

briefing notes road safety issues

Wairoa District

This report details aspects of Wairoa 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 Wairoa 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 Wairoa District is compared to similar authorities and those crashes with a high social cost (relating mainly to high numbers of fatal and serious crashes).

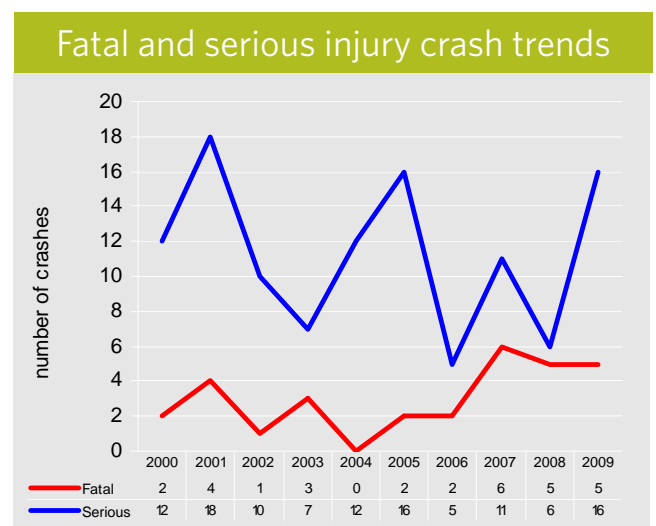
2009 road trauma	
Casualties	Wairoa District
Death	5
Serious injury	25
Minor injury	45
Total casualties	75

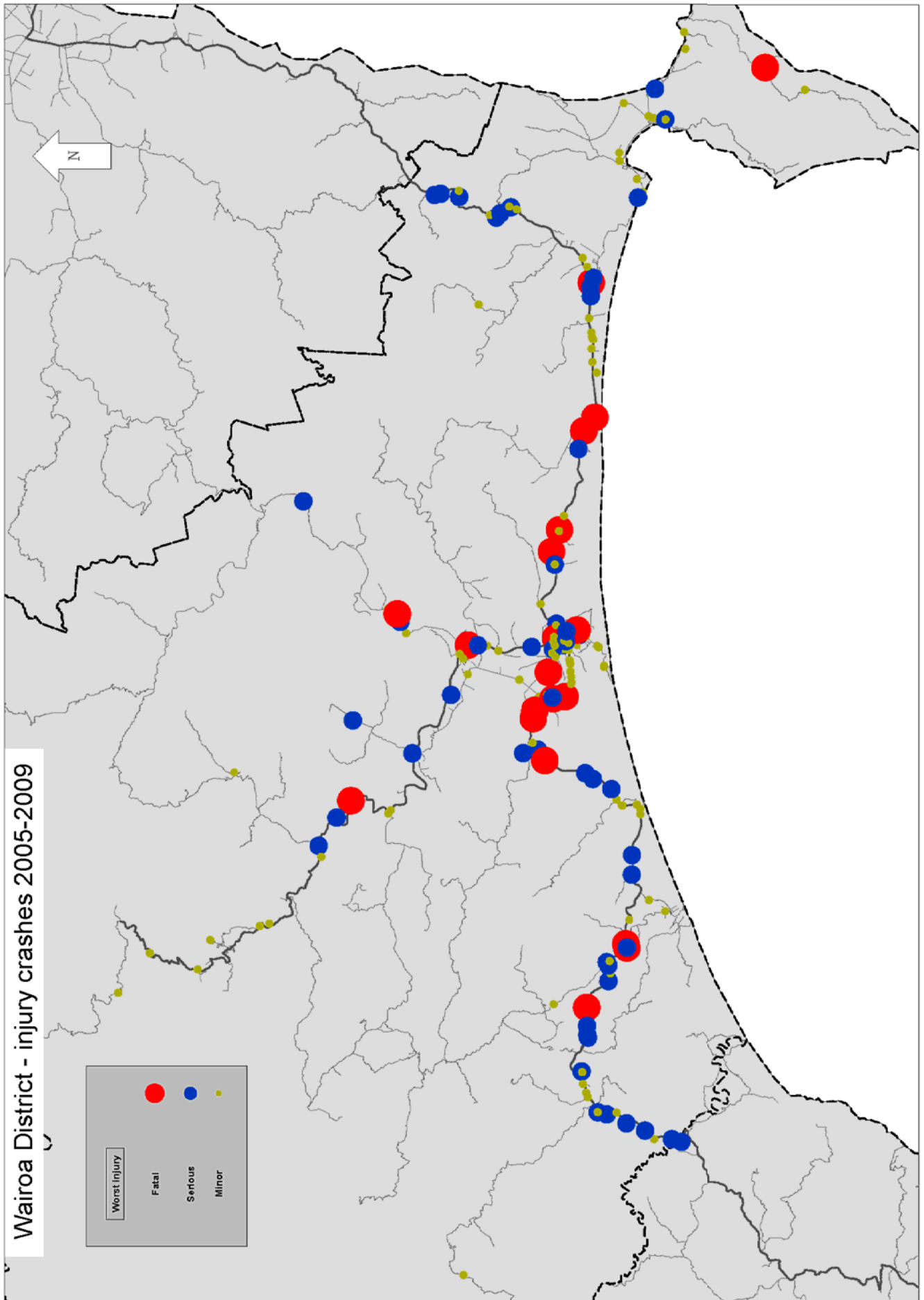
Crashes	Wairoa District
Fatal crashes	5
Serious injury crashes	16
Minor injury crashes	25
Total injury crashes	46
Non-injury crashes	56 reported

