Road Safety Outcomes for Māori

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Te Tiriti o Waitangi

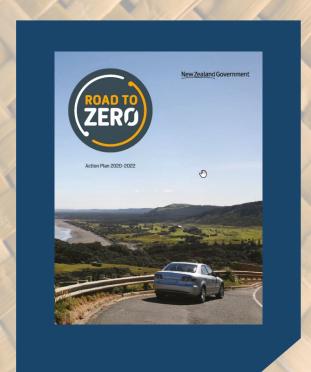


Kia whakatōmuri te haere whakamua

I walk backwards into the furture with my eyes fixed on my past



Road to Zero



- Te Manatū Waka
- Road to Zero 2020-2030
 - Provides strategic direction and vision to guide improvements in road safety over 10 years
- Road to Zero Action Plan 2020-2022
 - Focus Area 5; System Management
 - Improve our understanding of road safety outcomes for Māori

Safe System Approach

We need to recognise that people make mistakes and some crashes are inevitable.

1 People make mistakes ————— 2 People are vulnerable

Our bodies have a limited ability to withstand crash forces without being seriously injured or killed.

ACCEPT WE ARE HUMAN

We need to share responsibility -

Those who design the road system and those who use the roads must all share responsibility for creating a road system where crash forces don't result in death or serious injury.

We need to strengthen all parts of the 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.

MANAGE THE SYSTEM



Te Ara Kotahi Our Māori Strategy

Priority

Support initiatives that improve Māori road safety

Action

Work with others to obtain and analyse data relating to death and serious injury from road trauma for Māori as a ethnic group

Te Ara Kotahi // Our Māori Strategy



Ko koe ki tēnā ko au ki tēnei kīwai o te kete

Waka Kotahi and Māori working together to succeed for a better New Zealand



We recognise and respect Te Tiriti o Waitangi and will promote a partnering approach in our work with Māori.

PRIORITIES

» TE TIRITI O WAITANGI Act in a manner that upholds the principles of Te Tiriti o Waitangi and fulfils our statutory obligations to

PARTNERING FOR PROSPERITY Identify and seize opportunities to partner with Māori.

MĂORI CAPACITY AND CAPABILITY Foster Māori capacity and capability to contribute to our decision making processes at all levels.



value Te Ao Māori views in the work we do to enhance the delivery of the land transport system.

LEADERSHIP EXPECTATIONS Build a culturally competent leadership that enhances our

- CULTURAL EXPRESSION Value and promote Te Reo Māori and tikanga Māori in the work we do.
- CROSS-GOVERNMENT COLLABORATION Collaborate with the wider public sector to contribute to the Crown Māori relationship
- PERFORMANCE AND ACCOUNTABILITY Enhance performance measures. monitoring, evaluation and accountabilities. processes at all levels



We will engage effectively with Māori to build strong, meaningful and enduring relationships to achieve mutually beneficial outcomes



ENGAGING EFFECTIVELY WITH MĂORI

Support our people to develop strong, meaningful and enduring relationships with Māori.

- BEST PRACTICE Establish policies and guidance that assist with engaging and responding to Māori.
- MĀTAURANGA MĀORI Recognise and provide for cultural heritage, identity and Mātauranga Māori.



We support our people to have the capability, capacity and confidence to partner and engage successfully with Māori.



OUR CAPACITY AND

CAPABILITY Build our capacity and capability to work confidently with Māori.

LINDERSTAND WHO MĀORI ARE Better understand who Māori are and obtain information to support how we can deliver

better outcomes for Māori. CULTURAL COMPETENCE AND RECOGNITION Value and recognise staff cultural competence.



We support the development of strong and vibrant Māori communities and will work with Māori to identify opportunities to enhance Māori social, cultural, environmental and economic wellbeing in the work we do

WAKA KOTAHI NZ TRANSPORT AGENCY



PRIORITIES

- CARING FOR THE ENVIRONMENT Support Māori to exercise their environmental kaitiaki responsibilities.
- SUPPORT THE MÃORI ECONOMY Support and promote Māori economic and employment opportunities.
- IMPROVE SOCIAL WELLBEING Support the improvement of Māori social outcomes through inclusive access to transport services.
- IMPROVE MĂORI ROAD SAFETY Support initiatives to improve Māori road safety.

