

briefing notes road safety issues

Horowhenua District

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2003–2007 period.

This report is the ninth road safety report for the Horowhenua district. Most of the information, unless otherwise stated in this report, applies to both local roads and State highways.

The intent of the report is to highlight the key road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries in the district. More detailed information may be obtained from either Horowhenua District Council (local roads) or Transit NZ (State highways). Please refer to the last page for contact details.

The issues chosen for this report are drawn from either the most common crash types or those with high social cost of crashes (relating mainly to high numbers of fatal and serious crashes) or those that appear over-represented when the Horowhenua district is compared to similar local authorities.

We have also included a brief overview of crashes in the district for 2007.

Major road safety issues		2007 road trauma	
Horowhenua District		Casualties	Horowhenua District
Vulnerable road users (Cyclists and Motorcyclists)		Deaths	8
Intersections		Serious casualties	35
Loss of control		Minor casualties	103
Alcohol			
Nationally		Crashes	Horowhenua District
Speed		Fatal crashes	6
Alcohol		Serious injury crashes	22
Failure to give way		Minor injury crashes	67
Restraints		Non injury crashes	176

Overview 2007

In 2007 in Horowhenua district there were 95 injury crashes and 176 non-injury crashes reported by the New Zealand Police. Fifty seven percent of the total injury crashes in the district were on State highways.

Crashes by injury type in 2007

	State highways				Local roads			
	F	S	M	NI	F	S	M	NI
Rural ¹	4	12	24	75	1	4	10	16
Urban	0	2	12	23	1	4	21	62

Note: 1/ Rural - area with a speed limit of 80km/h or more
 F - Fatal crashes S - Serious injury crashes
 M - Minor injury crashes NI - Non-Injury crashes

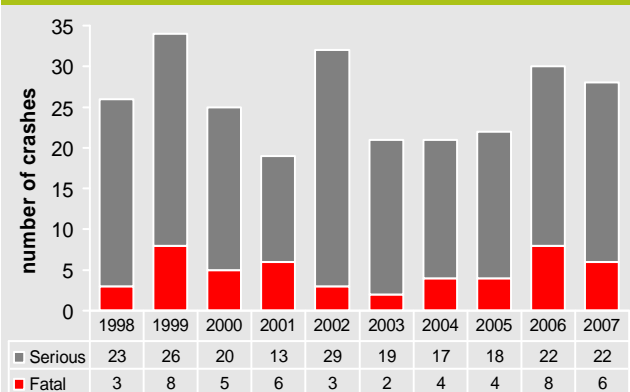
The table below shows the number of injuries resulting from these crashes in the district.

Casualties by injury type in 2007

	Fatalities	Serious injuries	Minor injuries	Total
Total	8	35	103	146

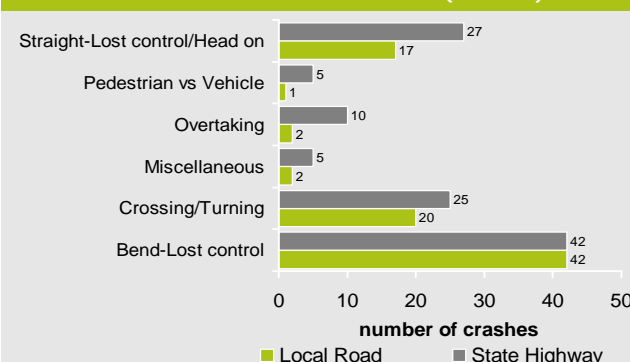
The total number of serious and fatal crashes shows an increasing trend since year 2003.

Fatal and serious crash trends



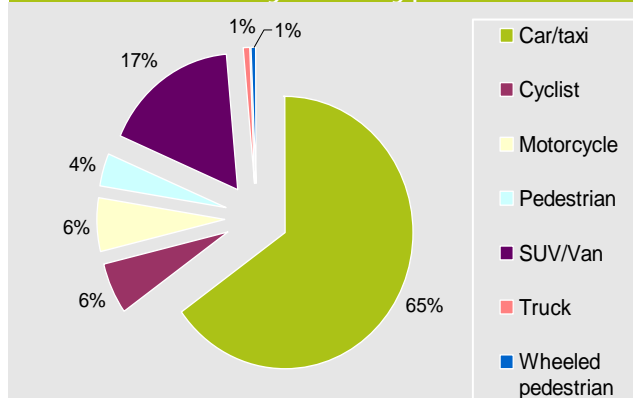
In 2007 *bend-lost control* was the main type of crash in the district. *Straight-lost control* and the *crossing and turning* were also quite predominant crash types in the district.

