



# briefing notes - road safety issues

## South Waikato and Taupo

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 South Waikato and Taupo area. In this report the South Waikato and Taupo area includes South Waikato and Taupo district councils.

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

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 South Waikato and Taupo area 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		2007 road trauma	
<b>South Waikato and Taupo</b>		<b>Casualties</b>	
Intersections		Deaths	29
Alcohol		Serious casualties	76
Speed		Minor casualties	237
Bends – Loss of Control			
<b>Nationally</b>		<b>Crashes</b>	
Speed		Fatal crashes	25
Alcohol		Serious injury crashes	45
Failure to give way		Minor injury crashes	149
Restraints		Non-injury crashes	382

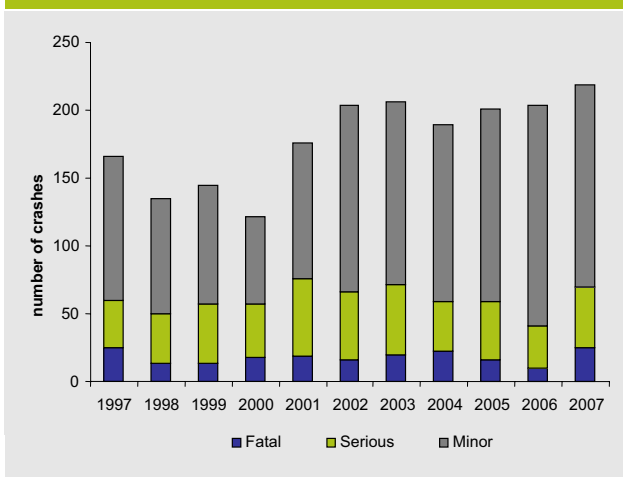
## Overview of 2007

In 2007 on local roads in South Waikato and Taupo there were 75 injury crashes and 166 non-injury crashes, in addition there were 144 injury crashes and 216 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	23	66	183	272
Urban	6	10	54	70
Total	29	76	237	342

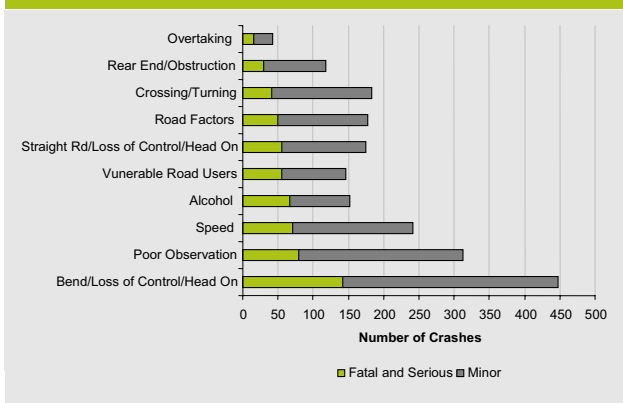
South Waikato and Taupo injury crashes 1997 - 2007



Fatal crashes in the district have fluctuated between the years 1997 and 2005 and more than doubled from 2006 to 2007.

Fatal and injury crashes as a whole rose between 2004 and 2007.

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	34	22
Too fast	25	24
At bends	48	37
At intersections	18	36
Vulnerable road users		
1. Pedestrians	9	7
2. Cyclists	6	8
3. Motorcyclists	16	9
Roadside hazard struck	55	59
Road factors	18	12
Night time	38	35
Loss of control	62	49

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

- Worst month April, best December
- Worst day Friday, best day Tuesday
- 23 percent wet road
- 28 percent night time
- 61 percent midblock
- 78 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$43m

Further information about 2007 injury and non injury crashes on Transit NZ roads in South Waikato and Taupo:

- Worst month May, best April
- Worst day Friday, best Monday
- 34 percent wet road
- 28 percent night time
- 75 percent midblock
- 67 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$109m

## 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 South Waikato and Taupo, excessive speed was a factor in 22 percent of injury crashes in 2007.

