



briefing notes - road safety issues

Southland District

New Zealand Transport Agency, (NZTA), has prepared this road safety issues report. It is based on reported crash data for the 2005–2009 period. The intent of the report is to highlight the key road safety issues to help identify possible ways to reduce the number of road deaths and injuries in Southland District.

In March 2010 the Government released a new strategy, “Safer Journeys”, to build on the gains made under the Road Safety to 2010 Strategy. The focus of these Issues Reports has changed to reflect the new strategy. Many of the issues reported on in the past fit neatly into the new strategy. An explanation of where things fit is included in this report.

The issues chosen for this report are drawn from: the most common crash types, those that appear over-represented when Southland District is compared to similar local bodies, those with high social cost, (high numbers of fatal and serious crashes), or those that are a priority under Safer Journeys.

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

We encourage Southland District to use its free access to the Ministry of Transport’s Crash Analysis System (CAS), to delve deeper into the highlighted issues and other road safety issues in the district. Also the NZTA Southern Performance Information Team in Christchurch is available to provide further information or assistance if required.

Major road safety issues		2009 road trauma	
	Note Issues are not in any order	Casualties	Southland District
Southland District			
Bend - loss of control or head-on		Deaths	5
Straight road - loss of control or head-on		Serious casualties	47
Young drivers		Minor casualties	188
Road factors and roadside hazards			
Nationally		Crashes	Southland District
Speed		Fatal crashes	4
Alcohol / Drugs		Serious injury crashes	35
Young Drivers		Minor injury crashes	109
Roads and Roadsides		Non-injury crashes	185
Motorcyclists			

Safer Journeys

For the past few years road safety in New Zealand has been directed by the Road Safety to 2010 strategy. This strategy was introduced in 2003 and aimed to reduce deaths and casualties from road crashes.

In March 2010 the Government released a new strategy, "Safer Journeys", to build on the gains made under the Road Safety to 2010 strategy.

Under this new strategy, road safety will be looked at from a system wide approach rather than focusing on the road user. The emphasis will be on improving all the parts road transport system that impact on safety; the road, the vehicle, travel speeds and the road user.

A number of areas were chosen as the areas of focus under the strategy. These areas were assigned a priority, based on research that shows five major areas of concern, five areas of lesser concern, and three areas where continued focus is needed, or concern is emerging.

These divisions are shown in the table opposite. This table is a direct extract from page 12 of the Safer Journeys document, which can be found at:

<http://www.transport.govt.nz/saferjourneys/Documents/SaferJourneyStrategy.pdf>

In this year's Road Safety Issues Briefing Notes changes have been made to the wording, and to the data presented, to better reflect and emphasise the connections to the new strategy.

On the following page we present a table that shows the areas of "high concern" under the Safer Journeys strategy. This table allows some relative comparison of the Safer Journeys priorities across the local bodies and regional authorities in the Otago / Southland Region of the New Zealand Transport Agency.

