Road Safety Strategy
Speed Reference Group

Ministry of Transport
TE MANATŪ WAKA

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Key contributors

This pack was put together by the Ministry of Transport, New Zealand Transport Agency and ACC.

It was reviewed by Hamish Mackie, and the NZ Police.

Purpose of pack

To provide the group with:

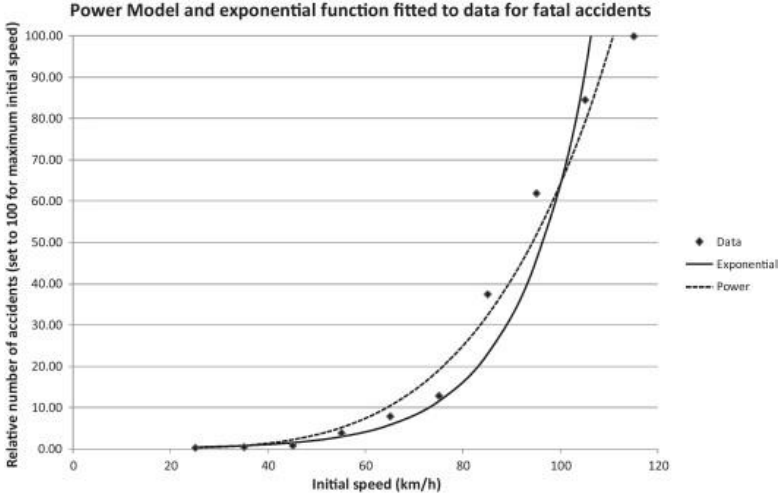
- an introduction to why speed is an important part of the Safe System approach to road safety.
- an overview of the problem in New Zealand.
- an understanding of what is happening internationally and how New Zealand compares.

This will support the group to determine what key themes it wants to explore for further discussion in subsequent meetings.

Why is speed important?

- Speed has a direct influence on the likelihood of a crash occurring and the survivability of a crash.
- In the event of any crash the speed of impact is the most important determinant of the severity of injuries sustained and the probability of death.
- The research tells us that the chance of a crash being fatal increases exponentially with increasing speed.
- Nilsson's 2004 Power Model shows how on average a 1% decrease in mean speeds leads to a 2% decrease in all injury crashes, a 3% decrease in serious injury crashes, and a 4% decrease in fatal injury crashes.
- Nilsson's model has been revised and validated several times. Elvik's 2013 Exponential Model is the most recent and proposes an exponential rather than a power model, which shows that the likelihood of a fatal crash occurring depends on the initial speed, rather than the change in mean speed.
- It also shows greater safety benefits when high initial speeds are reduced (i.e. from 100 km/h to 80 km/h) compared to the Power Model.

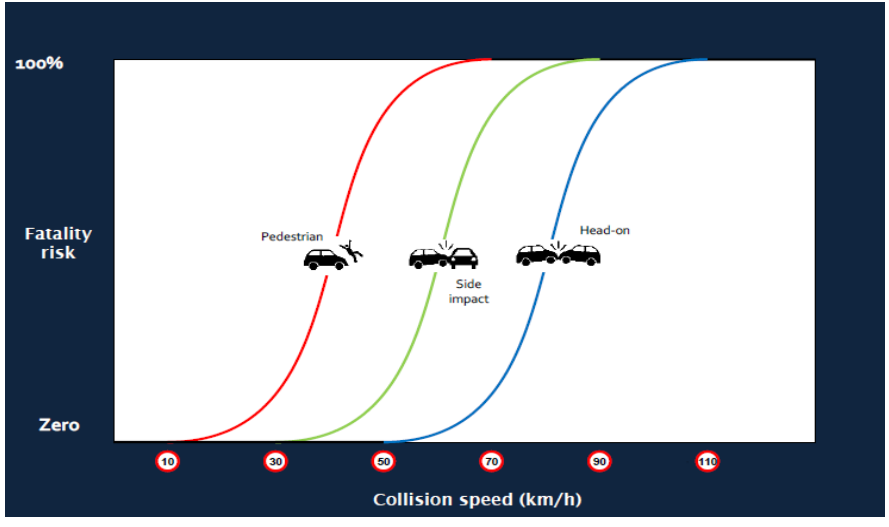
Nilsson's Power Model (2004)
vs.
Elvik's Exponential Model (2013)



Why is speed important?

- The International Transport Forum's 2018 report on speed and crash risks suggests that most unprotected road users survive if hit by a vehicle at up to 30 km/h, a modern car can protect occupants up to 50 km/h in a side collision, and can protect occupants up to 70 km/h in a head-on collision. The risks for vulnerable pedestrians, such as the elderly and young children, are higher.

Risk of fatality – vehicles crashes



Why is speed important?

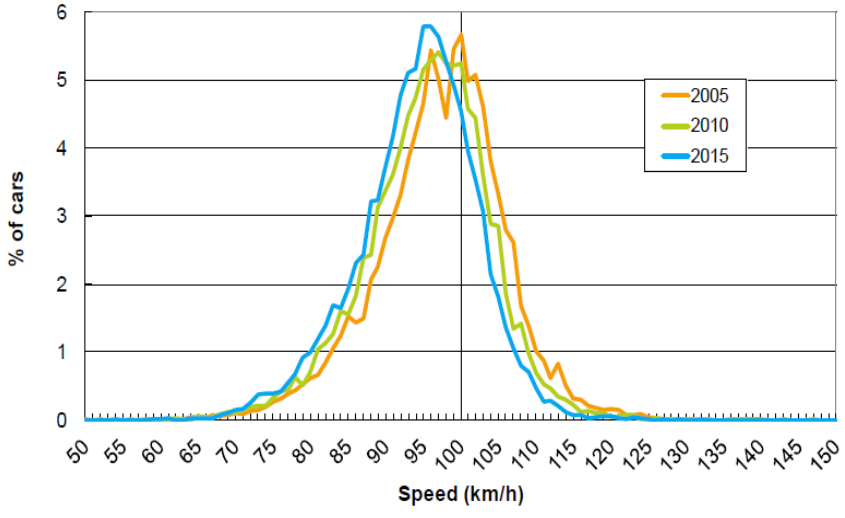
- The relationship between speed and road trauma is well-established internationally and managing speed is a key focus of road safety efforts. It is one pillar of the safe system.
- Low level speeding is the main contributor to road trauma because it is more common and affects the level of injury, no matter what the crash cause (Doeke, Kloeden, McLean, 2011).
- Most fatal and serious crashes occur when speeds are <10 km above the limit but inappropriate for the road or conditions (Doeke, Kloeden, McLean, 2011).
- A 2017 study of fatal and serious crashes in New Zealand revealed that approximately 87% of occurred at speeds <10 km/h over the posted speed limit (Mackie et al, 2017).
- Australian research found the greatest collective reduction in casualty crashes is obtained from a reduction in travel speeds in the first 5 km/h above the speed limit (Kloeden, McLean, Moore, 1997).

