

### New Zealand Government

# briefing notes - road safety issues

## South Canterbury 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 South Canterbury 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

#### **South Canterbury State Highways**

Straight Road loss of control or head-on

Fatigue

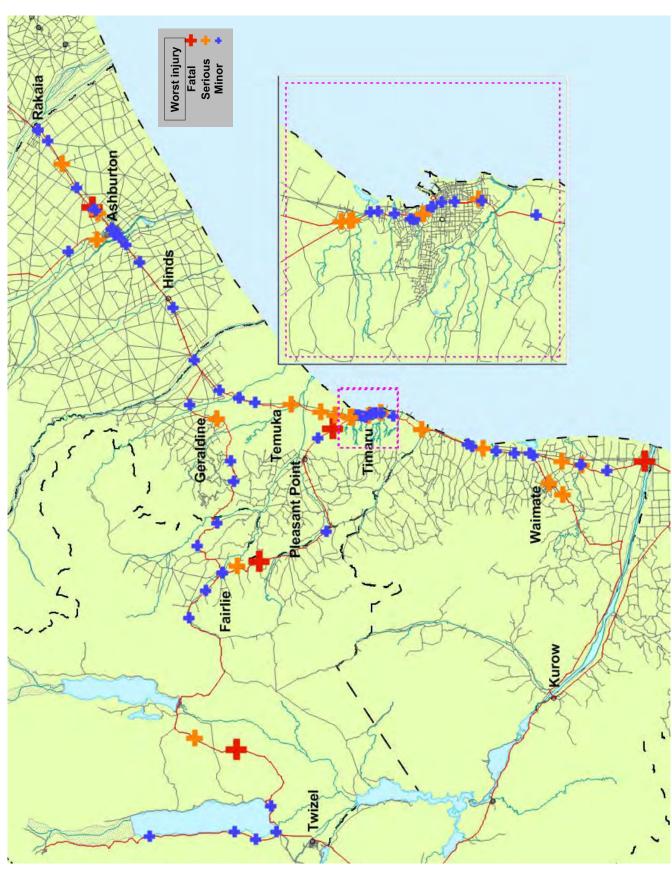
#### 2008 road trauma

Casualties	South Canterbury State Highways
Deaths	5
Serious casualties	25
Minor casualties	88

Nationally
Speed
Alcohol
Failure to give way
Restraints

Crashes	South Canterbury State Highways
Fatal crashes	5
Serious injury crashes	20
Minor injury crashes	61
Non-injury crashes	230

### Fatal and injury crashes South Canterbury State Highways 2008



#### **Overview**

In 2008 on State highways in South Canterbury there were 86 injury crashes and 230 reported non-injury crashes.

The table below shows the number of injuries resulting from the 86 injury crashes by rural or urban areas for South Canterbury 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	5	15	51	71
Urban	0	10	37	47
Total	5	25	88	118

All fatalities, six of every ten serious casualties and close to six from every ten minor casualties from crashes on South Canterbury State Highways were from crashes on rural highways.

The number of fatal crashes in 2003 was about double the average for the other nine years. For serious and minor crashes the numbers in 2007 were higher than in other years.

# Crash trends in South Canterbury State Highways

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	5	18	49	72
2000	3	21	57	81
2001	5	24	58	87
2002	5	22	51	78
2003	10	19	58	87
2004	6	20	52	78
2005	5	21	51	77
2006	2	11	69	82
2007	5	35	83	123
2008	5	20	61	86

Injury crashes 2004 to 2008			
Crash type or contributory cause 2004 to 2008	Percentage of all injury crashes		
Alcohol	14		
Too fast	14		
At bends	20		
On straights	32		
Road factors	11		
Fatigue	18		

# Social cost by State Highway Injury crashes 2004 to 2008

State Highway	Number of injury crashes	Social cost (m)
SH 1	299	\$137.8
SH 77	17	\$9.8
SH 78	2	\$0.2
SH 79	29	\$13.5
SH 8	71	\$36.4
SH 80	10	\$3.0
SH 82	18	\$6.5

Further information about 2004 to 2008 injury crashes on South Canterbury State Highways :

- Worst month February
- Worst days Friday, Saturday
- 18 percent on wet or icy roads
- 31 percent at night
- 30 percent at intersections
- 226 roadside objects struck
- Social cost of crashes in 2008 \$41.5 m

Injury straight road - loss of control or head on crashes South Canterbury State Highways 2004 - 2008



# **Straight road** -loss of control or head on

Between 2004 and 2008 thirty two percent of all injury crashes on South Canterbury State Highways were straight road - loss of control or head on crashes. These 143 crashes resulted in 16 fatalities, 48 serious injuries and 138 minor injuries.

### Injury Straight road - loss of control or head on crashes 2004 to 2008

Crash year	Fatal crashes	Serious crashes	Minor crashes
2004	3	8	14
2005	3	5	14
2006	1	4	25
2007	2	12	23
2008	3	6	20
Total	12	35	96

Most of these crashes occurred when a driver lost control of their vehicle and either ran off the road or collided 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 most common roadside hazards struck in injury crashes on South Canterbury State Highways were fence (28), poles or posts (21) ditch (15) and tree (15) from a total of 117 objects struck.

