

briefing notes - road safety issues

North 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 North 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

North Canterbury State Highways

Bend loss of control or head-on

Intersections

Motor cyclists

2008 road trauma

Casualties

North Canterbury State Highways

Deaths

13

Serious casualties

80

Minor casualties

303

Nationally

Speed

Alcohol

Failure to give way

Restraints

Crashes

Fatal crashes

Serious injury crashes

Minor injury crashes

Non-injury crashes

North Canterbury State Highways

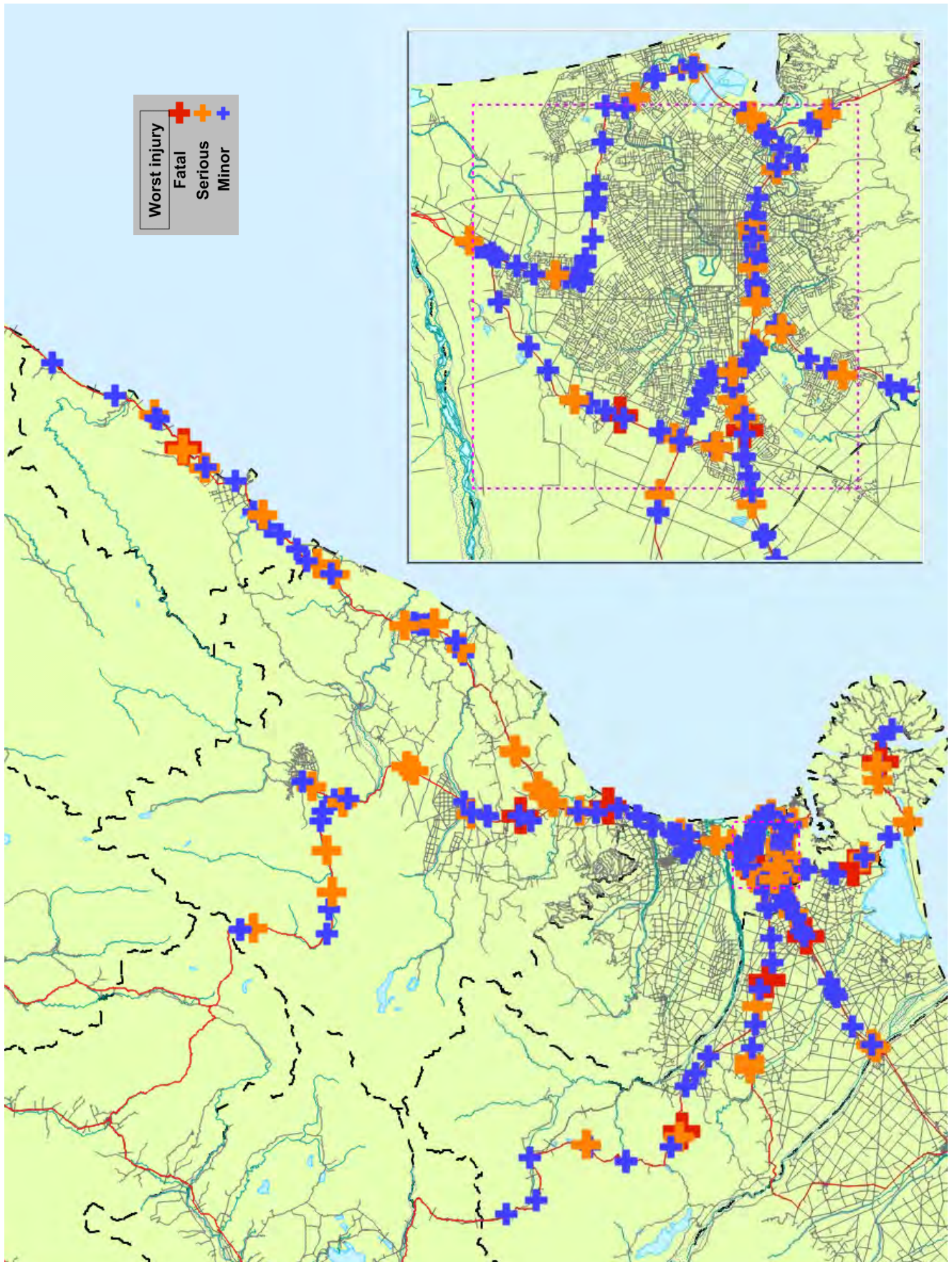
10

64

222

460

Fatal and injury crashes
North Canterbury State Highways
2008



Overview

In 2008 on State highways in North Canterbury there were 296 injury crashes and 460 reported non-injury crashes.