There were 242 speed related injury crashes reported in the last five years

Speed related injury crashes	2003	2004	2005	2006	2007
Urban	5	10	19	10	9
Rural	35	33	38	44	39
Total	40	43	57	54	48

Males represented 76 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	41	15	<b>56</b>
20 - 24	29	13	<b>42</b>
25 - 29	17	8	<b>25</b>
30 - 39	32	11	<b>43</b>
40 - 49	40	6	<b>46</b>
50 - 59	16	3	<b>19</b>
60 - 69	6	1	<b>7</b>
70+	1	0	<b>1</b>
<b>Total</b>	<b>182</b>	<b>57</b>	<b>239</b>

\* (note ranges are not equal)

Further information about speed related injury crashes (2003 to 2007) on local roads in South Waikato and Taupo districts:

- 8 deaths, 27 serious injuries, 104 minor injuries
- 71 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 75 percent midblock
- 31 percent wet road
- 51 percent night time
- Worst month January, best December
- Worst day of week Friday, best Wednesday

Further information about speed related injury crashes (2003 to 2007) on Transit NZ roads in South Waikato and Taupo districts:

- 25 deaths, 53 serious injuries, 175 minor injuries
- 75 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 88 percent midblock
- 40 percent wet road
- 40 percent night time
- Worst month February, best October
- Worst day of week Saturday, best Monday

## Intersections

Crashes at intersections are the most common crash type in urban areas of the South Waikato and Taupo districts.

During the five year period 2003 to 2007 there were 270 injury crashes at intersections and 655 non-injury crashes. In these 12 people died, 68 received serious injuries and 321 received minor injuries.

Intersection crashes	2003	2004	2005	2006	2007
Injury crash	57	43	63	51	56
Non-injury crash	122	123	136	156	128
Total	179	166	199	207	184

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

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH1/SH5 (Tirau)	30	14	7
SH1/Poihipi Road	26	10	10
SH1/SH5 (Wairakei)	25	10	2
SH 15/Arrowsmith Avenue	23	7	6
Heuheu Street/ Titiraupenga Street	16	2	1

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

Junction type	Rural	Urban
Roundabout	1	55
Tee	218	347
Cross (X)	49	212
Y	9	6
Other (includes driveways )	9	23

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 one when a driver fails to give way and crosses the path of a vehicle coming at a right angle to them. The second most common crash is when a driver turns right at an intersection and is hit by a vehicle approaching from the right.

Further information about injury crashes at intersections (2003 to 2007) on local roads in South Waikato and Taupo districts:

- 5 deaths, 14 serious injuries, 146 minor injuries
- 65 percent of at fault drivers were male
- 17 percent involved alcohol
- 29 percent wet roads
- 25 percent night time
- Worst month February, best August
- Worst day of week Friday, best Wednesday

Further information about injury crashes at intersections (2003 to 2007) on Transit NZ roads in South Waikato and Taupo districts:

- 7 deaths, 54 serious injuries, 175 minor injuries
- 65 percent of at fault drivers were male
- 7 percent involved alcohol
- 18 percent wet roads
- 20 percent night time
- Worst month March, best September
- Worst day of week Friday, best Thursday

## 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.

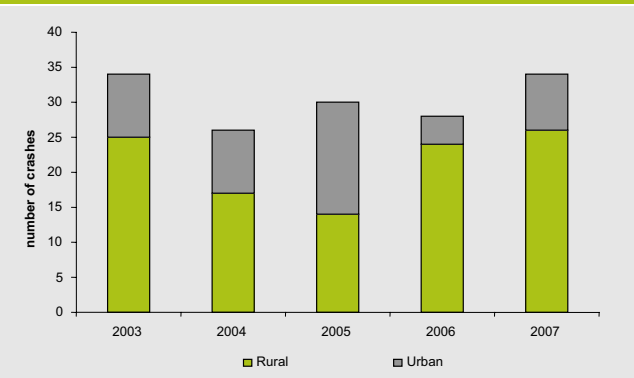
Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers in the same crash and if injured, they are also more likely to encounter complications in their recovery.

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 South Waikato and Taupo districts, alcohol was a factor in 16 percent of injury crashes in 2007, an increase from 2006.

There were 152 alcohol-related injury crashes reported in the last five years.