Source: Ministry of Transport

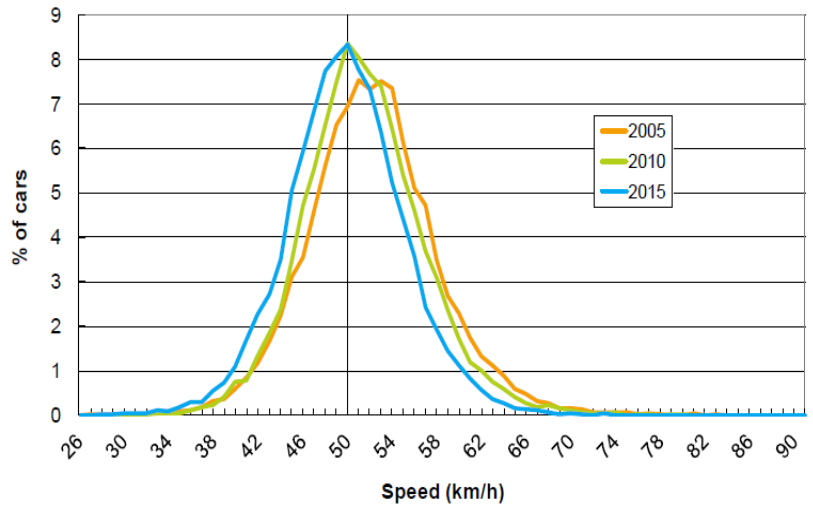
Why is speed important?

- Driving speed homogeneity is an important variable in determining road safety. Research shows that less variability in speed distribution results in fewer risky manouevres, such as overtaking, which leads to more positive road safety outcomes (SWOV, 2009).

Open road car speed distribution



Urban car speed distribution

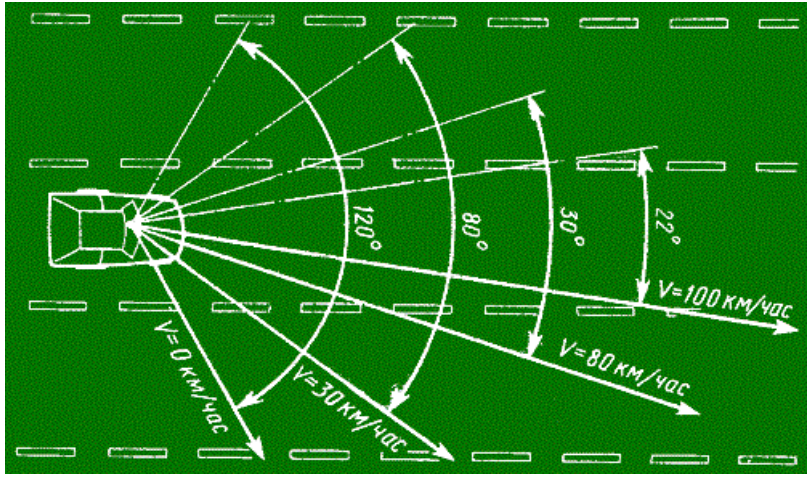


Source: Ministry of Transport

Why is speed important?

As speed increases, there is an increase risk of crash involvement, resulting from the following factors:

- Stopping distance – both the distance travelled during reaction time and the distance travelled after the brakes are applied.
- The probability of exceeding the critical speed on a curve.
- Less ability to spot and react to hazards in the driver's peripheral vision.
- The chance of other road users misjudging how fast the speeding driver/rider is travelling.
- The probability of a rear end crash if the driver/rider has not accounted for the increased speed by increasing the following distance.



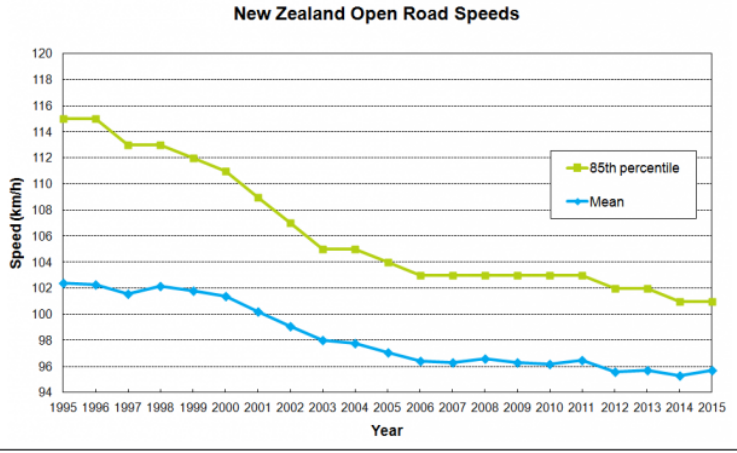
How do safer speeds contribute to wider transport outcomes?

- Managing speeds down to survivable impact levels for vulnerable road users creates more walking and cycling-friendly environments.
- This is particularly important in urban areas, where there are opportunities to create safer streets and improve the sense of place and access for everyone.
- There are already good examples of this in New Zealand – e.g. lower speed limits in Auckland, Wellington and Christchurch CBDs, and on Hamilton's residential streets.
- Establishing a clear hierarchy of roads helps determine which users have priority on each route, what the safe and appropriate speed should be, and where engineering improvements can be made to better protect road users at existing speeds.

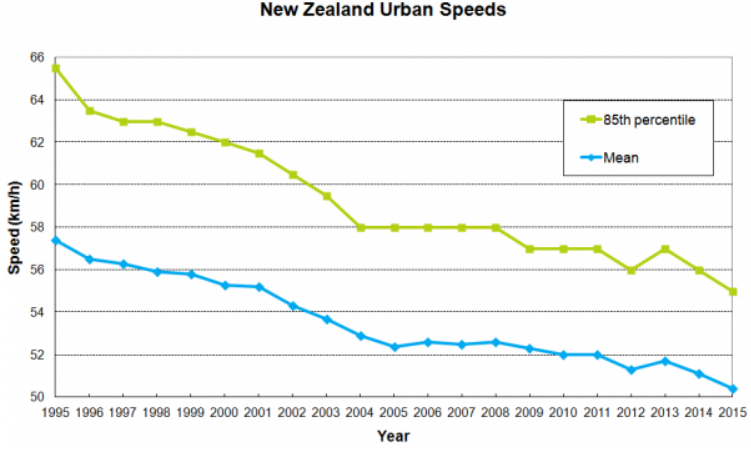
Source: Lucy Saunders

What is happening in New Zealand?

- Mean open road car speeds have remained relatively static around 96 km/h since 2006.
- 23% of cars were traveling faster than the open road speed limit of 100 km/h in 2015.
- On the open road approximately 30% of trucks were travelling faster than the open road speed limit of 90 km/h.



- Mean urban road car speeds have reduced from 52 km/h in 2010 to 50.4 km/h in 2015.
- 46% of cars were travelling faster than the urban road speed limit of 50 km/h on urban roads in 2015.
- On urban roads 23% of trucks were travelling faster than the speed limit of 50 km/h in 2015.



