

# briefing notes road safety issues

## Horowhenua District

This report details aspects of Horowhenua District’s traffic crash data. We begin by looking at how the district measures up regarding those areas of high concern prioritised in Safer Journeys (NZ’s Road Safety Strategy 2020) as compared to similar authorities and against the national picture. This is followed by an overview of crashes in Horowhenua District for 2009. Then we present more detailed analysis of local road safety issues based upon reported crash data and trends for the 2005-2009 period.

Included are graphs, charts and tabulations addressing crash movement, crash factors, road users, location and the social cost of crashes. Trends are determined by looking at the annual data for injury crashes and those injured over the last five year period. The information in this report covers both local roads and state highways.

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

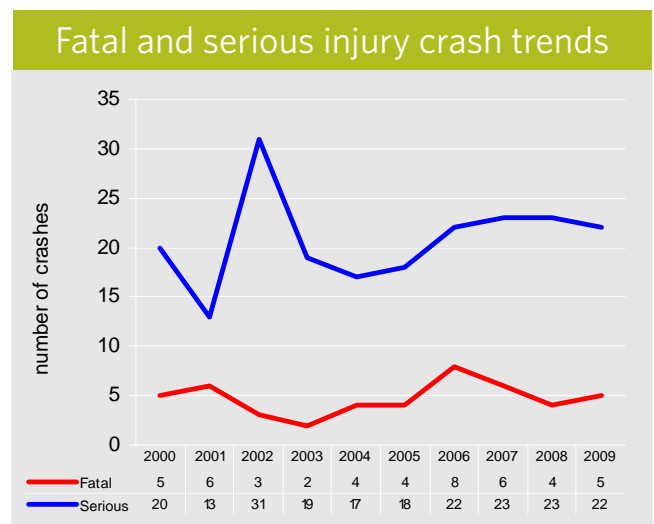
2009 road trauma	
Casualties	Horowhenua District
Death	8
Serious injury	25
Minor injury	89
<b>Total casualties</b>	<b>122</b>

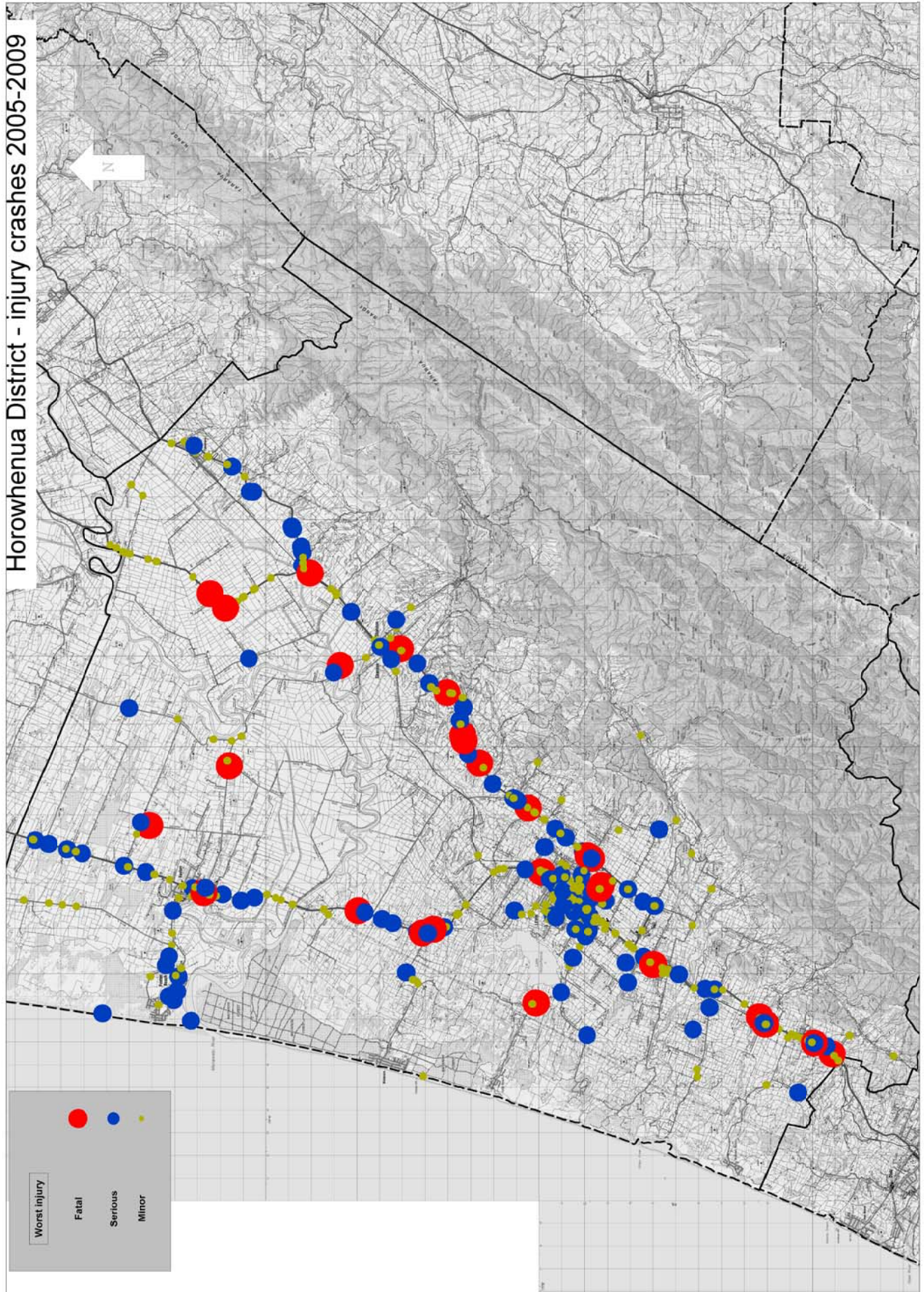
Crashes	Horowhenua District
Fatal crashes	5
Serious injury crashes	22
Minor injury crashes	65
<b>Total injury crashes</b>	<b>92</b>
Non-injury crashes	168 reported