South Waikato and Taupo rural/urban (injury) alcohol-related crashes 2003-2007



### Key locations

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

#### South Waikato and Taupo

Broadlands Road / View Road intersection

SH 5, 500m west of Waimakariri Road

SH 5, 2000m north of Palmer Mill Road

SH 1, 250m south of Horohoro Road

Further information about alcohol related injury crashes (2003 to 2007) on local roads in South Waikato and Taupo districts:

- 10 deaths, 34 serious injuries, 74 minor injuries
- 79 percent of at fault drivers were male
- 72 percent midblock
- 49 percent urban
- 28 percent wet road
- 75 percent night time
- Worst month January, best July
- Worst day of week Friday, best Thursday

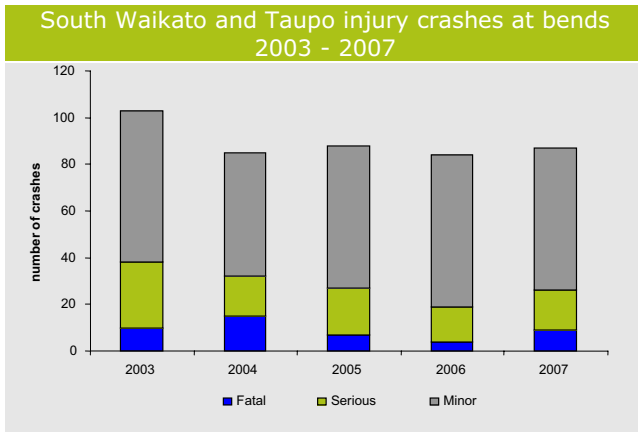
Further information about alcohol related injury crashes (2003 to 2007) on Transit NZ roads in South Waikato and Taupo districts:

- 22 deaths, 39 serious injuries, 55 minor injuries
- 69 percent of at fault drivers were male
- 87 percent midblock
- 8 percent urban
- 30 percent wet road
- 58 percent night time
- Worst month February, best July
- Worst day of week Saturday, best Monday

## Crashes at bends

Between 2003 and 2007 44 percent of all injury crashes in the South Waikato and Taupo area occurred at bends. These crashes resulted in 53 fatalities, 172 serious injuries and 488 minor injuries.

Fatal crash numbers declined between 2004 and 2006 but increased in 2007.



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 or 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 South Waikato and Taupo districts were banks (115), fences (61) and trees (59) from a total of 390 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	72 percent
Alcohol	21 percent
Excessive speed for the conditions	40 percent
Road factors	26 percent
Poor handling	33 percent
Rural road	88 percent
Wet road	35 percent
Night time	40 percent

Further information about injury crashes on bends (2003 to 2007) on local roads in South Waikato and Taupo districts:

- 16 deaths, 49 serious injuries, 137 minor injuries
- 76 percent of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 15-19 years
- 37 percent of crashes involved alcohol
- Worst month January, best April
- Worst day of week Friday, best Monday
- Worst time period, 9 - 12pm

Further information about injury crashes on bends (2003 to 2007) on Transit NZ roads in South Waikato and Taupo districts:

- 37 deaths, 123 serious injuries, 351 minor injuries
- 72 of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 40-49 years
- 15 percent of crashes involved alcohol
- Worst month January, best November
- Worst day of week Friday, best May
- Worst time period, 3 - 6pm

## Loss of Control

Between 2003 and 2007 61 percent of all injury crashes in the South Waikato and Taupo area involved loss of control. These crashes resulted in 80 fatalities, 229 serious injuries and 693 minor injuries.

Crash numbers rose between 2004 and 2006 and declined in 2007.

Loss of Control Crashes				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	17	37	82	136
2004	17	24	73	114
2005	10	27	88	125
2006	9	19	101	129
2007	14	24	81	119
Total	67	131	425	623

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 or 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 South Waikato and Taupo were cliffs or banks (157), fences (90) and trees (84) and from a total of 545 objects struck.

Main characteristics of loss of control injury crashes	
Crash characteristic	Percentage of crashes
Bend	72
Straight road	28
Single vehicle	72
Alcohol	20
Excessive speed for the conditions	33
Road factors	22
Poor handling	13
Rural road	87
Wet road	32
Night time	41

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

- 17 deaths, 61 serious injuries, 180 minor injuries
- 73 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- Most common age group 15-19 years
- 36 percent involved alcohol
- Worst month November, best December
- Worst day of week Friday, best Monday

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

- 63 deaths, 168 serious injuries, 513 minor injuries
- 68 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- Most common age group 40-49 years
- 14 percent involved alcohol
- Worst month February, best May
- Worst day of week Saturday, best Wednesday

## 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 South Waikato/Taupo area include:

### **New Zealand Police**

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### **Road Safety Co-ordinators**

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### **Accident Compensation Corporation**

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