Table 3 – Safer Journeys' areas of concern and the Safe System

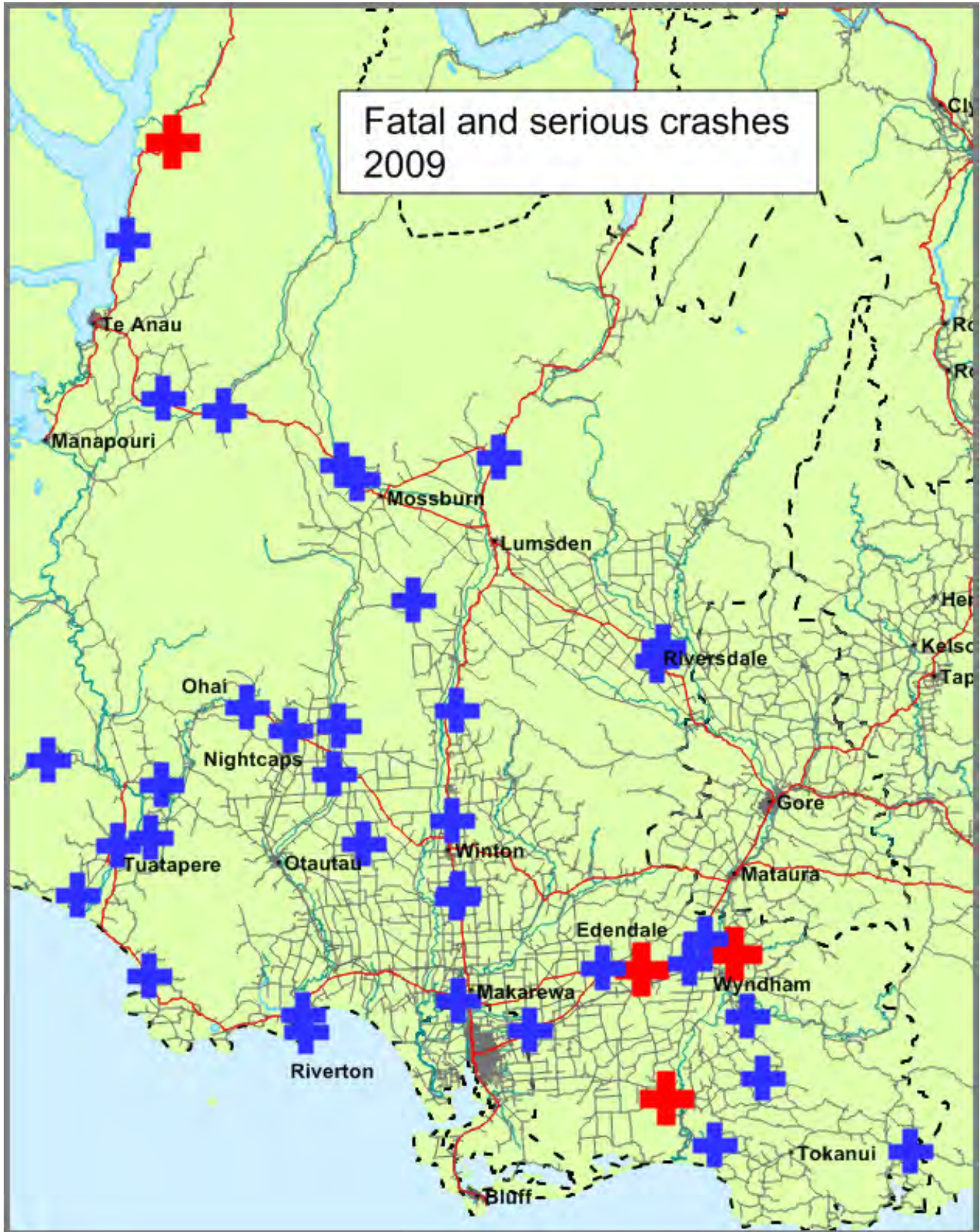
AREAS OF CONCERN WE WILL ADDRESS	WHERE WE WILL TAKE ACTION ACROSS THE SAFE SYSTEM			
	SAFE ROADS AND ROADSIDES	SAFE SPEEDS	SAFE VEHICLES	SAFE ROAD USE
Areas of high concern				
Reducing alcohol/drug impaired driving			✓	✓
Increasing the safety of young drivers	✓	✓	✓	✓
Safe roads and roadsides	✓			
Safe speeds	✓	✓	✓	
Increasing the safety of motorcycling	✓	✓	✓	✓
Areas of medium concern				
Improving the safety of the light vehicle fleet			✓	✓
Safe walking and cycling	✓	✓	✓	✓
Improving the safety of heavy vehicles	✓	✓	✓	✓
Reducing the impact of fatigue	✓	✓	✓	✓
Addressing distraction	✓		✓	✓
Reducing the impact of high risk drivers		✓	✓	✓
Areas of continued and emerging focus				
Increasing the level of restraint use			✓	✓
Increasing the safety of older New Zealanders	✓	✓	✓	✓

For some priorities (eg motorcycling), complementary action will be taken across all four areas of the Safe System. For others (eg reducing the impact of drink driving or safe roads), more effort would be focussed on one or two of the four Safe System areas.

Source
Safer Journeys, Road Safety Strategy 2010-2020
Ministry of Transport
March 2010

Status of the areas of “high concern” from Safer Journeys 2020 - Otago / Southland Region
(table is based on 2005 to 2009 fatal and serious crashes - local roads as well as State Highways)

Area of concern	Reducing alcohol and drug impaired driving	Increase the Safety of young drivers	Safer roads and roadsides		Reducing speed related crashes	Increasing the safety of motorcycling
Measure	Percentage of crashes with this factor	Percentage of at fault drivers 24 years or less	Percentage of crashes with an object struck	Number of intersections with two or more fatal or serious casualties in the last five years	Percentage of crashes with this factor	Percentage of crashes involving a motorcyclist
Waitaki District	19	35	52	0	19	16
Central Otago District	18	35	59	3	16	18
Queenstown-Lakes District	20	41	51	2	20	19
Dunedin City	17	44	46	21	21	13
Clutha District	14	36	61	1	22	15
Southland District	20	38	61	1	24	21
Gore District	16	53	46	1	20	18
Invercargill District	15	49	49	19	21	17
Otago Region	17	41	50	27	20	15
Southland Region	18	44	49	21	21	19
New Zealand	23	34	45	446	23	18



Overview

In 2009 on Southland District local roads there were 68 reported injury crashes, of which 19 were fatal or serious. In addition, on State Highways there were 80 reported injury crashes of which 20 were fatal or serious.