2009 - social cost of crashes	
Local roads	\$ 9.86M
State highways	\$ 27.07M
Total	\$ 36.93M

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	
Wairoa District	
Loss of control on rural roads	
Alcohol	
Fatigue	
Vulnerable road users; motorcyclists	





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

Wairoa District

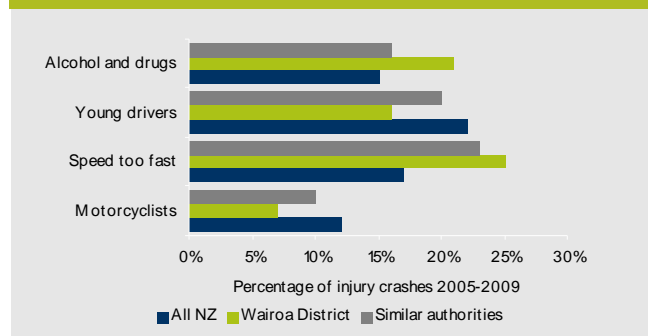
Presented below is a brief look at Wairoa District’s position on Safer Journeys’ areas of high concern compared to similar authorities’ averages and the all-NZ averages (sample period 2005-2009).

Restraints

According to 2009 survey results, restraint use rate in Wairoa District are 96 and 95 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 Wairoa District, alcohol was recorded in 21 percent of injury crashes in the last five years, resulting in 10 deaths, 25 serious injuries and 43 minor injuries. Alcohol related crashes were significantly higher proportionally than in similar authorities, and the trend in the district is upwards.

Young drivers

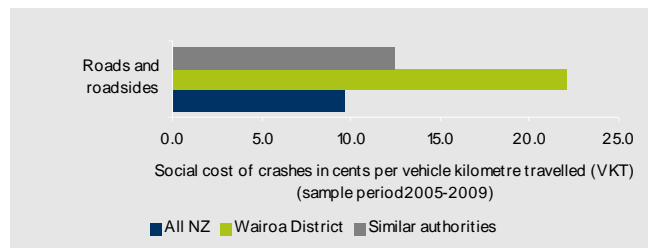
In Wairoa District, young drivers aged 15-19 years were involved in 16 percent of all injury crashes during the last five year period, resulting in 3 deaths, 14 serious injuries and 46 minor injuries. This was significantly lower proportionally compared to similar authorities, the trend is downward and the numbers low.

Speed too fast

Speed too fast was recorded in 25 percent of injury crashes in Wairoa District in the last five years, resulting in 6 deaths, 23 serious injuries and 60 minor injuries. Speed as a factor in crashes was higher proportionally when compared to similar authorities.

Motorcyclists

In Wairoa District, motorcyclists were involved in 7 percent of all injury crashes during the last five year period, resulting in 7 deaths, 40 serious injuries and 53 minor injuries. Injury crashes involving motorcyclists were significantly lower proportionally compared to similar authorities.



Roads and roadsides

In Wairoa District, there were on average 34 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes was 78 percent higher than the similar authority average (see the graph above).

