



briefing notes - road safety issues

Southland 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 Southland 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 Southland 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 Southland 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

Southland Region

Bend - loss of control or head-on

Intersections

Road factors including roadside hazards

Young drivers

Nationally

Speed

Alcohol

Failure to give way

Restraints

2008 road trauma

Casualties

Southland Region

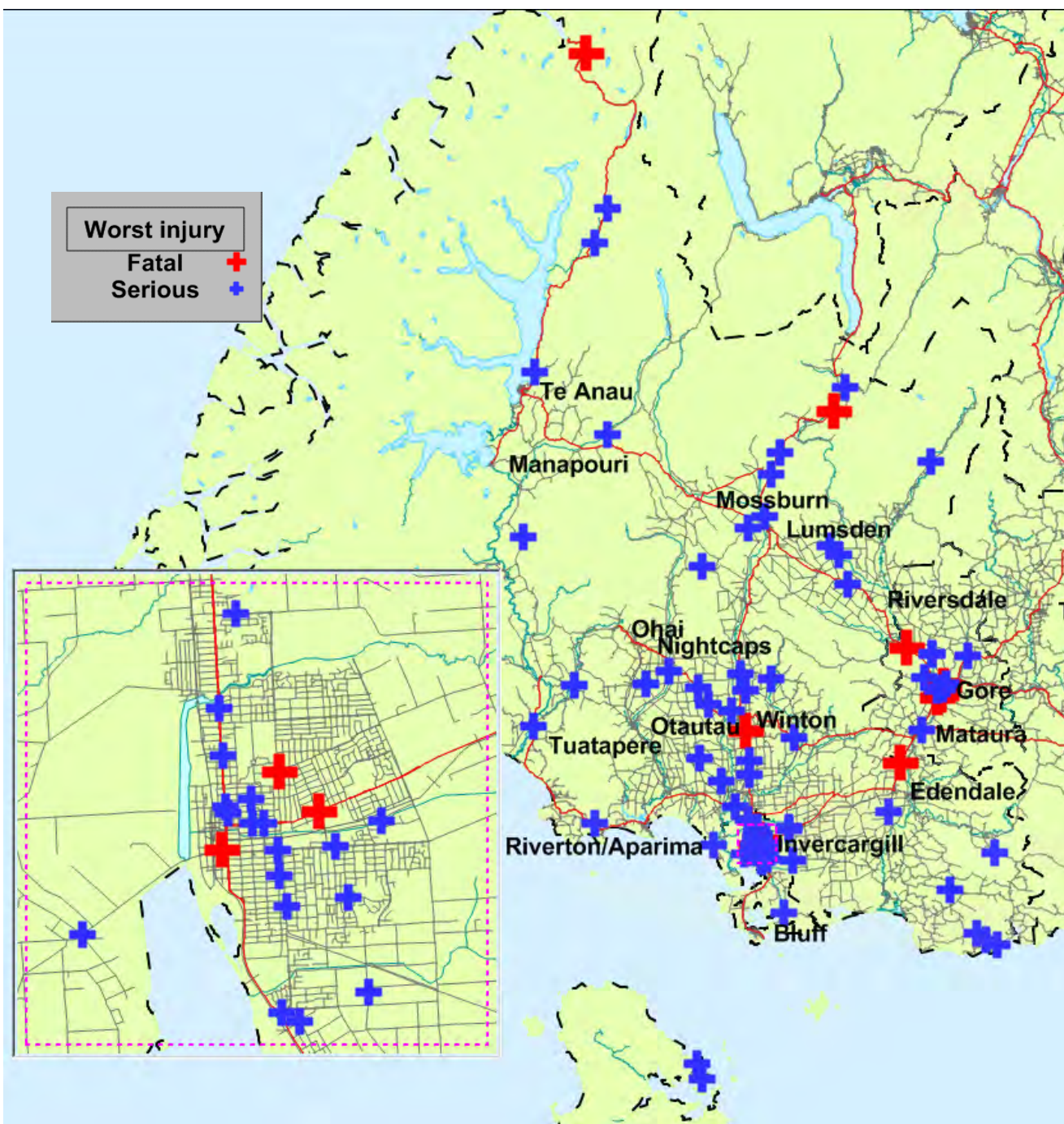
Deaths	12
Serious casualties	89
Minor casualties	475

