



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 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 Dunedin 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 Dunedin 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

Dunedin

Intersection crashes

Loss of control rural roads

Vulnerable road users

2006 road trauma

Casualties

Deaths	8
Serious casualties	124
Minor casualties	573

Nationally

Speed

Alcohol

Failure to give way

Restraint use

Crashes

Fatal crashes	7
Serious injury crashes	104
Minor injury crashes	364
Non-injury crashes	797

Overview

In 2006 on local roads in Dunedin City, there were 345 injury crashes and 637 non-injury crashes, in addition there were 130 injury crashes and 160 non-injury crashes on State Highways, as reported by the New Zealand Police.

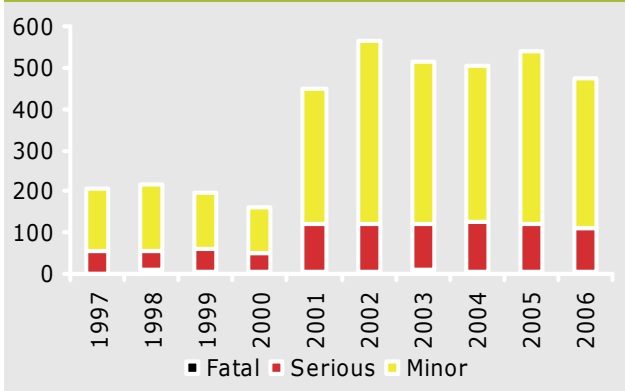
The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local and Transit roads (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by injury type 2006

	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	40	137	180
Urban	5	84	436	525
Total	8	124	573	705

Fatalities in the city have fluctuated over the last ten years between the high of eight seen in 2006 and 2003 and a low of three in 2005. Serious injuries fell slightly in 2006 to the lowest number since 2000. Nearly nine out of ten crashes on local roads in 2006 occurred in urban areas of Dunedin.

Injury crashes 1997 to 2006



Crash movement 2006	Percentage of all crashes of this type
Lost control at bend	24%
Lost control on straight	13%
Crossing/Turning	20%
Pedestrian vs vehicle	4%
Rear end/Obstruction	33%
Overtaking	4%
Miscellaneous	2%

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

- Worst month June (121), best January (57)
- Worst day Friday (189), best Monday (107)
- Wet/icy road 29 percent
- Night time 34 percent
- Intersection 32 percent
- 60 percent of at fault drivers male (injury crashes)
- 62 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 June (41), best January (11)
- Worst day Friday (51), best Sunday (31)
- Wet/icy road 26 percent
- Night time 30 percent
- Intersection 40 percent
- 62 percent of at fault drivers male (injury crashes)

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 Dunedin City with as little as 62 percent of at fault drivers in injury crashes being the holder of a full driving licence and nearly one in five drivers being on a restricted licence.

Driver licence status 2006	Percentage of total 'at fault' drivers (NZ value in brackets)
Full	62.8 (58.4) %
Learner	6.8 (9.5) %
Restricted	19.4 (17.6) %
Never licenced	1.7 (2.2) %
Disqualified	0.7 (1.7) %
Overseas	3.6 (4.2) %
Expired	0 (0.5) %
Other / unknown	4.6 (5.6) %

Intersections

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

During the five year period 2002 to 2006 there were 987 injury crashes at intersections and 1316 non-injury crashes. In these crashes six people died, 202 received serious injuries and 1226 received minor injuries.

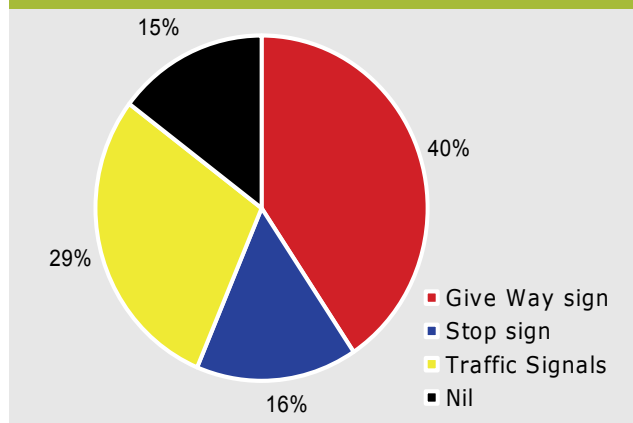
Severity	2002	2003	2004	2005	2006
Injury crash	231	204	167	206	179
Non injury crash	302	252	263	251	248
Total	533	456	430	457	427

The table below shows the locations of the five intersections with the highest number of crashes in Dunedin City between 2002 and 2006.