Source: Ministry of Transport

Speed continues to be a key contributing factor to deaths and serious injury crashes in New Zealand

- In 2016, travelling too fast for the conditions was the second highest contributing factor to fatal and serious injury crashes in New Zealand.
- Travelling too fast for the conditions was a contributing factor in 79 fatal crashes, 406 serious injury crashes and 1,234 minor injury crashes. These crashes resulted in 93 deaths, 512 serious injuries and 1,759 minor injuries.
- The total social cost of crashes involving drivers travelling too fast for the conditions was about $879 million, which is approximately 22% of the social cost associated with all injury crashes.
- However, the statistics are likely to under report how speed is contributing to crashes. Too fast for the conditions is determined by Police officers on site. It is not necessarily based on the new approach to identifying safe and appropriate travel speeds, which if applied, is likely to result in much higher numbers.

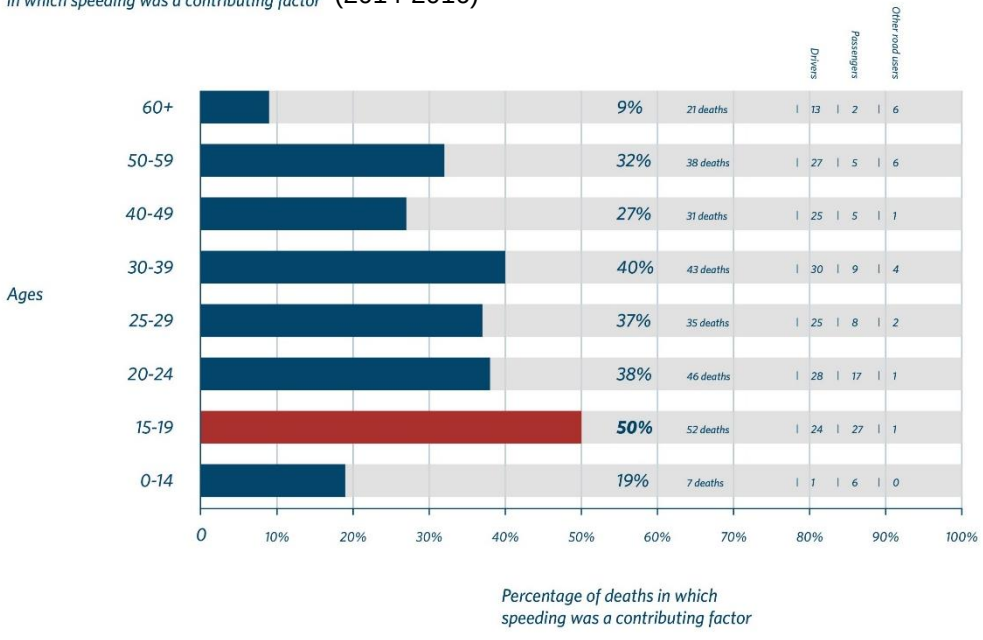
Source: Ministry of Transport

Young people and male drivers are overrepresented in speed-related fatal crashes in New Zealand

Key Facts - Speed

- 15-19 year age group had the highest proportion of speed related deaths.
- Males also have a higher proportion of involvement in speed-related crashes.

Percentage of deaths at different age ranges in which speeding was a contributing factor (2014-2016)



Source: Ministry of Transport

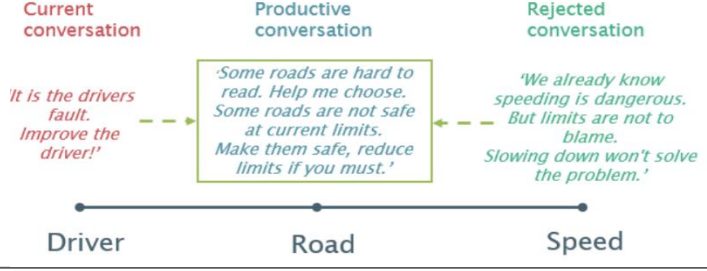
Speed is a factor in both open road and urban road environments in New Zealand

The main risks on the New Zealand Road network

Open roads	Urban roads
• Operate at high speeds • Many have 1-2 star safety rating with 100 km/h speed limits • Impact speeds are higher so crashes are more likely to be serious • Many New Zealand roads and roadsides are unprotected, and have a high risk of head-on or run-off road crashes. • Less reaction time and stopping distance due to higher speeds • Pedestrian and cyclist crashes more likely to be fatal • Motorcyclist crashes are more likely to be fatal • Many rural schools are located on open roads	• Intersection crashes • High active mode activity, including children and elderly on roads with a 50 km/h speed limit • High interaction with land use e.g. CBDs, residential streets, mixed-use arterials • High travel speeds do not align well in safe, equitable, liveable and accessible cities, where walking and cycling is safe and attractive

What does the public think about managing speed?

- Speed is a highly emotive issue for any country, and lowering speed limits is a politically difficult issue to tackle.
- Drivers overestimate how much time they might save travelling at greater maximum speeds and how much time they might lose travelling at lower maximum speeds.
- Many road users do not understand risk on the road and what travelling at a safe and appropriate speed means. This is compounded when the speed limit is too high and the road is unprotected.
- The majority of people support speed enforcement, with only 14% saying it doesn't work and just 5% wanting less enforcement.

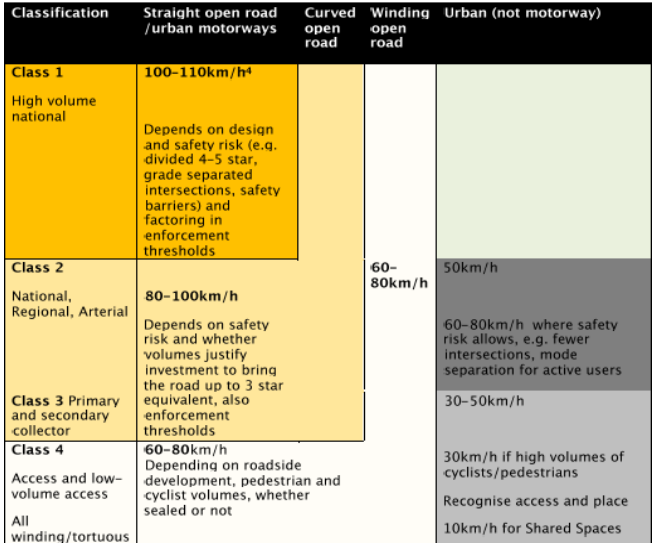


Source: Leblud, J (2017), Reduction of speed limit, European Road Safety Decision Support System, developed by the H2020 project SafetyCube.
Source: NZTA

Speed limits do not match the risk and function of our roads

- Most New Zealand's 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.
- Under Safer Journeys, a new approach to speed management was introduced based on the concept of ***safe and appropriate speeds*** that reflects the function, safety and use of a road.
- Over time this new approach will address the misalignment between our current speed limits and safe and appropriate speeds.
- Strategically important roads can be made safer at their current speed limit through infrastructure improvements, like median barriers. However, this takes time and there will not be sufficient funding for a significant proportion of the network to be upgraded.
- This approach supports creating more recognizable road types helps to make roads more 'self-explaining' and the safe and appropriate speed more obvious.

