

briefing notes road safety issues

Porirua City

This report details aspects of Porirua City’s traffic crash data. We begin by looking at how the city 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 Porirua City 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 Porirua City is compared to similar authorities and those crashes with a high social cost (relating mainly to high numbers of fatal and serious crashes).

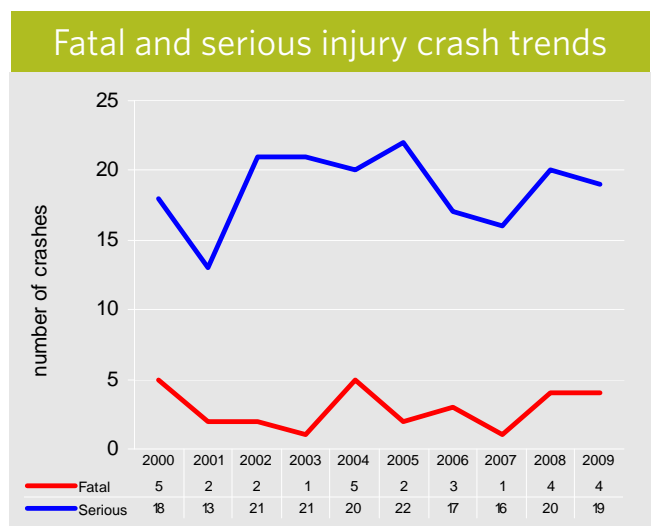
2009 road trauma	
Casualties	Porirua City
Death	5
Serious injury	25
Minor injury	110
Total casualties	140

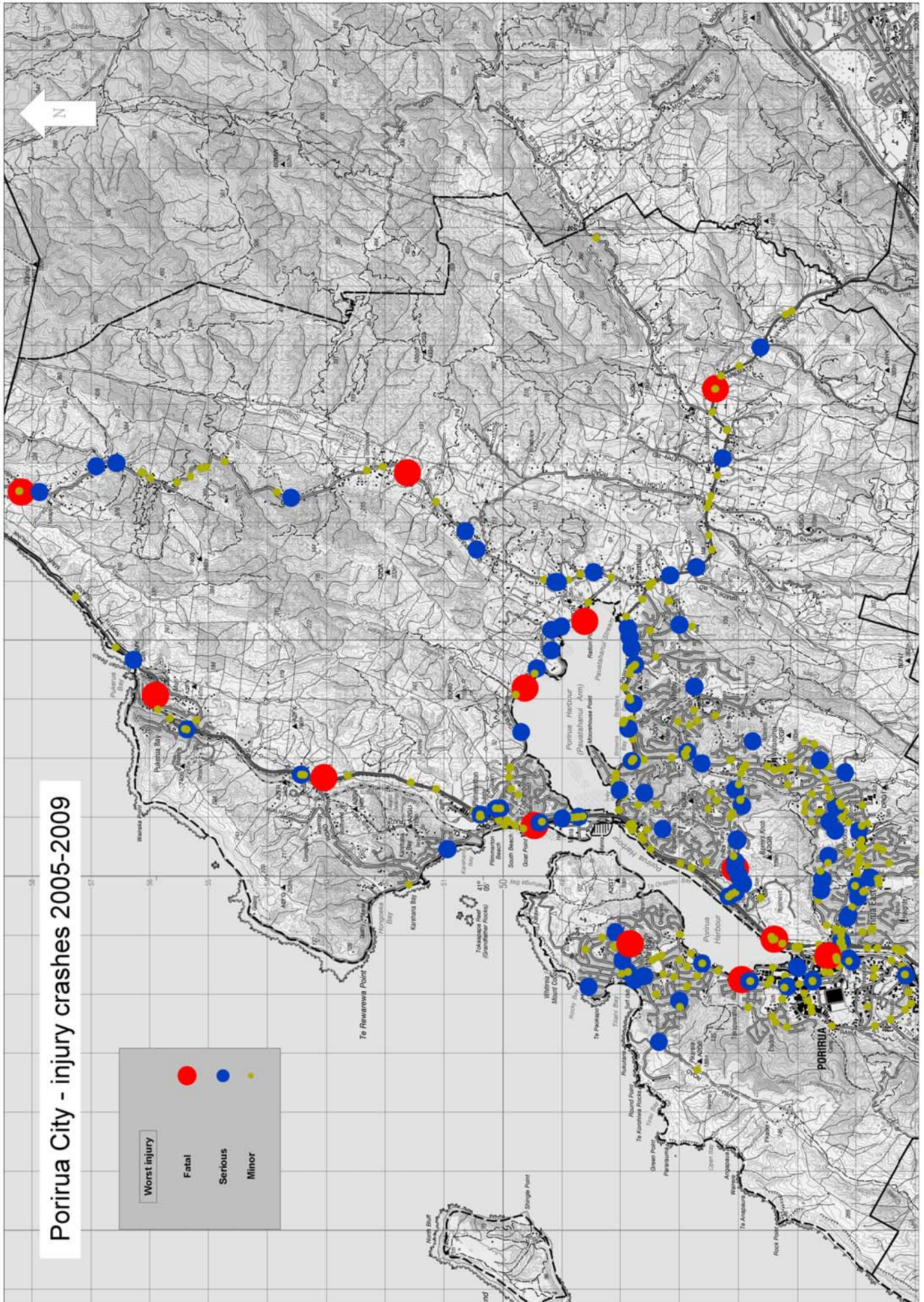
Crashes	Porirua City
Fatal crashes	4
Serious injury crashes	19
Minor injury crashes	83
Total injury crashes	106
Non-injury crashes	372 reported

