

## New Zealand Government

# briefing notes - road safety issues

## **Otago Region**

New Zealand Transport Agency has prepared this road safety issues report. It is based on reported crash data and trends for the 2004-2008 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 Otago Region.

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 Otago Region is compared to national figures or those with high social cost (high numbers of fatal and serious crashes mainly).

We have included a brief overview of crashes in the region.

We encourage Otago Region to delve deeper into the highlighted issues, and other road safety issues in the region. Contact the NZTA Performance Information team for additional information from to the Ministry of Transport's Crash Analysis System (CAS). All data and maps in this note are from CAS.

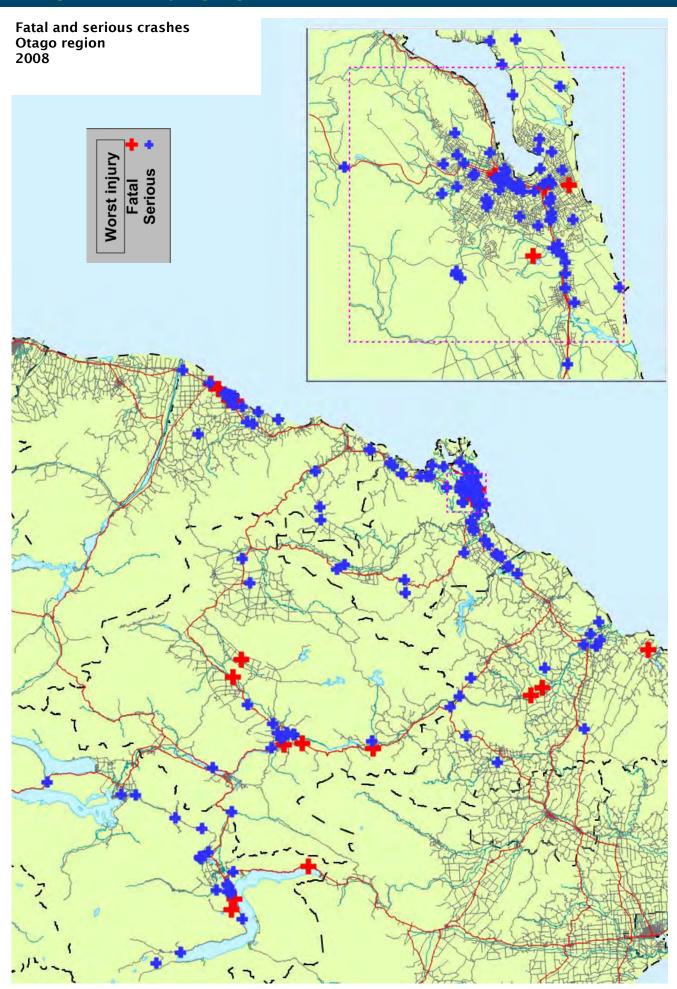
Major road safety issues		
	Otago Region	
Bend - loss of control or head-on		

Bend - loss of control or head-on
Intersections
Young drivers

Overseas	drivers

Casualties	Otago Region
Deaths	21
Serious casualties	188
Minor casualties	975

Nationally	Crashes	Otago Region
Speed	Fatal crashes	19
Alcohol	Serious injury crashes	161
Failure to give way	Minor injury crashes	638
Restraints	Non-injury crashes	1372



### **Overview**

In 2008 on local roads in Otago Region there were 506 injury crashes and 971 non-injury crashes. In addition there were 312 injury crashes and 401 non-injury crashes on State Highways both as reported by the New Zealand Police.

The table below shows the number of casualties resulting from the 818 injury crashes by rural or urban areas (rural is defined as an area with a speed limit of 80km/h or more).

## Casualties by urban / rural 2008

	Fatalities	Serious injuries	Minor injuries	Total
Rural	17	94	421	532
Urban	4	94	554	652
Total	21	188	975	1184

Overall 45 percent of casualties were from crashes in rural areas of the district, but for fatal and serious casualties 53 percent were in rural areas.