Crash characteristics (2007)



The highest number of casualties in 2007 were drivers and passengers of cars followed by those of SUV/Vans and motorcycles.

Casualties by user type in 2007



Further information about all crashes in 2007 on:

Local roads

- Worst day of week: *Friday (51 percent)*
- Wet road crashes: *24 percent*
- Night time crashes: *39 percent*
- Drivers with alcohol over limit (injury crashes): *17 percent*
- Too fast for conditions (injury crashes): *19 percent*
- Crashes at intersection: *36 percent*
- Road factors: *7 percent*
- At fault male driver (injury crashes): *60 percent*
- Full NZ licence held by at fault (injury crashes) drivers: *62 percent*

State highways

- Worst day of week: *Saturday (20 percent)*
- Wet road crashes: *17 percent*
- Night time crashes: *39 percent*
- Drivers with alcohol over limit (injury crashes): *12 percent*
- Too fast for conditions (injury crashes): *24 percent*
- Crashes at intersection: *41 percent*
- Road factors: *10 percent*
- At fault male driver (injury crashes): *63 percent*
- Full NZ licence held by at fault (injury crashes) drivers: *58 percent*

Social cost of crashes

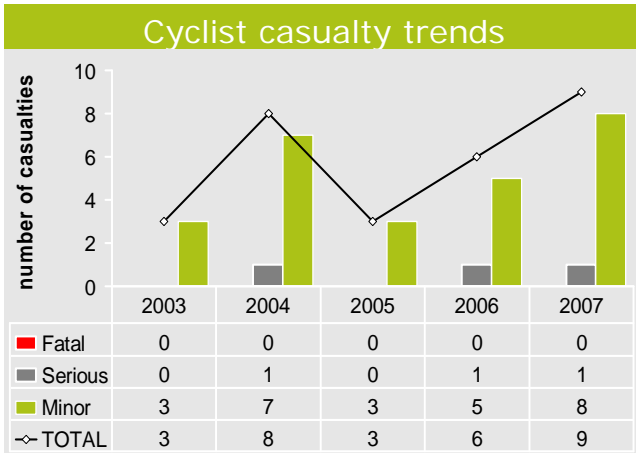
Local roads	\$ 17.38M
State highways	\$ 33.34M
Total	\$ 50.72M

NOTE: The estimated social cost includes loss of life or life quality, loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage.

Cyclists

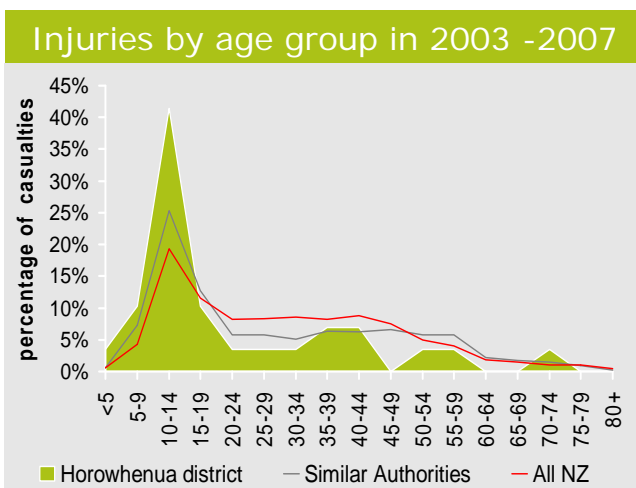
In the Horowhenua district, cyclists injury crashes accounted for 6 percent of all injury crashes in the last five years. There were 27 injury crashes and 4 non-injury crashes in this period.

The number of cyclists injured has been increasing in recent years since 2005. The cyclist injuries in 2007 were the highest in the last five year period.



Most (84 percent) cycling crashes occurred on urban roads. Half of the crashes happened at intersections. Only 13 percent of cyclist crashes occurred during the hours of darkness.

Cyclist injuries are not spread evenly across all age groups. More than half of the injured cyclists were between 5 to 19 years of age. The second most commonly injured cyclist age group is 35 to 44 years of age (14 percent).