2009 - social cost of crashes	
Local roads	\$ 36.27M
State highways	\$ 10.88M
Total	\$ 47.15M

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	
Porirua City	
Loss of control at bends	
Speed	
Alcohol	
Vulnerable road users; - pedestrians	





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

Porirua City

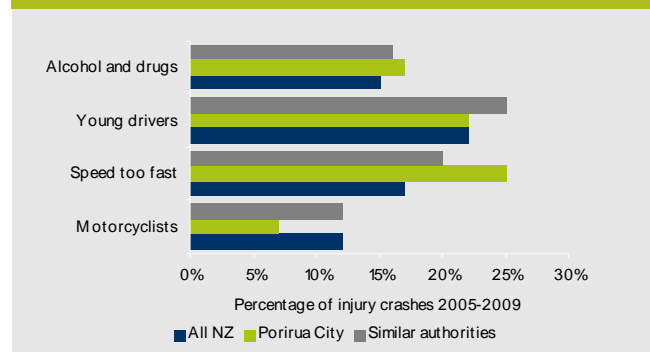
Presented below is a brief look at Porirua City’s position on Safer Journeys’ areas of high concern compared to similar authorities’ averages and the all-NZ averages (sample period 2005-2009).

Restraints

According to 2009 survey results, restraint use rate in Porirua City are 96 and 86 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 Porirua City, alcohol was recorded in 17 percent of injury crashes in the last five years, resulting in 2 deaths, 22 serious injuries and 83 minor injures. Alcohol related crashes were higher proportionally when compared to that of similar authorities.

Young drivers

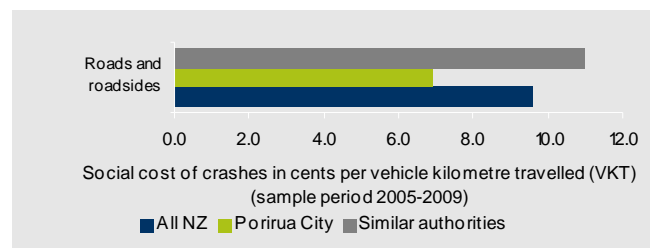
In Porirua City, young drivers aged 15-19 years were involved in 22 percent of all injury crashes during the last five year period, resulting in 5 deaths, 27 serious injuries and 133 minor injuries. This was proportionally lower than in similar authorities.

Speed too fast

Speed too fast was recorded in 25 percent of injury crashes in Porirua City in the last five years, resulting in 5 deaths, 39 serious injuries and 132 minor injuries. Speed as a factor in crashes was significantly higher proportionally as compared to similar authorities.

Motorcyclists

In Porirua City, motorcyclists were involved in 7 percent of all injury crashes during the last five year period, resulting in 2 deaths, 16 serious injuries and 27 minor injuries. Injury crashes involving motorcyclists was proportionally significantly lower than in similar authorities.



Roads and roadsides

In Porirua City, there were on average 21 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes is 37 percent lower than the similar authority average (see the graph above).