The table below shows the number of injuries resulting from the 86 injury crashes by rural or urban areas for North 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	12	51	156	219
Urban	1	29	147	177
Total	13	80	303	396

All but one fatality, over six of every ten serious casualties and over half of minor casualties from crashes on North Canterbury State Highways were from crashes on rural highways.

The number of fatal crashes has been reasonably stable except for high years in 1999 and 2007. For serious and minor crashes the number climbed to a high in 2006 and 2007 respectively and dropped since then.

Crash trends in North Canterbury State Highways				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	22	50	151	223
2000	13	59	162	234
2001	12	56	146	214
2002	14	39	158	211
2003	14	47	167	228
2004	12	53	164	229
2005	13	62	176	251
2006	10	72	234	316
2007	17	62	253	332
2008	10	64	222	296

Injury crashes 2004 to 2008

Crash type or contributory cause 2004 to 2008	Percentage of all injury crashes
Alcohol	10
Too fast	17
At bends	29
At intersections	40
Road factors	11

Social cost by State Highway Injury crashes 2004 to 2008

State Highway	Number of injury crashes	Social cost (m)
SH 1	594	\$269.2
SH 7	94	\$72.7
SH 7A	5	\$1.8
SH 71	22	\$5.6
SH 73	309	\$105.5
SH 73A	43	\$16.5
SH 74	199	\$48.9
SH 74A	17	\$2.7
SH 75	107	\$43.4
SH 77	25	\$23.0

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

- Worst month December
- Worst day Friday
- 22 percent on wet or icy roads
- 30 percent at night
- 40 percent at intersections
- 705 roadside objects struck
- Social cost of crashes in 2008 \$109.1 m

Injury Bend - loss of control or head on crashes
North Canterbury State Highways
2004 - 2008



Bend - loss of control or head on

Between 2004 and 2008 twenty nine percent of all injury crashes on North Canterbury State Highways were bend - loss of control or head crashes. These 406 crashes resulted in 33 fatalities, 143 serious injuries and 411 minor injuries.

Injury bend - loss of control or head on crashes 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	5	18	42	65
2005	6	30	52	88
2006	3	20	62	85
2007	8	23	65	96
2008	6	21	45	72
Total	28	112	266	406

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 North Canterbury State Highways were cliffs or banks (65), fence (55), tree (46), and over bank (38) from a total of 369 objects struck.

Main characteristics of injury bend - loss of control or head on crashes	
Crash characteristic	Percentage of crashes
Single vehicle	77
Alcohol	13
Too fast	42
Road factors	22
Poor handling	50
Rural road	89
Wet or icy road	34
Night time	35