# Main characteristics of injury straight road - loss of control or head on crashes 2004 to 2008

Crash characteristic	Percentage of crashes
Single vehicle	76
Alcohol	20
Excessive speed for the conditions	8
Road factors	6
Poor handling	36
Rural road	82
Wet or icy road	17
Night time	38

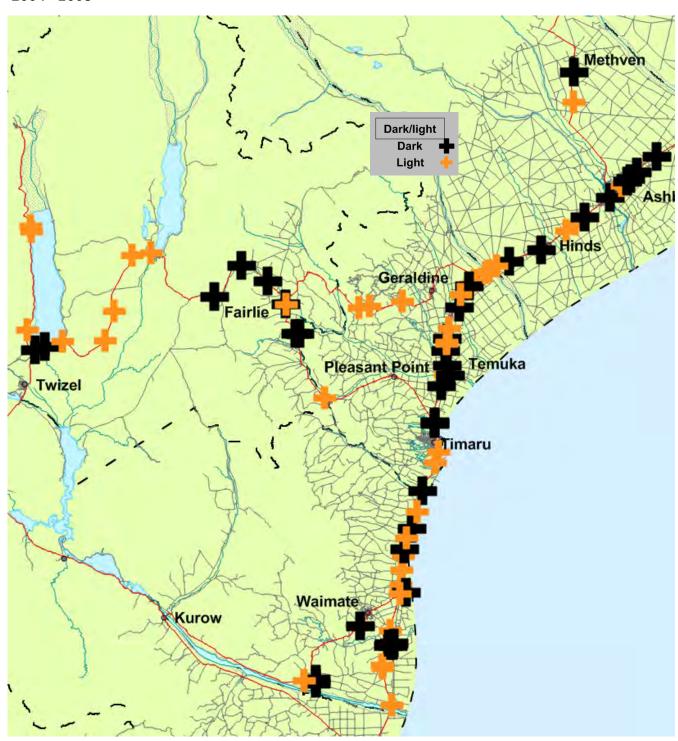
## Age and gender of at fault drivers in injury crashes 2004 to 2008

Ages of drivers	Male	Female
15- 19 years *	15	9
20 - 24	16	12
25 - 29	12	5
30 - 39	11	5
40 - 49	11	4
50 - 59	15	9
60 - 69	4	3
70+	8	2
Total	92	49

Further information about the 143 injury straight road - loss of control or head on crashes on (2004 to 2008) on State Highways in South Canterbury:

- 65 percent of at fault drivers were male
- Most common crash type "off road to left"
- Most common at fault driver age group 20 to 24 years
- 43 percent involved fatigue
- Worst month December
- Worst day of week Saturday
- Worst time period 3 pm to 6 pm

#### Fatigue related injury crashes South Canterbury State Highways 2004 - 2008



### **Fatigue**

Fatigue is a condition that can occur long before a driver falls asleep. It has a negative impact on reaction time, the ability to concentrate, and a drivers general understanding of the prevailing road and traffic conditions. In New Zealand in 2008 fatigued drivers were reported as contributing to 12 percent of all fatal crashes and 6 percent of all injury crashes.

On South Canterbury State Highways between 2004 and 2008, fatigue was reported as a factor in 18 percent of fatal and injury crashes in 2008. These 82 crashes resulted in 10 deaths, 28 people with serious injuries and 70 with minor injuries.

## Number of fatigue related injury crashes

Crash year	Rural road	Urban road	Total
2004	11	2	13
2005	13	2	15
2006	8	3	11
2007	21	1	22
2008	20	1	21
Total	73	9	82

(Rural road is defined as any area with a speed limit of 80 km/hr or more )

# Age and sex of at fault drivers in fatigue related injury crashes 2004 - 2008

Drivers age *	Male	Female	Total
15-19 years	15	2	17
20 - 24	8	2	10
25 - 29	6	3	9
30 - 39	11	4	15
40 - 49	4	0	4
50 - 59	13	4	17
60 - 69	2	1	3
70+	4	2	6
Total	63	18	81

# Social cost by State Highway Injury fatigue crashes 2004 to 2008

State Highway	Number of injury crashes	Social cost (m)
SH 1	54	\$37.7
SH 77	2	\$1.6
SH 78	0	\$0
SH 79	3	\$4.4
SH 8	15	\$15.1
SH 80	3	\$1.7
SH 82	5	\$2.6

Almost 9 from every 10 crashes where fatigue was reported were on rural roads in the area. Drivers aged 15 - 19 years and 50 - 59 years were those most likely to be involved in fatigue crashes.

# Home locations of fatigued drivers in injury crashes on South Canterbury State Highways 2004 - 2008

Local (Timaru - Waimate - Ashburton, Mackenzie)	55
Other South Island	42
North Island	2
Overseas	3

Further information about the 82 fatigue related injury crashes on South Canterbury State Highways 2004 to 2008:

- 78 percent of at fault drivers were male
- Most common crash type "off road to left on a straight road"
- 9 percent of crashes were at intersections
- 16 percent on wet or icy road
- 45 percent night time
- Worst month November
- Worst day of week Saturday
- Worst time 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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