2009 - social cost of crashes	
Local roads	\$ 15.35M
State highways	\$ 30.86M
<b>Total</b>	<b>\$ 46.21M</b>

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

Local road safety issues	
Horowhenua District	
<b>Loss of control</b>	
<b>Intersections</b>	
<b>Alcohol - incl. speed too fast</b>	
<b>Vulnerable road users; pedestrians motorcyclists</b>	







## 2020 Safer Journeys

**“A safe road system increasingly free of death and serious injury”**

Safer Journeys is New Zealand’s Road Safety Strategy for 2010-2020. It identifies actions and interventions to reduce trauma on our roads.

Please take time to visit the Safer Journeys website and study the documents found there:

<http://www.transport.govt.nz/saferjourneys/>

Areas of high concern have been identified. These are the areas where we need to make the most improvement in road safety or maximise efforts towards a safe system approach. Focusing on these areas could make the largest contribution toward reducing costs imposed on the economy by road deaths and injuries.

### Areas of high concern are:

- Reducing alcohol/drug impaired driving
- Increasing the safety of young drivers
- Safe roads and roadsides
- Safe driving speeds
- Increasing the safety of motorcyclists

### Areas of medium concern are:

- Improving the safety of the light vehicle fleet
- Safe walking and cycling
- Improving the safety of heavy vehicles
- Reducing the impact of driver fatigue
- Addressing driver distraction
- Reducing the impact of high risk drivers

### Areas of continued and emerging focus:

- Increasing the level of restraint use
- Increasing the safety of older New Zealanders

## Horowhenua District

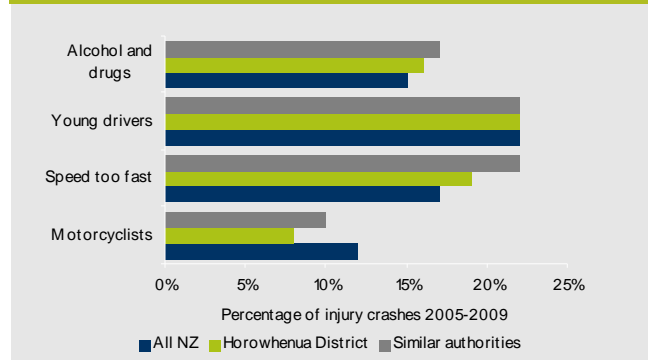
Presented below is a brief look at Horowhenua District’s position on Safer Journeys’ areas of high concern compared to similar authorities’ averages and the all-NZ averages (sample period 2005-2009).

### Restraints

According to 2009 survey results, restraint use rate in Horowhenua District are 95 and 83 percent for front seat and rear seat respectively; while corresponding national rates are 95 and 87 percent.

<http://www.transport.govt.nz/research/safetybeltstatistics/>

## Safer Journeys’ areas of high concern



### Alcohol and drugs

In Horowhenua District, alcohol was recorded in 16 percent of injury crashes in the last five years, resulting in 10 deaths, 30 serious injuries and 70 minor injuries. Alcohol-related crashes were proportionally lower than in similar authorities.

### Young drivers

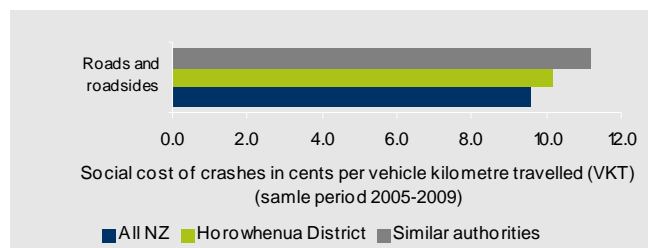
In Horowhenua District, young drivers aged 15-19 years were involved in 22 percent of all injury crashes during the last five year period, resulting in 3 deaths, 32 serious injuries and 105 minor injuries. This was proportionally similar compared to similar authorities, however the latest trend for the district is upwards.