Most of the cyclist crashes took place in the town centres. The high crash locations or routes (on the basis of injury crashes) for cyclist crashes in the district are shown in the table below:

High cyclist crash locations/routes

Levin: intersections on Oxford Street
Levin: Queen Street East and Queen Street West
Levin: Route through Mako Road and Liverpool Street
Foxton: Palmer Road

Further information about cyclist injury crashes in the Horowhenua district between 2003 and 2007 on:

Local roads

- 3 serious injuries and 22 minor injuries
- Worst day of week: Saturday (8 crashes)
- Most common injury crash factors: poor observation (57 percent) followed by failure to give way /stop (48 percent)
- Crashes at intersection: 48 percent
- Wet road crashes: 12 percent
- Night time crashes: 12 percent

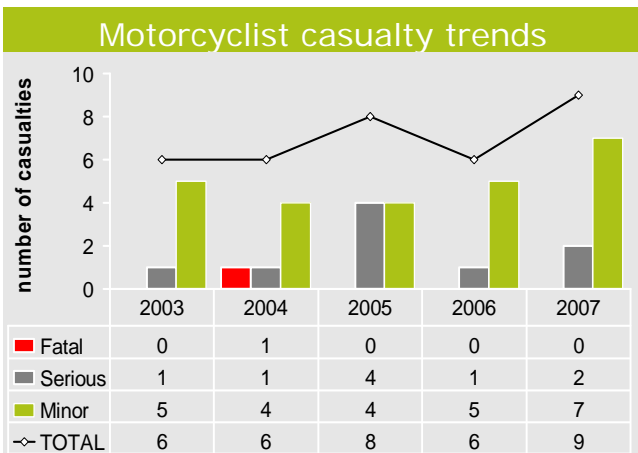
State highways

- 4 minor injuries
- Worst day of week: Thursday (2 crashes)
- Most common injury crash factors: poor observation (50 percent) and failure to give way /stop (50 percent)
- Crashes at intersection: 50 percent
- Wet road crashes: 17 percent
- Night time crashes: 17 percent

Motorcyclists

Motorcyclists in the Horowhenua district accounted for 7 percent of all injury crashes and 3 percent of deaths in the last five year period.

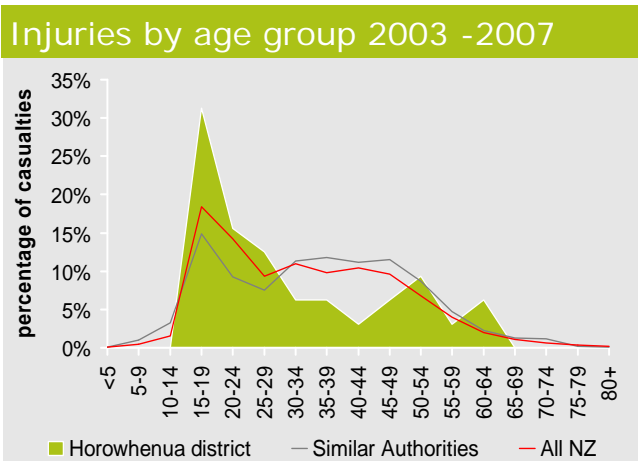
There is an increasing trend in motorcyclist casualties. The total number of motorcyclists injured in 2007 was the highest in the last five years.



Nationally, motorcycling fatalities dropped from a high of 20 percent of all fatalities in 1988 to just 6 percent in 2003. Since then there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2007 motorcyclists accounted for 11 percent of road fatalities in New Zealand.

More than half (53 percent) of the motorcycling crashes in the district happened on urban roads. Approx. 40 percent of the motorcycling crashes occurred at intersections.

Young motorcyclists of 15 to 29 years of age were the most commonly injured age group. However, there were also a significant number of motorcyclists in the older age groups involved in the crashes.



The high crash locations or routes (on the basis of injury crashes) for motorcyclist crashes in the district are shown in the table below:

High motorcyclist crash locations/routes
Johnson Street and Russel Street through the Foxton town centre (SH 1)
Central Levin town intersections generally and Oxford Street
SH 1 intersection of South Road and Kimberley Road

Further information about motorcycling crashes in the district between 2003 and 2007 on:

Local roads

- 19 serious injuries and 17 minor injuries
- Worst day of week: Sunday (10 crashes)
- Most common injury crash factors: Poor observation (34 percent) followed by failure to give way/stop (31 percent)
- Wet road crashes: 5 percent
- Night time crashes: 15 percent
- Drivers with alcohol over limit (injury crashes): 9 percent
- Crashes at intersection: 34 percent