The table below shows the number of casualties resulting from the 148 injury crashes by rural or urban areas (rural is defined as an area with a speed limit of 80km/h or more).

Casualties 2009 Southland District				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	25	278	912	1215
Urban	0	31	102	133
Total	25	309	1014	1348

In Southland District in 2009, all deaths, 90 percent of each of serious and minor injuries were from crashes in rural areas of the district.

The number fatal and serious crashes has generally reduced from a high of 69 in 2001. In 2009 the number was the lowest in the 10 year period.

Crash trends in Southland District				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	10	31	48	89
2001	10	59	125	194
2002	10	58	112	180
2003	8	58	113	179
2004	4	50	78	132
2005	6	61	118	185
2006	6	56	115	177
2007	4	56	119	179
2008	4	43	117	164
2009	4	35	109	148

The following table illustrates where the issues considered for this report fit within the Safer Journeys priority. The numbers and percentages give an indication of how they fit in the priorities for Southland District.

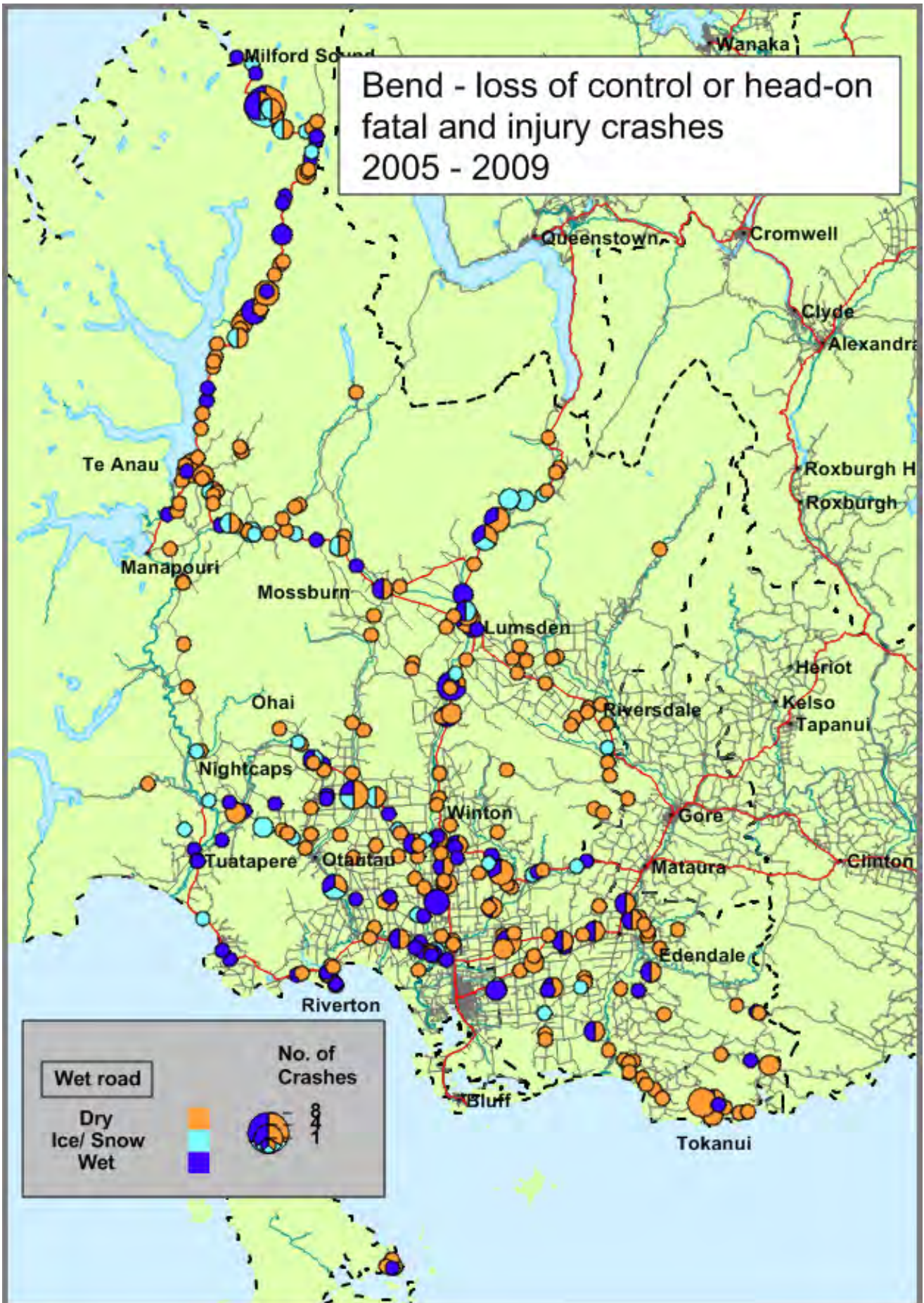
Crash characteristics (2005 to 2009) Southland District				
Crash type or contributory cause	Percent fatal and serious crashes	Percent all injury crashes	No. of injury crashes	Safer Journeys priority
Alcohol	20	14	122	1
Too fast	24	22	188	1
At bends	48	48	412	1
On straights	26	28	240	1
Intersections	14	16	135	1
Road factors	26	28	242	1
Motorcycling	21	9	81	1
Young drivers	38	40	332	1
Fatigue	9	10	86	2
Distraction	11	14	117	2
Pedestrians	2	2	13	2
Cycling	1	0	4	2
Heavy vehicles	9	8	64	2
Older road users	4	3	25	3
Overseas drivers	17	22	187	-

