

New Zealand Government

briefing notes - road safety issues

Coastal Otago State Highways

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 on State Highways in the Coastal Otago Network Management Area.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented or those with high social cost (high numbers of fatal and serious crashes mainly).

We have included a brief overview of crashes on State highways in the network management area.

We encourage Network Managers and operational staff to use their access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. Also the NZTA Christchurch Performance Information team is available to provide further information if required. All data and maps in this note are from CAS.

Major road safety issues

Coastal Otago State Highways

Bend - loss of control or head-on

Intersections

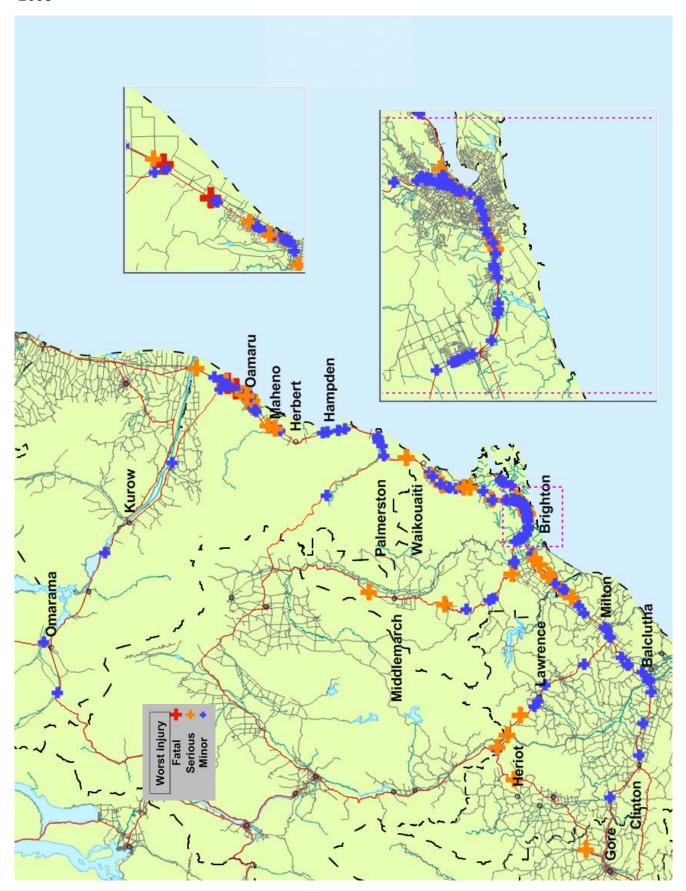
2008 road trauma

Casualties	Coastal Otago State Highways		
Deaths	4		
Serious casualties	42		
Minor casualties	301		

Nationally
Speed
Alcohol
Failure to give way
Restraints

Crashes	Coastal Otago State Highways
Fatal crashes	2
Serious injury crashes	38
Minor injury crashes	185
Non-injury crashes	295

Fatal and injury crashes Coastal Otago State Highways 2008



Overview

In 2008 on State highways in the Coastal Otago network area there were 225 injury crashes and 295 reported non-injury crashes.

The table below shows the number of injuries resulting from the 225 injury crashes by rural or urban areas on Coastal Otago State highways (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	2	32	158	192
Urban	0	10	143	153
Total	2	42	301	345

All fatalities, three quarters of serious casualties and just over half of minor casualties from crashes on Coastal Otago State Highways were from crashes on rural highways.

The number of fatal crashes in 2008 was the lowest in the last ten years. The numbers of serious injury crashes rose to a high of 74 in 2003, and has generally reduced since then to be the second lowest annual figure in the ten years.

Crash trends in Coastal Otago State Highways

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	11	24	80	115
2000	5	39	60	104
2001	8	63	154	225
2002	4	66	212	282
2003	8	74	171	253
2004	6	60	206	272
2005	5	55	208	268
2006	9	62	184	255
2007	7	42	204	253
2008	2	38	185	225

Injury crashes 20	004 to 2008
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Crash type or contributory cause 2004 to 2008	Percentage of all injury crashes
Alcohol	9
Too fast	13
At bends	32
On straights	16
Road factors	20

