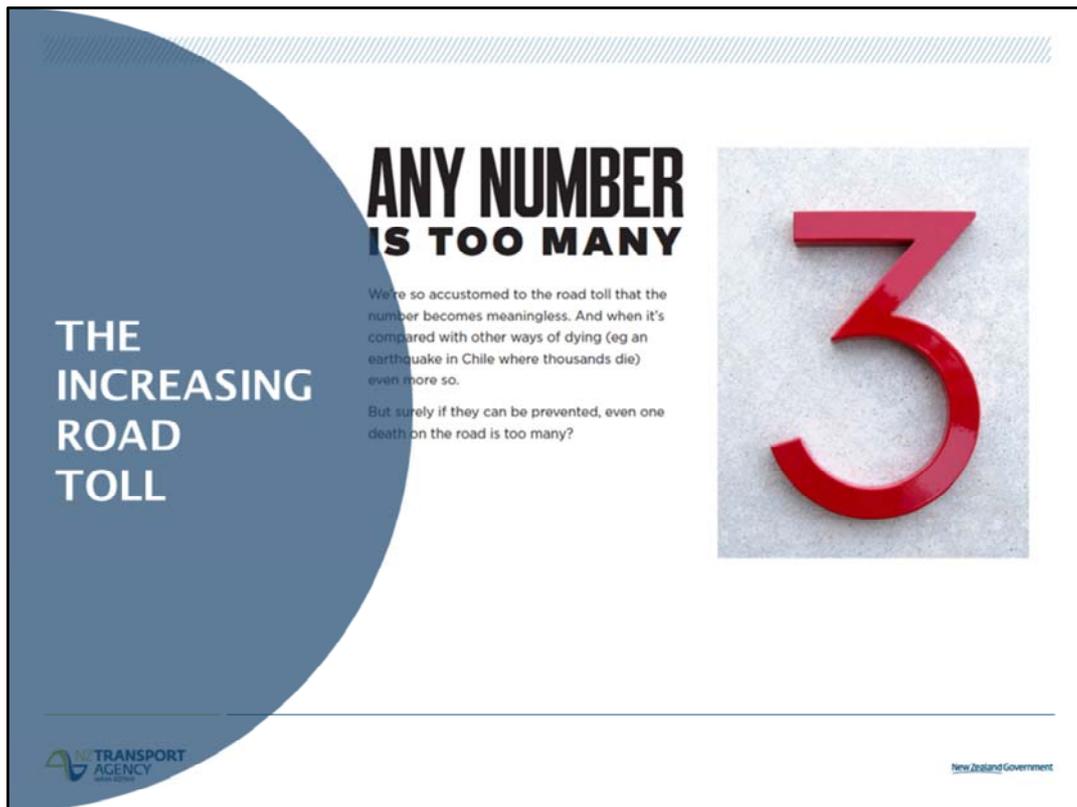


Time for action

Kaye Clark - Safer Roads Conference 24 May 2017





The road toll has increased worldwide

No-one can say exactly why the road toll has increased. This is true in all jurisdictions. Many factors and trends are involved. The New Zealand recent average of around 300 deaths annually is statistically a small sample, so subject to more volatility from relatively few events. A very small error can have catastrophic consequences in an instant.

We do, however, understand the main risk factors and interventions that are proven to reduce them. Unfortunately there are no silver bullets or quick fixes.

Achieving long-term reductions in deaths and serious injuries requires significant and sustained investment on many fronts to achieve the *Safer Journeys* vision.

OECD research shows a link between the economic downturn from 2009 onwards and reduced road deaths and serious injuries. Economic conditions affect both exposure to risk and user behaviour. As economies have improved this dampening effect appears to be tapering off. State Highway vehicle kilometres travelled increased by 4.4% in the period and may account for some of the increase in deaths and serious injuries.

In New Zealand

After initial decreases, the overall road toll of fatalities and the wider total of fatalities and serious injuries (DSIs) have increased in the last few years to their highest levels since 2010. The current levels are around 2700 DSIs per year, including 320-330

fatalities.