Overview 2009

In 2009 in Porirua City, 106 injury crashes resulting in 140 casualties and 372 non-injury crashes were reported by the New Zealand Police. Thirty-one 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	5	25	110	140

Local roads vs state highways

Local roads	5	19	72	96
State highways	0	6	38	44

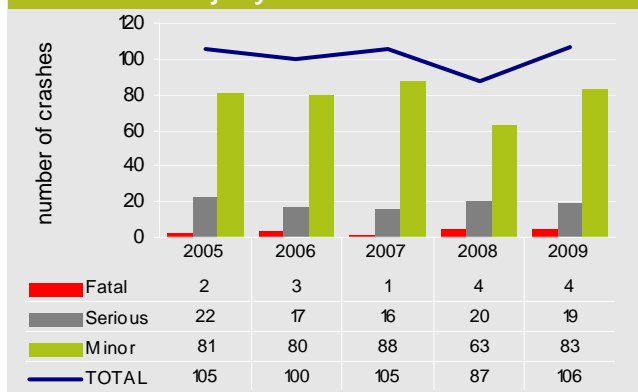
Rural vs urban roads

Rural ¹	3	16	30	49
Urban	2	9	80	91

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

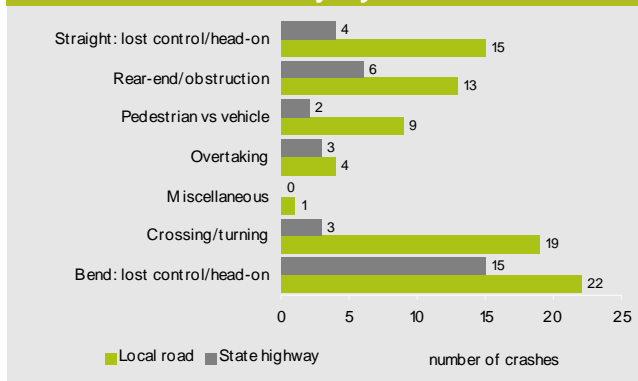
The latest five year data shows a level trend in the total number of injury crashes.

Injury crash trends

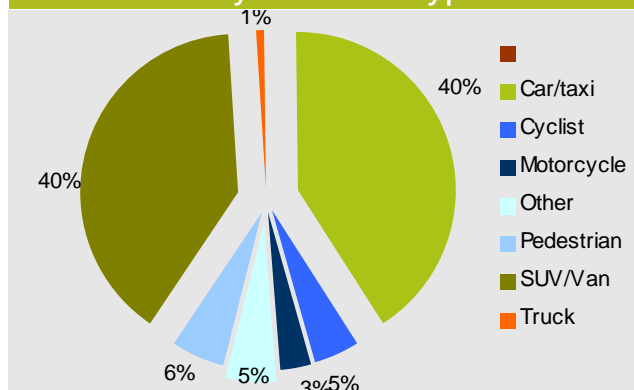


In 2009 two-fifths of injury crashes involved a driver losing control of their vehicle, one-fifth involved a crossing or turning movement and a similar number a rear-end collision.

Characteristics - injury crashes (2009)



Casualties by road user type in 2009



Two-fifths of the casualties were drivers or passengers, and a similar number of sports utility vehicles or vans. One-seventh of all casualties were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Porirua City, young drivers aged 15 to 19 years inclusive were at fault drivers in 16 percent of injury crashes and older drivers, 70 years of age and over, in 3 percent.

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

Local roads

- Total number of injury crashes: 73
- Worst month: February (15 percent)
- Worst day of week: Tuesday (19 percent)
- Wet road crashes: 23 percent
- Night time crashes: 26 percent
- Alcohol over limit: 11 percent
- Too fast for conditions: 22 percent
- Failed to give way/stop: 25 percent
- Pedestrian factors : 8 percent
- Crashes at intersection: 36 percent
- Road factors: 10 percent
- At fault male driver: 60 percent
- At fault driver held full NZ licence: 53 percent