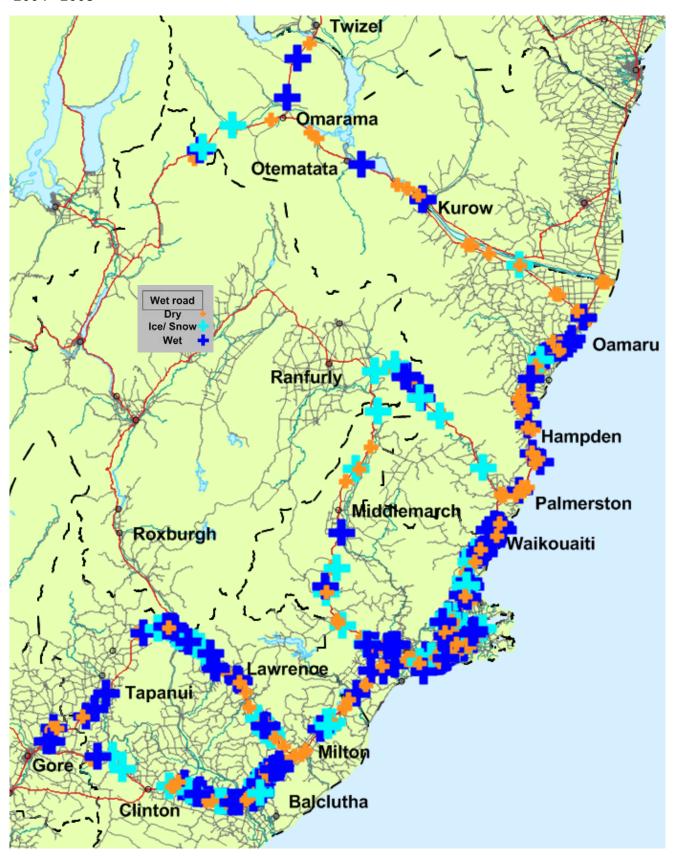
Social cost by State Highway Injury crashes 2004 to 2008

State Highway	Number of injury crashes	Social cost (m)
SH 1	940	\$254.7
SH 8	85	\$40.4
SH 83	29	\$9.7
SH 85	26	\$7.7
SH 86	3	\$0.3
SH 87	81	\$18.6
SH 88	73	\$16.2
SH 90	23	\$15.4

Further information about the 2004 to 2008 injury crashes on Coastal Otago State Highways:

- Worst month June
- Worst day Friday
- 31 percent on wet or icy roads
- 30 percent at night
- 31 percent at intersections
- 900 roadside objects struck
- Social cost of crashes in 2008 \$48.9 m

Injury Bend - loss of control or head on crashes Coastal Otago State Highways 2004 - 2008



Bend - loss of control or head on

Between 2004 and 2008 thirty two percent of all injury crashes on Coastal Otago State Highways were bend - loss of control or head crashes. These 403 crashes resulted in 19 fatalities, 129 serious injuries and 467 minor injuries.

Injury bend - loss of control or head on crashes 2004 to 2008

Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	4	23	62	89
2005	2	25	64	91
2006	6	29	51	86
2007	4	14	60	78
2008	1	13	45	59
Total	17	104	282	403

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 most common roadside hazards struck in injury bend - loss of control or head on crashes on Coastal Otago State Highways were fences (103), cliff or bank (88), ditch (83), over bank (71) and tree (39) from a total of 522 objects struck.