Crashes

Southland Region

Fatal crashes	11
Serious injury crashes	73
Minor injury crashes	316
Non-injury crashes	617

Fatal and Serious crashes
Southland Region
2008



Overview

In 2008 on local roads in Southland Region there were 233 injury crashes and 379 non-injury crashes. In addition there were 167 injury crashes and 238 non-injury crashes on State Highways both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 400 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	7	58	213	278
Urban	5	31	262	298
Total	12	89	475	576

Overall almost half of casualties were from crashes in rural areas of the Region, but for fatal and serious casualties only nearly two thirds were from rural area crashes.

In 2008, the number of fatal crashes was the highest since 2003, but was well short of the 2002 high of 18. There are no obvious trends in the crash data, but for serious and minor injury crashes the number has reduced from the high in 2006.

Crash trends in Southland Region

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	10	58	124	192
2000	12	62	138	212
2001	15	100	289	404
2002	18	112	333	463
2003	12	118	304	434
2004	8	93	279	380
2005	6	123	311	440
2006	10	128	347	485
2007	10	101	308	419
2008	11	73	316	400

Injury crashes 2004 to 2008

Crash type or contributory cause 2004 to 2008	Local road Percentage injury crashes	State Highway Percentage of injury crashes
Alcohol	12	11
Too fast	18	18
At bends	24	35
At intersections	44	30
Road factors	19	23

Vulnerable road users - casualties

Road user type	Local road Percentage of all casualties	State Highway Percentage of all casualties
Pedestrians	4	2
Cyclists	5	2
Motorcycles	7	3
Total vulnerable	16	7

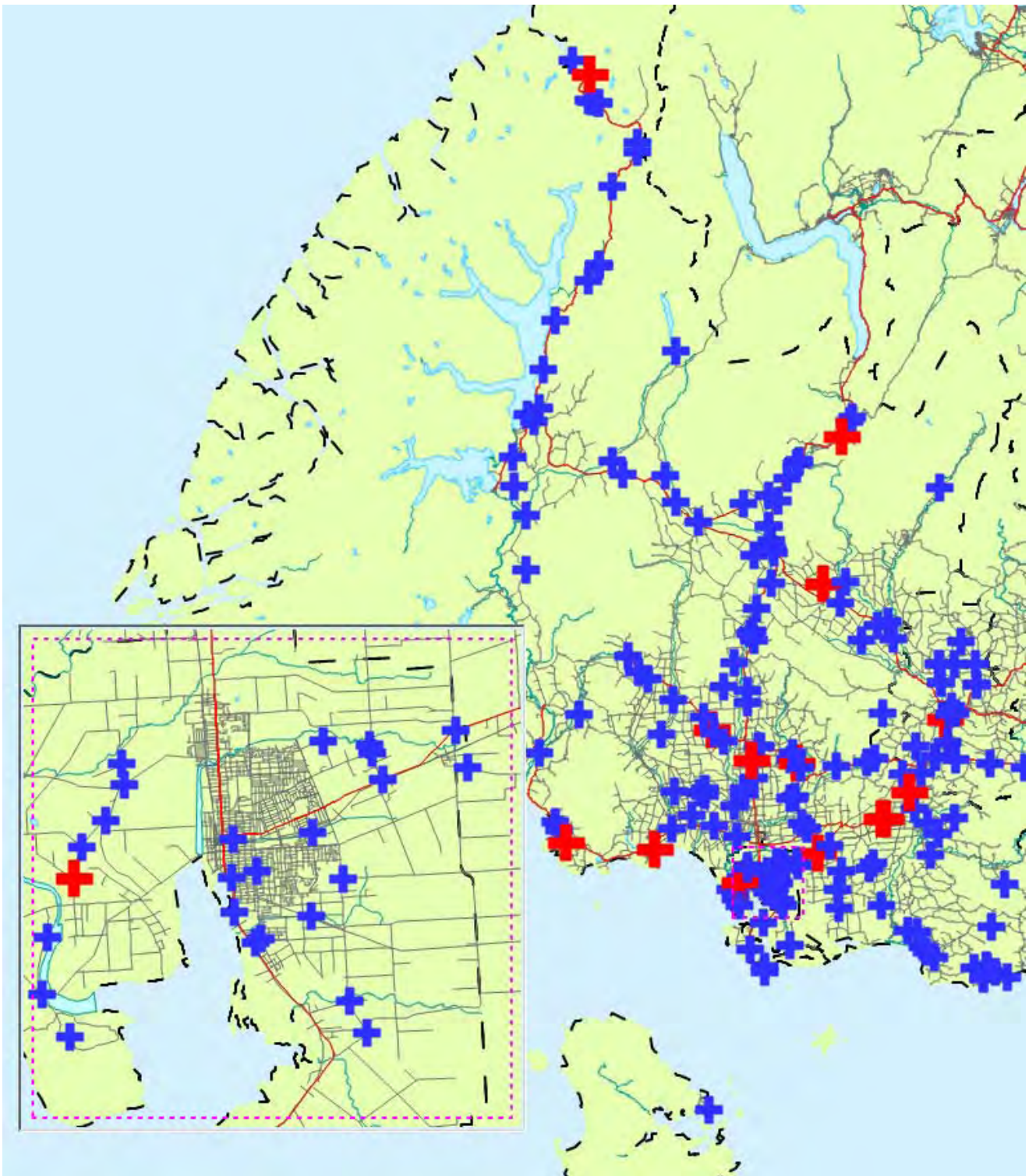
Further information about the 1228 injury crashes on local roads in Southland Region 2004 to 2008 :