### Speed too fast

Speed too fast was recorded in 19 percent of injury crashes in Horowhenua District in the last five years, resulting in 11 deaths, 29 serious injuries and 96 minor injuries. Speed as a factor in crashes was lower compared to similar authorities.

### Motorcyclists

In Horowhenua District, motorcyclists were involved in 8 percent of all injury crashes during the last five year period, resulting in 22 serious injuries and 25 minor injuries. Injury crashes involving motorcyclists were proportionally lower than in similar authorities.



### Roads and roadsides

In Horowhenua District, there were on average 22 injury crashes per 100 million VKT, measured over the last five years. The social cost per VKT of these crashes is 9 percent lower than the similar authority average (see the graph above).

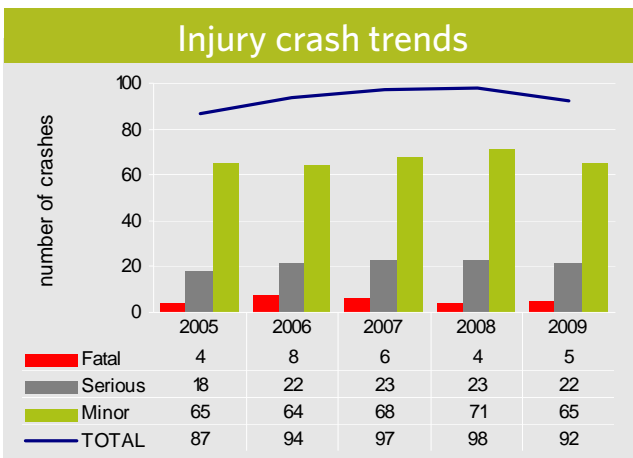
## Overview 2009

In 2009 in Horowhenua District, 92 injury crashes resulting in 122 casualties and 168 non-injury crashes were reported by the New Zealand Police. Fifty-seven percent of all injury crashes in the district were on state highways. The table below shows the number of injuries resulting from these crashes in the district.

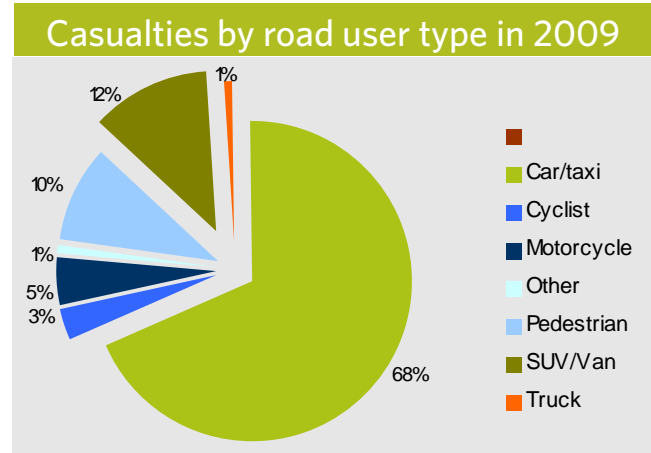
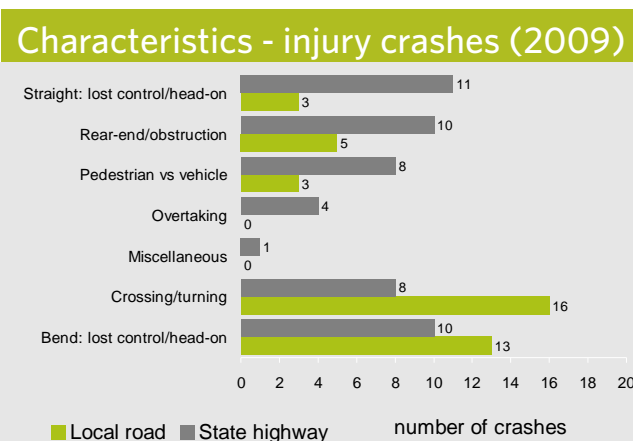
Casualties by injury type in 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Total	8	25	89	122
Local roads vs state highways				
Local roads	1	12	37	50
State highways	7	13	52	72
Rural vs urban roads				
Rural <sup>1</sup>	7	19	46	72
Urban	1	6	43	50

<sup>1</sup> Rural- an area with a speed limit of 80km/h or more

The latest five year data shows a level trend in the total number of injury crashes, as are individual trends for each degree of seriousness of injury.



In 2009 two fifths of the injury crashes involved a driver losing control of their vehicle and a quarter involved a crossing or turning movement.



Over two-thirds of the casualties were drivers or passengers of cars, an eighth of sports utility vehicles or vans and nearly a fifth were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Horowhenua District, young drivers aged 15 to 19 years inclusive were at fault drivers in 15 percent of injury crashes and older drivers, 70 years of age and over, in 16 percent.