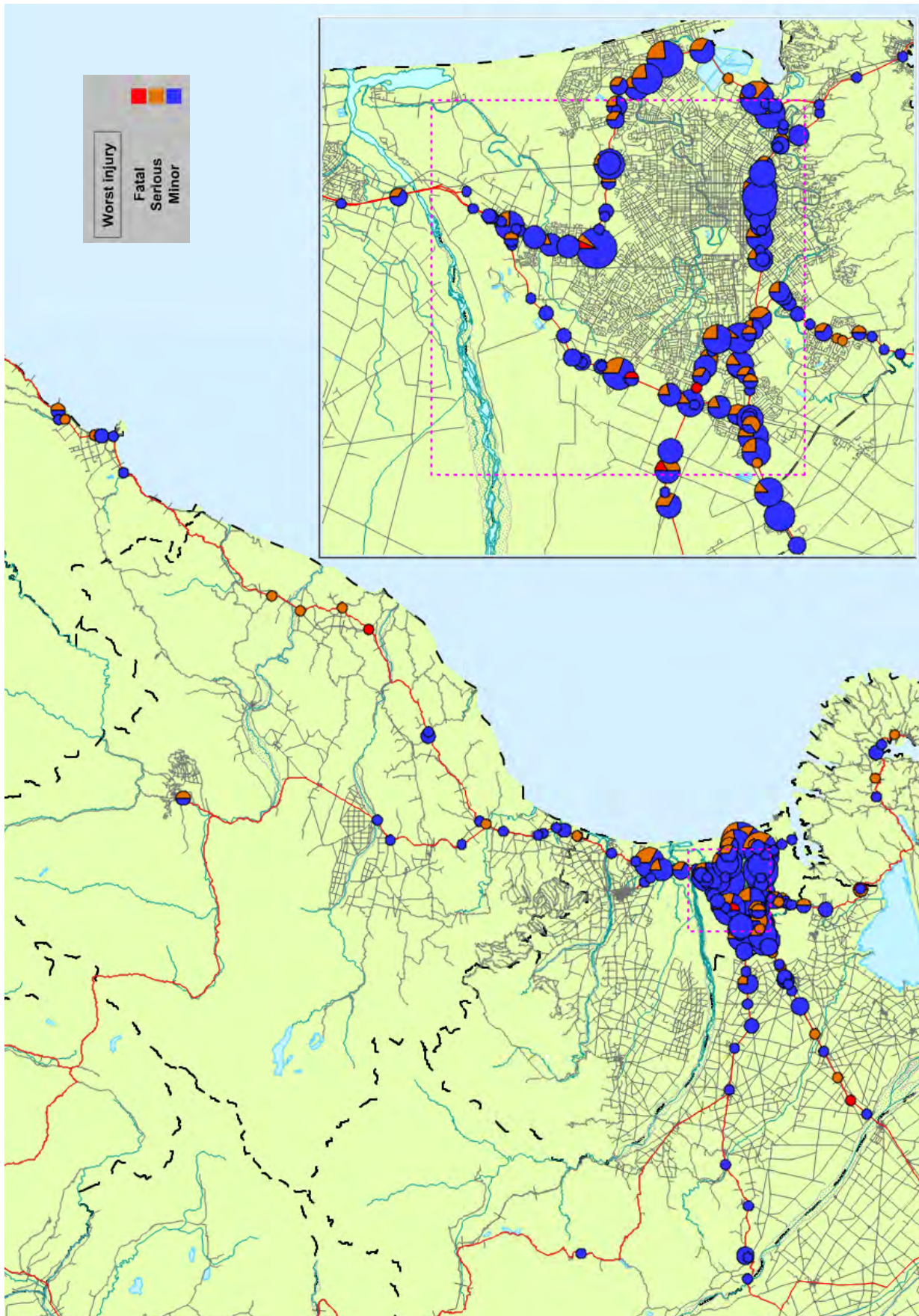
Injury bend loss of control or head on crashes by State Highway 2004 to 2008

	2004	2005	2006	2007	2008
SH 1	34	41	41	48	26
SH 7	7	9	14	19	13
SH 7A	0	0	0	1	1
SH 71	1	3	2	0	1
SH 73	10	13	10	7	11
SH 73A	0	1	0	1	1
SH 74	1	10	4	5	5
SH 74A	1	0	0	1	1
SH 75	10	9	10	8	11
SH 77	1	2	4	6	2

Further information about the 406 injury bend - loss of control or head on crashes on State Highways in North Canterbury 2004 to 2008:

- 72 percent of at fault drivers were male
- Most common at fault driver age group 30 to 39 years (22 percent of at fault drivers)
- Worst month January
- Worst day Sunday
- Worst time period 3 pm to 6 pm

Injury crashes at intersections
North Canterbury State Highways
2004 - 2008



Intersections

During the five year period 2004 to 2008 on North Canterbury State Highways, there were a total of 569 injury crashes at intersections. This was 40 percent of all injury crashes.

Crashes at Intersections			
	Fatal crashes	Serious crashes	Minor crashes
SH 1	4	34	135
SH 7	0	0	3
SH 7A	0	1	1
SH 71	0	2	6
SH 73	2	22	134
SH 73A	0	8	20
SH 74	1	24	107
SH 74A	0	2	13
SH 75	1	11	24
SH 77	0	0	7

Locations with ten or more injury crashes 2004 to 2008		
Intersection name	2004 to 2007	2008
Main North Road / QE II Drive	12	4
Anzac Drive / Pages Road	11	2
Brougham Street / Gasson Street	8	4
Brougham Street / Waltham Road	9	2
Dyers Road / Linwood Avenue	9	2
Brougham Street / Colombo Street	7	3
Russley Road / Memorial Avenue	9	1

These intersections are listed regardless on any work recently carried out.

Crashes at Intersections Speed limit and traffic control

	50	60	70	80	100
Give Way	53	37	17	45	46
Stop	12	11	26	16	48
Traffic signal	107	92	21	1	1
Nil	6	9	4	4	13

The most common crash type at intersections is the right turn into the path of oncoming traffic. The second most common type of crash is the right angle crash at an intersection.