- Worst month February
- Worst day Friday
- 30 percent on wet or icy roads
- 30 percent at night
- 44 percent at intersections
- 686 roadside objects struck
- Social cost of crashes in 2008 \$58.2 m

Further information about the 896 injury crashes on State Highways in Southland Region 2004 to 2008:

- Worst month July
- Worst day Friday
- 38 percent on wet or icy roads
- 31 percent at night
- 30 percent at intersections
- 691 roadside objects struck
- Social cost of crashes in 2008 \$56.9 m

Fatal and Serious bend - loss of control or head on crashes
Southland Region
2004 - 2008



Bend - loss of control or head on

Between 2004 and 2008 29 percent of all injury crashes in Southland Region were bend - loss of control or head on crashes. These 609 injury crashes resulted in 15 deaths, 219 serious injuries and 579 minor injuries.

There are no apparent trends in the crash numbers.

Crashes at bends 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	3	29	62	94
2005	3	44	85	132
2006	2	41	94	137
2007	2	40	80	122
2008	4	24	96	124
Total	14	178	417	609

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 in Southland Region were fence (162), cliff or bank (100), ditches (98), tree (76), and over bank (72) from a total of 682 objects struck.

Main characteristics of injury bend - lost control or head on crashes	
Crash characteristic	Percentage of crashes
Single vehicle	87
Alcohol	17
Excessive speed for the conditions	38
Road factors	35
Poor handling	60
Rural road	79
Wet or icy road	42
Night time	36