Safe and appropriate travel speeds



Proportion of the network where the posted speed limit does not match the safe and appropriate speed by road classification

Land Use	National Strategic (High Volume)	National Strategic	Regional Strategic	Arterial	Primary Collector	Secondary Collector	Access	Grand Total
Rural	72.8%	57.3%	81.7%	76.6%	85.3%	90.3%	98.8%	93.4%
Urban	54.3%	59.4%	38.9%	23.1%	39.2%	87.2%	79.0%	68.6%
All	68.1%	57.6%	72.3%	53.8%	73.1%	89.5%	94.9%	87.7%

Source: NZTA

How does the misalignment between posted speed limits and safe and appropriate speeds affect road safety outcomes?

- Half of all injury crashes occur on roads where the posted speed limit was higher than the safe and appropriate speed.
- Many people travel too fast for the conditions because the posted speed limit does not reflect the level of risk.

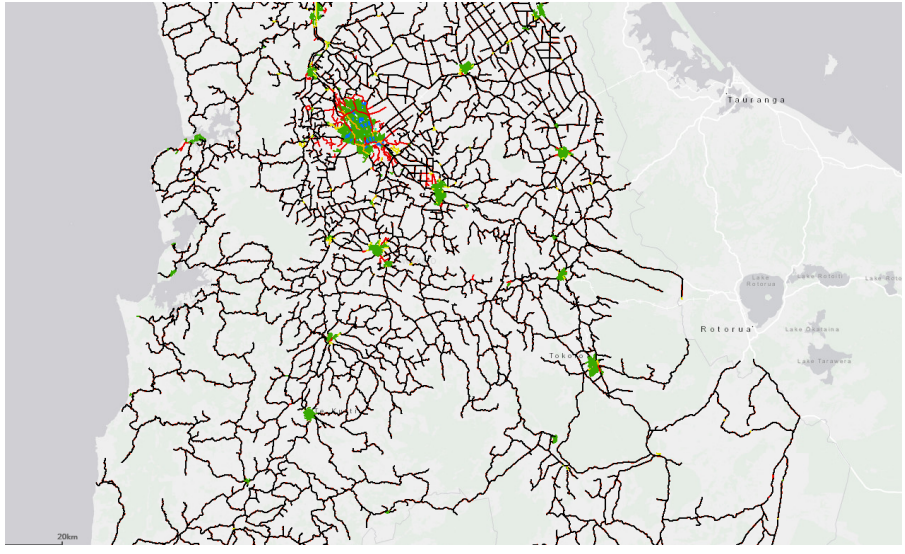
Safe and appropriate travel speed compared to posted speed limit

	Proportion of Injury Crashes	Proportion by Network Length
Safe and appropriate travel speed is lower than the posted speed limit	50.7%	86.3%
Safe and appropriate travel speed is the same as the posted speed limit	45.7%	12.3%
Safe and appropriate travel speed is higher than the posted speed limit	3.6%	1.4%

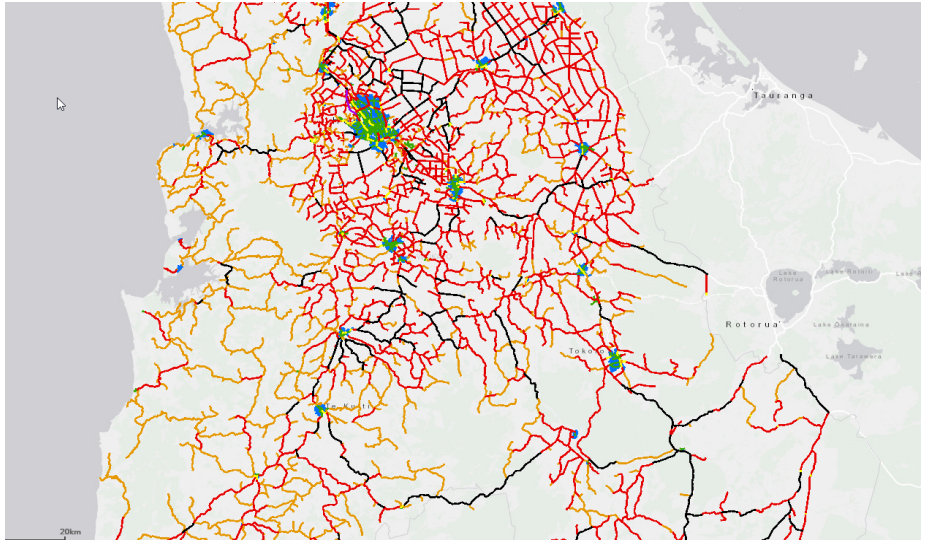
Source: NZTA

Comparison of existing speed limits and safe and appropriate speeds – Waikato region example

Existing speed limits



Safe and appropriate travel speeds



- 30 km/h and below
- 40 km/h
- 50 km/h
- 60 km/h
- <80 km/h (Rural only)
- 80 km/h
- 100 km/h
- 110 km/h

Source: NZTA

Comparison of existing speed limits and safe and appropriate speeds – Waikato region example

Percentage of roads at safe and appropriate travel speeds compared to current speed limits in the Waikato Region:

	Existing speed limit	Percentage of roads with appropriate travel speeds per speed bracket						
Existing speed limit		110 km/h	100 km/h	80 km/h	60 km/h	50 km/h	40 km/h	30 km/h
Rural	100 km/h		13%	49%	38%			
	80 km/h		2%	55%	43%			
Urban	100 km/h			6%	24%	47%	22%	1%
	80 km/h			44%	42%	13%	1%	
	50 km/h				2%	24%	73%	1%

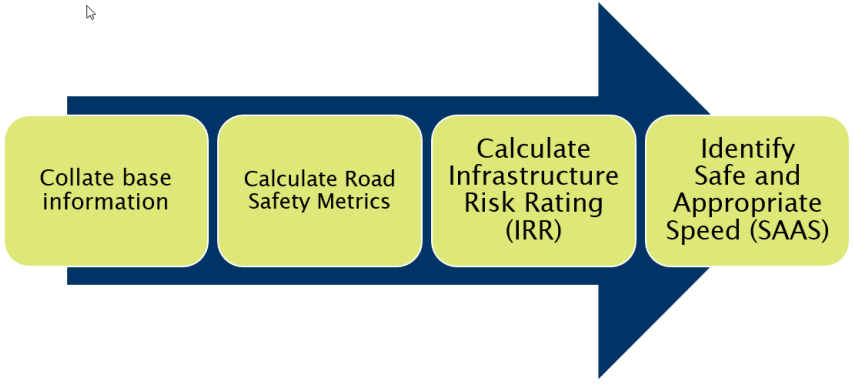
	Speed limit is lower than safe and appropriate travel speed
	Speed limit matches the safe and appropriate travel speed
	Speed limit is higher than safe and appropriate travel speed

