



briefing notes - road safety issues

Waikato 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 identify possible ways to reduce the number of road deaths and injuries in the Waikato District.

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

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 for any local body 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 the Waikato District is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

We encourage local authorities to use the Ministry of Transport's Crash Analysis System (CAS) to further investigate the highlighted issues.

Major Road Safety Issues

Waikato District

Intersections
Alcohol
Speed
Bends – Loss of Control

Nationally

Speed
Alcohol
Failure to give way
Restraints

2007 road trauma

Casualties

Deaths	19
Serious casualties	57
Minor casualties	229

Crashes

Fatal crashes	15
Serious injury crashes	46
Minor injury crashes	149
Non-injury crashes	344

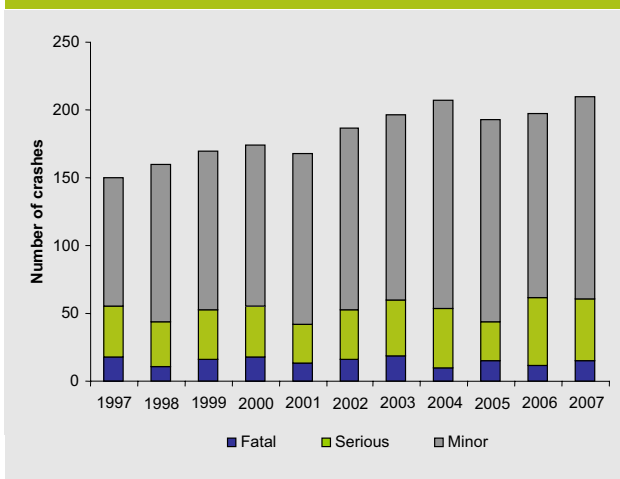
Overview of 2007

In 2007 on local roads in Waikato District there were 87 injury crashes and 136 non-injury crashes, in addition there were 128 injury crashes and 211 non-injury crashes on Transit NZ roads, as reported by the New Zealand Police.

The table below shows the number of injuries resulting from 2007 crashes by rural or urban areas for both local and Transit NZ roads (rural is defined as an area with a speed limit of 80km/h or more).

	Fatalities	Serious injuries	Minor injuries	Total
Rural	15	48	203	266
Urban	4	11	30	45
Total	19	59	233	311

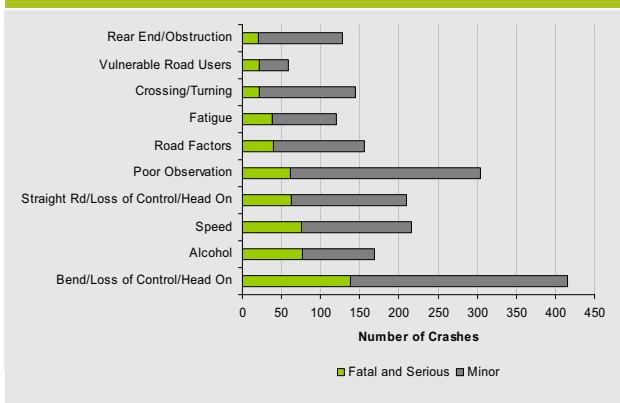
Waikato District injury crashes 1997 - 2007



Fatal crashes in the district have fluctuated over the last 10 years.

Crashes overall have risen over the last 3 years.

Main crash characteristics 2003 - 2007



Local road fatal and serious crashes

Crash type or contributory cause 2003-2007	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	19	20
Too fast	20	26
At bends	48	47
At intersections	19	21
Vulnerable road users		
1. Pedestrians	5	4
2. Cyclists	3	3
3. Motorcyclists	15	9
Roadside hazard struck	50	63
Road factors	15	17
Night time	31	38
Loss of control	67	68

Further information about 2007 injury and non-injury crashes on local roads in Waikato District:

- Worst month April, best February
- Worst day Thursday, best day Tuesday
- 30 percent wet road
- 46 percent night time
- 74 percent midblock
- 69 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$54m

Further information about 2007 injury and non injury crashes on Transit roads in Waikato District:

- Worst month March, best February
- Worst day Saturday, best Wednesday
- 30 percent wet road
- 32 percent night time
- 78 percent midblock
- 64 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$58m

Speed

Nationally, speed is one of the major contributing factors to road crashes. For the 12 months to the end of December 2007, excessive speed contributed to around 33 percent of fatal crashes and 18 percent of injury crashes.

During 2007, there were 2103 injury crashes where the driver was travelling too fast for conditions.

Reducing speeds to appropriate levels is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for drivers to respond to hazardous situations and it also leads to more serious injuries. Research has shown that a one km/h reduction in mean speed can produce up to a three percent reduction in injury crashes.

In the Waikato District, excessive speed was a factor in 19 percent of injury crashes in 2007.