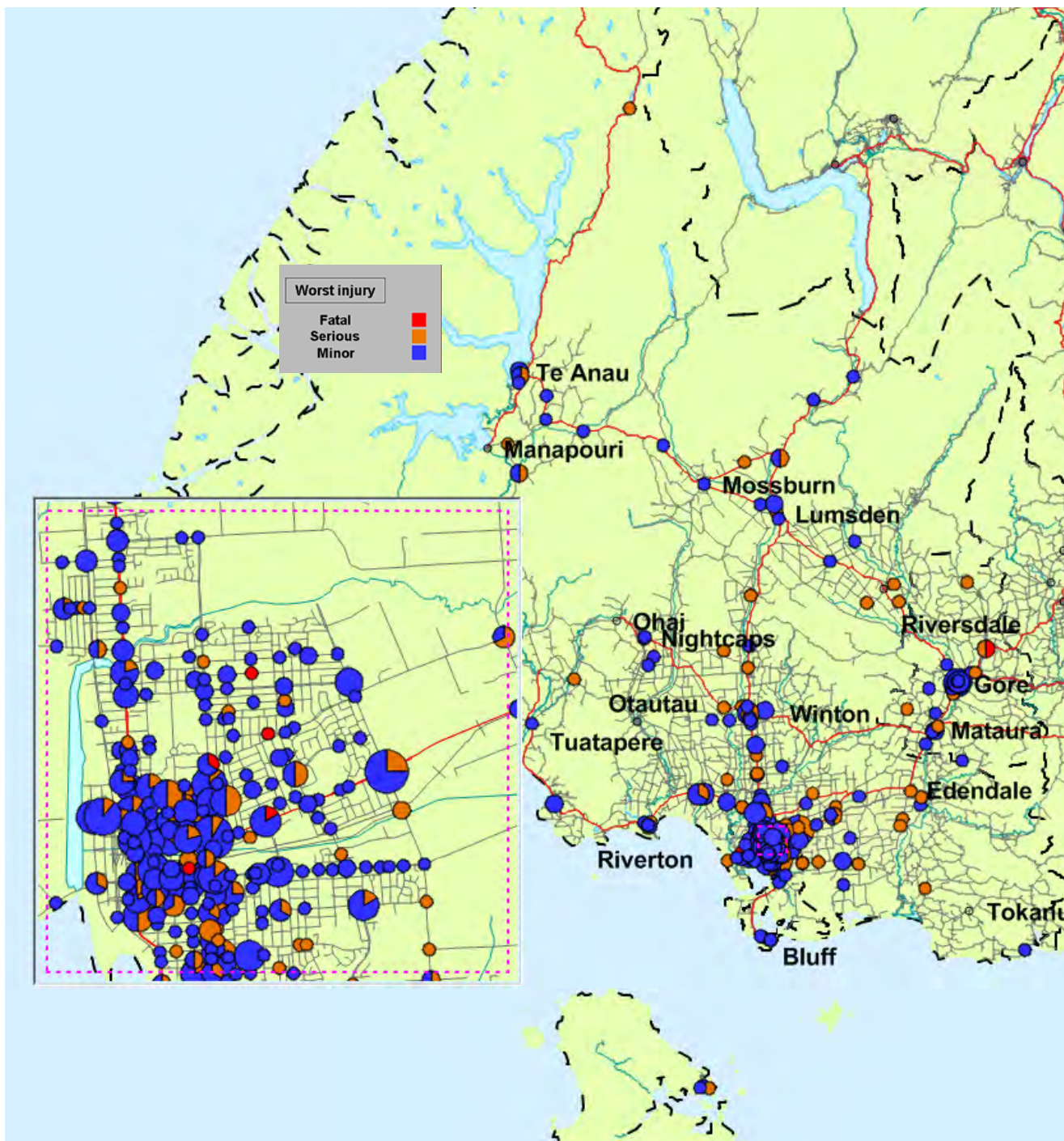
Further information about the 293 injury bend - loss of control or head on crashes (2004 to 2008) on local roads in Southland Region :

- 4 deaths, 114 serious injuries and 354 minor injuries
- 67 percent of at fault drivers were male
- Most common at fault driver age group 15 -19 years (33 percent of all at fault drivers)
- 20 percent of crashes involved alcohol
- 38 percent of crashes involved speed too fast for the conditions
- Worst month February
- Worst day of week Sunday
- Worst time 3 pm till 6 pm

Further information about the 316 injury bend - loss of control or head on crashes (2004 to 2008) on State Highways in Southland Region:

- 11 deaths, 105 serious injuries and 405 minor injuries
- 67 percent of at fault drivers were male
- Most common at fault driver age group 15 - 19 years (24 percent of at fault drivers)
- 14 percent of crashes involved alcohol
- 39 percent of crashes involved speed too fast for the conditions
- Worst month July
- Worst day of week Sunday
- Worst time 3 pm to 6 pm

Injury crashes at intersections Southland Region 2004 - 2008



Intersections

During the five year period 2004 to 2008 within Southland Region there were a total of 1839 crashes at intersections, 808 of these were injury crashes and 1031 non-injury.