Source: NZTA

Safer Journeys – Speed Management Programme

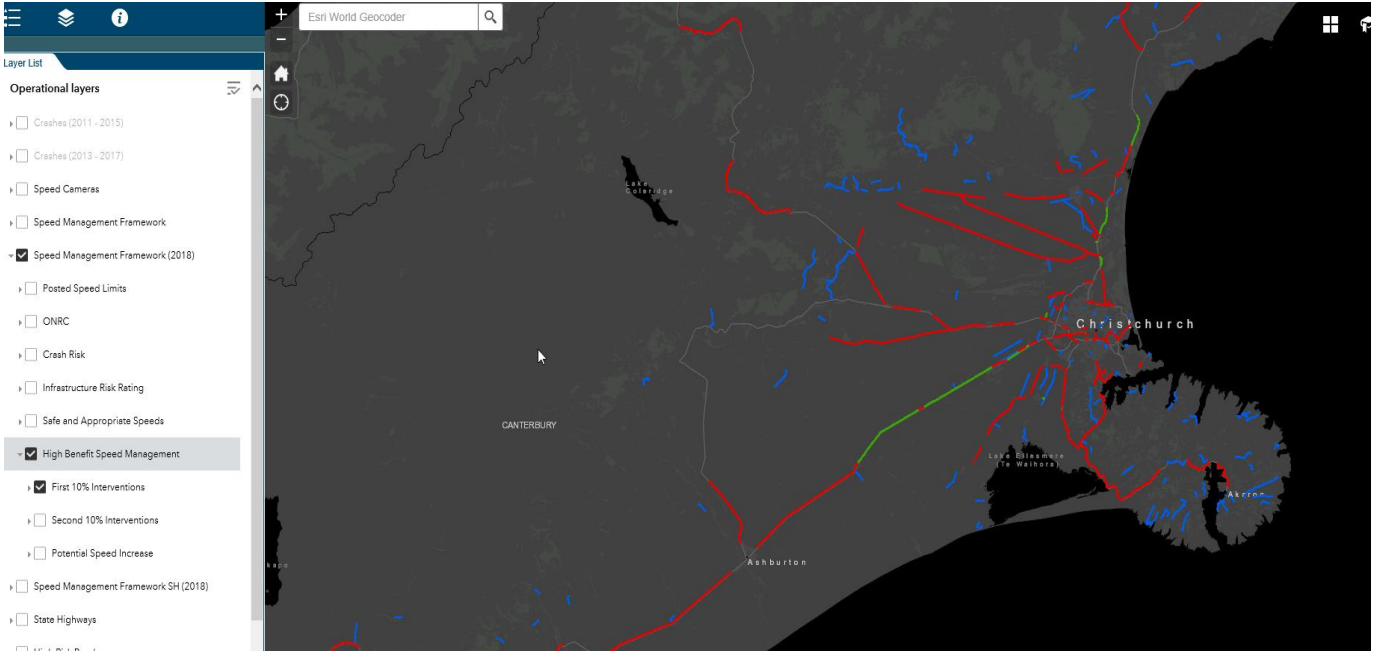
New Speed Management Guide

- Nationally consistent approach to speed management.
- Assist local councils to prioritise ‘high benefit’ speed management opportunities.
- Supports a new conversation on road risk and speed.



Source: NZTA

Safer Journeys – speed management high-benefit opportunities



10% by treatment type:

1) **Engineer Up**
   Roads meant for efficient travel, but not designed for it

2) **Challenging Conversation**
   Roads that have travel speeds that align with posted speed limit but are not safe at that speed

3) **Self-Explaining**
   Roads travel speeds are already lower than posted speed

Source: NZTA

Safer Journeys – speed demonstration projects

Speed demonstration project – State Highway 1 (Centennial Highway)

- A 3.5 km long median safety barrier was installed on State Highway 1 Centennial Highway, just north of Wellington in 2005. This was a particularly treacherous piece of road. In the 4 years to 2000 it recorded 8 fatalities, 2 serious injuries and 7 minor crashes. Between 2001 and 2004, the passing lanes were removed and road markings, reflectors and signs were increased. However, it still saw 4 fatalities, 2 serious injuries and 2 minor injury crashes.

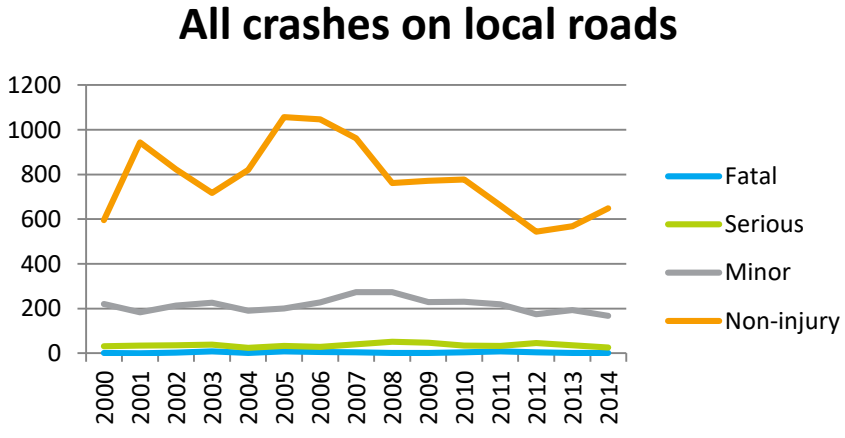
- In the 13 years from 2005 to 2017, following the installation of a flexible median safety barrier and lowering the speed limit to 80 km/h, there were no fatal crashes, and only 3 serious and 13 minor injuries on the road.

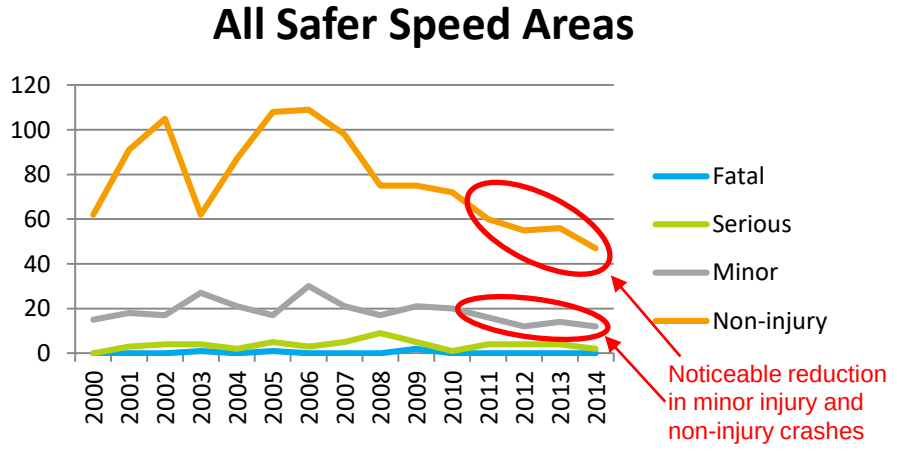
Source: NZTA

Safer Journeys – speed demonstration projects

Speed demonstration project – Hamilton Safer Speed Areas

- In 2011-12, Hamilton City Council introduced 40 km/h Safer Speed Areas. Since their initial introduction, the 40 km/h Safer Speed Areas have been extended to significant residential areas across the city. In these areas, mean speeds have dropped. In the first year after the 40 km/h speed limit was implemented, there was a 35% reduction in crashes, whereas crashes have increased on other local roads. Hamilton City now has 40 km/h speed limits outside all schools.