Intersection name	Total crashes 02-06	Injury crashes 02-06	Total crashes in 2006
SH1 Great King St / Albany St	25	12	8
SH1 / Andersons Bay Road	24	8	6
Stuart Street / London Street	22	7	1
SH1 Castle St / St Andrew St	21	8	5
King Edward St / Hillside Rd	21	9	3

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

Intersection control 2006



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
- 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	68.1 (60.9) %
Learner	5.8 (9.4) %
Restricted	15.4 (14.8) %
Never licenced	1.5 (2.5) %
Disqualified	0.7 (1.6) %
Overseas	3.2 (3.7) %
Expired	0.3 (0.8) %
Other / unknown	4.8 (6.3) %

Further facts about intersection related crashes in Dunedin City 2002 to 2006 (divided into local roads and Transit roads):

Local roads

- Three deaths, 156 serious injuries, 870 minor injuries
- Male driver 58 percent
- Six percent alcohol over limit
- 97 percent urban
- 27 percent wet roads
- 28 percent night time

Transit roads

- Three deaths, 46 serious injuries, 356 minor injuries
- Male driver 58 percent
- Three percent alcohol over limit
- 91 percent urban
- 23 percent wet roads
- 28 percent night time
- Worst month May, best January

Vulnerable road users

Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries.

On 24 February 2005, the Government launched *Getting there - on foot, by cycle*, its strategy to advance walking and cycling in New Zealand transport.

Getting there - on foot, by cycle aims to improve environments for walking and cycling, improve safety for pedestrians and cyclists, and increase the choice of walking and cycling for day-to-day transport.

As a result Land Transport NZ expects local bodies to take a proactive approach to this subject. This should include the development of a walking and cycling strategy and making appropriate funding applications to progress that strategy.

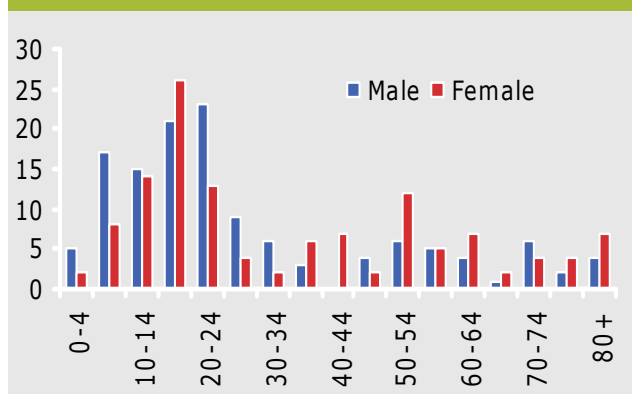
It is vitally important to recognise that promotion alone of cycling and walking is not going to be effective at increasing their mode share unless they can be made safer.

Pedestrians

Although pedestrian crashes do not feature highly in Dunedin City, representing only four percent of all reported crashes, they make up over one quarter of all road fatalities over the last five years.

Pedestrian injuries	2002	2003	2004	2005	2006
Fatal	1	4	2	0	1
Serious	18	21	16	24	15
Minor	37	40	41	22	32
Total	56	65	59	46	48

Pedestrian casualties 2002–2006



Nearly all crashes involving a pedestrian occurred on urban roads, with 40 percent at intersections and two thirds during daylight hours.