10 people were killed, 194 received serious injuries and 998 received minor injuries.

86 percent of these crashes were in urban areas.

Crashes at Intersections					
	2004	2005	2006	2007	2008
Injury crash	148	156	185	154	165
Non-injury crash	160	189	179	226	277
Total	308	345	364	380	442

The number of reported crashes at intersections in the region in 2008 was the highest in the last five years. This was mainly due to an increase in reported non-injury crashes.

Casualties from crashes at intersections 2004 - 2008			
Authority	Deaths	Serious injury	Minor injury
Gore District	2	14	56
Invercargill City	8	132	785
Southland District	0	48	157
Southland Region	10	194	998

Junction control Injury and non-injury crashes				
Junction control	Traffic signals	Nil	Give Way	Stop
Number of crashes	282	186	1154	215

The most common crash types at intersections were:

- Right angle collision
- Right turn across the path of a vehicle approaching from the opposite direction
- Right turn from a side road, across the path of a vehicle approaching from the right
- Loss of control turning at an intersection

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	3	166
Tee	178	567
Cross (X)	74	826
Multi leg	1	2
Other (includes driveways)	1	21

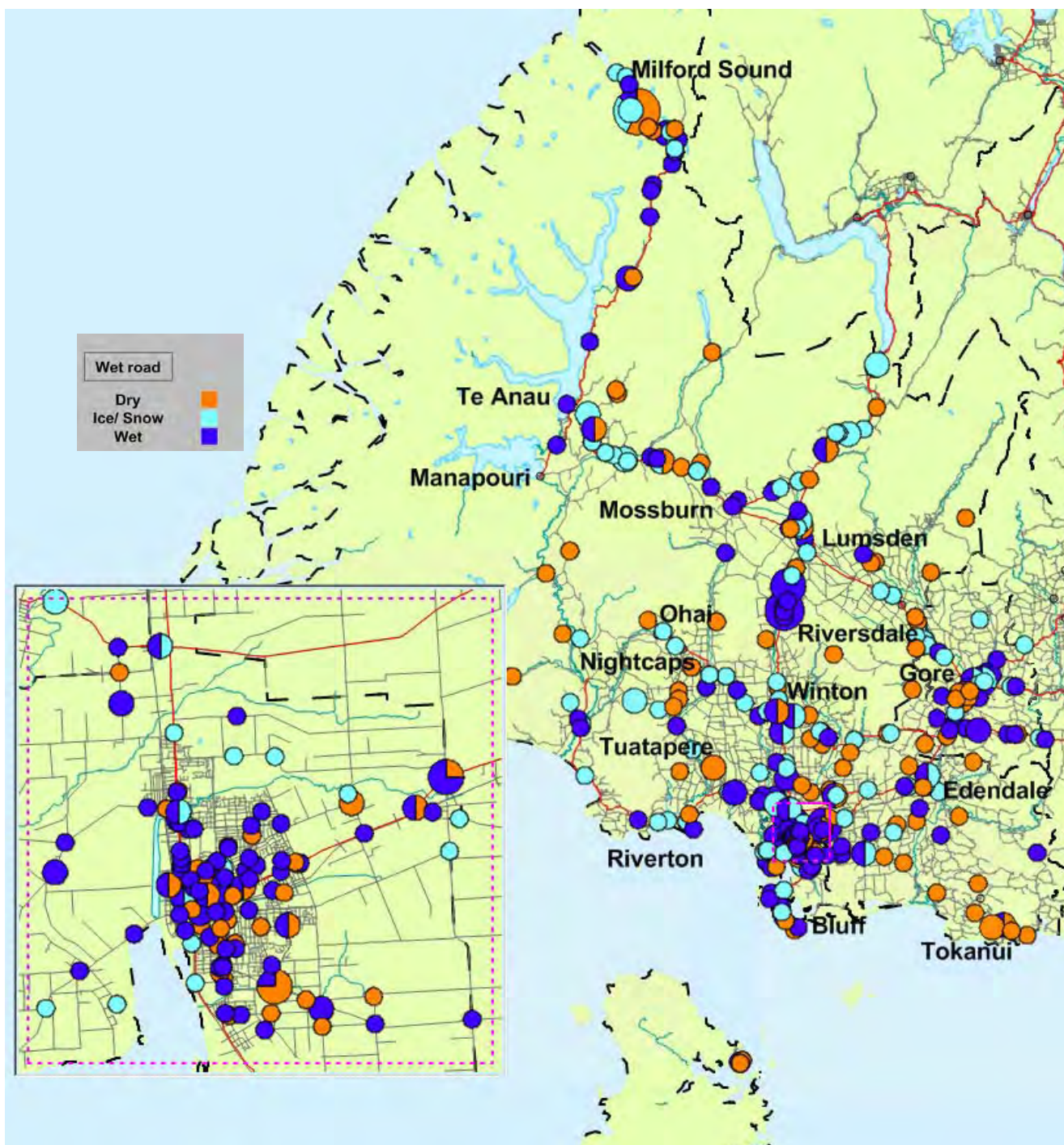
Further information about the 542 injury crashes at intersections on local roads in Southland Region 2004 to 2008:

- 7 deaths, 136 serious injuries and 675 minor injuries
- 32 percent wet or icy roads
- 24 percent night time
- Worst month February
- Worst day of week Thursday
- Worst time 3 pm till 6 pm

Further information about the 266 injury crashes at intersections on State Highways in Southland Region 2004 to 2008:

- 3 deaths, 58 serious injuries and 323 minor injuries
- 29 percent wet or icy roads
- 29 percent night time
- Worst month February, April
- Worst day of week Friday
- Worst time 3 am till 6

Injury crashes with road factors
Southland Region
2004 - 2008



Road Factors - including roadside hazards

A safe road environment includes appropriate geometric design standards, good delineation, adequate surface skid resistance and a roadside free of unforgiving hazards.

From 2004 to 2008 in Southland Region, "road factors" were a contributing factor in 21 percent of all injury crashes.

Additionally in Southland Region between 2004 and 2008, 48 percent of all injury crashes involved a roadside hazards were being struck. The table below shows the number of injury crashes involving road factors.

Road factor related injury crashes					
Road type	2004	2005	2006	2007	2008
Urban	10	21	44	35	40
Rural	50	59	78	74	38
Total	60	80	122	109	78

Roadside hazards normally contribute to the overall crash outcome by increasing injury severity but can in themselves be a contributory factor in a crash. For example occupants in an errant vehicle striking a large tree close to the road edge are likely to sustain worse injuries than if the tree was not present. If the same tree had low branches and was located at an intersection it could also contribute to a lack of visibility.

In the 1020 injury crashes in Southland Region where a roadside hazard was struck 22 people died, 321 received serious injuries and 1199 minor injuries.

In total 1377 objects were struck.

Most common types of hazard struck (all injury crashes in Southland Region)

Type of hazard 2004 to 2008	Number of times hazard struck
Fence	316
Ditch	177
Upright cliff / bank	162
Tree	141
Post or pole	132
Over bank	95

Types of road factors in injury crashes

Road factor type 2004 to 2008	Number of occasions reported
Slippery road	347
Road surface in poor condition	90
Road obstructed	7
Visibility limited	71
Signs or signals (needed or faulty)	17
Markings (needed or faulty)	13
Street lighting	2