Further information about injury crashes in the district during 2009 on:

#### Local roads

- Total number of injury crashes: 40
- Worst month: November (15 percent),
- Worst day of week: Friday (23 percent)
- Wet road crashes: 20 percent
- Night time crashes: 33 percent
- Failed to give way/stop: 38 percent
- Too fast for conditions: 33 percent
- Alcohol over limit: 23 percent
- Pedestrian factors: 5 percent
- Crashes at intersection: 50 percent
- Road factors: 10 percent
- At fault male driver: 63 percent
- At fault driver held full NZ licence: 38 percent

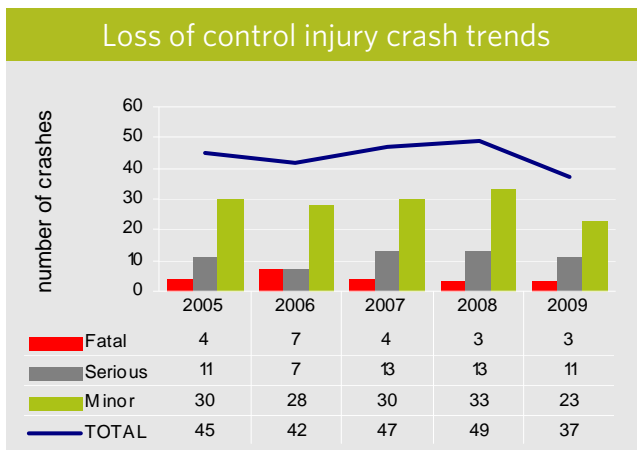
#### State highways

- Total number of injury crashes: 52
- Worst month: May (17 percent)
- Worst day of week: Friday (20 percent)
- Wet road crashes: 16 percent
- Night time crashes: 50 percent
- Alcohol over limit: 25 percent
- Failed to give way/stop: 17 percent
- Too fast for conditions: 17 percent
- Pedestrian factors: 12 percent
- Crashes at intersection: 22 percent
- Road factors: 15 percent
- At fault male driver: 78 percent
- At fault driver held full NZ licence: 68 percent

## Loss of control

During the most recent five year period (2005-2009) 47 percent of all injury crashes in Horowhenua District occurred due to loss of control. These crashes resulted in 30 deaths, 87 serious injuries and 222 minor injuries. A further 358 non-injury crashes were reported involving loss of control.

The latest five year data shows a slight downward trend in the total number of loss of control type injury crashes.



The majority of loss of control crashes occurred at bends (60 percent). These involved a driver losing control of their vehicle then commonly running off the road or perhaps colliding with another vehicle (17 percent).

The following table shows a breakdown of the general environment of all loss of control crashes (578 crashes) in Horowhenua District 2005-2009, split to show urban/rural speed limits.

Number of crashes	Local urban	Local rural	SH urban	SH rural
At bends	16%	17%	3%	24%
Straight road	9%	6%	2%	23%

Note: Rural roads are roads with a speed limit of 80km/hr or more.

The three most common roadside hazards struck in loss of control crashes were fences (32 percent) followed by ditches (19 percent) and posts or poles (13 percent). There were a total 658 objects reported being struck. Hitting these objects can result in more serious injuries than would otherwise be sustained.

The following table shows the main characteristics of loss of control crashes. Alcohol was a contributing factor in just over a quarter of the loss of control injury crashes. Speed too fast for conditions and poor handling each individually figure as contributory factors in a third of these injury crashes. Nearly three-quarters of all loss of control crashes occurred on rural roads, with half during hours of darkness and a quarter of all these crashes occurred in wet conditions.

Loss of control crashes	
Crash characteristics	Percentage of crashes
Single vehicle	83%
Alcohol (injury crashes)	27%
Too fast for the conditions (injury crashes)	32%
Road factors	14%
Poor handling (injury crashes)	33%
Rural road	70%
Wet road	26%
Night time	48%

Further information about all crashes due to loss of control in Horowhenua District 2005-2009 on:

### Local roads

- 6 deaths, 27 serious injuries and 102 minor injuries
- Worst month: November (32 crashes)
- Worst day of week: Saturday (65 crashes)
- Wet road crashes: 22 percent
- Night time crashes: 51 percent
- Crashes at intersection: 34 percent
- Road factors: 10 percent
- Alcohol over limit (injury crashes): 35 percent
- Most common injury crash factors: too fast (41 percent) followed by poor handling (36 percent)
- At fault male driver (injury crashes): 64 percent
- At fault driver held learner or restricted licence (injury crashes): 38 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years (54 percent)

