

briefing notes - road safety issues

Dunedin City

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 Dunedin City.

This report is the ninth road safety report for Dunedin City. 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 Dunedin City 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

Dunedin City

Intersections
Loss of control

2007 road trauma

Casualties

Dunedin City

Deaths	5
Serious casualties	108
Minor casualties	616

Nationally

Speed
Alcohol
Failure to give way
Restraints

Crashes

Dunedin City

Fatal crashes	4
Serious injury crashes	82
Minor injury crashes	413
Non-injury crashes	845

Overview

In 2007 on local roads in Dunedin City there were 364 injury crashes and 686 non-injury crashes. In addition there were 135 injury crashes and 161 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 499 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	4	37	137	178
Urban	1	71	479	551
Total	5	108	616	729

The annual numbers of fatal and serious injury crashes rose from a low of 51 in 2000 to a high of 127 in 2004, and then decreased to 86 in 2007. The annual number of minor and non-injury crashes have been about 1200 since 2002.

Crash trends				
Year	Fatal crashes	Serious injury crashes	Minor injury crashes	Non-injury crashes
1998	8	49	158	717
1999	4	57	134	637
2000	4	47	109	708
2001	4	117	327	805
2002	4	119	440	865
2003	8	114	391	796
2004	7	120	375	836
2005	3	120	416	738
2006	7	109	366	803
2007	4	82	413	847

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	10%	8%
Too fast	18%	11%
Straight—lost control crash	10%	14%
Bend—lost control crash	27%	25%
Crossing / turning crash	26%	24%
Road factors	23%	17%
Vulnerable road users (Percent of casualties)	18%	8%
1, Pedestrians	5%	3%
2, Cyclists	8%	2%
3, Motorcyclists	5%	2%

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

- Worst month May
- Worst day Friday
- 29 percent on wet roads
- 33 percent at night
- 34 percent at intersections
- Social cost of crashes in 2007 was \$80.9m

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

- Worst month May
- Worst day Friday
- 30 percent on wet roads
- 32 percent at night
- 37 percent at intersections
- Social cost of crashes in 2007 was \$32.3m

Loss of Control

Between 2003 and 2007 32 percent of all crashes in Dunedin City involved loss of control. These crashes resulted in 21 fatalities, 334 serious injuries and 1083 minor injuries.

The number of minor and non-injury crashes have shown a steady increase over the last five years.

Loss of Control Crashes 2003 to 2007				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Non-injury crashes
2003	4	56	114	198
2004	4	56	123	245
2005	3	55	136	183
2006	6	51	145	278
2007	2	43	162	273
Total	19	261	680	1177

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 three most common roadside hazards struck in injury crashes in Dunedin City were cliffs or banks (197), over bank (136), Pole (133) and fences (164) from a total of 1138 objects struck.

Main characteristics of injury loss of control crashes	
Crash characteristic	Percentage of crashes
Bend	70
Straight road	30
Single vehicle	80
Alcohol	18
Excessive speed for the conditions	32
Road factors	38
Poor handling	47
Rural road	45
Wet road	44
Night time	46

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

- 9 deaths, 235 serious injuries and 777 minor injuries
- 66 percent of at fault drivers were male
- Most common crash type "Loss of control on bends"
- Most common age group 15-19 years
- 18 percent of crashes involved alcohol
- 37 percent of crashes involved speed
- Worst month July
- Worst day of week Saturday
- Worst time period 3 pm - 6 pm

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

- 12 deaths, 99 serious injuries and 306 minor injuries
- 66 percent of at fault drivers were male
- Most common crash type "Loss of control on bends"
- Most common age group 15-24 years
- 16 percent of crashes involved alcohol
- 21 percent of crashes involved speed
- Worst month July
- Worst day of week Friday
- Worst time period 6 am - 9 am

Intersections

In Dunedin City during the period 2003 to 2007 there were 948 injury crashes at intersections and 1310 non-injury crashes. In these crashes, five people died, 185 received serious injuries and 1195 received minor injuries.

96 percent of these crashes were in urban areas of the district. These crashes make up 40 percent of all urban crashes. There were 93 intersection crashes in rural areas of the City.

Junction type Injury and Non-injury crashes		
Junction Type	Urban	Rural
Roundabout	47	0
Tee	941	67
Cross (X)	1143	26
Multi leg	69	0
Total	2200	93

Over the last five years the number of crashes at intersections has trended upward.

Crashes at Intersections					
	2003	2004	2005	2006	2007
Injury crash	203	164	203	179	199
Non-injury crash	252	259	247	244	308
Total	455	423	450	423	507

The most common intersection crash is one when a driver turns right across the path of a vehicle coming straight towards 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 .

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

- Not checking properly
- Failure to stop and give way
- Poor handling

Locations with high crash numbers

Intersection name	Total crashes 2003-2006	Total 2007
Great King St / Duke St	26	3
Castle St / St Andrew St	20	3
George St / St Andrew St	15	7
Hillside Rd / King Edward St	17	4
Cumberland St / Frederick St	17	4
SH 1 / Andersons Bay Road	19	2

These locations are listed regardless of work done.

Further information about injury crashes at intersections 2003 to 2007 on local roads in Dunedin City :

- 3 deaths, 150 serious injuries and 855 minor injuries
- 6 percent involved alcohol
- 11 percent involved speed
- 27 percent wet roads
- 28 percent night time
- Worst month March, April
- Worst day of week Friday
- Worst time 3 pm - 6 pm

Further information about injury crashes at intersections 2007 to 2007 on Transit NZ roads in Dunedin City :

- 2 deaths, 35 serious injuries and 340 minor injuries
- 3 percent involved alcohol
- 3 percent involved speed
- 21 percent wet roads
- 28 percent night time
- Worst month May
- Worst day of week Thursday
- Worst time 3 pm - 6 pm

National issues

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

Speed

In Dunedin City "Too fast" was recorded in 376 fatal and injury crashes in the district in the last five years resulting in 8 deaths and 593 injuries. Speed as a factor in crashes is increasing in the district.

73 percent of all speed-related crashes were Loss of control on bends. Poor handling was the other driver factors most often associated with speed in injury crashes.

80 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 Dunedin City, alcohol was involved in 204 fatal and injury crashes in the district in the last five years resulting in 7 deaths, and 290 other injuries. The number of injury crashes involving alcohol is increasing.

83 percent of all alcohol crashes were in urban areas of the district. 47 percent were Loss of control on bends. Speed and Poor handling were the other factors often associated with alcohol in injury crashes.

77 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 24 years .

Failure to give way

In Dunedin City, failure to give way or stop was reported in 678 fatal and injury crashes during the last five years resulting in 5 deaths and 989 other injuries.

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

58 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 24 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/>