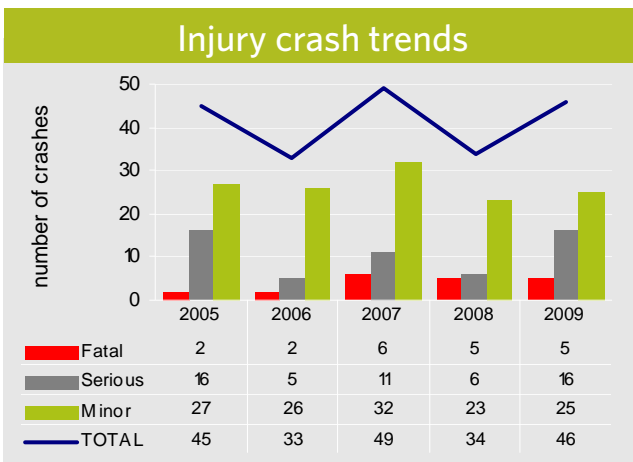
Overview 2009

In 2009 in Wairoa District, 46 injury crashes resulting in 75 casualties and 56 non-injury crashes were reported by the New Zealand Police. Sixty-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.

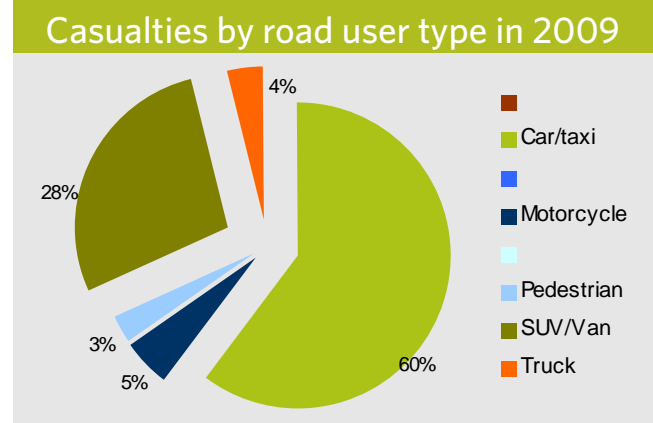
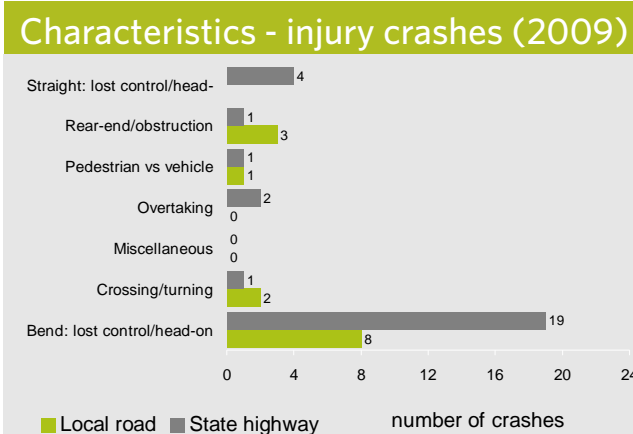
Casualties by injury type in 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Total	5	25	45	75
Local roads vs state highways				
Local roads	1	11	17	29
State highways	4	14	28	46
Rural vs urban roads				
Rural ¹	5	20	33	58
Urban	0	5	12	17

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 trend, even though numbers fluctuating annually, while the combined fatal and serious injury trend is upwards.



In 2009 three-quarters of injury crashes involved a driver losing control of their vehicle.



Over half the casualties were drivers and passengers of cars, over a quarter of sports utility vehicles or vans and one-twelfth were vulnerable road users (pedestrians and motorcyclists).

In 2009 in Wairoa District, young drivers aged 15 to 19 years inclusive were at fault drivers in 7 percent of injury crashes and older drivers, 70 years of age and over, in 7 percent.