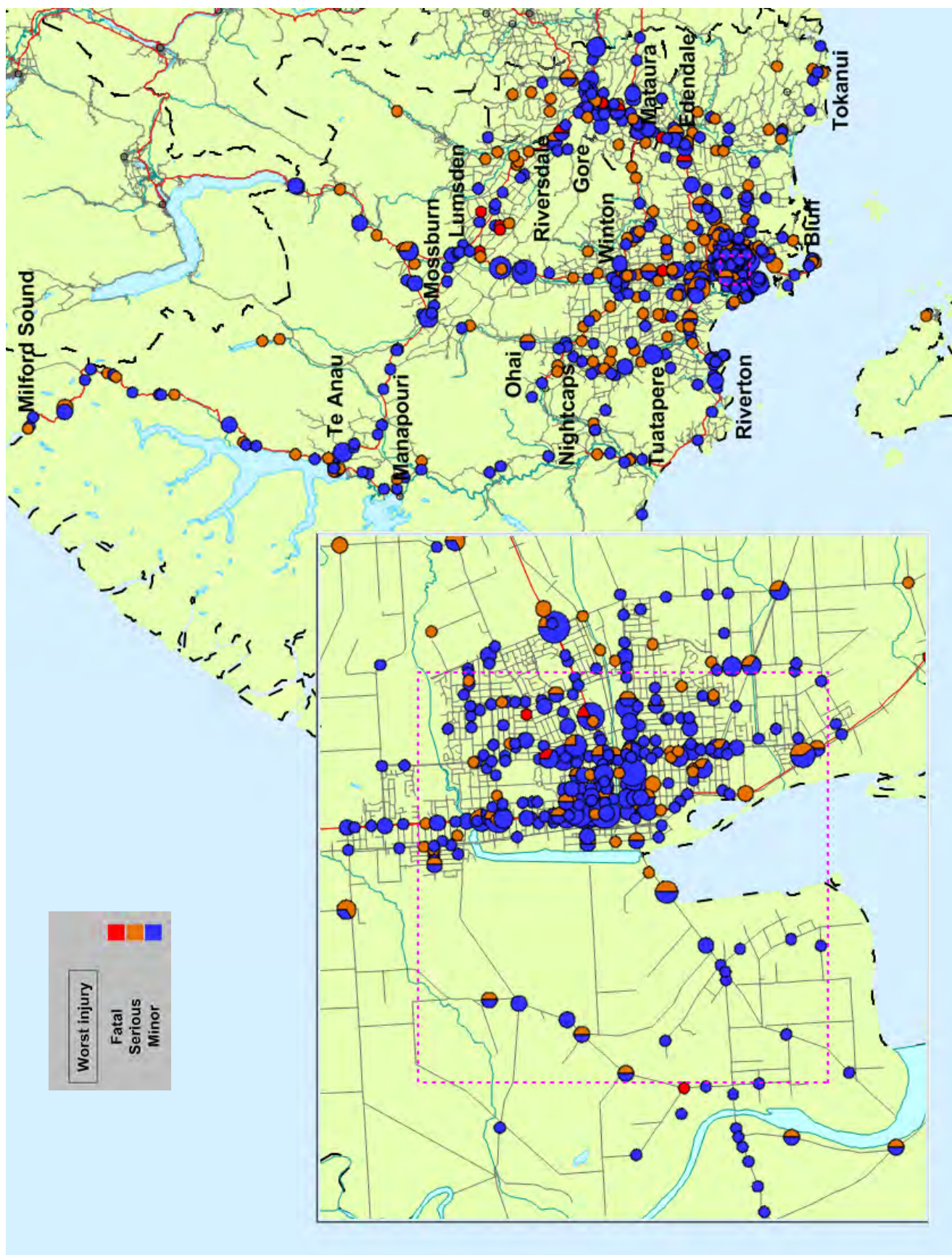
Further information about the 239 road factor related injury crashes in Southland Region on local roads (2004 to 2008):

- 1 death, 80 serious injuries and 283 minor injuries
- Most common crash type, bend - loss of control or head on
- 36 percent at intersections
- 50 percent urban
- 56 percent wet or icy road
- 26 percent night time
- Worst month June
- Worst day Tuesday
- Worst time 3 pm - 6 pm

Further information about the 210 road factor related injury crashes in Southland Region on State Highways (2004 to 2008):

- 7 deaths, 48 serious injuries and 289 minor injuries
- Most common crash type, bend - loss of control or head on
- 14 percent at intersections
- 15 percent urban
- 85 percent wet or icy road
- 38 percent night time
- Worst month July
- Worst day Friday
- Worst time 3 pm - 6 pm

Injury crashes involving young drivers Southland Region 2004 - 2008



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 Southland Region between 2004 and 2008, 48 percent of injury crashes involved young drivers. These 1014 crashes resulted in 26 fatalities, 306 serious injuries and 1283 minor injuries.