Te Tūāpapa / Foundation

Te Tiriti o Waitangi





HE PŪRONGO WHAKAHAUMARU HUARAHI MŌ NGĀ IWI MĀORI

Māori road safety outcomes

June 2021

















The report

Builds on an earlier review of literature and investigation of crash and injury data from several sources to identify current road safety outcomes for Māori

Provides a snapshot of current planned initiatives and processes led by Waka Kotahi that may positively impact on road safety for Māori

Provides an indicative process for how we could address the findings of this report



Approach

Specific actions we have undertaken have included:

- exploring historic and current demographic, social and economic contexts for Māori
- investigating crash and injury data for Māori and non-Māori from several sources
- considering transport system factors such as access, infrastructure, vehicles, speed and user behaviour
- developing a snapshot of current and planned Māori road safety initiatives across Waka Kotahi.



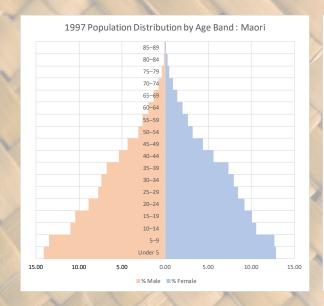
Sources of Data

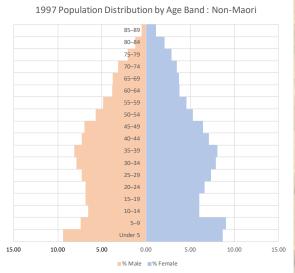
- Crash Anaylsis System (CAS)
- Motor Vehicle Register (MVR)
- The Monash University Accident Centre (MUARC) vehicle crash database
- Tatauranga Aotearoa's 2013 Census Data and associated population information
- Midlands Trauma System (MTS) hospitalisation data



NZ Population 1997

Māori vs Non-Māori





Age distributions are not uniform

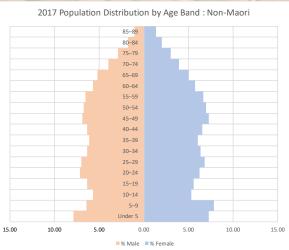
Large proportion of Māori population were aged 0-9 years in 1997



NZ Population 2017

Māori vs Non-Māori





Māori were 15.5% of the population in 2017

Age distributions were still not uniform

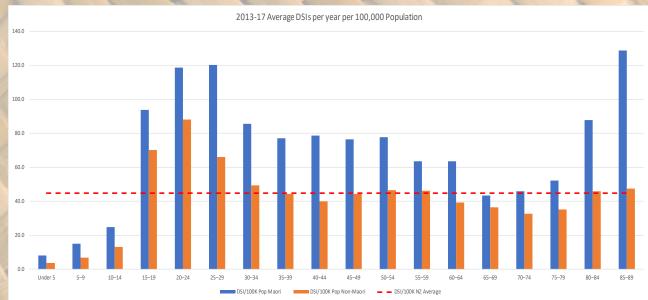
Note that the large proportion of Māori population aged 0-9 in 1997 was aged 20-29 in 2017

In 2017 there was still a large proportion of Māori population aged 0-9 years



DSIs 2013 - 2017 per 100,000

Māori vs Non-Māori



NZ average DSIs = 45 / 100,000 population

Māori are overrepresented in DSIs

For ages 15-24 years DSI for both Māori and Non-Māori are well above the average

Māori continue to be over-represented for ages 25-64 years

Proportion of Māori fatalities where ethnicity is known has increased



Male DSIs 2013 - 2017 per 100,000

Māori vs Non-Māori



Māori men average DSIs = 87 / 100,000 population, much higher than the NZ male average of 61.5

All men aged 15-34 years are significantly over represented in DSIs

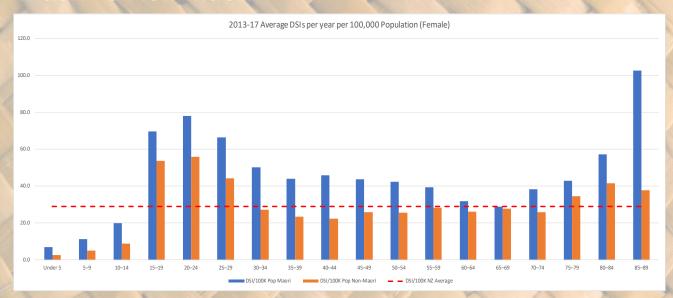
Māori men continue to be significantly over represented until aged 64

Highest at-risk group is Māori men 25-29 years. Note increase in rate compared with 20-24 – versus significant decrease for non-Māori



Female DSIs 2013 - 2017 per 100,000

Māori vs Non-Māori



Māori women average DSIs = 40.5 / 100,000 population compared to a NZ female average of 29 / 100,000

Less than half the DSI rate for Māori men

Māori women are also over represented in DSI from 15-64 years



Social Deprivation

Key determinant of road safety outcomes for all New Zealanders

Maori are disproportionately affected because they make up far larger proportions of the population living in those areas.