Young people are often the most commonly injured in pedestrian crashes. In Dunedin 20 percent of pedestrians injured over the last five years were aged between five and 14. Young children have difficulty in judging the speed and distance of approaching vehicles and are also easily distracted and unable to focus on multiple events at a time. A common factor in child pedestrian injuries is inexperience crossing the road.

The recent decision by Police to enforce a lower speed tolerance around schools is a strong step in creating a safer lower speed environment for young pedestrians.

In Dunedin older pedestrians also figure strongly in the crash statistics. Thirty percent of injured pedestrians are aged between 15 and 24, an age group who should be more experienced and have more road sense than a young child. This high figure is partly explained by the particular demographic in Dunedin caused by the number of students in the city.

Pedestrian crashes in Dunedin are concentrated on arterial and collector roads in the CBD. The top five locations on the basis of injury crashes are shown in the table below.

Location	Number of pedestrian injury crashes
George St / St Andrew St	8
George St / Hanover St	7
Princes St / Moray Pl	7
George St / London St	6
Hillside Rd / King Edward St	5

The most common factors in Dunedin pedestrian crashes are crossing the road heedless of traffic and stepping out from behind a parked vehicle. Combined these two factors account for 34 percent of crashes. In ten percent of injury crashes the pedestrian was visibly intoxicated.

Not all crashes were the fault of the pedestrian. One in five crashes occurred when a vehicle failed to give way to a pedestrian, either at traffic signals or a pedestrian crossing. The driver was deemed to be at fault in 44 percent of crashes involving a pedestrian over the last five years.

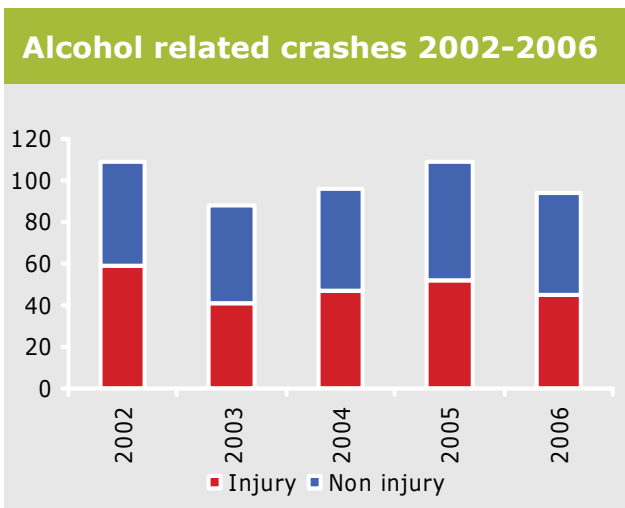
Drink driving

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 2006, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes.

In Dunedin alcohol was a factor in nine percent of injury crashes in 2006, on a par with the previous year. Over the last five years there were 209 alcohol-related injury crashes recorded.



In 2006 77 percent of drivers involved in alcohol related injury crashes were male.

The following table illustrates the licence status of at fault drivers in alcohol related crashes in Dunedin and all New Zealand (2006).

Driver licence status	Percentage of total 'at fault' drivers (NZ value in brackets)
Full	50.0 (41.6) %
Learner	10.0 (15.8) %
Restricted	16.7 (20.8) %
Never licenced	6.7 (4.6) %
Disqualified	6.7 (6.2) %
Overseas	0 (1.0) %
Expired	0 (1.4) %
Other / unknown	10.0 (8.2) %

Further facts about alcohol related crashes in Dunedin City over the last five years, divided into local roads and Transit roads:

Local roads

- Nine deaths, 81 serious injuries and 189 minor injuries
- Male driver 79 percent
- Most common crash type loss of control when turning
- 26 percent at intersections
- 91 percent urban
- 28 percent wet road
- 79 percent night time
- Worst day of week Saturday, best Sunday

Transit roads

- Two deaths, 23 serious injuries and 50 minor injuries
- Male driver 76 percent
- Most common crash type loss of control when turning
- 15 percent at intersections
- 37 percent urban
- 36 percent wet road
- 72 percent night time
- Worst month July, best April
- Worst day of week Friday, best Tuesday