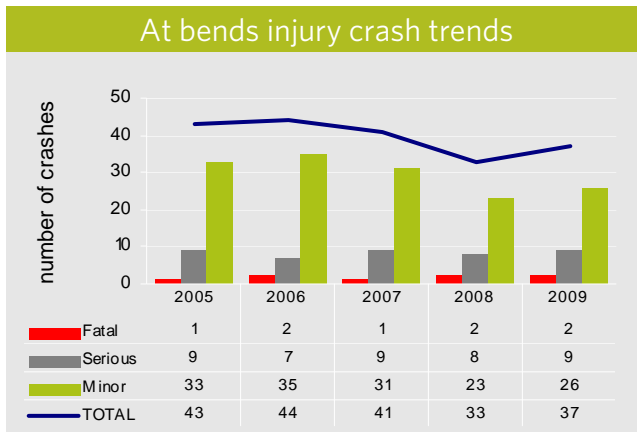
State highways

- Total number of injury crashes: 33
- Worst months: October and December (15 percent each)
- Worst day of week: Tuesday (24 percent)
- Wet road crashes: 34 percent
- Night time crashes: 30 percent
- Alcohol over limit: 18 percent
- Too fast for conditions: 24 percent
- Failed to give way/stop: 9 percent
- Fatigue: 9 percent
- Crashes at intersection: 24 percent
- Road factors: 9 percent
- At fault male driver: 59 percent
- At fault driver held full NZ licence: 62 percent

Loss of control at bends

During the most recent five year period (2005-2009) 40 percent of all injury crashes in Porirua City occurred due to loss of control at bends. These crashes resulted in 9 deaths, 55 serious injuries and 216 minor injuries. There were a further 454 non-injury crashes reported involving loss of control at bends.

The latest five year data shows a downward trend in the total number of injury crashes due to loss of control at bends. There is a level trend in fatal and serious injury crashes over this period.



Most crashes at bends involved a driver losing control of their vehicle and running off the road and hitting a roadside object (79 percent) or perhaps colliding with another vehicle (31 percent).

The three most common roadside hazards struck during crashes in the city were fences (23 percent), cliffs or banks (13 percent) and parked vehicles (12 percent) out of total 695 reported objects struck. Hitting these objects can result in more serious injuries than would otherwise be sustained.

Nearly a third of loss of control crashes at bends occurred on state highways(31 percent), resulting in 60 percent of total fatalities in the city. Fifty-eight percent of loss of control crashes at bends took place in urban areas.

The table below shows a breakdown of the general environ of all loss of control crashes occurring at bends in Porirua City for 2005-2009.

Loss of Control at bends	Local Urban	Local Rural	SH urban	SH Rural
652 crashes	50%	19%	7%	24%

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

The following table shows speed too fast was a factor in half of the injury crashes and alcohol was a contributory factor in a quarter. Of these loss of control at bend injury crashes. Just under half of all loss of control at bend crashes occurred during hours of darkness and two-thirds of all crashes occurred in wet conditions.

Loss of control crashes at bends

Crash characteristics	Percentage of crashes
Single vehicle	70
Alcohol (injury crashes)	26
Too fast for the conditions (injury crashes)	49
Road factors	15
Poor handling (injury crashes)	30
Rural road	43
Wet road	40
Night time	44

Half of the at fault drivers in these crashes were aged under 24 years of age (50 percent), mostly male (71 percent) and over half (58 percent) held either a learner licence, a restricted licence or were never licensed.

Further information about all loss of control crashes at bends in Porirua City 2005-2009 on:

Local roads

- 5 deaths, 48 serious injuries and 131 minor injuries
- Worst month: October (48 crashes)
- Worst day of week: Saturday (99 crashes)
- Wet road crashes: 35 percent
- Night time crashes: 47 percent
- Alcohol over limit: 27 percent
- Most common injury crash factors: too fast (59 percent) followed by poor handling (30 percent)
- Road factors: 13 percent
- At fault male driver (injury crashes): 75 percent
- At fault driver held full NZ licence (injury crashes): 42 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old (55 percent)

State highways

- 4 deaths, 7 serious injuries and 85 minor injuries
- Worst month: October (23 crashes)
- Worst day of week: Saturday (38 crashes)
- Wet road crashes: 48 percent
- Night time crashes: 37 percent
- Alcohol over limit (injury crashes): 22 percent
- Most common injury crash factors: poor handling (32 percent) followed by too fast (30 percent)
- Road factors: 20 percent
- At fault male driver (injury crashes): 64 percent
- At fault driver held full NZ licence (injury crashes): 52 percent
- Most common at fault drivers' age group (injury crashes): 15-29 years old (52 percent)