In 2007 and in 2008, the number of fatal crashes was the second highest in the last ten years. Overall, crash numbers rose to a high of 956 in 2005. Since that year the numbers have dropped with 2008 having the lowest number of injury crashes since 2001.

## Crash trends in Otago Region

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	18	94	231	343
2000	16	111	229	356
2001	20	203	531	754
2002	10	239	686	953
2003	17	244	608	869
2004	15	227	648	890
2005	12	236	708	956
2006	13	199	658	870
2007	19	163	716	898
2008	19	161	638	818

### Injury crashes 2004 to 2008

Crash type or contributory cause 2004 to 2008	<b>Local road</b> Percentage injury crashes	State Highway Percentage of injury crashes
Alcohol	11	9
Too fast	19	13
At bends	35	35
At intersections	33	29
Road factors	27	21

#### Vulnerable road users - casualties

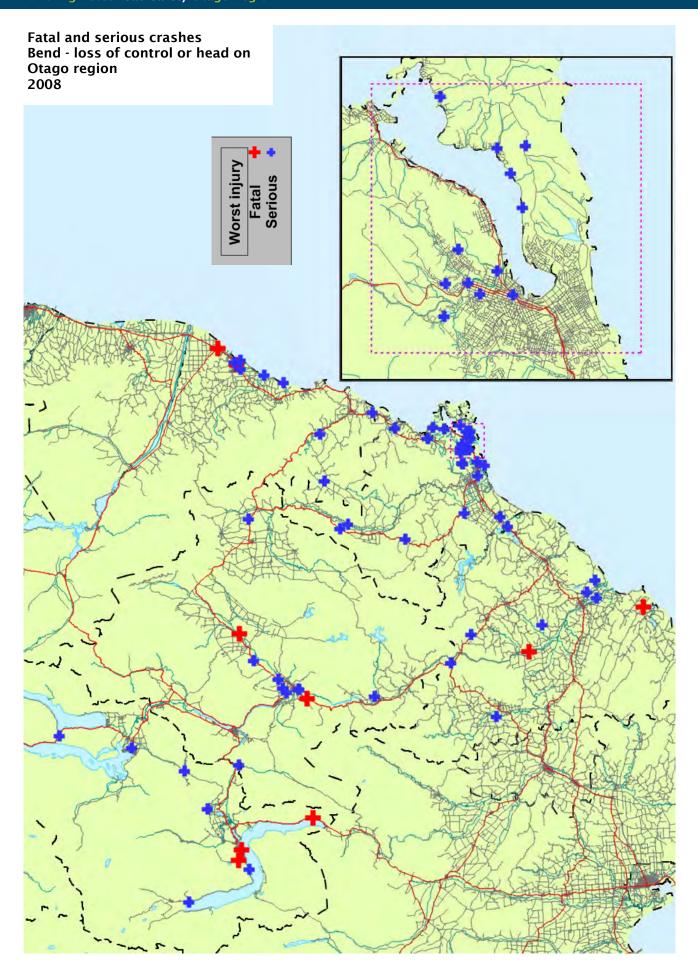
Road user type	<b>Local road</b> Percentage of all casualties	State Highway Percentage of all casualties
	_	_
Pedestrians	7	3
Cyclists	4	2
Motorcycles	6	4
Total vulnerable	17	9

Further information about the 2723 injury crashes on local roads in Otago Region 2004 to 2008 :

- Worst month March
- Worst day Friday
- 30 percent on wet or icy roads
- 32 percent at night
- 33 percent at intersections
- 1713 roadside objects struck
- Social cost of crashes in 2008 \$154.4m

Further information about the 1709 injury crashes on State Highways in Otago Region 2004 to 2008:

- Worst month June
- Worst day Friday
- 30 percent on wet or icy roads
- 30 percent at night
- 29 percent at intersections
- 1251 roadside objects struck
- Social cost of crashes in 2008 \$82.2 m



#### Bend - loss of control or head on

Between 2004 and 2008 thirty five percent of all injury crashes in Otago Region were bend - loss of control or head on crashes. These crashes resulted in 44 deaths, 478 serious injuries and 1876 minor injuries.

