



briefing notes - road safety issues

Invercargill City

Land Transport New Zealand has prepared this road safety issues report, it is based on reported crash data and trends for the 2002–2006 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 Invercargill City.

All the material, unless otherwise stated, in this report applies to both local roads and to State Highways (Transit roads).

In each year’s 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 Invercargill City is compared to similar local bodies or those with a high social cost (high numbers of fatal and serious crashes mainly). We have included a brief overview of crashes in the city for 2006.

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

Major road safety issues		2006 road trauma	
Invercargill City		Casualties	
Urban intersection crashes		Deaths	2
Vulnerable road users		Serious casualties	76
Speed		Minor casualties	326
Alcohol			
Nationally		Crashes	
Speed		Fatal crashes	2
Alcohol		Serious injury crashes	63
Failure to give way		Minor injury crashes	194
Restraint use		Non-injury crashes	281

Overview

In 2006 on local roads in Invercargill City there were 183 injury crashes and 204 non-injury crashes, in addition there were 75 injury crashes and 77 non-injury crashes on State Highways, as reported by the New Zealand Police.

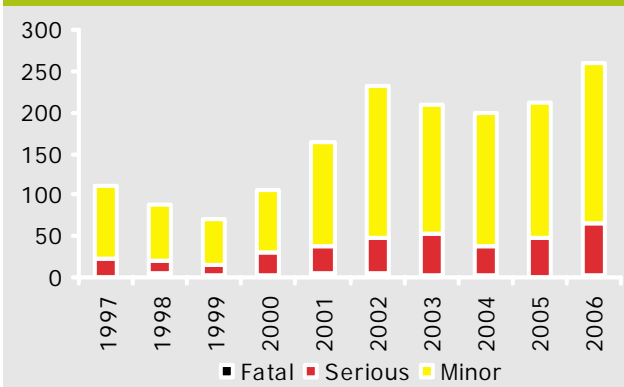
The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local and Transit roads (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by injury type 2006

	Fatalities	Serious injuries	Minor injuries	Total
Rural	2	16	54	72
Urban	0	60	272	332
Total	2	76	326	404

Fatalities in the area remain below the ten-year average. The highest number recorded in the last ten years was six in 2002, the lowest was none in 2005. Serious injuries on the other hand rose to the highest level seen in ten years, increasing from 56 in 2005.

Injury crashes 1997 to 2006



Crash movement 2006	Percentage of all crashes of this type
Lost control at bend	11%
Lost control on straight	13%
Crossing/turning	41%
Pedestrian vs vehicle	3%
Rear end/obstruction	27%
Overtaking	4%
Miscellaneous	1%

Further information about 2006 injury and non-injury crashes on local roads:

- Worst month April (45), best January (22)
- Worst day Friday (80), best Tuesday (46)
- Wet road 31 percent
- Night time 30 percent
- Intersection 55 percent
- 61 percent of at fault drivers male (injury crashes)
- 60 percent of at fault drivers in injury crashes held a full NZ licence

Further information about 2006 injury and non injury crashes on Transit roads:

- Worst month March (17), best April (7)
- Worst day Friday (38), best Wednesday (13)
- Wet road 26 percent
- Night time 26 percent
- Intersection 55 percent
- 60 percent of at fault drivers male (injury crashes)
- 53 percent of at fault drivers in injury crashes held a full NZ licence

It has been observed nationally that there is a growing group of drivers who have not been exiting the graduated licence system and who are choosing to stay on restricted licences. This is making it increasingly difficult to distinguish drivers who are truly inexperienced from those that should have moved to a full licence. As a consequence it is more difficult to target educational material.

This is certainly true in Invercargill with as little as 57 percent of at fault drivers in injury crashes being the holder of a full driving licence and nearly one in five being on a restricted licence.

Driver licence status 2006	Percentage of total 'at fault' drivers (NZ value in brackets)
Full	57.6 (58.4) %
Learner	9.7 (9.5) %
Restricted	24.1 (17.6) %
Never licenced	1.2 (2.2) %
Disqualified	2.1 (1.7) %
Overseas	1.2 (4.2) %
Expired	0.4 (0.5) %
Other / unknown	3.3 (5.6) %

Intersections

Crashes at intersections are one of the most common crash types in urban areas of Invercargill City.

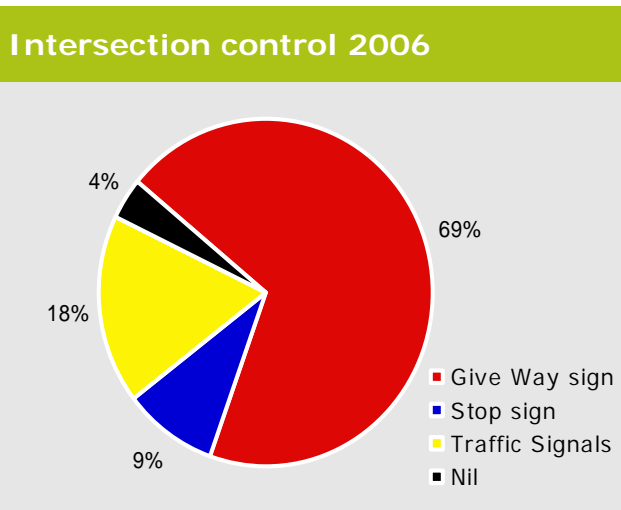
During the five year period 2002 to 2006 there were 631 injury crashes at intersections and 699 non-injury crashes. In these crashes four people died, 149 received serious injuries and 787 received minor injuries.