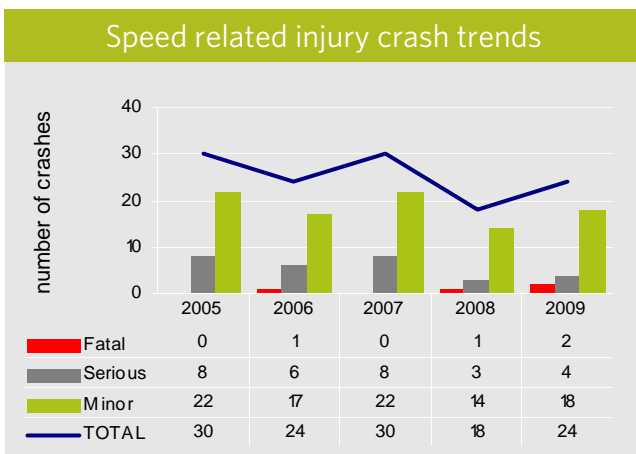
Speed

Speed is a major contributing factor involved in road crashes. In 2009, excessive speed contributed to 31 percent of all fatal crashes and 17 percent of all injury crashes in New Zealand. These crashes resulted in 118 deaths, 553 serious injuries and 2067 minor injuries.

In Porirua City, speed too fast for conditions was a factor in 23 percent of all injury crashes in 2009, which was higher proportionally when compared to both the national average (17 percent) and the average for similar authorities (20 percent).

During the last five year period (2005-2009) there were 126 speed-related injury crashes resulting in 5 deaths, 40 serious injuries and 138 minor injuries. There were also 283 non-injury speed-related crashes reported in this period.

The latest five year data shows a downward trend in the total number of speed related injury crashes. However the trend in the number of fatal and serious casualties resulting from these crashes is upwards, totalling 13 from the 6 crashes in 2009.



Three-quarters of the speed related crashes occurred on local roads (73 percent) and three-fifths took place in urban areas (60 percent).

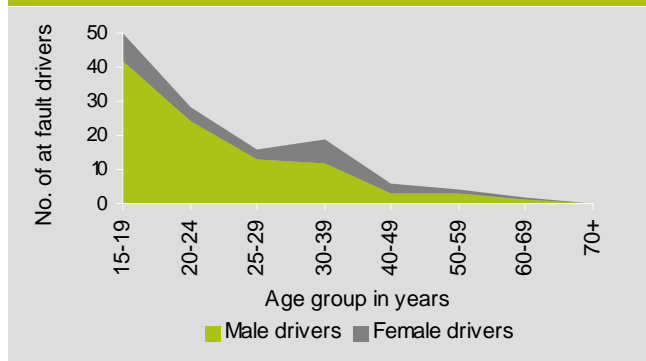
The following table shows a breakdown of the speed limit environ of all speed related crashes in Porirua City 2005-2009.

Speed related crashes					
	2005	2005	2006	2007	2009
Urban	53	45	52	54	43
Rural	36	28	32	25	41
Total	89	73	84	79	84

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

Sixty percent of the at fault drivers in these crashes held either a learner or restricted licence, never licensed or disqualified drivers.

Age & gender of at fault drivers 2005-2009



Seventy-eight percent of at fault drivers in speed related injury crashes were male. Forty percent of at fault drivers, both sexes combined, were in the age group 15-19 years.

Alcohol was a contributing factor in 29 percent of the speed-related injury crashes in the city 2005-2009.

Further information about speed related crashes in Porirua City 2005-2009 on:

Local roads

- 4 deaths, 36 serious injuries and 100 minor injuries
- Worst month: May (33 crashes)
- Worst day of week: Saturday (68 crashes)
- Wet road crashes: 36 percent
- Night time crashes: 45 percent
- Alcohol over limit (injury crashes): 33 percent
- Most common injury crash factor: loss of control at bends (78 percent)
- At fault male driver (injury crashes): 82 percent
- At fault driver held full NZ licence (injury crashes): 32 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old (62 percent)

State highways

- 1 death, 4 serious injuries and 38 minor injuries
- Worst month: November (13 crashes)
- Worst day of week: Tuesday (26 crashes)
- Wet road crashes: 54 percent
- Night time crashes: 37 percent
- Alcohol over limit (injury crashes): 15 percent
- Most common injury crash factor: loss of control at bends (64 percent)
- At fault male driver (injury crashes): 64 percent
- At fault driver held full NZ licence (injury crashes): 43 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old (64 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.