Further information about the 373 injury crashes on local roads in Southland District, 2005 to 2009:

- 10 deaths, 157 serious injuries and 393 minor casualties
- Five year age group with most at fault drivers in injury crashes: 15 to 19 years (25 percent of at fault drivers)
- Social cost of crashes in 2009 \$24.57 m

Further information about the 480 injury crashes on State Highways in Southland District, 2005 to 2009:

- 15 deaths, 152 serious injuries and 621 minor casualties
- Five year age group with most at fault drivers in injury crashes: 15 to 19 years (21 percent of at fault drivers)
- Social cost of crashes in 2009 \$26.3 m



Bend - loss of control or head on

Between 2005 and 2009, 48 percent of all injury crashes in Southland District were bend - loss of control or head on crashes. These crashes resulted in 14 deaths, 151 serious injuries and 501 minor injuries.

In 2009 the number of fatal and serious crashes was the lowest in the last five years.

Bend - loss of control or head on crashes Southland District (2005 - 2009)				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	3	29	57	89
2006	2	28	59	89
2007	1	32	45	78
2008	4	17	58	79
2009	3	14	60	77
Total	13	120	279	412

Inexperienced drivers (often young drivers) are strongly reported in crashes at bends in Southland District.

Forty percent of at fault drivers were ages 15 years to 24 years. Of these 64 percent were males. Overall 60 percent of at fault drivers were males.

At fault drivers in Bend - loss of control or head on crashes Southland District 2005 to 2009			
Ages	Male	Female	Total
15 to 19	50	31	81
20 to 24	55	27	82
25 to 29	39	11	50
30 to 39	53	23	76
40 to 49	35	10	45
50 to 59	31	13	44
60 to 69	17	6	23
70 plus	4	5	9
Total	248	126	410

If drivers lose control, their vehicles may crash into roadside hazards such as ditches, banks, poles or trees. Hitting roadside objects can result in a minor off-road event becoming more serious.

The most common roadside hazards struck in injury bend - loss of control or head on crashes in Southland District were fences (114), upright banks (70), ditch (63), over bank (52) and trees (49) from a total of 449 objects struck. Seventy nine percent of crashes involved an object being struck.