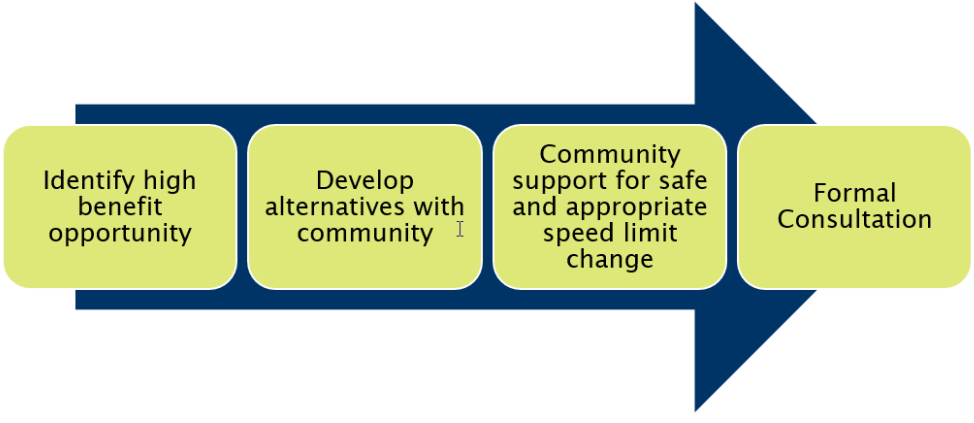
Source: Hamilton City Council

Speed limits around schools

- The Speed Management Guide and Safer Journeys for Schools Guide encourage:
  - 40 km/h permanent speed limits in urban residential areas
  - 40 km/h variable speed limits outside schools where a significant pedestrian risk exists, but where the risk is not continuous.
- 40 km/h speed limits are now in place outside all Hamilton schools (some using variable speed limits on main roads, and the rest through permanent 40km/h area wide speed limits).

Safer Journeys – engagement framework: "Better Conversations on Road Risk"

- Stakeholder engagement: A collaborative, one-network approach
- Community engagement: "This road is high risk … why do you think that is? What should we do?"
- Formal consultation: Only move to formal consultation if key stakeholders and community are on the same page



Source: NZTA

Safer Journeys – new Land Transport Setting of Speed Limits Rule 2017

- Applies the new approach in the Speed Management Guide.
- Requires the NZTA to provide speed management information to RCAs.
- This information encourages RCAs to look at high benefit opportunities first.
- RCAs must have regard to this information when reviewing a speed limit.
- RCAs must aim to achieve mean travel speeds no more than 10% above the posted speed limit.

Source: NZTA

Safer Journeys and changing user behaviour in New Zealand

- Changing user behaviour through enforcement is a key and proven Safe System intervention.
- General deterrence model – focus on reducing mean speeds.
- Enforcement is risk targeted – success is a reduction in crashes.
- The number of fixed safety cameras was recently expanded to 56 cameras at high crash risk locations across the country.
- The number of red light cameras also recently increased from 7 to 13 (12 of these are in Auckland, one is located in Wellington).
- The locations of both these safety camera programmes are publicly available.
- The Police also operate mobile safety camera units in high risk areas across thousands of sites around the country.

Encouraging safe road use through incentives

- Encouraging behaviour change is much broader than sanctioning people when they do wrong.
- Incentives can be an equally powerful tool to encourage and reward safe road use. The following are examples of incentive schemes:
  - Financial rewards or registration rebates for overall speed compliance (e.g. based on data loggers. These are already used by insurance companies overseas).
  - Competitions or lotteries, with entry dependent on e.g. speed compliance past schools.
  - Support/subsidies for installing ISA devices in vehicles.
  - Commercial fleet policies that accelerate ISA and other available technologies into the NZ vehicle fleet.
- *This area has linkages to other reference groups: Road user behaviour, Vehicles as a Workplace and Vehicles, vehicles standards and certification*.

Safer Journeys & speed promotion: Safer Summer

Focus Groups: What does 'speeding' mean?

Roadside billboards

Social media engagement

Truck backs

Focus Groups: Claimed behaviour change during Safer Summer

Roadside billboards

What's happening in other jurisdictions in speed limit setting?

- Leading countries are moving towards setting speed limits that match the form, function and road safety risk of the road:

Country	Year(s)	Road type	Speed limit reduction	Mean speed change	Change in road casualties
Urban environments					
Portsmouth (UK)	2007	Highly pedestrianised urban environments	30 mph (48 km/h) → 20 mph (32 km/h)	-6.6%	-21.0% (deaths & serious injuries)
London (UK)	2013-2015	Highly pedestrianised urban environments	30 mph (48 km/h) → 20 mph (32 km/h)	-8.3%	Unknown
Rural environments					
Norway	2001	High-risk open roads	90 km/h → 80 km/h (on 393 km of road)	-5.4% (90 → 80 km/h)	-85.8% (deaths) and 87.0% (serious injuries)
			80 km/h → 70 km/h (on 741 km of road)	-3.4% (80 → 70 km/h)	-70.4% (deaths) and 68.0% (serious injuries)
Adelaide (Australia)	2002	Arterial rural/semi-rural roads	100 km/h → 80 km/h	Unknown	-15.0% (serious injuries only)
Sweden	2008	Rural/open roads	90 km/h → 80 km/h	-3.1%	-41.0% (deaths only)
France	2018	Rural/open roads (without median barriers)	90 km/h → 80 km/h	TBC	TBC

Sources:

- https://www.itf-oecd.org/sites/default/files/docs/speed-crash-risk.pdf https://www.thelocal.fr/20180307/france-to-lower-speed-limit-to-80kmh-in-july-despite-opposition
- https://crossriverpartnership.org/media/2017/08/170531-Analysis-of-Impact-of-20-mph-Limits-Research-Report-Issue1.pdf
- http://casr.adelaide.edu.au/rsr/RSR2008/LongA.pdf https://www.rospa.com/rospaweb/docs/advice-services/road-safety/drivers/20-mph-zone-factsheet.pdf https://www.toi.no/getfile.php?mmfileid=883

How does New Zealand compare internationally on speed limits?