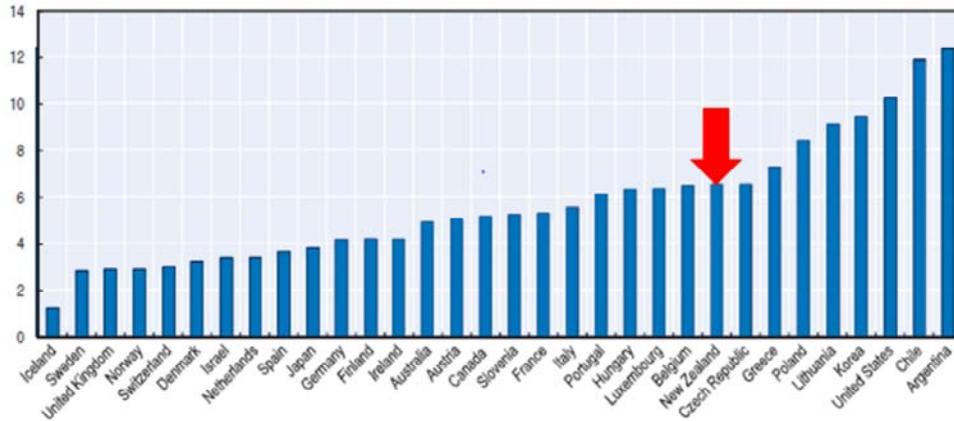
Statistically the increase from 319 deaths in 2015 to 328 deaths in 2016, and 322 for the 12 months to today, does not indicate that the road toll is rising at a concerning rate. Because of New Zealand's small population there is always some volatility in year to year results.

Some factors contribute disproportionately to the road toll. Alcohol or drugs feature in 21% of all fatal and serious injury crashes, and similarly excessive speed features in 21% of fatal and serious injury crashes. Motorcyclists account for 18% of all fatal and serious injuries, and "high risk" drivers feature in 11% of fatal and serious injury crashes.

safety problems

- **international road safety problem, as countries develop and transport networks grow, so do the social problems and in our case the crash trend**
- **extremes internationally Sweden (significant investment and vision zero focus) to 1st world countries where growth happening at rapid rate but safety philosophy not keeping pace, hence significant DSI statistics**
- **NZ crash trend, vkt, population and growth (refer to graph)**
- **wet road crash rates (refer to graph)**
- **need for stepped change**

Fatalities per 100,000 inhabitants 2014



Remember international audience!

The reality is that New Zealand roads and roads users are often a long way from a safe system. We have narrow winding roads with no margin for error, a lack of median and side barriers, inappropriate speed limits combined with an ageing vehicle fleet and persistent patterns of non-compliance or risky behaviour.

International trends in Road Safety

- Road traffic deaths worldwide have plateaued at 1.25M since 2007
- Active and passive safety developments lowering vehicle occupant deaths
- Rate of reduction in vehicle occupant deaths is exceeding other road user groups, particularly vulnerables
- Vulnerable road user deaths (mostly urban areas) are increasing as vehicle occupant deaths are reducing - highlighting an increasing residual proportion in totals
- Sweden expects vulnerable deaths to overtake vehicle occupant deaths in the future
- Older road users (as occupants and pedestrians) and motorcyclist deaths are increasing

The number of road traffic deaths worldwide has plateaued at 1.25million since 2007.

This reflects progress made by Governments and nongovernmental organisations.

Some Australian Jurisdictions achieved annual reductions in 2015 and others have achieved record low annual results in recent times, however recent years have seen a plateauing (and/or increases) across Australia and New Zealand in the annual number of people killed in road crashes.

Leading countries including Australia and New Zealand are seeing increasingly higher rates of improvement in vehicle occupant deaths as active and passive safety developments deliver results.

The rate of reduction in vehicle occupant deaths is exceeding the rate of reduction in other road user groups, particularly amongst vulnerable road users (pedestrians, cyclists and motor cyclists).

Vulnerable road user deaths, mostly in urban areas, in Australia and New Zealand are increasing in number or are an increasing proportion of the total road deaths as vehicle occupant deaths (making up the biggest numbers) come down more rapidly highlighting an increasing residual proportion of vulnerable users present in the total number of deaths.

A leading Safe System country, Sweden expects total deaths of vulnerable road users to overtake vehicle occupant deaths in the next couple of years. This trend has already

occurred in South Korea with deaths of "aged reckless pedestrians" overtaking vehicle occupant deaths in recent years.

Fatalities from extreme risk taking remain a concern with legislative and enforcement responses most effective. Fatalities due to risk taking are highlighted as an increasing proportion of the total as overall crash numbers come down, attracting continued attention.

Less obvious to the "public eye" is the contribution that inadvertent errors make, being a large contributor to serious injury crashes and up to 50% of the fatal crash problem in jurisdictions nationally and internationally. An improvement in serious injury data collection, monitoring and reporting is important to raise awareness and build support for safe system interventions.

Road deaths among older road users as vehicle occupants and pedestrians are increasing in number and/rate in some jurisdictions nationally and internationally.

Motorcycle deaths fluctuate annually but are an increasing proportion of road fatalities in several Australian jurisdictions and in countries such as the United States.