There were 216 speed related injury crashes reported in the last five years

Speed related injury crashes	2003	2004	2005	2006	2007
Urban	6	9	8	8	4
Rural	38	38	36	35	34
Total	44	47	44	43	38

Males represented 74 percent of at fault drivers in speed related injury crashes.

Drivers at fault or part fault in speed related injury crashes (2003-2007) *	Male	Female	Total
15- 19 years	32	13	45
20 - 24	30	17	47
25 - 29	22	5	27
30 - 39	32	9	41
40 - 49	24	5	29
50 - 59	11	3	14
60 - 69	4	3	7
70+	2	0	2
Total	157	55	212

* (note ranges are not equal)

Further information about speed related injury crashes (2003 to 2007) on local roads in Waikato District:

- 20 deaths, 36 serious injuries, 108 minor injuries
- 76 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 82 percent midblock
- 37 percent wet road
- 41 percent night time
- Worst month August, best July
- Worst day of week Saturday, best Monday

Further information about speed related injury crashes (2003 to 2007) on Transit NZ roads in Waikato District:

- 9 deaths, 32 serious injuries, 100 minor injuries
- 71 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 79 percent midblock
- 50 percent wet road
- 41 percent night time
- Worst month December, best May
- Worst day of week Sunday, best Friday

Intersections

Crashes at intersections are one of the most common crash types in both rural and urban areas of Waikato District.

During the five year period 2003 to 2007 there were 235 injury crashes at intersections and 412 non-injury crashes. In these 14 people died, 40 received serious injuries and 312 received minor injuries.

Intersection crashes	2003	2004	2005	2006	2007
Injury crash	52	49	40	49	45
Non-injury crash	87	73	82	85	85
Total	139	122	122	134	130

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

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH1B/Holland Road	26	13	3
SH1/Tainui Bridge Road	23	9	0
SH1/SH1B	15	3	0
SH1/TeKauwhata Road	15	4	0
SH 1/Pukete Road	14	5	1

Crashes at Tee junctions in rural areas are the most common type of intersection crash reported, followed by crashes at Tee urban junctions.

Junction type	Rural	Urban
Roundabout	4	17
Tee	316	189
Cross (X)	51	30
Y	15	7
Other (includes driveways)	9	9

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

- Failure to stop and give way
- Not checking properly
- Too fast for conditions

The most common crash is when a driver turns right at an intersection and is hit by a vehicle approaching from the right. The second most common crash is one when a driver loses control at an intersection.

Further information about injury crashes at intersections (2003 to 2007) on local roads in Waikato District:

- 2 deaths, 14 serious injuries, 109 minor injuries
- 69 percent of at fault drivers were male
- 18 percent involved alcohol
- 36 percent wet roads
- 28 percent night time
- Worst month March, best September
- Worst day of week Saturday, best Tuesday

Further information about injury crashes at intersections (2003 to 2007) on Transit NZ roads in Waikato District:

- 12 deaths, 26 serious injuries, 203 minor injuries
- 68 percent of at fault drivers were male
- 7 percent involved alcohol
- 33 percent wet roads
- 28 percent night time
- Worst month October, best February
- Worst day of week Friday, best Monday

Drink-driving

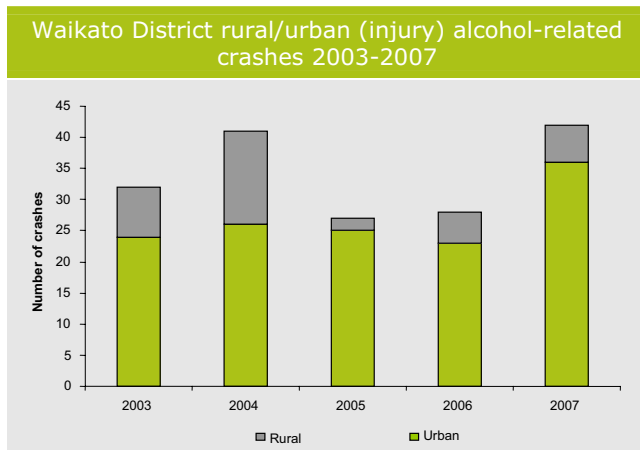
Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers in the same crash and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2007, alcohol-affected drivers contributed to 34 percent of all fatal crashes and 15 percent of all injury crashes.

In Waikato District, alcohol was a factor in 20 percent of injury crashes in 2007, an increase from 2006.

There were 169 alcohol-related injury crashes reported in the last five years.



Key locations

The following provides a breakdown of the key locations in Waikato District at which drink-driving crashes occurred during the 2003 to 2007 period.