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

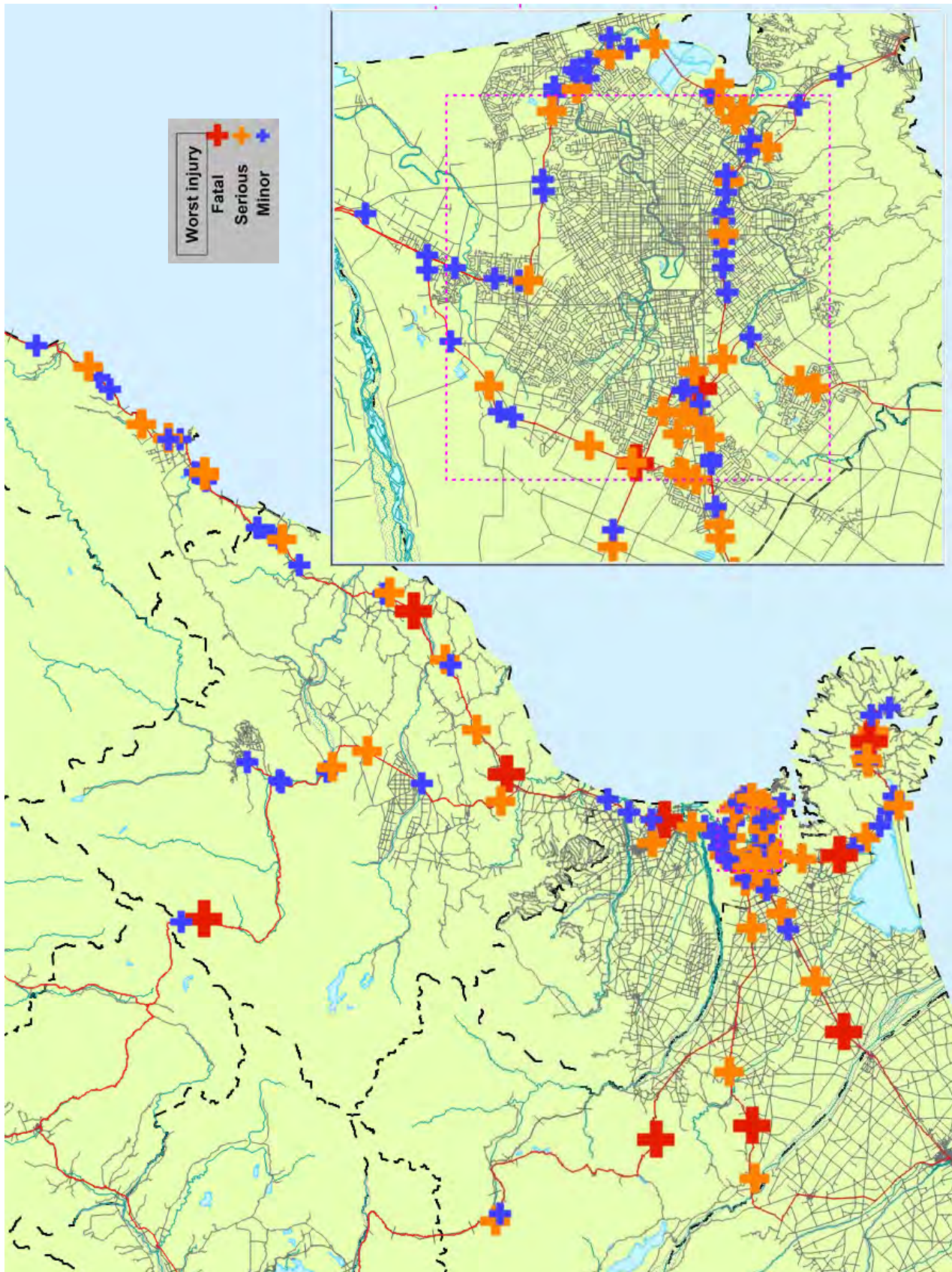
- Failure to stop and give way
- Not checking properly.