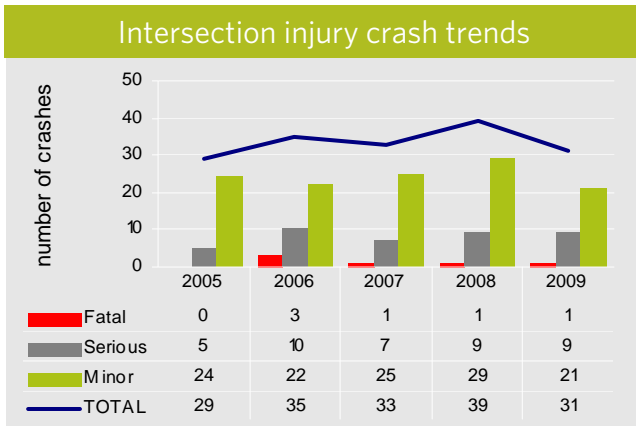
### State highways

- 24 deaths, 60 serious injuries and 120 minor injuries
- Worst months: April and August (35 crashes each)
- Worst day of week: Sunday (59 crashes)
- Wet road crashes: 30 percent
- Night time crashes: 45 percent
- Crashes at intersection: 18 percent
- Road factors: 19 percent
- Alcohol over limit (injury crashes): poor handling (30 percent) followed by too fast and fatigue (25 percent each)
- At fault male driver (injury crashes): 71 percent
- At fault driver held learner or restricted licence (injury crashes): 39 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years (37 percent)

## Intersections

During the last five year period (2005-2009) 36 percent of all injury crashes in Horowhenua District occurred at intersections. These crashes resulted in 6 deaths, 50 serious injuries and 177 minor injuries. There were a further 301 non-injury crashes reported.

The latest five year data shows a slight upward trend in the total number of injury crashes at intersections.



Half of all intersection crashes occurred at urban intersections (48 percent). Half of all intersection crashes occurred on state highways accounting for two-thirds of the fatalities and 58 percent of the serious injuries.

	Local urban	Local rural	SH urban	SH rural
Intersection crashes	47%	5%	21%	27%

Note: Rural roads are roads with a speed limit of 80km/hr or more.

The table below shows the locations of intersections with a high number of crashes in Horowhenua district (2005-2009).

Intersection name	Total crashes 2005-2009	Injury crashes 2005-2009	Total crashes in 2009
SH 57 / Queen St East	15	9	1
SH 5 / Kimberley Road	14	5	1
SH 1N / Bath St	15	5	3
Salisbury St /	6	3	1
SH 1N / Exeter St	5	3	0
Queen St East / SH 1N	8	3	3
Bristol St / Exeter St	7	3	2
Queen St East /	6	3	3
SH 1N / Gleeson Road	3	2	0
SH 1N / Roslyn Road	2	2	0

Junction Type	Rural	Urban
T-junction	95	163
Crossroad	48	123
Roundabout	0	19
Driveway	0	13
Y-junction	5	1

Crashes at T-junctions and crossroads in urban areas are the most common types of intersection crashes in Horowhenua District 2005-2009.

Two-fifths of intersection crashes occurred due to a drivers' failure to give way; at a give way sign (41 percent), at a stop sign (22 percent), at traffic signals (5 percent) and at intersections without any traffic control (32 percent).

Twenty-nine percent of at fault drivers were in the age group 15-24 years and 20 percent were aged over 70 years of age. Sixty-two percent of at fault drivers held a full NZ licence and twenty-six percent held a learner licence or restricted licence.

Further information about all intersection crashes in Horowhenua District 2005-2009 on:

### Local roads

- 2 deaths, 21 serious injuries and 79 minor injuries
- Worst month: June (36 crashes)
- Worst day of week: Friday (43 crashes)
- Wet road crashes: 21 percent
- Night time crashes: 28 percent
- Alcohol over limit (injury crashes): 19 percent
- Most common injury crash factors: failed to give way/stop (49 percent) followed by poor observation (43 percent)
- At fault male driver (injury crashes): 58 percent
- At fault driver held full NZ licence (injury crashes): 56 percent
- Most common age group (injury crashes): 15-24 years (32 percent)

### State highways

- 4 deaths, 29 serious injuries and 98 minor injuries
- Worst month: May (26 crashes)
- Worst day of week: Friday (41 crashes)
- Wet road crashes: 24 percent
- Night time crashes: 24 percent
- Alcohol over limit (injury crashes): 10 percent
- Most common injury crash factors: failed to give way/stop (48 percent) followed by poor observation (45 percent)
- At fault male driver (injury crashes): 58 percent
- At fault driver held full NZ licence (injury crashes): 67 percent
- Most common age group (injury crashes): 15-29 years (20 percent) and over 70 (21 percent)

## 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 NZ legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

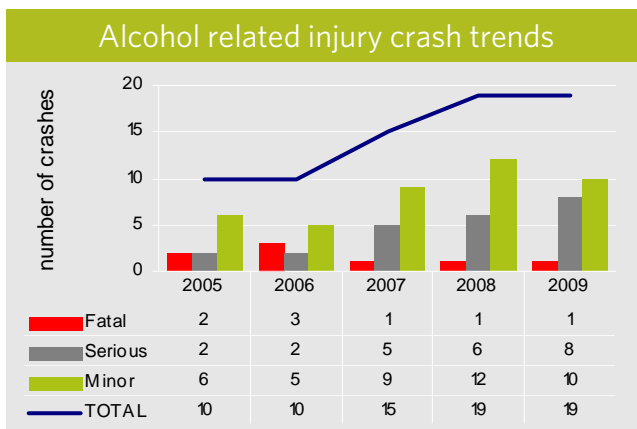
During 2009, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes in New Zealand.