- Leading countries are moving towards setting speed limits that match the form, function and road safety risk of the road:

	Urban roads	Open roads
Sweden	30 km/h where high active modes and shopping centres 50 km/h other	70-90 km/h if undivided 110-120 km/h motorways
Norway	30 km/h where high active modes and shopping centres 50 km/h other	70-90 km/h if undivided 90-110 km/h motorways
Netherlands	30 km/h where high active modes and shopping centres 50 km/h other	80 km/h 120-130 km/h motorways
France	30 km/h where high active modes and shopping centres 50 km/h other	90 km/h (recently changed to 80 km/h) 110-130 km/h motorways
Britain	32 km/h in some built up city centres and residential streets 48 km/h other	96 km/h 112 km/h motorways
Victoria	50 km/h School zones 40 km/h	100 km/h School zones 40 km/h (on roads 70 km/h or less) School zones 60 km/h (on roads 80 km/h or more)
NSW	50 km/h Schools zones 40 km/h	100 km/h School zones 40 km/h
New Zealand	50 km/h (some 30 km/h in CBDs, some 40 km/h residential) Some school zones 40 km/h	100 km/h (some 70-80 km/h) Some school zones 60-70 km/h

Roads are also being engineered to support lower speed environments

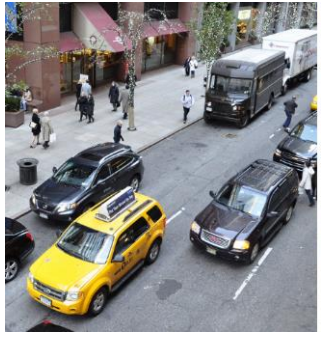
- Engineering to support lower speeds in urban environments – self explaining shared streets.
- Federal Street, Auckland: Painted streets to create a slower, safer environment for pedestrians and cyclists.
- New Regent Street, Christchurch: Shared slow street for trams, pedestrians and cyclists, together with outdoor café areas and seating.
- *This has linkages to the Infrastructure, design and planning reference group.*

Case Study: Vision Zero in New York

- New York city adopted Vision Zero in 2013 as part of a wider objective to transform parts of the city into more liveable neighbourhoods.
- Many city speed limits reduced from 30 miles/h (48 km/h) to 25 miles/h (40 km/h), backed up with significant investment in walking and cycling and placemaking infrastructure, intersection improvements and increased enforcement.
- 230 people lost their lives on New York City roads in 2016, the fewest in any year since New York City began keeping records in 1910. The first three years of Vision Zero is the safest three-year period in the city's history, and also the first time in over a decade that fatalities fell for three consecutive years.
- The volume of pedestrians in Times Square increased by 11%, with 63% fewer injuries for car riders and 35% fewer injuries for pedestrians.








Source: https://www.pbs.org/newshour/nation/urban-designers-transformed-these-five-plazas-into-pedestrian-paradise

Self-explaining roads

Self-explaining roads are roads where drivers are encouraged to naturally adopt behaviour consistent with the design and function of the road. Self-explaining roads have the following characteristics:

- Different classes of roads should be distinctive.
- Within each class, features such as road width, road markings, signing and use of street lighting would be consistent throughout the route.
- Drivers perceive the type of road and ‘instinctively’ know how to behave and the speed to travel.
- Simplicity and consistency of design reduce driver stress and error.
- Less need for separate traffic signs/ controls to regulate traffic behaviour.

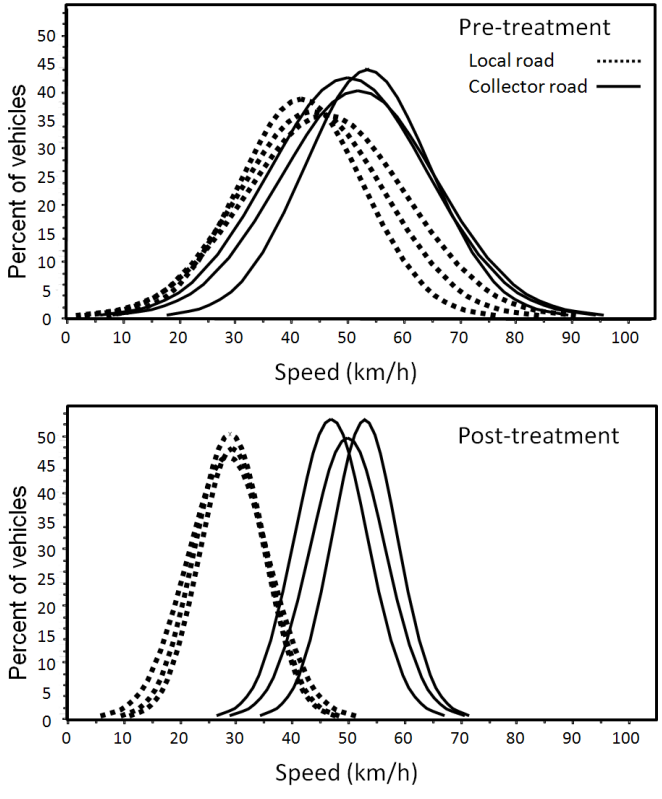
Local roads - Pre

Local roads - Post

Collector roads - Pre

Collector roads - Post

What are the benefits of self-explaining roads?



Fewer and less severe casualties

40% reduction in crashes

50% reduction in crash costs

- More homogenous speeds on collector roads.
- Little change in mean speeds.
- Can make speeds more consistent with relatively small investment (just with careful use of paint).

Charlton and Mackie 2010.Accid Anal & Prev;42:1989

Future streets – Māngere

Before

85th percentile travel speed: 56 km/h

After

85th percentile travel speed: 39 km/h
(30% reduction)

Roads are also being engineered up to support higher speeds

- Countries recognise that roads can be engineered up to support existing or higher speed limits. For example, Sweden invested in engineering up a number of motorways across the country. In 2008, speed limits on these motorways were increased from 110-120 km/h to align with the safety classification of these high standard roads. This led to a 3.4% increase in mean speeds, but no significant change in the number of road fatalities.
- New Zealand has already started to make these changes, with the Tauranga-Eastern Link and Waikato Expressway being engineered up to support 110 km/h.
- These changes are applied to strategically important routes. Engineering up takes time and there will not be sufficient funding for a significant proportion of the network to be upgraded.

Source: http://www.nzta.govt.nz/roads-and-rail/road-engineering/road-safety-hardware/flexible-road-safety-barriers/

What is happening internationally to change road user behaviour?

The Swedish approach to safety cameras:

- Focused on trying to slow people down, rather than catching people out
- Cameras are highly visible
- Raise awareness of the road safety risk in a particular area, ahead of engineering improvements
- 1100 safety cameras (12 per 100,000 population, compared to 1.5 per 100,000 population in New Zealand)
- Each camera operates only 2-3% of the time, limiting the number of tickets issued
- Heavy fines for low level speeding, $370 for 1-10 km/h over 30 km/h limit

Approximate number of road safety cameras per 100,000 population:

Jurisdiction	Number of safety cameras per 100,000 population
Sweden	12
UK	5
France	5
Victoria	5
Queensland	3.7
NSW	2.7
New Zealand	1.5

Note these figures include fixed safety cameras, point-to-point cameras, red light cameras and combined red light/safety cameras. New Zealand does not have any point-to-point or combined red light/safety cameras.