The total number of injury crashes involving young drivers rose from 2004 to a high of 234 in 2005. Since then the numbers have dropped, and in 2008 the number was the lowest in the last five years. The number of fatal crashes has remained quite steady over the five years.

Injury crashes involving young drivers				
	Fatal	Serious	Minor	Total
2004	5	48	134	187
2005	5	60	169	234
2006	5	63	156	224
2007	4	50	149	203
2008	5	30	131	166
Total	24	251	739	1014

Almost half of the 1125 young drivers in these crashes had a learner or restricted licence. More than six of every ten of them were males and 57 percent were 15-19 year olds.

Nearly all the young drivers were residents of Southland Region or the surrounding areas.

Young drivers in injury crashes			
Licence type	Female	Male	Total
Full	129	259	388
Learner	61	99	160
Restricted	177	219	396
Overseas	21	29	50
Never licensed	16	31	47
Disqualified	3	37	40
Other (unknown, wrong class)	8	36	44
Total	415	710	1125

Injury crashes involving young drivers

Crash type or contributory cause	% of injury crashes
Alcohol	13
Speed	25
Failed to stop/Give way	26
Poor handling	29
Poor observation	45
Lost control - straight	18
Lost control - bend	29
Rear end / obstruction	17
Crossing / turning	25

Further information about the 593 injury crashes involving young drivers on local roads in Southland Region 2004 to 2008:

- 45 percent were single vehicle crashes
- 63 percent were on urban roads
- 41 percent at intersections
- 37 percent at night
- 30 percent in wet or icy conditions
- Worst month February
- Worst day of week Sunday

Further information about the 421 injury crashes involving young drivers on State highways in Southland Region 2004 to 2008:

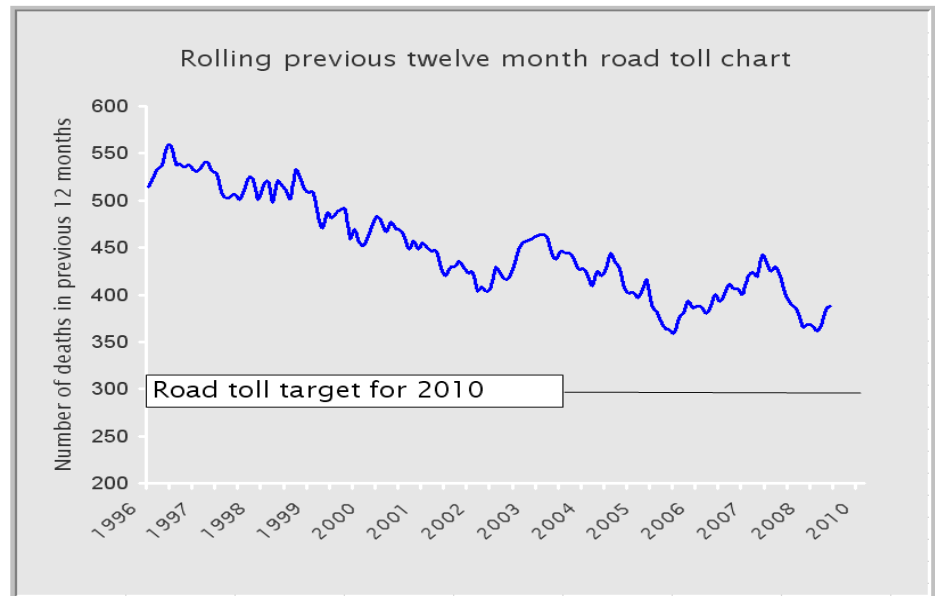
- 47 percent were single vehicle crashes
- 41 percent were on urban roads
- 32 percent at intersections
- 39 percent at night
- 37 percent in wet or icy conditions
- Worst month February
- Worst day of week Friday, Sunday

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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