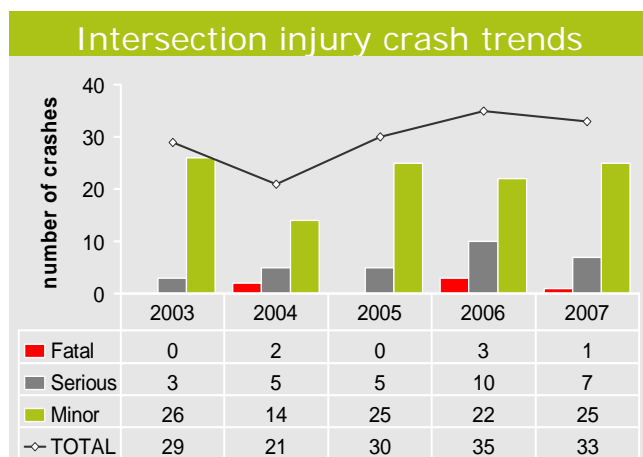
State highways

- 2 deaths, 23 serious injury and 12 minor injuries
- Worst days of week: Saturday and Sunday (8 crashes each)
- Most common injury crash factors: Poor observation (32 percent) and too fast (25 percent)
- Wet road crashes: 8 percent
- Night time crashes: 19 percent
- Drivers with alcohol over limit (injury crashes): 4 percent
- Crashes at intersection: 31 percent

Intersections

During the five year period 2003 to 2007, 37 percent of all crashes in the Horowhenua district occurred at intersections. These crashes resulted in 6 deaths, 39 serious injuries and 153 minor injuries. There were a further 297 non-injury crashes reported.

Injury crashes at intersections are fluctuating in the last five years.



Most of the crashes (65 percent) had occurred on urban intersections and nearly half of them occurred on State highways with two thirds of fatalities.

Crash location	Local urban	Local rural	SH urban	SH Rural
Intersection crashes	205	20	86	134

The table below shows the locations of intersections with the highest number of crashes in the district between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH 57/ Queen St East	17	9	1
SH 1N/ SH 57	12	5	2
SH1N/Muhunoa East Rd	8	5	1
SH1N/Bath St	13	5	4
SH57/Kimberley Rd	15	5	5
Queen St East/ Bartholomew Rd	8	4	0
SH1 N/Queen St East	11	4	0
Bristol St/Exeter St	5	3	3
Liverpool St/ Cambridge St	4	3	0

Crashes at *T (tee) junctions* and *cross roads* are the most common types of intersection crashes reported, followed by *roundabouts*.

Junction Type	Rural	Urban
T (tee)	92	145
Driveways	1	8
X (cross)	54	121
Y	7	2
Roundabout	0	15

Sixty-four percent of these crashes occurred due to *failure to give way* at *give way* sign or *stop* sign and 30 percent of crashes occurred at intersections without traffic control.

Further information about crashes at intersections in the district for the period between 2003 and 2007 on:

Local roads

- 2 deaths, 15 serious injuries and 68 minor injuries
- Worst day of week: *Friday* (38 crashes)
- Wet road crashes: 21 percent
- Night time crashes: 33 percent
- Drivers with alcohol over limit (injury crashes): 17 percent
- Most common injury crash factors: *Failed to give way/stop* (48 percent) followed by *poor observation* (43 percent)
- At fault male driver (injury crashes): 61 percent
- 39 percent of drivers at fault (injury crashes) were either on restricted, learner or never licensed
- Most common age group (injury crashes): 15 to 24 and 40+ years age group

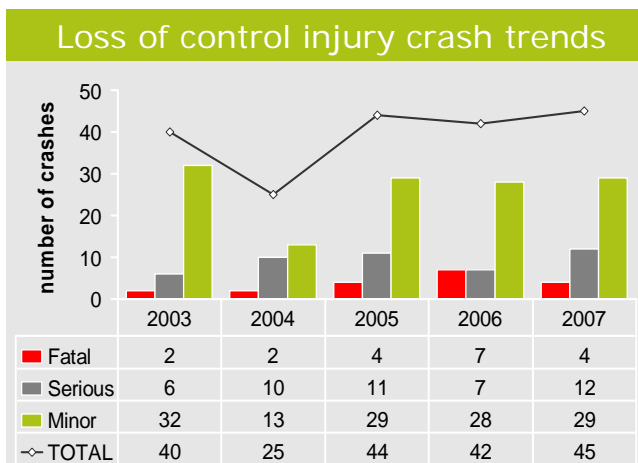
State highways

- 4 deaths, 24 serious injuries and 85 minor injuries
- Worst day of week: *Friday* (44 crashes)
- Wet road crashes: 30 percent
- Night time crashes: 26 percent
- Drivers with alcohol over limit (injury crashes): 8 percent
- Most common injury crash factors: *failed to give way/stop* (41 percent) and *poor observation* (41 percent)
- At fault male driver (injury crashes): 60 percent
- 31 percent of drivers at fault (injury crashes) were either on restricted, learner or never licensed

Loss of control

During the five year period 2003 to 2007, 43 percent of all injury crashes in the Horowhenua district occurred due to loss of control. These crashes resulted in 24 deaths, 79 serious injuries and 213 minor injuries. There were a further 321 non-injury crashes reported.

