

briefing notes - road safety issues

Waimakariri 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.

The intent of the report is to highlight the key road safety issues and be a resource to help identify possible ways to reduce the number of road deaths and injuries in Waimakariri District.

This report is the ninth road safety report for Waimakariri District. All the material unless otherwise stated in this report applies to both local roads and to Transit New Zealand (Transit NZ) roads.

In each new report one year's data is added to a five year block and the oldest dropped so it is unlikely that the core issues would change radically from report to report.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when Waimakariri District is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly). We have included a brief overview of crashes in the district.

We encourage local bodies to use the free access to the Ministry of Transport's Crash Analysis System to delve deeper into the highlighted issues.

Major road safety issues

Waimakariri District

Loss of Control

Intersections

2007 road trauma

Casualties

Waimakariri District

Deaths 3

Serious casualties 23

Minor casualties 92

Nationally

Speed

Alcohol

Failure to give way

Restraints

Crashes

Waimakariri District

Fatal crashes 3

Serious injury crashes 18

Minor injury crashes 64

Non-injury crashes 185

Overview

In 2007 on local roads in Waimakariri District there were 72 injury crashes and 144 non-injury crashes. In addition there were 13 injury crashes and 41 non-injury crashes on Transit New Zealand (Transit NZ) roads, both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 85 injury crashes, by rural or urban areas for all roads, (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by environment 2007				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	18	54	75
Urban	0	5	38	43
Total	3	23	92	118

The annual numbers of fatal and serious injury crashes in the district have generally decreased from 30 in 1998 to 21 in 2007. The lowest number of 15 was recorded in 2002. In 2007 the number of non-injury crashes increased notably. There were 185 non-injury crashes in 2007 compared with the previous high of 133 in 2005.

Crash trends				
Year	Fatal crashes	Serious injury crashes	Minor injury crashes	Non-injury crashes
1998	1	29	59	116
1999	7	22	37	91
2000	2	29	32	81
2001	3	21	44	118
2002	4	11	48	93
2003	4	20	64	94
2004	7	15	63	102
2005	2	21	70	133
2006	1	19	61	121
2007	3	18	64	185

Injury crashes 2003 - 2007		
Crash type or contributory cause 2003 to 2007	Local Road Percent of injury crashes	Transit Road Percent of injury crashes
Alcohol	17%	10%
Too fast	20%	11%
Straight—lost control crash	25%	23%
Bend—lost control crash	22%	18%
Crossing / turning crash	25%	25%
Road factors	9%	9%
Vulnerable road users (Percent of casualties)	13%	6%
1, Pedestrians	3%	1%
2, Cyclists	5%	2%
3, Motorcyclists	5%	3%

Further information about 2003 to 2007 injury and non-injury crashes on local roads:

- Worst month September, October
- Worst day Saturday
- 22 percent on wet or icy roads
- 37 percent at night
- 40 percent at intersections
- Social cost of crashes in 2007 was \$23.5m

Further information about 2003 to 2007 injury and non-injury crashes on Transit NZ roads:

- Worst month May
- Worst day Saturday
- 29 percent on wet or icy roads
- 35 percent at night
- 35 percent at intersections
- Social cost of crashes in 2007 was \$12.2m

Loss of Control

Between 2003 and 2007 46 percent of all crashes in Waimakariri District involved loss of control. These crashes resulted in 10 fatalities, 59 serious injuries and 201 minor injuries.

Non-injury crash numbers have risen in the last five years.

Loss of Control Crashes 2003 to 2007				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Non-injury crashes
2003	3	8	27	46
2004	3	7	28	50
2005	1	12	31	63
2006	1	13	26	50
2007	1	5	30	87
Total	9	45	142	296

Most loss of control crashes occur when a driver loses control of their vehicle and either runs off the road or collides with another vehicle.

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

The four most common roadside hazards struck in injury crashes in Waimakariri District were poles (36), ditches (28) trees (23) and fences (55) from a total of 191 objects struck.