There were fewer crashes of this type in 2008 than in any of the previous four years.

Crashes at bends 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	6	82	202	290
2005	4	89	221	314
2006	9	86	242	337
2007	11	68	251	330
2008	9	58	213	280
Total	39	383	1129	1551

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 minor off-road event turning into something more serious.

The most common roadside hazards struck in injury bend - loss of control or head on crashes in Otago Region were cliff or bank (387), fence (297), over bank (247) and ditches (222) from a total of 1772 objects struck.

# Main characteristics of injury bend - lost control or head on crashes

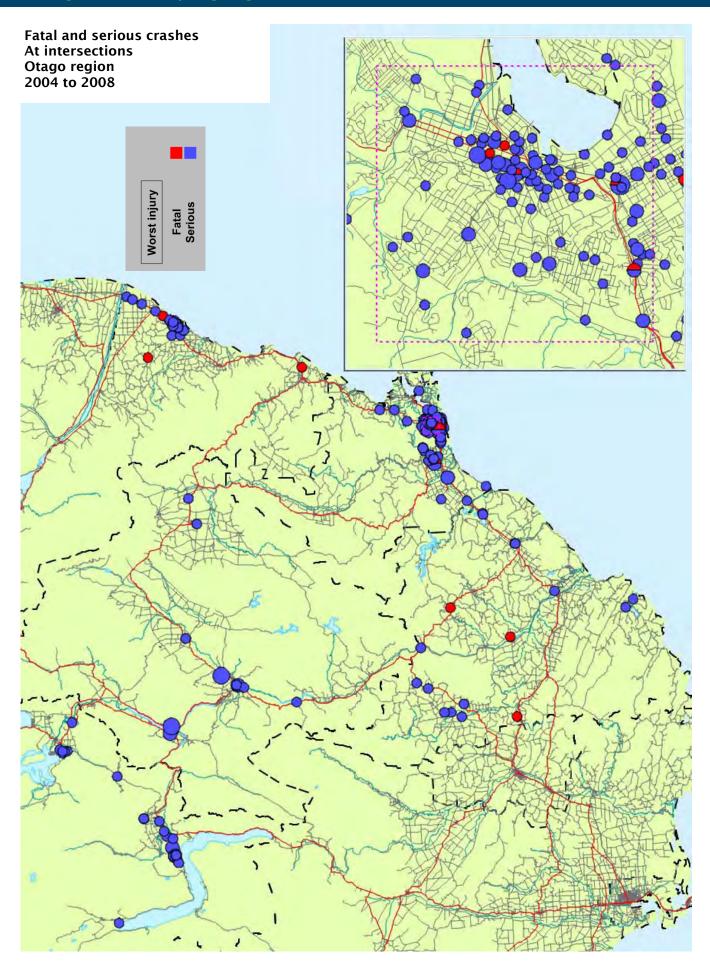
Crash characteristic	Percentage of crashes
Single vehicle	82
Alcohol	16
Excessive speed for the conditions	34
Road factors	43
Poor handling	55
Rural road	70
Wet or icy road	44
Night time	41

Further information about the 949 injury bend - loss of control or head on crashes (2004 to 2008) on local roads in Otago Region :

- 19 deaths, 301 serious injuries and 1167 minor injuries
- 68 percent of at fault drivers were male
- Most common at fault driver age group 15-19 years (29 percent of all at fault drivers)
- 17 percent of crashes involved alcohol
- 39 percent of crashes involved speed too fast for the conditions
- Worst month June
- Worst day of week Saturday
- Worst time 3 pm till 6 pm

Further information about the 602 injury bend - loss of control or head on crashes (2004 to 2008) on State Highways in Otago Region:

- 25 deaths, 177 serious injuries and 709 minor injuries
- 65 percent of at fault drivers were male
- Most common at fault driver age group 20 - 24 years (22 percent of at fault drivers)
- 13 percent of crashes involved alcohol
- 27 percent of crashes involved speed too fast for the conditions
- Worst month June
- Worst day of week Saturday
- Worst time 3 pm to 6 pm



## Intersections

During the five year period 2004 to 2008 within Otago Region there were a total of 3406 crashes at intersections, 1383 of these were injury crashes and 2023 non-injury. In these crashes 14 people were killed, 281 received serious injuries and 1716 received minor injuries.

89 percent of these crashes were at urban intersections

#### Crashes at Intersections

	2004	2005	2006	2007	2008
Injury crash	243	285	249	289	317
Non- injury crash	378	342	334	446	523
Total	621	627	583	735	840

The number of reported crashes, both injury and non-injury, at intersections in the region in 2008 was the highest in the last five years.

# Casualties from crashes at intersections 2004 - 2008

Authority	Deaths	Serious injury	Minor injury
Central Otago District	0	20	73
Clutha District	3	15	89
Dunedin City	7	189	1241
Queenstown-Lakes District	1	30	155
Waitaki District	3	27	158
Otago Region total	14	281	1716

#### Junction control Injury and non-injury crashes

Junction control	Traffic signals	Nil	Give Way	Stop
Number of crashes	687	575	1660	477

The most common crash type at intersections was when a vehicle travelling straight through an intersection was struck by a vehicle also travelling straight through from a side road.

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

- Poor observation
- · Failure to give way or stop

## Junction type Injury and Non-injury crashes

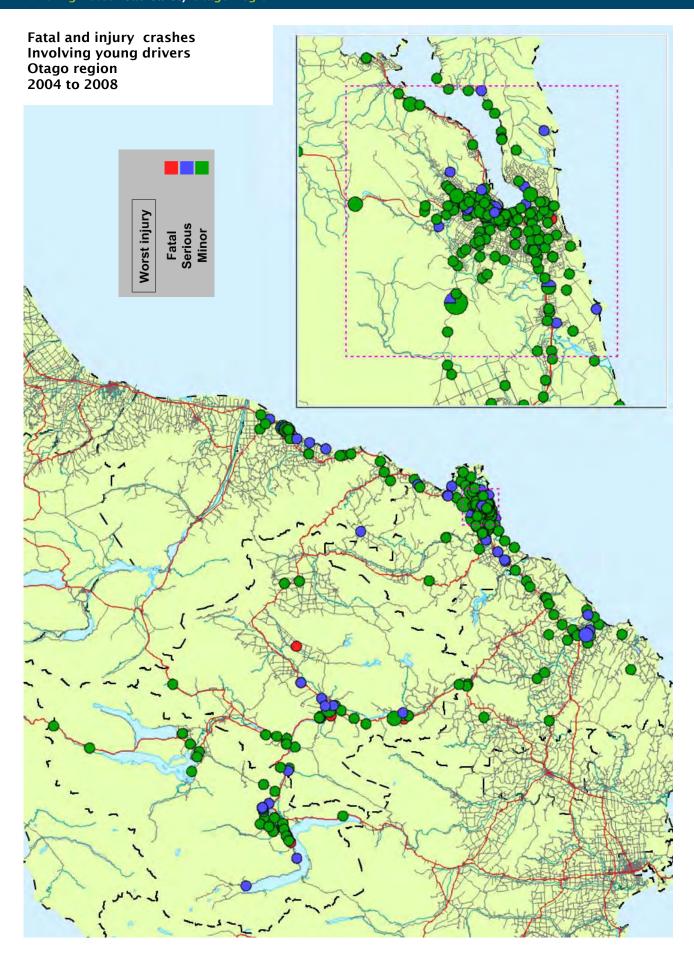
Junction Type	Rural	Urban
Roundabout	0	115
Tee	304	1376
Cross (X)	62	1377
Multi-leg	2	109
Other (includes driveways)	9	52