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

Local roads

- Total number of injury crashes: 18
- Worst months: February, August and November (17 percent each)
- Worst days of week: Tuesday, Saturday and Sunday (23 percent each)
- Wet road crashes: 22 percent
- Night time crashes: 44 percent
- Alcohol over limit: 44 percent
- Too fast for conditions: 6 percent
- Failed to give way/stop: 11 percent
- Vehicle factors : 11 percent
- Crashes at intersection: 28 percent
- Road factors: 17 percent
- At fault male driver: 79 percent
- At fault driver held full NZ licence: 74 percent

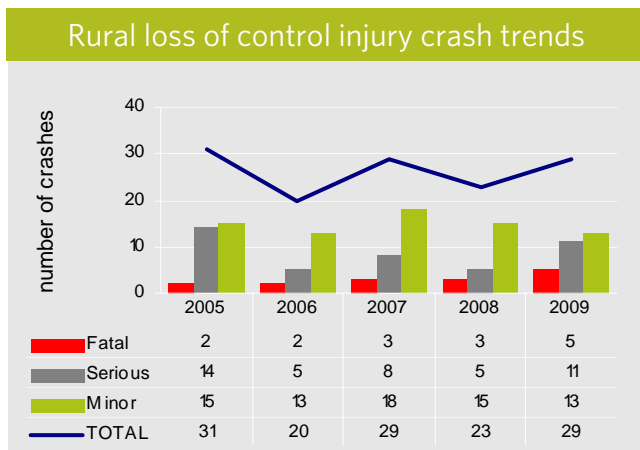
State highways

- Total number of injury crashes: 28
- Worst month: March (25 percent)
- Worst day of week: Sunday (25 percent)
- Wet road crashes: 15 percent
- Night time crashes: 25 percent
- Alcohol over limit: 14 percent
- Too fast for conditions: 18 percent
- Incorrect lane/posn: 32 percent
- Fatigue: 25 percent
- Crashes at intersection: 15 percent
- Road factors: 4 percent
- At fault male driver: 73 percent
- At fault driver held full NZ licence: 73 percent

Rural loss of control

During the most recent five year period (2005-2009) 63 percent of all injury crashes in Wairoa District occurred due to loss of control on rural roads. These crashes resulted in 19 deaths, 56 serious injuries and 138 minor injuries. There were a further 154 non-injury crashes reported.

The latest five year data shows a level trend in the total number of loss of control injury crashes on rural roads.



Eighty-five percent of rural loss of control crashes occurred at bends. Nineteen percent of rural loss of control injury crashes record fatigue as a factor.

The following table shows a breakdown of the general environment of rural loss of control crashes in the district 2005-2009.

Rural loss of control 2005-2009		
Loss of Control	Local roads	State highways
At bends	51 crashes	191 crashes
On Straight	9 crashes	35 crashes

Most crashes at bends involved a driver losing control of their vehicle then running off the road or perhaps colliding with another vehicle, as was the case in a fifth of all rural loss of control crashes (19 percent).

Seventy percent of all crashes struck roadside objects. The three most common roadside hazards struck during crashes in the district were ditches (30 percent), fences (20 percent) and banks (16 percent). Hitting these objects can result in more serious injuries than would otherwise be sustained.

The following table shows that the majority of these crashes were a single vehicle crashes. Alcohol was a factor in a sixth of the injury crashes and too fast for conditions in a third of these injury crashes. A third of all crashes were at night and similar a third on wet roads. A fifth of all loss of control crashes show road factors to have been a contributing factor.

Rural loss of control crashes	
Crash characteristic or factors	Percentage occurrence
Single vehicle	82%
Alcohol (injury crashes)	17%
Too fast for the conditions (injury crashes)	33%
Road factors	18%
Poor handling (injury crashes)	40%
Wet road	32%
Night time	35%

Eighteen percent of rural loss of control injury crashes involved trucks (2005-2009), a trend that is showing an increase, resulting in 4 deaths, 9 serious and 15 minor injuries in the last five years.

Further information about all rural loss of control crashes in Wairoa District 2005-2009 on:

Local roads

- 2 deaths, 11 serious injuries and 34 minor injuries
- Worst month: January and December (9 crashes each)
- Worst day of week: Monday (15 crashes)
- Wet road: 24 percent
- Night time: 35 percent
- Alcohol over limit: 19 percent
- Most common injury crash factor: failed to keep left (33 percent) followed by poor handling (32 percent)
- At fault male driver (injury crashes): 72 percent
- 25 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed
- Most common age range (injury crashes): 15 to 19 years (24 percent) and 30-49 years (48 percent)

State highways

- 17 deaths, 45 serious injuries and 104 minor injuries
- Worst month: March (30 crashes)
- Worst day of week: Tuesday (36 crashes)
- Wet road: 34 percent
- Night time: 35 percent
- Alcohol over limit: 17 percent
- Most common injury crash factor: poor handling (42 percent) followed by too fast (35 percent each)
- At fault male driver (injury crashes): 72 percent
- 30 percent of drivers at fault (injury crashes) were either on restricted or on learner license
- Most common age range (injury crashes): 15 to 39 years (59 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.