Main characteristics of injury loss of control crashes	
Crash characteristic	Percentage of crashes
Bend	46%
Straight road	54%
Single vehicle	82%
Alcohol	24%
Excessive speed for the conditions	34%
Road factors	15%
Poor handling	26%
Rural road	86%
Wet road	29%
Night time	49%

Further information about injury loss of control crashes (2003 to 2007) on local roads in Waimakariri District :

- 5 deaths, 44 serious injuries and 168 minor injuries
- 59 percent of at fault drivers were male
- Most common crash type "Lost control on straight road"
- Most common age group 15-19 years
- 26 percent of crashes involved alcohol
- 38 percent of crashes involved speed
- Worst month January, October
- Worst day of week Saturday
- Worst time period 3 pm - 9 pm

Further information about injury loss of control crashes (2003 to 2007) on Transit NZ roads in Waimakariri District:

- 5 deaths, 15 serious injuries and 33 minor injuries
- 59 percent of at fault drivers were male
- Most common crash type "Lost control on straight road"
- Most common age group 15-19 years
- 18 percent of crashes involved alcohol
- 18 percent of crashes involved speed
- Worst month January
- Worst day of week Saturday
- Worst time period 6 am - 9 am

Intersections

In Waimakariri District during the period 2003 to 2007 there were 149 injury crashes at intersections and 262 non-injury crashes. In these crashes, 5 people died, 39 received serious injuries and 175 received minor injuries.

51 percent of these crashes were in urban areas of the district. These crashes make up 54 percent of all urban crashes. There were 206 intersection crashes in rural areas of the District.

Junction type Injury and Non-injury crashes		
Junction Type	Urban	Rural
Roundabout	27	0
Tee	111	139
Cross (X)	79	62
Multi leg	1	5
Total	218	206

Over the last five years the annual number of non-injury crashes at intersections has increased.

Crashes at Intersections					
	2003	2004	2005	2006	2007
Injury crash	35	26	37	26	25
Non-injury crash	37	46	52	51	76
Total	72	72	89	77	101

The most common intersection crash is one when two drivers cross paths at right angles and collide. The second most common crash is when a driver turns right at an intersection and is hit by a vehicle approaching from the right.

The main causes contributing to crashes described in Police reports were:

- Not checking properly
- Failure to stop and give way
- General errors of judgement
- Poor handling

Locations with high crash numbers

Intersection name	Total crashes 2003-2006	Total 2007
SH 1 / Main North Road	18	4
Percival Street / Queen Street	14	0
SH 71 / Cam Road off ramp	11	2
Williams Street / Beach Road	3	5
Tram Road / Main North Road	7	0
Williams Street / Charles Street	5	2

These locations are listed regardless of work done.

Further information about injury crashes at intersections from 2003 to 2007 on local roads in Waimakariri District :

- 3 deaths, 28 serious injuries and 147 minor injuries
- 15 percent involved alcohol
- 13 percent involved speed
- 19 percent wet roads
- 24 percent night time
- Worst month February, November
- Worst day of week Thursday
- Worst time 3 pm - 6 pm

Further information about injury crashes at intersections from 2003 to 2007 on Transit NZ roads in Waimakariri District:

- 2 deaths, 11 serious injuries and 28 minor injuries
- 7 percent involved alcohol
- 3 percent involved speed
- 23 percent wet roads
- 20 percent night time
- Worst month May
- Worst day of week Wednesday
- Worst time 3 pm - 6 pm

National issues

This section contains some brief information on the key national road safety issues as measured in Waimakariri District. They may have been covered elsewhere in this document or not be a specific issue.

Speed

In Waimakariri District, "Too fast" was recorded in 74 fatal and injury crashes in the district in the last five years resulting in 6 deaths and 111 injuries. Speed as a factor in crashes is increasing the district.

68 percent of all speed-related crashes were Lost control on a bend. Poor handling and Poor judgement was the other driver factors most often associated with speed in injury crashes.

67 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 19 years .

Alcohol

In Waimakariri District, alcohol was involved in 62 fatal and injury crashes in the district in the last five years resulting in 5 deaths, and 77 other injuries. The number of injury crashes involving alcohol is increasing.

64 percent of all alcohol crashes were in rural areas of the district. 77 percent were Lost control. Speed and Poor observation were the other factors often associated with alcohol in injury crashes.

73 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 19 years .

Failure to give way

In Waimakariri District, failure to give way or stop was reported in 85 fatal and injury crashes during the last five years resulting in 4 deaths and 129 other injuries.

Poor observation was the driver factor most often associated with failure to give way.

65 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 19 years .

Restraints

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a regional level, and may not be fully appropriate to a Territorial Authority. The results are obtainable from the Ministry of Transport website.

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

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