	2002	2003	2004	2005	2006
Injury crash	142	110	111	120	148
Non injury crash	148	134	124	153	140
Total	290	244	235	273	288

The table below shows the location of the five intersections with the highest number of crashes in Invercargill between 2002 and 2006.

Intersection name	Total crashes 02-06	Injury crashes 02-06	Total crashes in 2006
Clyde Street / Tweed Street	27	5	4
Tay Street / Clyde Street	27	6	8
Tweed Street / Elles Road	27	6	7
Tay Street / Elles Road	26	10	8
Queens Drive / Gala Street	24	10	3

Crashes at Give Way controlled intersections in urban areas are the most common type of intersection crash reported, followed by crashes at traffic signals.



The most common intersection crash is one in which vehicles hit at right angles followed by one vehicle turning right across the path of another.

The main causes contributing to crashes described in Police reports were failure to stop and give way as required, not checking properly and general errors of judgement.

Intersections present most drivers with one of their biggest driving challenges and as a result less experienced drivers are well represented in these crashes as illustrated in the table below showing licence class of at fault drivers.

Driver licence status	Percentage of total 'at fault' drivers (NZ value in brackets)
Full	60.5 (60.9) %
Learner	7.2 (9.4) %
Restricted	25.0 (14.8) %
Never licenced	0 (2.5) %
Disqualified	1.9 (1.6) %
Overseas	1.9 (3.7) %
Expired	0 (0.8) %
Other / unknown	3.3 (6.3) %

Further facts about intersection related crashes in Invercargill in 2006:

Local roads

- 33 serious injuries, 138 minor injuries
- Male driver 58 percent
- Seven percent alcohol over limit
- 97 percent urban
- 33 percent wet roads
- 26 percent night time
- Worst month June, best August

Transit roads

- One death, six serious injuries, 48 minor injuries
- Male driver 59 percent
- Five percent alcohol over limit
- 92 percent urban
- 21 percent wet roads
- 24 percent night time
- Worst month September, best August

Vulnerable road users

Both pedestrian and cyclist casualty numbers had been falling for the last three years. In 2006 however crashes for both groups of road users increased.

After a ten year low of nine pedestrian injuries in 2005, the number of people injured in 2006 more than doubled to 20.

The number of injury crashes involving cyclists jumped from 13 to 25 in 2006, the highest number since 30 crashes were recorded in 1990.

The table below shows the age of all pedestrians and cyclists injured on Invercargill roads between 2002 and 2006.

Age group	Pedestrian	Cyclist
0 to 4	3	0
5 to 9	7	6
10 to 14	12	34
15 to 19	20	11
20 to 24	9	9
25 to 29	3	4
30 to 34	5	3
35 to 39	4	5
40 to 44	5	5
45 to 49	4	4
50 to 54	4	2
55 to 59	3	0
60 to 64	6	1
65 to 69	1	1
70 +	8	0

Speed

'Too fast for the conditions' was recorded in 12 percent of injury crashes in the district in the last five years resulting in six deaths, 57 serious injuries and 186 minor injuries. There were also 155 non-injury speed-related crashes reported. The same number of speed related crashes were reported in 2006 as in 2005.

Two thirds of speed-related crashes over the last five years were loss of control type crashes, 76 percent of which took place on local roads. 29 percent of speed related crashes also involved excess alcohol.

85 percent of at fault drivers in speed related crashes over the last five years were male, with those under the age of 20 years old accounting for 43 percent of all drivers. 29 percent of all at fault drivers held a restricted licence, 12 percent were on their learner licence.

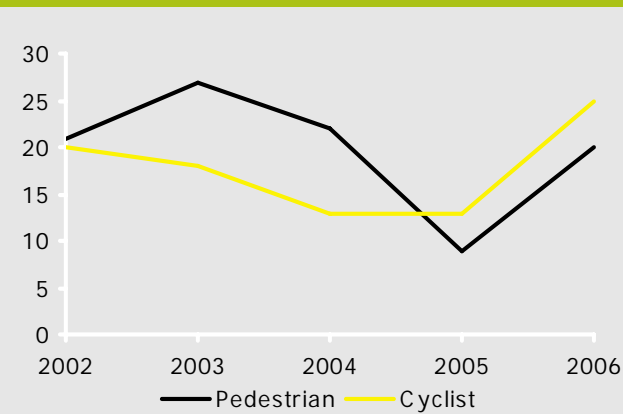
Alcohol

Alcohol was a factor in 11 percent of injury crashes in the district over the last five years resulting in seven deaths, 77 serious injuries and 115 minor injuries. There were a further 118 crashes reported where there was no injury. After falling for each of the last three years the number of alcohol related injury crashes increased in 2006 back to the level seen in 2003.