Waikato District

Te Ohaki Road, 8.5km north of Harris Street

SH 1, 240m north of Fox Road

SH 1, 690m north of Bern Road

SH 23, 700m west of Howden Road

Further information about alcohol related injury crashes (2003 to 2007) on local roads in Waikato District:

- 16 deaths, 32 serious injuries, 71 minor injuries
- 79 percent of at fault drivers were male
- 82 percent midblock
- 28 percent urban
- 27 percent wet road
- 71 percent night time
- Worst month September, best July
- Worst day of week Saturday, best Monday

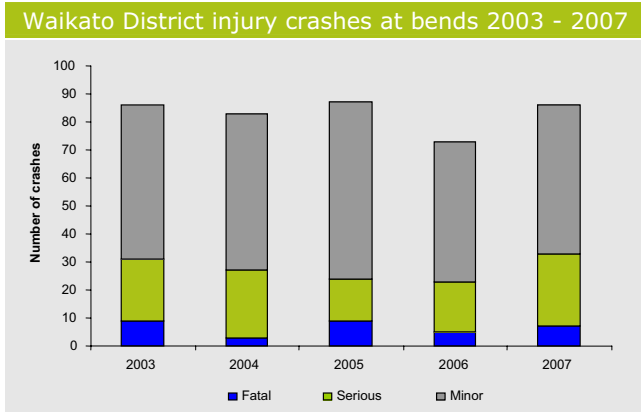
Further information about alcohol related injury crashes (2003 to 2007) on Transit roads in Waikato District:

- 11 deaths, 40 serious injuries, 71 minor injuries
- 85 percent of at fault drivers were male
- 87 percent midblock
- 19 percent urban
- 34 percent wet road
- 62 percent night time
- Worst month October, best September
- Worst day of week Sunday, best Wednesday

Crashes at bends

Between 2003 and 2007 41 percent of all injury crashes in the Waikato District occurred at bends. These crashes resulted in 39 fatalities, 138 serious injuries and 400 minor injuries.

Crash numbers have fluctuated over the last 5 years.



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

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

The three most common roadside hazards struck in injury crashes in Waikato District were fences (105), banks (73) and ditches (55) from a total of 422 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	75 percent
Alcohol	21 percent
Excessive speed for the conditions	38 percent
Road factors	21 percent
Poor handling	27 percent
Rural road	90 percent
Wet road	40 percent
Night time	39 percent

Further information about injury crashes on bends (2003 to 2007) on local roads in Waikato District:

- 14 deaths, 58 serious injuries, 217 minor injuries
- 75 percent of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 30-39 years
- 26 percent of crashes involved alcohol
- Worst month May, best July
- Worst day of week Saturday, best Wednesday
- Worst time period, 3 - 6pm

Further information about injury crashes on bends (2003 to 2007) on Transit NZ roads in Waikato District:

- 25 deaths, 80 serious injuries, 183 minor injuries
- 71 of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 30-39 years
- 16 percent of crashes involved alcohol
- Worst month December, best February
- Worst day of week Sunday, best Monday
- Worst time period, 3 - 6pm

Loss of Control

Between 2003 and 2007 63 percent of all injury crashes in the Waikato district area involved loss of control. These crashes resulted in 68 fatalities, 195 serious injuries and 642 minor injuries.

Crash numbers have fluctuated over the last 5 years.

Loss of Control Crashes				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	15	25	84	124
2004	8	32	83	123
2005	13	25	96	134
2006	9	31	75	115
2007	10	34	90	134
Total	55	160	428	630

Most loss of control crashes involved a driver losing control of their vehicle and either running off the road or colliding with another vehicle.

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

The three most common roadside hazards struck in injury crashes in Waikato district were fences (153), cliffs or banks (99) ditches (93) and from a total of 642 objects struck.

Main characteristics of loss of control injury crashes	
Crash characteristic	Percentage of crashes
Bend	66
Straight road	34
Single vehicle	75
Alcohol	21
Excessive speed for the conditions	29
Road factors	19
Poor handling	26
Rural road	89
Wet road	35
Night time	40

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

- 24 deaths, 83 serious injuries, 313 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- Most common age group 30-39 years
- 26 percent alcohol over limit
- Worst month May, best June
- Worst day of week Saturday, best Monday

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

- 44 deaths, 112 serious injuries, 329 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- Most common age group 30-39 years
- 17 percent over alcohol limit
- Worst month December, best February
- Worst day of week Sunday, best Monday

Partnerships

Land Transport NZ works closely with many road safety partners at national, regional and local levels. These include government departments, enforcement agencies, territorial local authorities, health authorities and local service providers.

Some of the key road safety partners in the Waikato District include:

New Zealand Police

Waikato District Road Policing Manager
Inspector Leo Tooman
PO Box 3078
Hamilton
Phone 07 850 7063

Road Safety Co-ordinator

Waikato
Megan Jolly
1 Galbraith Avenue
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Phone 07 850 5059

Local Authority Engineers

Waikato District Council
Tony Peake
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Phone 07 824 8633

Accident Compensation Corporation

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ACC Injury Prevention Consultant
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