Further information about the 891 injury crashes at intersections on local roads in Otago Region 2004 to 2008:

- 9 deaths, 200 serious injuries and 1083 minor injuries
- 27 percent wet or icy roads
- 27 percent night time
- Worst month March
- Worst day of week Friday
- Worst time 3 pm till 6 pm

Further information about the 492 injury crashes at intersections on State Highways in Otago Region 2004 to 2008:

- 5 deaths, 81 serious injuries and 633 minor injuries
- 17 percent wet or icy roads
- 24 percent night time
- Worst month May
- Worst day of week Thursday
- Worst time 3 pm till 6 pm



## Young drivers

Young drivers are those aged less than 25 years.

This analysis is based on injury crashes only as driver age is not recorded in non-injury crashes.

In Otago Region between 2004 and 2008, 43 percent of injury crashes involved young drivers. These 1978 crashes resulted in 44 fatalities, 544 serious injuries and 2489 minor injuries.

The total number of injury crashes involving young drivers has fluctuated over the last five years, although the number in 2008 was the lowest in the last five years.

## Injury crashes involving young drivers

	Fatal	Serious	Minor	Total
2004	5	100	283	388
2005	7	98	328	433
2006	8	89	273	370
2007	9	72	351	432
2008	7	65	283	355
Total	36	424	1518	1978

Two thirds of the 2185 young drivers in these crashes were males. Forty three percent had a learner or restricted licence. Just over half were in the 15 to 19 years age group.

## Young drivers in injury crashes

2008 - 2008				
Licence type	Female	Male	Total	
Full	277	638	915	
Learner	95	159	254	
Restricted	254	439	693	
Overseas	51	80	131	
Never licensed	23	42	65	
Disqualified	8	34	42	
Other (unknown, wrong class)	29	56	85	
Total	737	1448	2185	

### Injury crashes involving young drivers

Crash type or contributory cause	% of injury crashes
Alcohol	12
Speed	25
Failed to Give way or stop	22
Poor handling	32
Poor observation	43
Lost control - straight	13
Lost control - bend	37
Rear end / obstruction	20
Crossing / turning	21

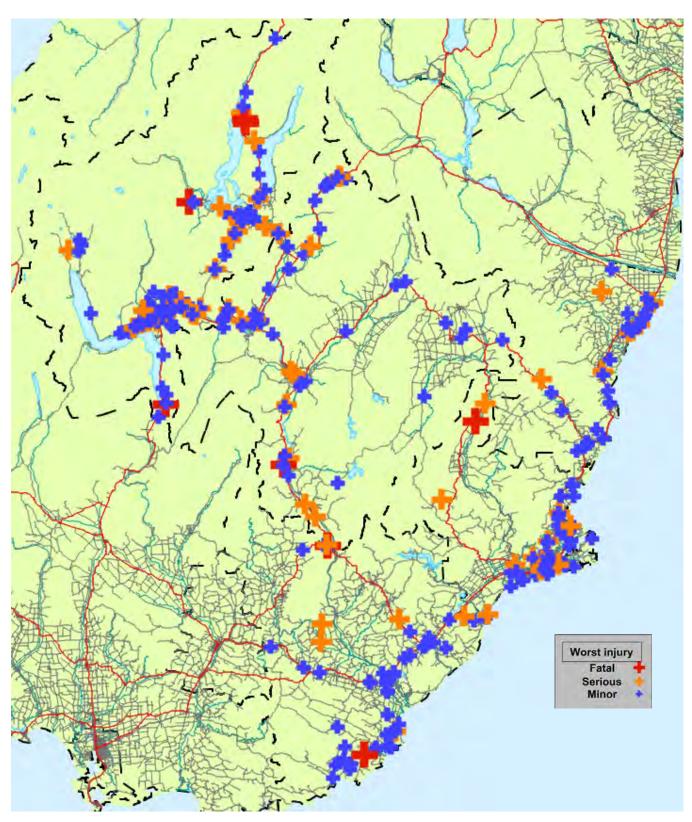
Further information about the 1302 injury crashes involving young drivers on local roads in Otago Region 2004 to 2008:

- 45 percent were single vehicle crashes
- 70 percent were on urban roads
- 33 percent at intersections
- 37 percent at night
- 31 percent in wet or icy conditions
- Worst month April
- Worst day of week Friday
- Worst time 3 pm to 6 pm,

Further information about the 676 injury crashes involving young drivers on State highways in Otago Region 2004 to 2008:

- 45 percent were single vehicle crashes
- 39 percent were on urban roads
- 30 percent at intersections
- 38 percent at night
- 30 percent in wet or icy conditions
- Worst month June
- Worst day of week Friday
- Worst time 3 pm to 6 pm

Fatal and injury crashes Involving overseas drivers Otago region 2004 to 2008



## **Overseas drivers**

In Otago Region between 2004 and 2008 nine percent of injury crashes involved overseas drivers. These 413 crashes resulted in 10 deaths, 91 serious injuries and 597 minor injuries.

These drivers may include both tourists and New Zealand residents driving on an overseas licence.

## Injuries in crashes in Otago Region, involving overseas drivers

	2004	2005	2006	2007	2008
Fatal	6	0	2	2	0
Serious	21	18	22	14	16
Minor	128	95	123	118	133
Total	155	113	147	134	149

The number of casualties from crashes involving overseas drivers has fluctuated between a high of 155 in 2004 and a low of 113 in 2005. There is no apparent long term trend.

# Injury crashes in Otago Region involving overseas drivers 2004-2008

	2004	2005	2006	2007	2008
Rural	58	47	65	52	55
Urban	26	23	28	29	30
Total	84	70	93	81	85

More than six in every ten crashes in the region that involved an overseas driver were in the rural areas.

In Otago Region, 41 percent of all crashes involving overseas drivers were Bend - loss of control or head-on crashes. Straight road - loss of control or head on crashes accounted a further 13 percent of injury crashes.

Male drivers of all ages made up 68 percent of at fault drivers.

Ages of drivers at fault in crashes involving overseas drivers

Ages	Male	Female	Total
15 to 19	23	11	34
20 to 24	74	38	112
25 to 29	39	31	70
30 to 39	53	30	83
40 to 49	29	11	40
50 to 59	32	8	40
60 to 69	24	5	29
70 +	16	1	17

The common home locations of the overseas drivers were:

Europe 68 United kingdom 45 Australia- 40, Asia 36 North America 28 South America 2 Pacifica 1

Further information about the 413 injury crashes involving overseas drivers in Otago Region 2004 to 2008:

- Most common crash factors were:- Poor observation, Poor handling, Poor judgement, failed to give way or stop and too fast.
- 28 percent of crashes were at intersections
- 17 percent of crashes at night
- 29 percent in of crashes in wet or icy conditions
- Worst month February
- Worst day of week Friday
- Worst times midday 3 pm to 6 pm

## The next ten years—moving beyond Road Safety 2010

In August this year the Ministry of Transport (MoT) will embark on a nationwide road safety consultation programme as it moves to formulate priorities for the next ten years.

The chart on the right illustrates the progress made during the life of the Road Safety 2010 strategy and while progress has been made it would seem unlikely that the target of 300 or fewer fatalities will be met.

Information will be published on the Ministry of Transport web site and we would encourage any person or group with an interest in road safety to watch the site carefully for developments.



Follow this link: http://www.transport.govt.nz/ourwork/Land/landsafety/SaferJourneys-RoadSafetyStrategyto2020/

#### **Restraints**

The Ministry of Transport conducts surveys of restraint use. Results are available for front, rear and child restraints although not all at a local authority level. The results of these surveys are available at the MoT website: http://www.transport.govt.nz/research/safetybeltstatistics/

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