2020 vision (insert to circle diagram)

- safer roads & roadsides
- safer speeds
- safer vehicles
- safer drivers

And of course the fifth pillar – trauma response.

Generally the **Safer Journeys Action Plan** is well-placed to address the types of fatal crashes that happened over recent years. The challenge now is to implement and evaluate specific activities that are going to make a tangible difference to these areas of risk.

The reality is that New Zealand roads and roads users are often a long way from a safe system. We have narrow winding roads with no margin for error, a lack of median and side barriers, inappropriate speed limits combined with an ageing vehicle fleet and persistent patterns of non-compliance or risky behaviour.

Therefore, if tangible improvements to road safety are to be achieved, through the **four pillars of the safe system**, meaningful, sizable and bold steps may be needed to influence road user behaviour and attitudes, and reduce the likelihood of high severity trauma.

Many *Safer Journeys* initiatives are still in the pipeline or planning stages and have yet to

achieve their full benefits. These include actions to address unsafe speeds, high risk rural roads and motorcycle safety.



3. NZTA activity to date

- research early 1990's to link second order relationship between wet road run off the road crashes and surface friction
- this research led to development of policy and targeted investment into measuring road surface and targeted surface treatment
- mid 1990's policy developed T10 specification developed - measure, monitor and treatment
- this has had a significant impact (refer to graph)
- as this is a complex subject, given the number of influencing variance (tyres, road surface, environmental conditions) need continued and increased focus, especially sustainability of knowledge in this area
- targeted investment over last 20 years, now leading to premium road surfacing materials being used eg Glenbrook Steel Mill by-product melter slag being crushed and used as road surfacing aggregate
- wins to date - refer to graph
- NZ has led the way internationally with development of the road surface monitoring and we continue to discover new things about how road surfaces respond to differing conditions - be it traffic demands, environmental impacts or treatment methodologies

Safe Roads and Roadsides

All roads of national significance (RONS) are built to at least a 4-star safety standard – this involves median and side barriers, well-designed intersections and improved alignment (reducing out-of-context curves). The recently opened Kapiti expressway is an excellent example.

The RONS are massive infrastructure projects – two of the seven have been completed, others are in construction or design stages. Their full safety benefits are unlikely to be achieved for five or more years.

Other significant programmes to improve infrastructure safety are:

- complete the Safer Roads Alliance improvement programme which targets key risks on State Highway urban arterials and rural roads
- a national programme of improvements to specified highest risk local urban arterial roads [not State Highways] in the 2018-2021 National Land Transport Programme.

Safe Use

We're excited by the opportunities new technologies provide to improve road safety by enabling users to make smart and safe choices.

Actions include increasing the use of technologies to support road user education and to provide better real-time information to road users about road risk, speed limits and road conditions.

We're also working with Police and the Ministry of Transport to develop an automated compliance strategy by the end of 2017.

Motorcyclists are a particularly vulnerable group, comprising 18% of deaths and serious injuries although they account for only a small proportion of the vehicle fleet. Actions focus on training programmes to increase rider skills and raising awareness of the risks involved, as well as infrastructure improvements for high risk routes.