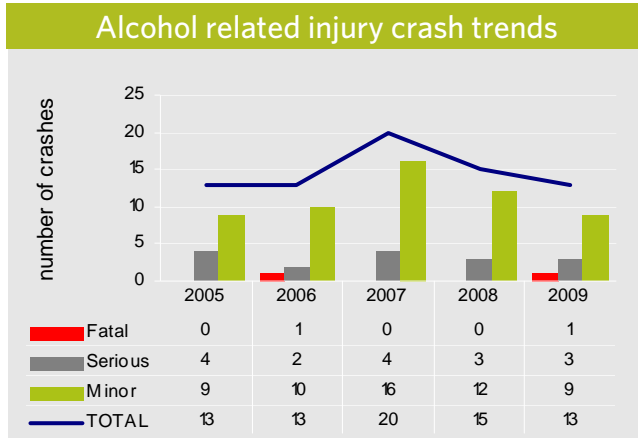
During 2009, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes in New Zealand.

Porirua City

During the last five year period (2005-2009) 17 percent of all injury crashes in Porirua City were alcohol-related. This is proportionally higher when compared to the national average (15 percent) and is equal to the similar authorities average for the same period. In 2009 in the city, 14 percent of all injury crashes recorded alcohol as a contributing factor.

There were 74 alcohol-related injury crashes and 155 non-injury crashes reported in the last five years. These crashes resulted in 2 deaths, 22 serious and 84 minor injuries.

The latest five year data shows a slight upwards trend in the total number of injury crashes over this period, even though the last three years show downward trend in the number of these crashes.



Seventy-nine percent of the alcohol related crashes occurred on local roads in urban areas, which have speed limits of less than 80km/hr. Fifty-nine percent of alcohol-related crashes involved a loss of control at bend crash movement and 29 percent were at intersections.

Most at fault drivers in injury crashes were male (81 percent), with just over a quarter of at fault drivers in each of the age groups 15-19 years and 20-24 years (27 percent each).

Thirty-six percent of at fault drivers held either learner or restricted licence and 25 percent were never licensed or disqualified drivers.

Alcohol and speed

Speed was a factor in half of the alcohol-related injury crashes in Porirua City during the period 2005-2009, resulting in 2 deaths, 14 serious injuries and 43 minor injuries. Alcohol and speed combined has been a factor in 7 percent all injury crashes in the city during the last five years, accounting for 13 percent of the fatal and serious casualties.

Eighty-six percent of the crashes where driver alcohol and speed were both contributing factors occurred on local roads and mostly in dark conditions (72 percent). Eighty-five percent of these crashes were loss of control at bend type crashes.

Sixty-nine percent of the at fault drivers in these injury crashes where alcohol and speed were both factors were males under 24 years of age. Thirty-five percent of at fault drivers held either learner or restricted licences and similarly 35 percent were never licensed or disqualified drivers.

Further information about alcohol related crashes in Porirua City 2005-2009 on:

Local roads

- 1 death, 20 serious injuries and 56 minor injuries
- Worst month: December (25 crashes)
- Worst day of week: Sunday (52 crashes)
- Wet road crashes: 22 percent
- Night time crashes: 74 percent
- Crashes at Intersection: 30 percent
- Most common injury crash factors: too fast (61 percent) followed by poor handling (17 percent)
- Road factors: 3 percent
- At fault male driver (injury crashes): 83 percent
- At fault driver held full NZ licence (injury crashes): 15 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old (64 percent)

State highways

- 1 death, 2 serious injuries and 28 minor injuries
- Worst months: October and December (7 crashes each)
- Worst day of week: Thursday (14 crashes)
- Wet road crashes: 35 percent
- Night time crashes: 60 percent
- Crashes at Intersection: 30 percent
- Excessive speed: 20 percent
- Most common injury crash factors: poor handling and poor observation (25 percent each)
- Road factors: 10 percent
- At fault male driver (injury crashes): 75 percent
- At fault driver held full NZ licence (injury crashes): 65 percent
- Most common at fault drivers' age group (injury crashes): 20-39 years old (60 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.