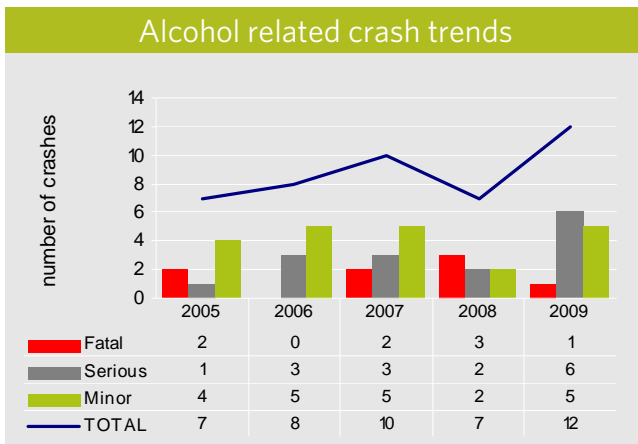
During 2009, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes in New Zealand.

Wairoa District

During the last five year period (2005-2009) 21 percent of all injury crashes in Wairoa District were alcohol related. This is higher when compared to the similar authorities average (16 percent). Alcohol-related crashes show an increasing trend in the district with 26 percent of all injury crashes last year (2009) recording alcohol as a factor.

There were 44 injury and 27 non-injury alcohol-related crashes reported in the last five years. These crashes have resulted in 10 deaths, 25 serious and 44 minor injuries.

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



Over half of the alcohol-related crashes occurred in rural areas (54 percent). Fifty-nine percent of injury crashes occurred on state highways, these accounted for 90 percent of all alcohol-related fatalities. Fifty-five percent of all alcohol-related crashes involved loss of control at bend type crash movements and 35 percent of all injury crashes show drivers driving too fast for conditions. Three-fifths of all alcohol-related crashes occurred during hours of darkness (62 percent).

Two-fifths of the at fault drivers in alcohol related injury crashes were aged under 25 years of age (41 percent) and a third were in the age group 25-40 years. Fifty-six percent of the at fault drivers held either a learner licence or a restricted licence. Most of the at fault drivers in alcohol-related injury crashes were male (88 percent).

Alcohol and speed

Speed was a factor in 7 percent of all the alcohol-related injury crashes in the district 2005-2009, resulting in 3 deaths, 6 serious injuries and 14 minor injuries. Speed itself has been a factor in 25 percent of all injury crashes in the district in the last five years.

Fifty-eight percent of the crashes where alcohol and speed were both contributing factors occurred within rural speed limits, mostly on the state highways (48 percent) and in dark conditions (79 percent). Three quarters of these were loss of control at bend type crashes (74 percent). Four-fifths were single vehicle crashes (79 percent).

Just over half of the at fault drivers in these injury crashes were males under 25 years of age (54 percent). Most at fault drivers held a learner licence or restricted licence (69 percent).

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

Local roads

- 1 death, 13 serious injuries and 24 minor injuries
- Worst month: August (7 crashes)
- Worst day of week: Saturday (12 crashes)
- Wet road: 17 percent
- Night time: 69 percent
- Intersection: 31 percent
- Most common injury crash factor: speed too fast (22 percent) and poor handling (28 percent)
- At fault male driver (injury crashes): 83 percent
- 32 percent of drivers at fault (injury crashes) were either on learner or restricted license
- Most common at fault drivers' age group (injury crashes): 15 to 24 years old (39 percent)