Junction type Injury and Non-injury crashes		
Junction Type	Rural	Urban
Multi road	1	1
Tee and Y	87	114
Cross (X)	50	233
Roundabout	32	43
Other (includes driveways)	4	4

Further information about the injury crashes at intersections on North Canterbury State Highways 2004 to 2008:

- 9 deaths, 118 serious injuries and 643 minor injuries
- 15 percent wet or icy roads
- 32 percent night time
- 65 percent of at fault drivers were male
- 70 percent of at fault drivers held a full licence
- 31 percent of crashes occurred at rural intersections
- Worst month December
- Worst day Friday
- Worst period 3 pm till 6 pm

Injury crashes involving motor cycles
North Canterbury State Highways
2004 - 2008



Motorcyclists

Nationally motorcycling fatalities dropped from 20 percent of all fatalities in 1988, to just six percent in 2003. Since then there has been an increase in motorcycle registrations and this has reversed the downward trend.

Motorcyclist casualties do not feature highly in the overall crash statistics on North Canterbury State highways representing less than 9 percent of all casualties. However, they make up 18 percent of fatal and serious casualties.

Casualties from motorcyclist crashes

	2004	2005	2006	2007	2008
Fatal	0	4	4	2	5
Serious	8	12	15	15	19
Minor	12	16	19	32	17
Total	20	32	38	49	41

The number of casualties from motorcycle crashes more than doubled from 2004 to 2007. There was a slight reduction in the 2008 total casualties, but the number of fatal and seriously injured people in 2008 was the highest in the last five years.

Major causes in motorcycle crashes, North Canterbury State highways, 2004-2008

Cause	Motorcyclist at fault	Other road users at fault
Poor handling	53	2
Poor observation	8	43
Failed to give way or stop	4	35
Alcohol	20	1
Too fast	19	1
Misjudged speed	10	3
Overtaking	9	4
Inexperience	11	1
Sudden action	10	1

The most common types of motor cycle crash on state highways in the network area are loss of control turning right, right turn into the path of an oncoming vehicle and loss of control turning left.

The other common types were the right angle crash and a vehicle turning right from a side road into the path of a vehicle approaching from the right.

Ages of motorcycle riders

Ages	Female	Male	Total
15 to 19	0	14	14
20 to 24	0	19	19
25 to 29	2	9	11
30 to 34	2	21	23
35 to 39	0	12	12
40 to 44	5	26	31
45 to 49	3	13	16
50 to 54	1	13	14
55 to 59	0	11	11
60 to 64	0	3	3
65 to 69	0	2	2
70 and over	0	2	2

Further information about the 154 injury motorcyclist crashes on North Canterbury State highways in 2004 to 2008:

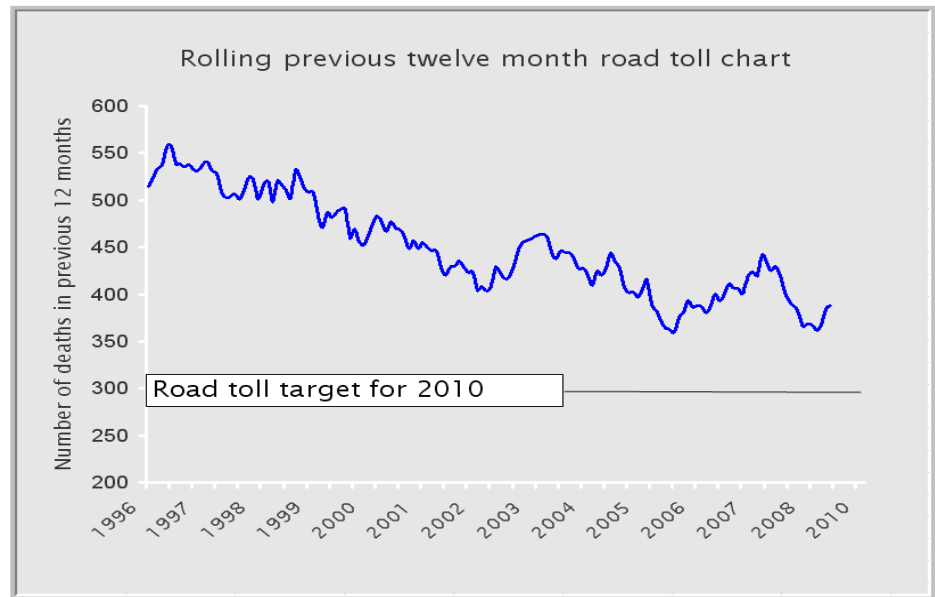
- 15 people died, 69 received serious injuries and 96 minor injuries
- 7 percent were on wet or icy roads
- 42 percent at intersections
- 18 percent at night
- Worst month December
- Worst day of the week Sunday
- Worst time midday - 3 pm

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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