### Horowhenua District

During the most recent five year period (2005-2009) 16 percent of all injury crashes in Horowhenua District were alcohol-related. Although lower than the latest five year average for similar authorities (17 percent), the trend in the district is increasing. In 2009, 24 percent of all injury crashes in Horowhenua District recorded alcohol as a contributing factor.

There were 73 injury and 88 non-injury alcohol-related crashes reported in the last five years. These crashes resulted in 10 deaths, 31 serious injuries and 70 minor injuries.

The latest five year data shows an upward trend in the total number of alcohol-related injury crashes. The trend in total casualties is also upwards.



Half of all alcohol-related crashes occurred in rural areas (50 percent) and half of all the crashes involved a loss of control at bend type crash movement (48 percent). Two-fifths of the crashes occurred at intersections (39 percent).

Just over a third of alcohol-related crashes occurred on state highways (36 percent), these accounted for four-fifths of fatalities (80 percent) and half the serious injuries (52 percent).

Seventy-two percent of the crashes occurred during the hours of darkness. Fifty-eight percent of the crashes occurred on weekends, between 6pm Friday and 6am Monday.

Forty percent of the at fault drivers involved in alcohol-related injury crashes held either learner licence or restricted licence and a further 21 percent were never licensed or disqualified.

## Alcohol and speed

Speed was a factor in 34 percent of the 73 alcohol related injury crashes in the district 2005-2009, resulting in 5 deaths, 12 serious injuries and 27 minor injuries. There were a further 21 non-injury crashes reported with combined factors of alcohol and speed during this period.

In crashes where driver alcohol and speed were both contributing factors, more than two-fifths of the crashes occurred on local roads in urban areas (41 percent) and were mostly during hours of darkness (80 percent). Three-quarters of these crashes were loss of control at bend type crashes.

Drivers at fault involved in these crashes were predominantly in the age group 20-24 years (65 percent). Thirty-two percent of the at fault drivers held a restricted licence and similarly 32 percent were disqualified from driving. Nearly all at fault drivers were male (96 percent).

Further information about alcohol related crashes in Horowhenua District 2005-2009 on:

### Local roads

- 2 deaths, 15 serious injuries and 36 minor injuries
- Worst month: November (13 crashes)
- Worst day of week: Saturday (26 crashes)
- Wet road crashes: 24 percent
- Night time crashes: 73 percent
- Crashes at intersection: 42 percent
- Most common injury crash factors: too fast (47 percent) followed by poor handling (17 percent)
- Road factors: 3 percent
- At fault male driver (injury crashes): 87 percent
- At fault driver held learner or restricted licence or disqualified (injury crashes): 63 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years (50 percent)

### State highways

- 8 deaths, 16 serious injuries and 34 minor injuries
- Worst month: April (8 crashes)
- Worst day of week: Saturday (15 crashes)
- Wet road crashes: 25 percent
- Night time crashes: 71 percent
- Crashes at intersection: 22 percent
- Most common injury crash factors: too fast (27 percent) followed by poor handling (19 percent)
- Road factors: 10 percent
- At fault male driver (injury crashes): 82 percent
- At fault driver held learner or restricted licence or never licensed (injury crashes): 59 percent
- Most common at fault drivers' age group injury crashes): 15-24 years (47 percent)

## Vulnerable road users

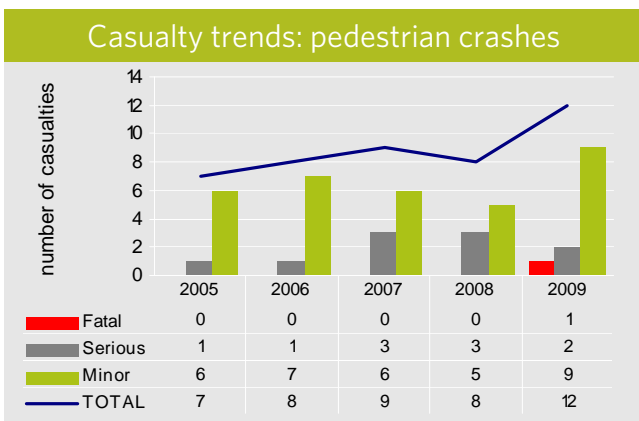
Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries. These are defined as pedestrians, motorcyclists and cyclists.

In Horowhenua District, vulnerable road users were involved in 21 percent of all injury crashes in 2005-2009, accounting for 17 percent of all casualties, 3 percent of all deaths and 24 percent of all serious injuries in the district over the five year period.