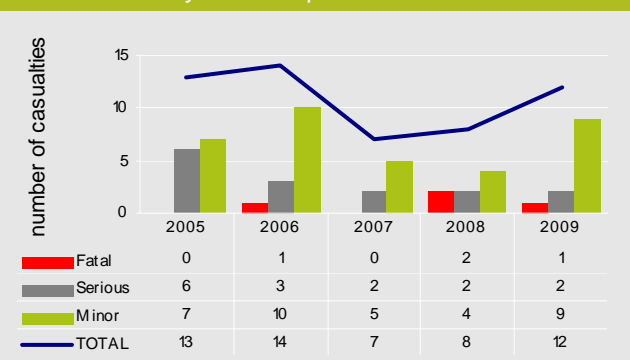
In Porirua City, vulnerable road users were involved in 24 percent of all injury crashes 2005-2009, accounting for 20 percent of all casualties; 53 percent of all deaths and 32 percent of all serious injuries in the city for this period.

Pedestrians

Injury crashes involving pedestrians in Porirua City accounted for 10 percent of all injury crashes during the last five year period. These pedestrian crashes resulted in 4 deaths, 15 serious injuries and 35 minor injuries. In terms of casualties, pedestrians made up 27 percent of all deaths and 14 percent of all serious injuries 2005-2009.

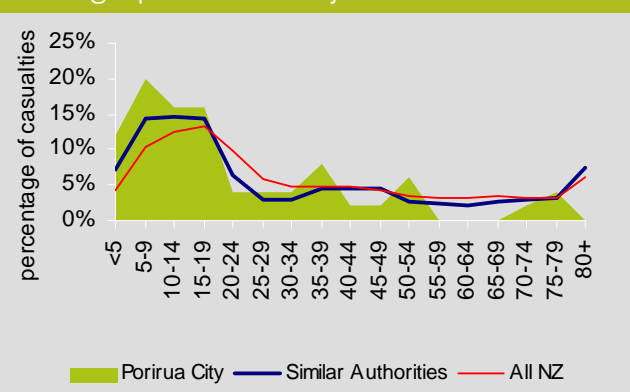
The latest five year data shows a downward trend in the total number of casualties in crashes involving pedestrians over this period, even though the trend over the last three years is upwards.

Casualty trends: pedestrian crashes



A third percent of pedestrians injured were under nine years of age (32 percent). Similarly a third of the pedestrians injured were aged 10-19 years (32 percent). This differs from similar authorities and skews the age distribution of pedestrian casualties in the city towards the young.

Age: pedestrians injured 2005-2009



Location/ route	Number of pedestrian injury crashes
Mungavin Avenue / Martin St	3
Titahi Bay Road / Awarua St	2
Mungavin Avenue / Gear Terrace	2
Mungavin Avenue / Gloucester St	2
Warspite Avenue / Omapere St	2
Mungavin Avenue route	9
Warspite Avenue route	8
Titahi Bay Road route	4

Pedestrian crashes were concentrated on the arterial and collector roads in Porirua City. The worst locations or routes 2005-2009 are shown in the table above.

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

- 23 percent involved pedestrians crossing roads heedless of traffic
- 5 percent involved pedestrians who were visibly intoxicated
- 4 percent involved pedestrians stepping out from behind parked cars

A quarter of pedestrian crashes were at intersections (25 percent) and three-quarters occurred during the hours of daylight (75 percent). Eleven percent record that a driver failed to give way to pedestrians on a zebra crossing.

Further information regarding pedestrian crashes in Porirua City 2005-2009 on:

Local roads

- 4 deaths, 15 serious injuries and 32 minor injuries
- Worst months: March and June (7 crashes each)
- Worst day of week: Friday (13 crashes)
- Wet road crashes: 19 percent
- Night time crashes: 24 percent
- Alcohol over limit (injury crashes): 11 percent
- Crashes at intersection: 22 percent
- Pedestrian factors contributing: 57 percent

State highways

- 3 minor injuries, 1 in 2007 and 2 in 2009
- Worst months: 2 in December 2009 and 1 in September 2007
- Worst days of week: Friday (2 crashes) and Tuesday (1 crash)
- Wet road crashes: Nil
- Night time crashes: 33 percent
- Alcohol over limit (injury crashes): 33 percent
- Crashes at intersection: 67 percent
- Pedestrian factors contributing: 67 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 Porirua City 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.

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