Main characteristics of injury bend - loss of control or head on crashes

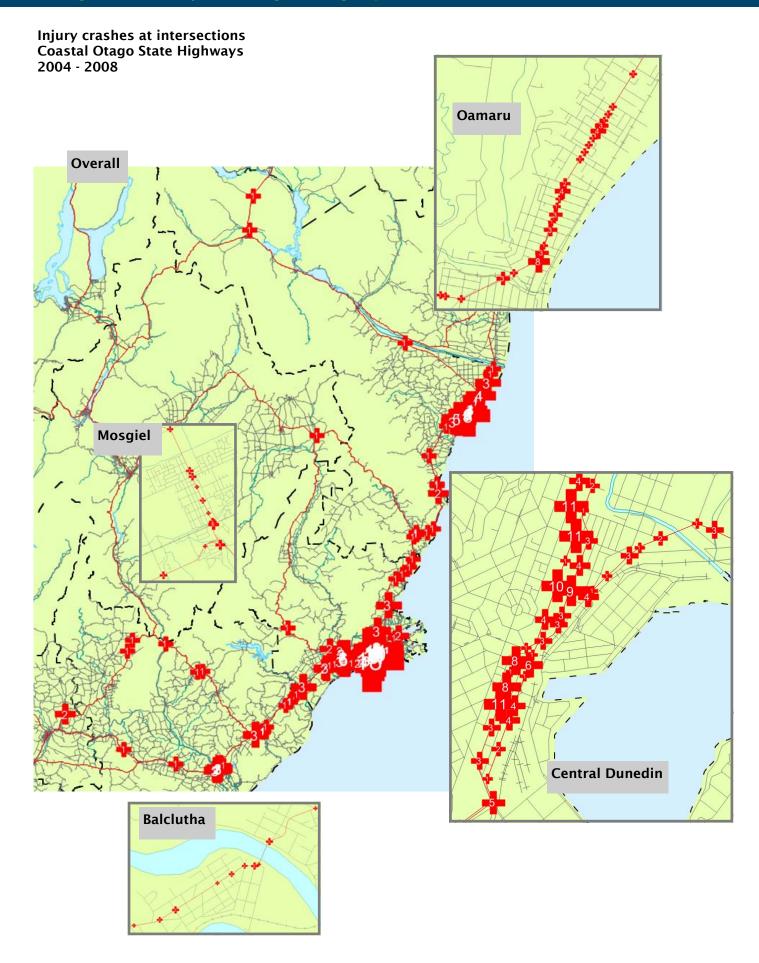
Crash characteristic	Percentage of crashes
Single vehicle	84
Alcohol	15
Excessive speed for the conditions	28
Road factors	34
Poor handling	53
Rural road	89
Wet or icy road	46
Night time	43

Injury bend- loss of control or head on crashes by 2004 to 2008

	2004	2005	2006	2007	2008
SH 1	59	59	45	49	36
SH 8	5	7	19	11	8
SH 83	5	3	5	3	2
SH 85	5	8	3	2	0
SH 86	1	0	0	1	0
SH 87	7	6	3	3	7
SH 88	4	3	8	4	4
SH 90	2	4	4	4	1

Further information about the 403 injury bend - loss of control or head on crashes on State Highways in Coastal Otago 2004 to 2008:

- 66 percent of at fault drivers were male
- Most common at fault driver age group 20 to 24 years (21 percent of at fault drivers)
- Worst month June
- Worst day Saturday
- Worst time period 3 pm to 6 pm



Intersections

During the five year period 2004 to 2008 on Coastal Otago State Highways, there were a total of 399 injury crashes at intersections.

Injury crashes at Intersections (2004 to 2008)

(2001:00200)				
	Fatal crashes	Serious crashes	Minor crashes	
SH 1	3	42	271	
SH 8	1	1	271	
SH 83	0	1	1	
SH 85	0	0	2	
SH 87	0	1	25	
SH 88	T	3	28	
SH 90	1	3	0	

Injury crashes at Intersections Speed limit and traffic control

	50	60	70	80	100
Give Way	131	9	2	2	44
Stop	28	1	4	1	19
Traffic Signal	0	130	0	0	0
Nil	13	0	3	1	9

Locations with nine or more injury crashes 2004 to 2008

Intersection name	2004 to 2007	2008
SH 1 / Barnes Drive	12	6
Cumberland St / Frederick St	9	2
Great King St / Albany St	9	2
Crawford St / Police St	8	3
Cumberland St / St Andrew St	3	7
Castle St / St Andrew St	7	2

The most common crash type at intersections is a right angle collision between two vehicles. The second common type of crash is when a vehicle turns right across the path of a vehicle approaching from the opposite direction.

The main causes contributing to crashes on Coastal Otago State highways:

- Not checking properly
- Failure to give way or stop

Junction type - Injury crashes, 2004 to 2008

Junction Type	Rural	Urban
Multi leg	1	21
Roundabout	0	9
Tee and Y	55	80
Cross (X)	20	209
Other (includes driveways)	0	4

Further information about the 399 injury crashes at intersections on Coastal Otago State Highways 2004 to 2008:

- 6 deaths, 55 serious injuries and 514 minor injuries
- 19 percent wet roads
- 24 percent night time
- 65 percent of at fault drivers were male
- 72 percent of at fault drivers held a full licence
- 19 percent of crashes occurred at rural intersections
- Worst month May
- Worst day Friday
- Worst period 3 pm till 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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