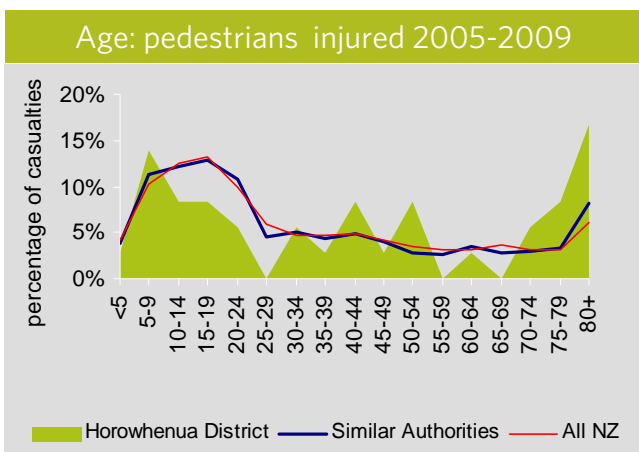
## Pedestrians

Injury crashes involving pedestrians in Horowhenua District accounted for 8 percent of all injury crashes during the last five year period. These pedestrian crashes resulted in 1 death, 10 serious injuries and 33 minor injuries. In terms of casualties pedestrians made up 3 percent of all deaths and 7 percent of all serious injuries during 2005-2009.

The latest five year data shows an upward trend in the total number of casualties in crashes involving pedestrians.



Just under a third of pedestrians injured (31 percent) during the last five years were aged over 70 years of age. This age group is proportionally much higher when compared to similar authorities and all NZ averages. Fourteen percent of the injured were young pedestrians in the age group of 5-9 years.



Location / route	Number of pedestrian Injury crashes
Route along SH 1N, SH 57 and Bath St and near the following intersections	
SH 1N/ Queen St	4
SH 1N / Bath St	4
SH 1N / Queen St East	3
SH 1N / Exeter St	2
Bath St/ Salisbury St	2
SH 57/ Queen St East	1
SH 1N / Newth Road	1

The worst pedestrian crash locations 2005-2009 are shown in the table above.

Most of the pedestrian crashes occurred on urban roads (87 percent) while a third were at intersections (33 percent). Over four-fifths took place during the hours of daylight (82 percent).

The following were the most commonly reported pedestrian factors involved in these pedestrian crashes:

- 41 percent involved pedestrians crossing roads heedless of traffic
- 13 percent involved pedestrian child unsupervised or escaped from supervision
- 11 percent involved failed to give way to pedestrians on a crossing or at signals
- 8 percent involved pedestrians who were visibly intoxicated

Further information regarding pedestrian injury crashes in Horowhenua District 2005-2009 on:

### Local roads

- 3 serious injuries and 18 minor injuries
- Worst months: January and September (3 crashes each)
- Worst day of week: Tuesday (7 crashes)
- Wet road crashes: 11 percent
- Night time crashes: 16 percent
- Alcohol over limit (injury crashes): 6 percent
- Crashes at intersection: 26 percent
- Pedestrian factors contributing to crashes: 72 percent

### State highways

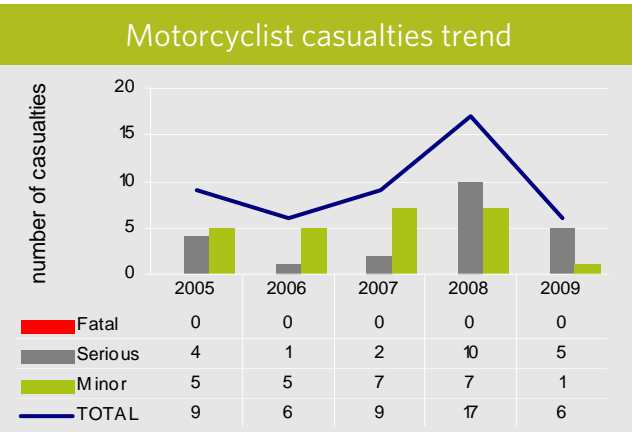
- 1 death, 7 serious injuries and 15 minor injuries
- Worst months: May and July (4 crashes each)
- Worst days of week: Thursday and Friday (4 crashes each)
- Wet road crashes: 15 percent
- Night time crashes: 20 percent
- Alcohol over limit (injury crashes): 21 percent
- Crashes at intersection: 40 percent
- Pedestrian factors contributing to crashes: 63 percent



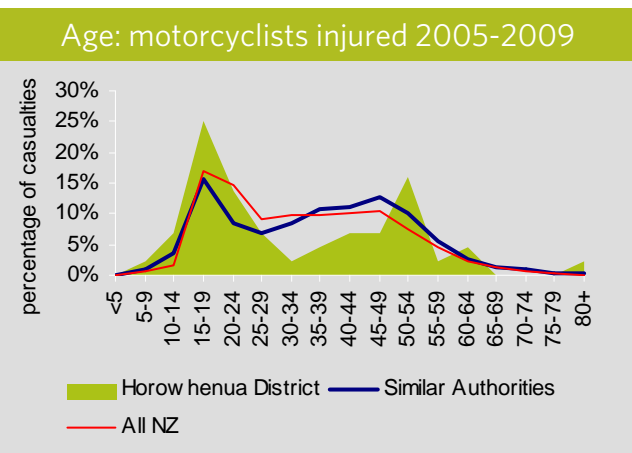
# Motorcyclists

Injury crashes involving motorcyclists represent 9 percent of all injury crashes in Horowhenua District during the last five year period 2005-2009, resulting in 22 serious injuries and 25 minor injuries.