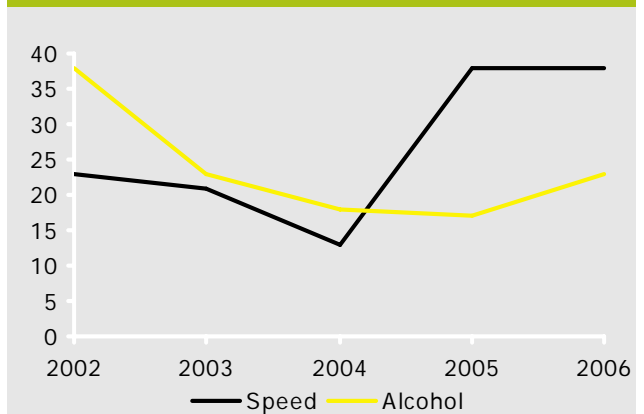
As with speed related crashes, male drivers account for the majority of those at fault. Over the last five years, nine out of ten alcohol related injury crashes were caused by a male driver.

As is to be expected, a large number of alcohol related crashes occurred at night, 80 percent. Loss of control while turning was the most common factor, with 42 percent of crashes occurring at intersections. Alcohol was combined with travelling too fast for the conditions in 32 percent of injury crashes.

Pedestrian & cyclist casualties 02-06



Speed & alcohol crashes 02-06



Rural crashes

Although only 11 percent of crashes in Invercargill in 2006 occurred on rural roads, higher speed crashes are generally more severe.

Over half of all rural crashes involved a vehicle losing control and either leaving the road or colliding with an oncoming vehicle.

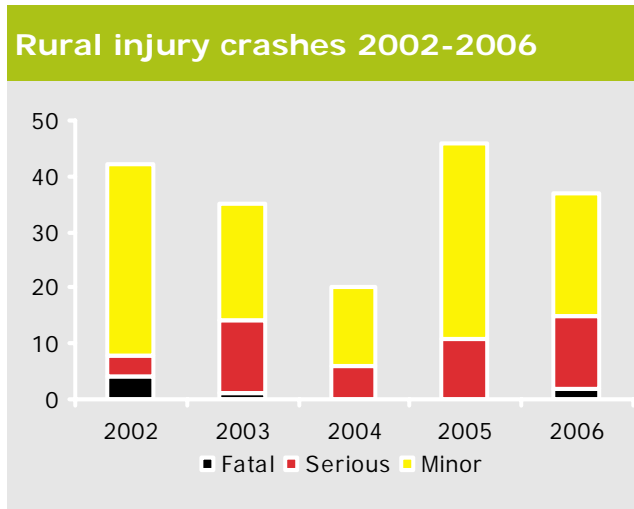
After drivers lose control of their vehicles they often crash into roadside hazards such as ditches, banks, poles or trees. It is hitting these objects that can result in a relatively minor off-road event turning into something far more serious.

The following table shows the number of various road side hazards that were hit in rural crashes in Invercargill City during the period 2002-2006. Note that the same hazard can be struck more than once in the same crash and that each crash could have a number of objects of different types hit.

Type of roadside hazard	Local road	State Highway
Bridge ends	2	2
Cliff or bank	17	12
Ditch	35	29
Fence	31	23
House or building	1	0
Guard rail	0	2
Over bank	2	9
Parked vehicle	3	0
Post or pole	16	10
Stray animal	8	10
Traffic sign	6	7
Train	3	0
Tree	8	14
Water/River	2	2

The 61 reported crashes on rural roads in 2006 was a fall from the ten year high of 85 seen in 2005 but remains slightly above the ten year average of 57. The number of crashes resulting in fatal or serious injuries however increased to 15, the highest number since 1989.

The following graph shows the number of reported injury crashes on rural roads over the last five years.



Further information about rural crashes in Invercargill City in 2006:

Local roads

- 12 serious injuries, 26 minor injuries and eight non injury crashes
- At fault drivers 70 percent male
- Most common crash type - losing control on a straight section of road
- Five percent of injury crashes involved alcohol over limit
- 27 percent of injury crashes involved a vehicle travelling too fast for the conditions
- 43 percent of crashes were on a wet surface
- 30 percent of crashes occurred at night
- 57 percent of crashes involved a single vehicle

Transit roads

- Two deaths, four serious injuries, 28 minor injuries and 16 non injury crashes
- At fault drivers 65 percent male
- Most common crash type loss of control on a bend
- 20 percent of injury crashes involved alcohol over limit
- 33 percent of injury crashes involved a vehicle travelling too fast for the conditions
- About half of all crashes were on a wet surface
- Ten percent of crashes occurred on an icy surface
- 35 percent of crashes occurred at night
- 55 percent of crashes involved a single vehicle