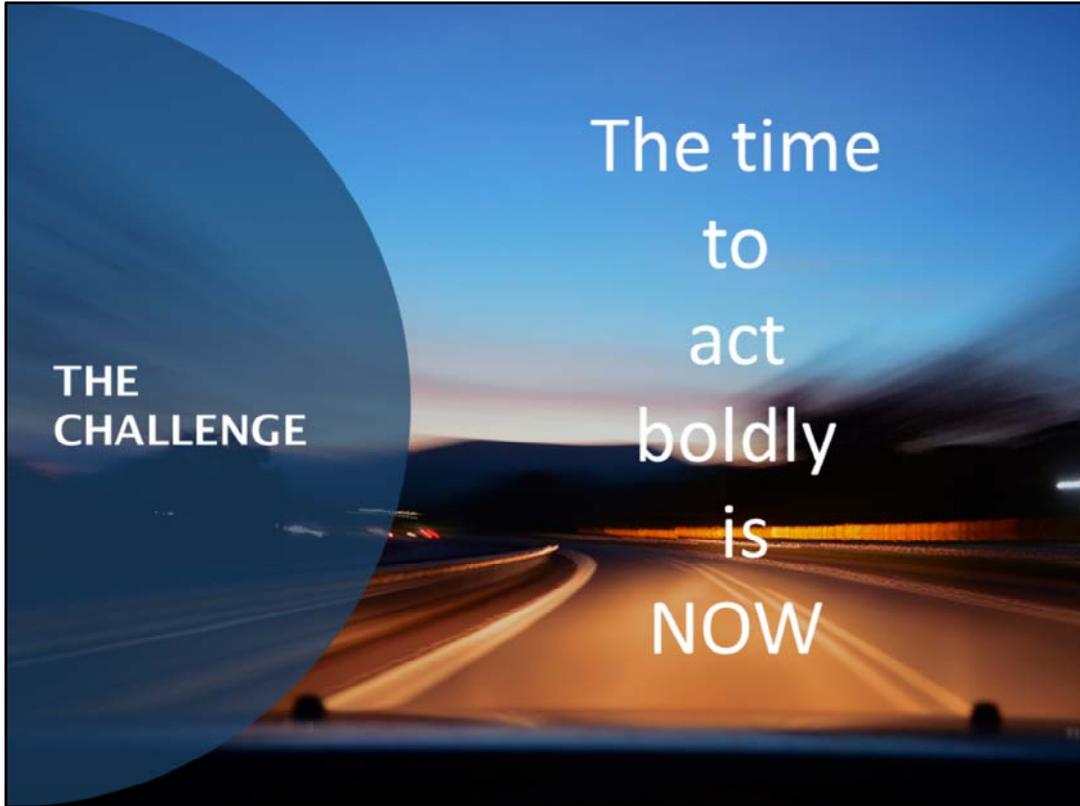
Safe Vehicles

The Action Plan aims to maximise the benefit from increasing levels of international vehicle safety, including new vehicle safety technology.

We are improving the availability and quality of consumers' safety information about new and used vehicles.

With our partners we'll also work with fleet buyers, importers and operators to encourage and incentivise safer vehicle purchasing decisions.

We will set up the technology platform for future uptake of vehicle-to-vehicle communication and vehicle-to-road communication.



The “clock is ticking”, the time to act boldly is now, to address emerging problems, to maintain improving results, to push on below plateauing results, to progress towards a Safe System.



What the Transport Agency is doing to achieve more in road safety

We recognise that more focus, effort and expertise needs to go into identifying the interventions that will deliver the step change needed in land transport safety.

Road Safety Centre of Excellence

- More Focus, Effort and Expertise
- Integrate Systems Thinking
- Optimise Levers and Tools
- Accelerate Investment in High Risk Roads and Roadsides
- Work with Police to Target Enforcement and Deterrence Levers
- Support the Continuation of Our World-Class User Behaviour Programme
- Leverage WorkSafe and ZeroHarm Programmes Through Partnerships
- Explore New Vehicle Technologies
- Develop an Automated Compliance Strategy with Police, Ministry of Transport, ACC and Ministry of Justice



New Zealand Government

Our plans are to create a centre of excellence. This will be through a Safety and Environment Business Group which will:

- focus and direct the Transport Agency's expertise and services to integrate systems thinking and optimize the levers and tools that will have significant impact
- accelerate investment in high risk roads and roadsides
- work with Police to target their enforcement and deterrence levers for better road safety outcomes
- continue our world class user behaviour programme
- leverage WorkSafe and Zero Harm programmes by partnering with the public and private sectors to assist businesses to build safe driving and vehicle procurement into their day-to-day business
- explore new vehicle technologies
- develop an automated compliance strategy in partnership with Police, Ministry of Transport, ACC and the Ministry of Justice.

International Responses

- United Nations Sustainable Development Goals (SDG's):
- SDG 3.6 - by 2020, halve the number of global deaths & injuries from road crashes from 2010 levels
- SDG 11.2 - by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- Ambitious 50% reduction - an opportunity for thinking "outside the box"
- World Health Organisation (WHO) preparing a Safe System road package for the UN



The United Nations have endorsed a new set of sustainable development goals (SDG's). Two SDG's are relevant to road safety;

SDG 3.6- by 2020, halve the number of global deaths & injuries from road crashes from 2010 levels.

SDG 11.2- by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

Leading road safety countries are using the ambitious 50% reduction as an opportunity for strategic review, "to think outside the box" and to consider further strategies to achieve "stretch" improvements. Adoption of the Safe System opens up new thinking and new solutions.

The World Health Organisation (WHO) is preparing a Safe System road safety policy package for the UN road safety meeting in late April to advise countries on how to achieve urgent and ambitious reductions in serious road trauma to meet the United Nations SDG 3.6 reduction of 50% by 2020.



The journey to transform and change to the Safe System needs to come through applied research, shared practice and knowledge transfer, this is vital to further progress and results for the safe mobility of people who will always makes mistakes in traffic.