However road safety outcomes for Māori need to be seen in the context of demographic and safe system (roads, roadsides, speed, vehicles and user factors), patterns, together with authentic engagement to establish the situational and societal context of crashes.



Socio-economic factors: Rural

Proportion Rural DSIs (2013 - 17) and Population by Deprivation Index : Maori vs Non Maori							
	Ma	ori	Non-Maori				
Deprivation Index	DSIs	Population	DSIs Population				
1	14%	5%	86%	95%			
2	15%	7%	85%	93%			
3	16%	7%	84%	93%			
4	17%	9%	83%	91%			
5	21%	11%	79%	89%			
6	26%	13%	74%	87%			
7	24%	15%	76%	85%			
8	29%	18%	71%	82%			
9	43%	24%	57%	76%			
10	60%	34%	40%	66%			
Blank	19%	2%	81%	98%			
Total	22%	14%	78%	86%			

Higher proportions of Māori live in high deprivation areas

The proportion of rural DSIs for Māori are higher than the % of the population for Deprivation Indices 8-10



Socio-economic factors: Urban

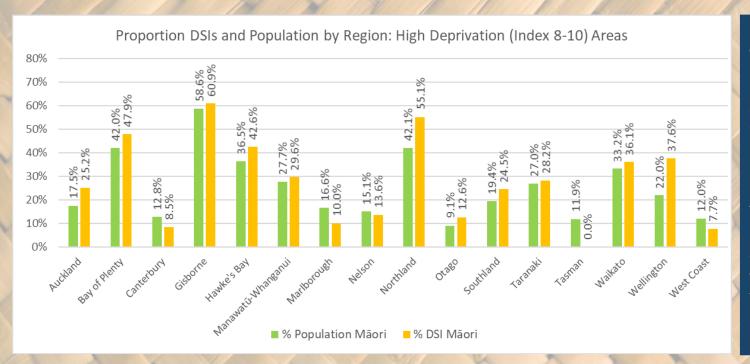
Proportion Urban DSIs (2013 - 17) and Population by Deprivation Index : Maori vs Non Maori						
	Maori			Non-Maori		
Deprivation Index	DSIs	Рорі	ulation	DSIs Population		
1		8%	5%	92%	95%	
2	1	L2%	7%	88%	93%	
3	1	L2%	7%	88%	93%	
4	1	L5%	9%	85%	91%	
5	1	L7%	11%	83%	89%	
6	1	L6%	13%	84%	87%	
7	1	L9%	15%	81%	85%	
8	2	23%	18%	77%	82%	
9		30%	24%	70%	76%	
10	3	39%	34%	61%	66%	
Blank	1	L4%	2%	86%	98%	
Total	2	21%	14%	79%	86%	

Higher proportions of Māori live in high deprivation areas

The proportion of urban DSIs for Māori is almost the same as the % of population that is Māori regardless of deprivation



Socio-economic factors by region



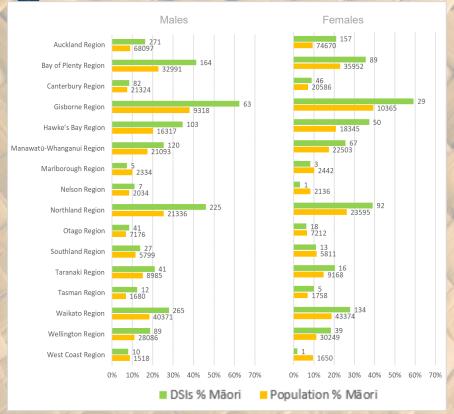
The proportion of Māori DSIs occurring in high deprivation areas (indices 8-10) approximates the proportion of the population that is Māori.

Appears to support the link between social deprivation and road safety outcomes.

There are large variations between regions



Regional Differences



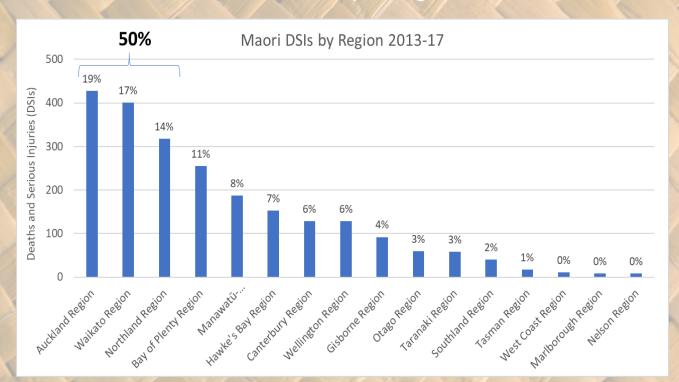
Large Differences in % Population and % DSIs