How does New Zealand compare with Europe on speeding infringement fees?

	Urban roads	Open roads
Sweden	1-10 km/h over 30 km/h limit = $370 11-15 km/h over = $430 16-20 km/h over = $504 +21 km/h over = $611, plus 2-6 months licence suspension	+21 km/h over any limit = $611, plus 2-6 months licence suspension
Norway	+21 km/h over limit = $1,625, plus licence suspension 3-36 months	+21 km/h over limit = $1,225, plus licence suspension 3-36 months
Netherlands	+20 km/h over 30 km/h limit = $344, plus min 1 month licence suspension +20 km/h over 50 km/h limit = $1,225, plus min 1 month licence suspension	+20 km/h over open road speed limits = $240, plus min 1 month licence suspension ***(Note: Penalties updated yearly by CPI adjustment)***
Britain	+21 km/h over limit = $203 +41 km/h over limit = $203-$2,025, plus licence suspension	+21 km/h over limit = $203 +41 km/h over limit = $203-$2,025, plus licence suspension
France	+20 km/h over limit = $232 +40 km/h over limit = $232, plus 2-6 months licence suspension	+20 km/h over limit = $232 +40 km/h over limit = $232, plus 2-6 months licence suspension
New Zealand	Up to 10 km/h over limit $30 11-15 km/h over limit $80 16-20 km/h over $120 +20 km/h over limit $170-$400 +40 km/h over limit $510-$630, plus licence suspension	Up to 10 km/h over limit = $30 11-15 km/h over limit = $80 16-20 km/h over = $120 +20 km/h over limit = $170-$400 +40 km/h over limit = $510-$630, plus licence suspension

Source: NZTA, NZ Police, http://www.speedingeurope.com/

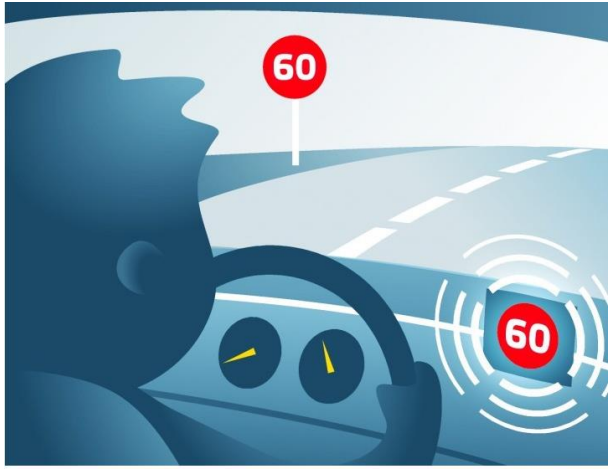
How does New Zealand compare with Australia on speeding infringement fees and demerits?

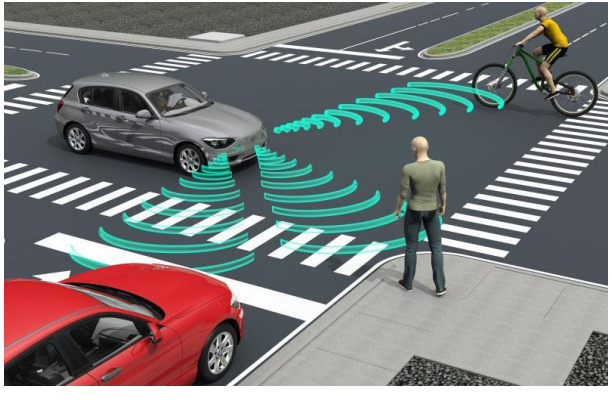
	Fines (converted to NZ dollars)	Demerit points
Victoria	Up to 10 km/h over limit = $220 10-24 km/h over limit = $355 25-29 km/h over limit = $488 plus 1 month licence suspension 30-34 km/h over limit = $577 plus 1 month licence suspension 35-39 km/h over limit = $665 plus 6 months licence suspension +40 km/h over limit = $755-$888 plus 6-12 months licence suspension	1 3 4 4 6 6 (12 demerits over 3 years results in licence suspension)
Queensland	Less than 13 km/h over limit = $191 13-19 km/h over limit = $287 20-29 km/h over limit = $479 30-39 km/h over limit = $670 +40 km/h over limit = $1,341 plus 6 month suspension	1 3 4 6 8 plus 6 months licence suspension (12 demerits over 3 years results in licence suspension)
NSW	Up to 10 km/h over limit = $131 10-19 km/h over limit = $303 20-29 km/h over limit = $520 30-45 km/h over limit = $995 +45 km/h over limit = $2,682 (higher penalties apply for heavy vehicle speeding and around schools)	1 3 4 5 6 (13 demerits over 3 years results in licence suspension)
New Zealand	Up to 10 km/h over limit = $30 11-15 km/h over limit = $80 16-20 km/h over = $120 +20 km/h over limit = $170-400 +40 km/h over limit = $510-$630 plus licence suspension	10 20 20 35-50 Instant licence suspension (100 demerits over 2 years results in licence suspension) ***(Note: Demerit points do not apply to safety camera-detected offences in New Zealand)***

Source: NZTA, NZ Police, Victoria, NSW and Queensland Govt websites

Technology is developing to improve vehicle safety

- New and emerging in-vehicle and roadside technologies can also help people to travel at safe speeds.
- Many of these are already available:
  - Intersection, weather and school variable speed limit signs are being increasingly used.
  - Intelligent speed assistance and other speed management devices have not been taken up widely, but their potential is considerable.
  - Several fleet companies (e.g. Fonterra and the NZTA) proactively help their drivers to manage their speeds through the use of data loggers and real-time information.
- Other emerging technologies still in their infancy, such as autonomous vehicles and Co-operative Intelligent Transport Systems (C-ITS), where the vehicle and the road 'talk' to each other and the driver, will also help achieve safe speeds.
- *This area has linkages to other reference groups: Vehicles as a Workplace and Vehicles, vehicles standards and certification.*





What work is currently happening?

Accelerating implementation of speed management

- The draft Government Policy Statement on Land Transport signalled an expectation that the NZTA and RCAs will accelerate implementation of the Speed Management Guide, and address the top 10% highest risk parts of the network as quickly as possible.
- The NZTA is increasing its resourcing and support for RCAs to tackle this part of the network, in particular to support changes in Auckland, Waikato and Canterbury, and the riskiest parts of the State Highway network.
- The NZTA is also supporting other RCAs to develop their speed management plans.
- The NZTA is putting in place a National Speed Limit Register, which it aims to have completed in 2020.

Tackling Unsafe Speeds package

- Simplifying the process for setting speed limits, in particular reviewing bylaw making requirements.
- Reviewing speed limits around schools.
- Increasing use of technology, in particular safety cameras.

Thank you