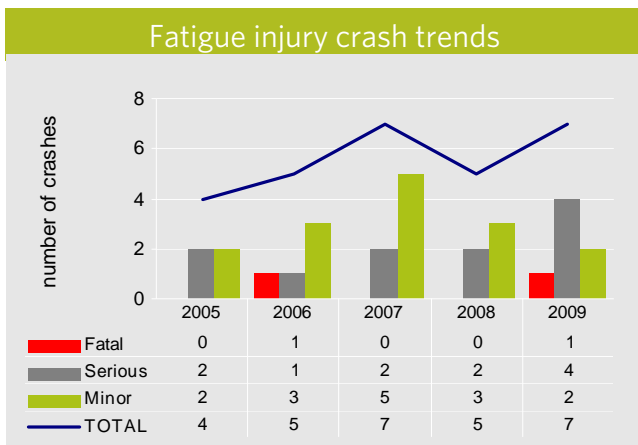
State highways

- 9 deaths, 12 serious injuries and 20 minor injuries
- Worst month: December (5 crashes)
- Worst day of week: Sunday (10 crashes)
- Wet road: 9 percent
- Night time: 63 percent
- Intersection: 23 percent
- Most common injury crash factor: speed too fast (35 percent) followed by fatigue (27 percent)
- At fault male driver (injury crashes): 89 percent
- 56 percent of drivers at fault (injury crashes) were either on restricted or on learner license
- Most common at fault drivers' age group (injury crashes): 15 to 24 years (42 percent) and 25 to 39 years (35 percent)

Fatigue

During the most recent five year period (2005-2009) fatigue was reported as a factor contributing to 14 percent (28 injury crashes) of all injury crashes in Wairoa District. These crashes resulted in 2 deaths, 12 serious injuries and 22 minor injuries. There were a further 21 non-injury crashes reported.

The latest five year data shows an upward trend in the total number of fatigue-related injury crashes.



Eighty-one percent of the fatigue related crashes occurred on state highways in rural areas. During 2005-2009 there were 25 fatigue related injury crashes on state highways:

- SH 2: 19 fatigue-related injury crashes
- SH 38: 6 fatigue related injury crashes.

Forty-three percent of fatigue related crashes occurred on a weekend, between 6pm Friday and 6am Monday. Half (51 percent) of the fatigue related crashes occurred during the hours of darkness and 9 percent occurred at intersections.

The most common factors in the fatigue-related injury crashes are alcohol (29 percent) and too fast for conditions (11 percent).

The most common movement cause associated with fatigue is loss of control (98 percent):

- loss of control at bends: 67 percent
- loss of control on a straight road: 31 percent

There is a wide spread of at fault drivers across all age groups involved in fatigue-related crashes, the most predominant being that group aged 20-39 years (43 percent) and mostly male (93 percent).

Sixty percent of drivers at fault in fatigue-related injury crashes held a full NZ driver's licence and 30 percent of at fault drivers in these crashes held either a learner licence or a restricted licence.

Fatigue causes	Percentage of injury crashes	
	Wairoa District	New Zealand
General (drowsy, tired, fell asleep)	11.1%	4.6 %
Long trip	nil	0.2 %
Lack of sleep	1.4%	1.0 %
Worked long hours before driving	0.5%	0.3 %

The above table shows the recorded causes of fatigue and their contribution to all injury crashes in Wairoa District 2005-2009.

Further information about all fatigue-related crashes in Wairoa District 2005-2009 on:

Local roads

- 3 serious injuries and 2 minor injuries
- Worst month: November (3 crashes)
- Worst day of week: Sunday (2 crashes)
- Wet road crashes: 40 percent
- Night time crashes: 80 percent
- Alcohol over limit (injury crashes): 33 percent
- Most common injury crash factors: poor handling (67 percent) followed loss of control at bend (60 percent)
- Road factors: nil
- At fault male driver (injury crashes): 100 percent
- At fault driver held full NZ licence (injury crashes): 67percent
- Most common at fault drivers' age group (injury crashes): 25-39 years old

State highways

- 2 deaths, 11 serious injuries and 18 minor injuries
- Worst month: December (8 crashes)
- Worst day of week: Sunday (10 crashes)
- Wet road crashes: 21 percent
- Night time crashes: 48 percent
- Alcohol over limit (injury crashes): 28 percent
- Most common injury crash factors: failed to keep left (16 percent) followed by poor handling (12 percent)
- Weather factors: 2 percent
- At fault male driver (injury crashes): 92 percent
- At fault driver held full NZ licence (injury crashes): 58 percent
- Most common at fault drivers' age group (injury crashes): 15 to 24 years (36 percent)