Highest proportional population rates and over-representation in DSIs for Māori men and women are:

- Gisborne
- Northland
- Bay of Plenty
- Waikato

Regional Differences

Differences in number of DSIs per region



Highest numbers of DSIs for Māori are:

- Auckland
- Waikato
- Northland

These 3 regions combined make up 50% of Māori DSI



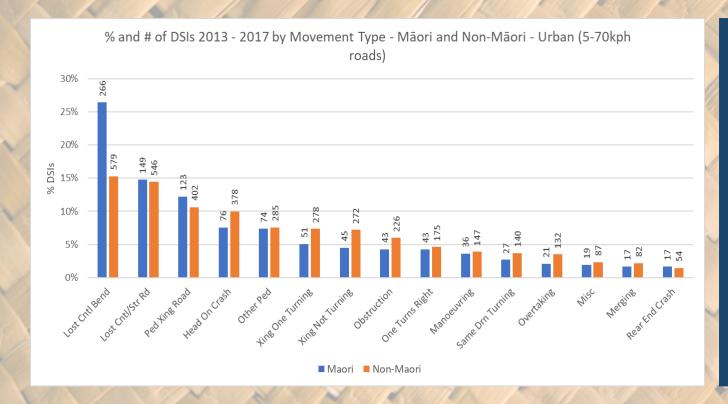
Urban & Rural Roads

Rate of rural & urban DSIs practically the same proportion for gender and ethnicity

DSIs 2013 - 17 by Gender, Ethnicity and Rural/Urban Split							
Urban/Rural	Urban # DSIs	Rural # DSIs	Total # DSIs	% of DSIs that are Rural			
Male Maori	679	846	1525	55.5%			
Male Non-Maori	3202	3771	6973	54.1%			
Female Maori	327	433	760	57.0%			
Female Non-Maori	1792	2124	3916	54.2%			
Total	6000	7174	13174	54.5%			



Crash Movements - Urban

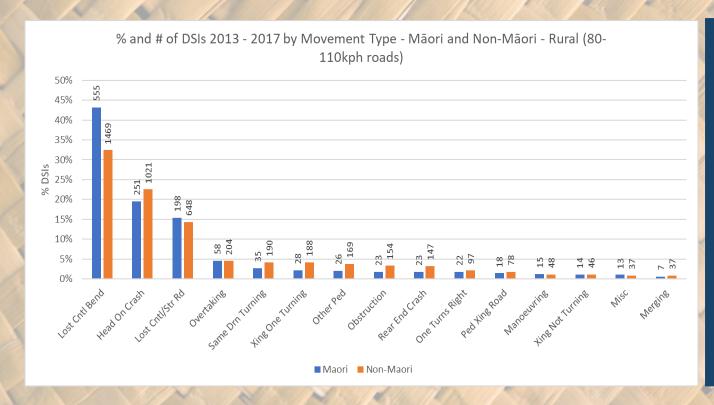


Most common types of movements resulting in DSI crashes are the same for Māori and non-Māori

A 1/3 more Māori DSIs occur as a result of a loss of control on a bend (36%) than for non-Māori (24%)

Differences more pronounced for urban roads (defined by 5-70kph speed limits) vs. rural roads (defined by 80-110kph speed limits)

Crash Movements - Rural

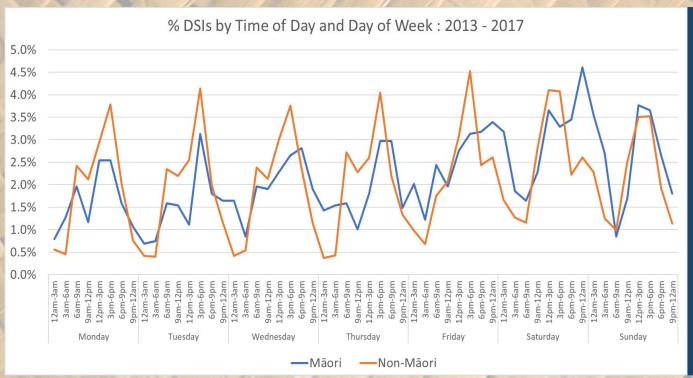


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Time and Day of Week



3pm-6pm weekday timebands have the highest proportion of DSIs for non-Māori

Similar 'peaks' for Māori during 3pm-6pm weekday time-bands but 'peaks' and 'troughs' are not as pronounced for Māori