The number of injury crashes related to loss of control has been steady since 2005, however in 2007 the number of injury crashes was the highest in the last five years.



Sixty percent of loss of control crashes occurred at bends. Fifty-two percent of crashes occurred on state highways in rural areas.

Crash location	Local Urban	Local Rural	SH urban	SH Rural
At bends	27%	23%	6%	44%
On Straight	20%	13%	7%	60%

Most crashes at bends involved a driver losing control of their vehicle running off the road or on occasions colliding with another vehicle.

After drivers lose control, their vehicles could crash into roadside hazards such as ditches, banks, poles or trees. Hitting these objects can result in a relatively minor event turning into something far more serious.

The three most common roadside hazards struck during crashes in the district were *fences* (30 percent), *ditches* (20 percent) and *posts or poles* (17 percent) out of the total number of 571 objects struck.

Main characteristics of crashes with Loss of Control

Crash characteristic	Percentage of crashes
Single vehicle	82%
Alcohol (injury crashes)	20%
Too fast for the conditions (injury crashes)	29%
Road factors	12%
Poor handling (injury crashes)	33%
Rural road	69%
Wet road	26%
Night time	46%

It has been noted that *alcohol* over limit and *too fast* were other factors associated in a significant number of loss of control crashes on local roads. More than 60 percent of at fault drivers in these crashes did not hold Full NZ driver licence..

Further information about crashes due to loss of control in the district between 2003 and 2007 on:

Local roads

- 6 deaths, 25 serious injuries and 92 minor injuries
- Worst day of week: *Saturday* (56 crashes)
- Wet road crashes: 25 percent
- Night time crashes: 54 percent
- Drivers with alcohol over limit (injury crashes): 31 percent
- Most common injury crash factors: *Too fast* (42 percent) followed by *poor handling* (38 percent)
- At fault male driver (injury crashes): 68 percent
- Full NZ licence at fault drivers (injury crashes): 38 percent
- Most common at fault drivers' age group (injury crashes): 15 to 24 years old

State highways

- 18 death, 54 serious injuries and 121 minor injuries
- Worst day of week: *Sunday* (54 crashes)
- Wet road crashes: 26 percent
- Night time crashes: 40 percent
- Drivers with alcohol over limit (injury crashes): 13 percent
- Most common injury crash factors: *poor handling* (29 percent) and *Fatigue* (29 percent)
- At fault male driver (injury crashes): 64 percent
- Full NZ licence at fault drivers (injury crashes): 61 percent
- Most common at fault drivers' age group (injury crashes): 15 to 24 and 30 to 59 years old

Alcohol

Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

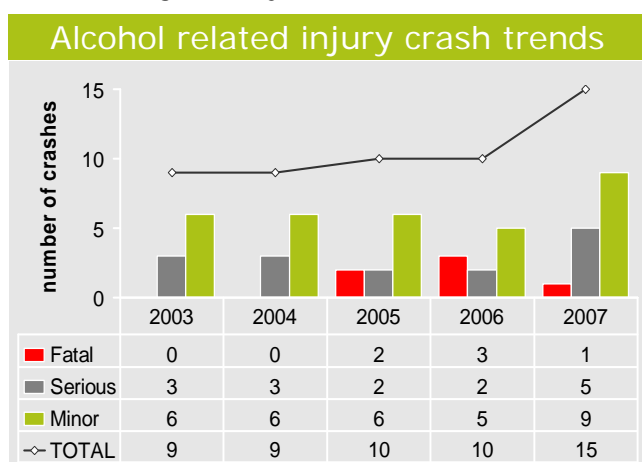
People with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers in the same crash.

Nationally in 2007, alcohol-affected drivers contributed to 34 percent of all fatal crashes and 15 percent of all injury crashes.