The latest five year data shows a slight upward trend in the total number of casualties involved in motorcyclist crashes, even allowing for the low numbers last year.



The age distribution of injured motorcyclists is shown below. A third of the injured motorcyclists were young riders in the age group 10-19 years (32 percent). This age group is proportionally much higher when compared to similar authorities and all NZ averages. Sixteen percent of the injured motorcyclists were in the age group of 50-54 years.



The scenarios for crashes involving motorcyclists were many and varied. The most common scenarios for all crashes involving motorcyclists in Horowhenua District 2005-2009 were:

- loss of control: 34 percent
- a straight through vehicle collides with another vehicle ahead that was turning right from the main road: 13 percent
- a vehicle turning right across an oncoming straight through vehicle: 9 percent
- at a crossroad both vehicle travelling straight through collide: 7 percent

Location / route	Number of motorcyclist injury crashes
SH 1N route	18
SH 57 route	10
Seabury Avenue route	2
Union St route	2
Waitare Beach Road route	2
SH 57/ Kaihinu Road	2
SH 57/ Queen St East	2

Crash locations for motorcycle crashes in Horowhenua District 2005-2009 are scattered, high crash locations or routes are shown above.

Just over half of all crashes involving motorcyclists occurred in rural areas (54 percent), of these over two-thirds were on state highways (69 percent). Most of the crashes occurred during dry conditions (90 percent) and three-quarters during the daylight hours (75 percent). Just over a third of the crashes involving motorcyclists occurred at intersections (35 percent). A third of the crashes were single party motorcycle only crashes.

Further information regarding crashes involving motorcyclists in Horowhenua District 2005-2009 on:

## Local roads

- 8 serious injuries and 12 minor injuries
- Worst months: September and October (3 crashes each)
- Worst days of week: Saturday and Sunday (5 crashes each)
- Most common injury crash factors: Poor observation (41 percent) and failure to give way/stop (29 percent each)
- Wet road crashes: nil percent
- Night time crashes: 16 percent
- Crashes at intersection: 26 percent
- Alcohol over limit (injury crashes): 12 percent
- Too fast for conditions (injury crashes): 18 percent
- Male motorcyclists injured: 73 percent

## State highways

- 14 serious injuries and 13 minor injuries
- Worst months: August and October (4 crashes each)
- Worst day of week: Friday (7 crashes)
- Most common injury crash factors: poor observation (52 percent) followed by failure to give way/stop (26 percent)
- Wet road crashes: 17 percent
- Night time crashes: 31 percent
- Crashes at intersection: 41 percent
- Alcohol over limit (injury crashes): 9 percent
- Too fast for conditions (injury crashes): 9 percent
- Male motorcyclists injured: 91 percent

## Further information

This report has been prepared by the Performance Information team at NZ Transport Agency. It is the eleventh such annual road safety issues report. The intent of this report is to highlight local road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries. It has been prepared using data from the Ministry of Transport's Crash Analysis System (CAS) database. This report forms a part of the Briefing Notes series of reports. The Briefing Notes present information derived from pertinent statistics to be used for decision support.

More detailed information may be obtained from either Horowhenua District Council (local roads) or NZ Transport Agency.

NZ Transport Agency encourages local bodies, regional councils and NZ Police to study the briefing notes series of reports along with the road safety data reports and the road safety black-spot report. There will be road safety issues beyond those covered in this Road Safety Issues Report and we encourage our partners to use their access to the Crash Analysis System to identify and examine these further.

## Contacts

### NZ Transport Agency

#### Palmerston North Regional Office

IRD Building, L3  
43 Ashley Street  
PO Box 1947  
Palmerston North 4440  
Tel 64 6 953 6396  
Fax 64 6 953 6203  
<http://www.nzta.govt.nz>

#### Performance Information / Senior Engineer CAS

James King (04 931 8917)

#### Senior Engineer

Sol Hessel (06 953 6622)

### Horowhenua District Council

Braden Austin (06 366 0999)  
Manager Community Assets

### Horizons Regional Council

Mary Mitchell (06 952 2810)  
Road Safety Coordinator

### New Zealand Police

Road Policing Manager  
Central DHQ-PM  
Private Bag 11040 Manawatu Mail Centre  
Tel 06 351 3600