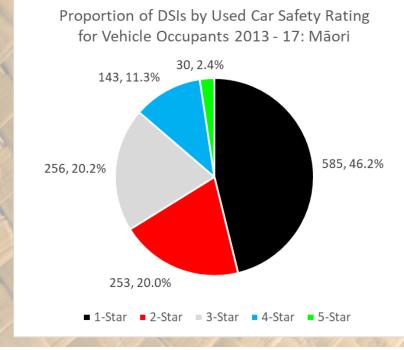
Saturday nights from 6pm to after midnight show high proportions of DSIs for Māori but not non-Māori

DSI proportions almost identical for Māori and non-Māori on Sundays from 6am to midnight.

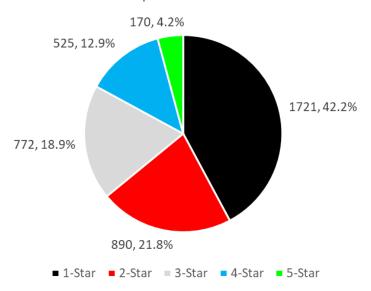


Light Vehicles

Very little difference between Māori and non Māori



Proportion of DSIs by Used Car Safety Rating for Vehicle Occupants 2013 - 17: Non-Māori

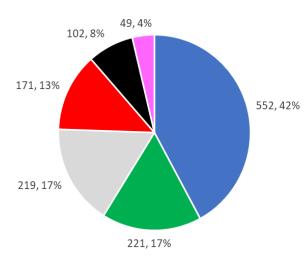




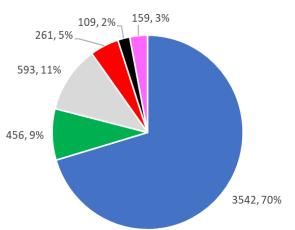
License Status and Type

Unlicensed drivers and Restricted Licence holders more at-risk

Māori Driver Licence Status and Type: Driver DSIs 2013 - 2017



Non-Māori Driver Licence Status and Type: Driver DSIs 2013 - 2017

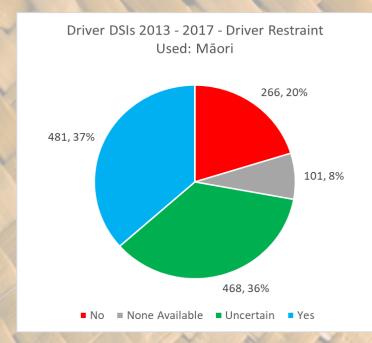


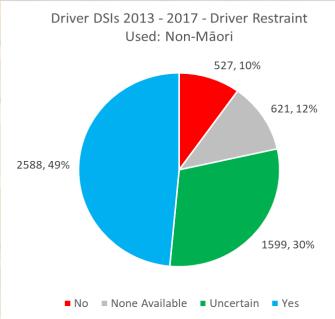
Māori drivers in DSI crashes have a lower proportion of current full driver licences (42%) than non-Māori (70%) regardless of gender



Restraint use

Wearing a seatbelt increases the chance of surviving a crash by 40%





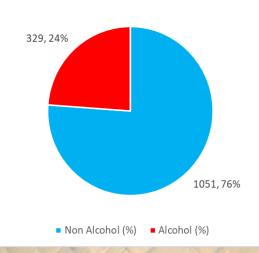
Māori drivers in DSI crashes were less likely than non-Māori to wear a seatbelt



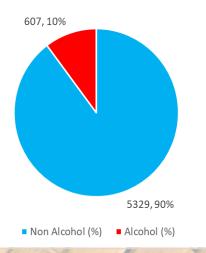
Impairment

Driving impaired by alcohol increases risk

Proportion of drivers where alcohol intoxication was confirmed in a DSI Injury 2013-17: Māori



Proportion of drivers where alcohol intoxication was confirmed in a DSI Injury 2013-17: Non-Māori



Māori drivers who were killed or seriously injured in a crash had higher (confirmed) rates of alcohol above the legal limit compared to non-Māori drivers

24% of Māori drivers seriously injured or killed in crashes had alcohol intoxication confirmed, compared with 10% for non-Māori drivers



Next steps

Waka Kotahi along with Manatū Waka and Ngā Pirihimana to partner with Māori communitites to;

- Build relationship
- Engage Māori and gather feedback on the report
- Explore opportunities to collaborate
- Support Māori in their aspirations
- Gather feedback and to identify, prioritise and commission further research where necessary or appropriate