In the Horowhenua district, alcohol was a factor in 17 percent of all injury crashes in 2007 which is higher than the national average and higher than the last five year district average of 13 percent.

Between 2003 and 2007, there were 53 injury and 66 non-injury alcohol related crashes reported. These crashes resulted in 6 deaths, 25 serious injuries and 55 minor injuries.

The number of alcohol related injury crashes was relatively steady between 2003 and 2006, but increased significantly in 2007.



Only one third of alcohol related crashes occurred on State highways, but these account for two thirds of the total fatalities. It is also noted that on State highways most of the alcohol related crashes occurred in rural areas where as on local roads it occurred in urban areas.

Seventy percent of at fault drivers involved in alcohol related crashes on local roads did not hold full New Zealand driver licence which is a matter of concern. More than half of the at fault drivers were 15 to 24 years old age group (56 percent).

Further information about alcohol related crashes in the district between 2003 and 2007 on:

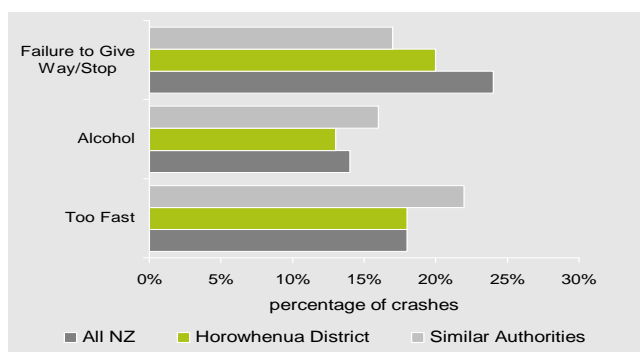
Local roads

- 2 deaths, 15 serious injuries and 30 minor injuries
- Worst day of week: *Saturday (19 crashes)*
- Wet road crashes: *19 percent*
- Night time crashes: *72 percent*
- Crashes at intersection: *46 percent*
- Excessive speed: *40 percent*
- Most common injury crash factors: *poor observation (17 percent)* and *poor handling (17 percent)*
- Road factors: *4 percent*
- At fault male driver (injury crashes): *91 percent*
- Full NZ licence at fault drivers (injury crashes): *19 percent*
- Most common at fault drivers' age group (injury crashes): *15 to 24 years old*

State highways

- 4 deaths, 10 serious injuries and 25 minor injuries
- Worst day of week: *Saturday (11 crashes)*
- Wet road crashes: *22 percent*
- Night time crashes: *68 percent*
- Crashes at intersection: *27 percent*
- Excessive speed: *43 percent*
- Most common injury crash factors: *poor observation (35 percent)* followed by *poor handling (22 percent)*
- Road factors: *6 percent*
- At fault male driver (injury crashes): *83 percent*
- Full NZ licence at fault drivers (injury crashes): *44 percent*
- Most common at fault drivers' age group (injury crashes): *15 to 24 years old*

National issues



Speed

Speed *too fast* was recorded in 18 percent of injury crashes in the district in the last five years resulting in 10 deaths and 112 injuries. *Speed* as a factor in crashes is increasing in the district.

Fifty-eight percent of speed-related injury crashes were *bend-lost control*. *Alcohol* and *poor handling* were the driver factors most often associated with *speed* crashes. Male drivers aged less than 20 years were most involved in *speed* related crashes.

Alcohol

Alcohol was involved in 13 percent of injury crashes in the district in the last five years resulting in 6 fatal, 26 serious injuries and 56 minor injuries. The number of injury crashes involving *alcohol* is increasing.

Fifty-four percent of *alcohol* related crashes occurred in urban areas of the district. Seventy seven percent of alcohol related crashes were *loss of control* either at bends or on straight sections of the road. Travelling *too fast* and *poor observations* were the factors often associated with *alcohol*. Eighty-eight percent of at fault drivers were male.

Failure to give way

In Horowhenua district *Failure to give way or stop* was a factor in 20 percent of all reported injury crashes for the last five years, resulting in 2 deaths and 133 other injuries. Most (90%) of these were related to *crossing/turning* manoeuvres and often associated with *failure to look for other parties*. Thirty-four percent of the crashes occurred in rural areas.

Restraints

The Ministry of Transport conducts surveys of restraint use. 2007 survey results show restraint rates in Horowhenua district for front seat and rear seat are 95 and 91 percent respectively (while corresponding national rates are 95 and 87 percent). The results are obtainable from the Ministry of Transport website.

<http://www.transport.govt.nz/belts-index/>

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