Vulnerable road users

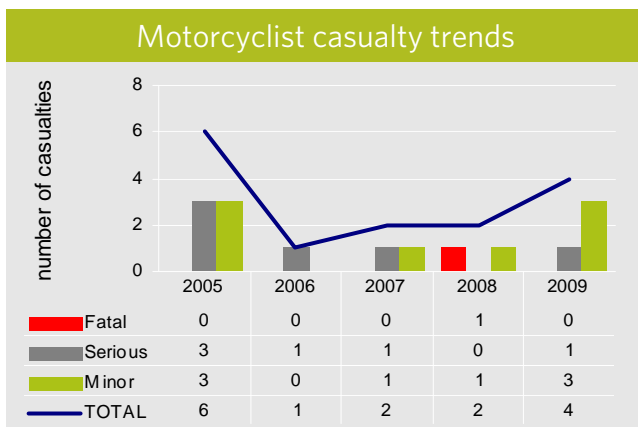
Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries. These are described as pedestrians, motorcyclists and cyclists.

In Wairoa District, vulnerable road users were involved in 6 percent of all injury crashes over the last five years (2005-2009), accounting for 8 percent of all casualties; 13 percent of all deaths, 12 percent of all serious injuries and 6 percent of all minor injuries.

Motorcyclists

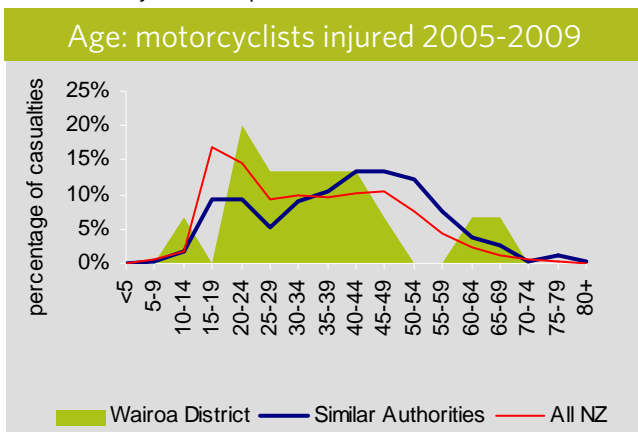
Injury crashes involving motorcyclists represent 7 percent of all injury crashes in Wairoa District during the last five year period 2004-2009, resulting in 1 death, 6 serious injuries and 8 minor injuries. There were a further 4 non-injury crashes reported involving motorcyclists.

The latest five year data shows a slightly downward trend in the total number of casualties involved in motorcyclist crashes.



Most of the motorcycle crashes occurred on rural roads (84 percent). All but one crash occurred during daylight hours (94 percent) and similarly in dry conditions (94 percent). Seventeen percent of the crashes were at intersections.

The age distribution of injured motorcyclist is shown below. Most commonly injured motorcyclist age group was 20-29 years (33 percent).



High motorcyclist crash locations/routes	Number of motorcyclist injury crashes 2005-2009
SH 2 route generally through Wairoa town centre especially at intersections	12
SH 38 near Ohuka Road and Aniwanuiwa Road	2
Cricklewood Road	1
Ohuka Road	1
Tiniroto Road / Ruakituri Road	1

The worst accident locations or routes for motorcyclist injury accidents in the district are listed above.

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

- loss of control: 56 percent
- a vehicle turning right from a side road or driveway across a vehicle travelling straight through: 17 percent
- a motorcyclist and another vehicle colliding head-on when one of the parties has swung wide on a bend: 12 percent

Further information about motorcyclist crashes in Wairoa District 2005-2009 on:

Local roads

- 2 serious injuries and 3 minor injuries
- Worst day of week: Monday (3 crashes)
- Most common injury crash factor: loss of control at bend (60 percent) and poor handling (50 percent)
- Wet road crashes: none
- Night time crashes: none
- Crashes at intersection: none
- Alcohol over limit (injury crashes): none
- Male motorcyclist injured: 60 percent
- Speed too fast (injury crashes): none

State highways

- 1 death, 4 serious injuries and 5 minor injuries
- Worst day of week: Saturday (6 crashes)
- Most common injury crash factor: lost control at bend (46 percent).
- Wet road crashes: 8 percent
- Night time crashes: 8 percent
- Crashes at intersection: 23 percent
- Alcohol over limit (injury crashes): 10 percent
- Male motorcyclist injured: 82 percent
- Speed too fast (injury crashes): 40 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 Wairoa 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.

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