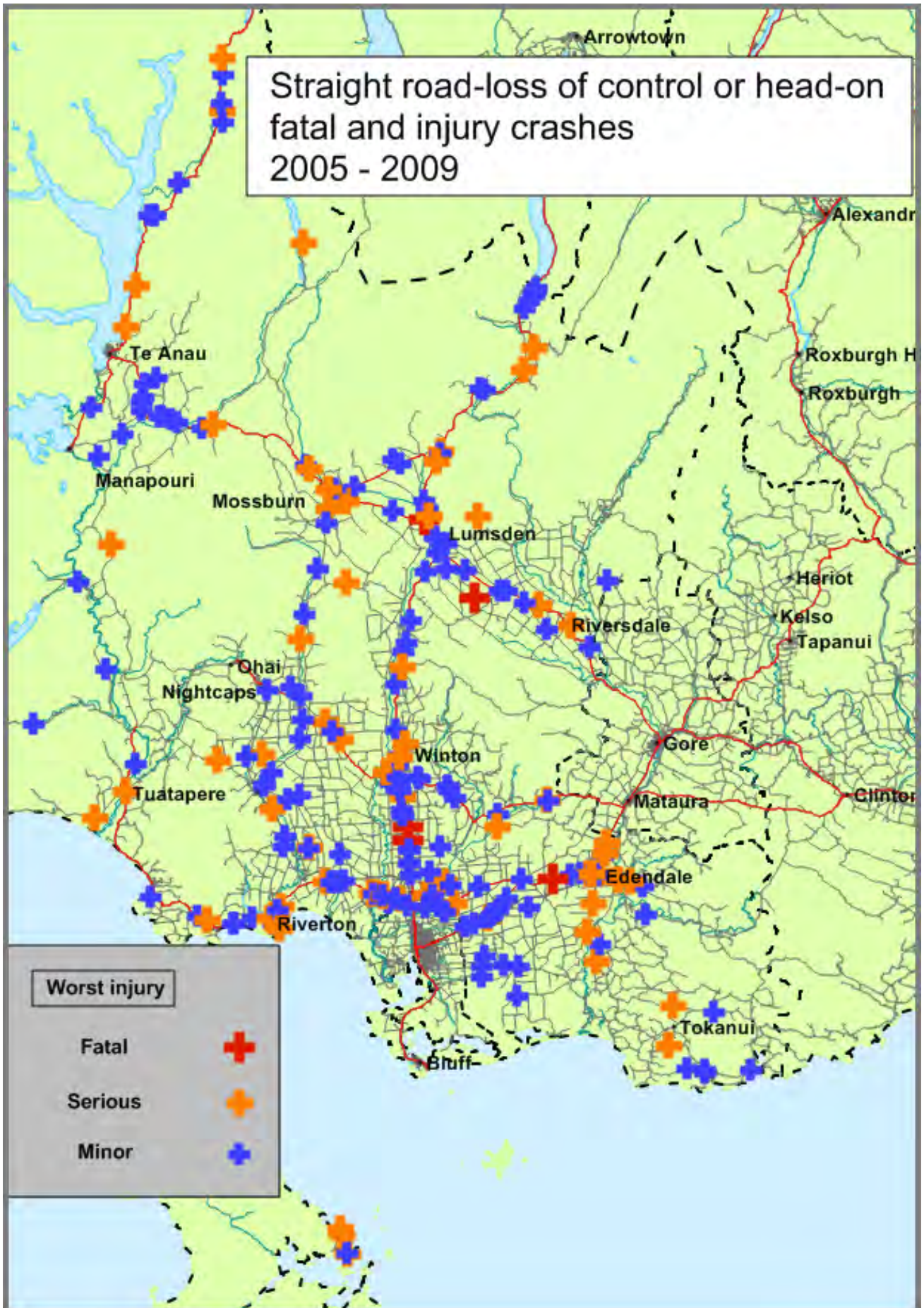
A roadside hazard was struck in 79 percent of bend - loss of control or head on crashes in the District.

Further information about the 185 injury bend - loss of control or head on crashes on local roads in Southland District, (2005 to 2009):

- 4 deaths, 76 serious injuries and 197 minor injuries
- 22 percent of crashes involved alcohol
- 30 percent of crashes involved speed too fast for the conditions
- 31 percent involved road factors
- 64 percent involved poor handling
- 89 percent were on rural roads
- 29 percent were on wet or icy roads
- 38 percent were at night
- Worst months January, April
- Worst day of week Sunday
- Worst time period 3 pm till 6 pm

Further information about the 227 injury bend - loss of control or head on crashes on State Highways in Southland District, (2005 to 2009):

- 10 deaths, 75 serious injuries and 304 minor injuries
- 14 percent of crashes involved alcohol
- 37 percent of crashes involved speed too fast for the conditions
- 39 percent involved road factors
- 59 percent involved poor handling
- 96 percent were on rural roads
- 49 percent were on wet or icy roads
- 31 percent were at night
- Worst month July
- Worst day of week Sunday
- Worst time period 3 pm till 6 pm



Straight road -loss of control or head on

Between 2005 and 2009, 28 percent of all fatal and injury crashes in Southland District were straight road - loss of control or head on crashes. These 240 crashes resulted in 5 deaths, 86 serious injuries and 268 minor injuries.

Straight road - loss of control or head on crashes Southland District				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	2	17	28	47
2006	1	14	39	54
2007	1	11	45	57
2008	0	16	31	47
2009	1	9	25	35
Total	5	67	168	240

These crashes occurred when a driver lost control and either ran off the road or collided with another vehicle. If drivers lose control, they may crash into roadside hazards such as ditches, banks, poles or trees. Hitting roadside objects can result in a minor off-road event becoming more serious.

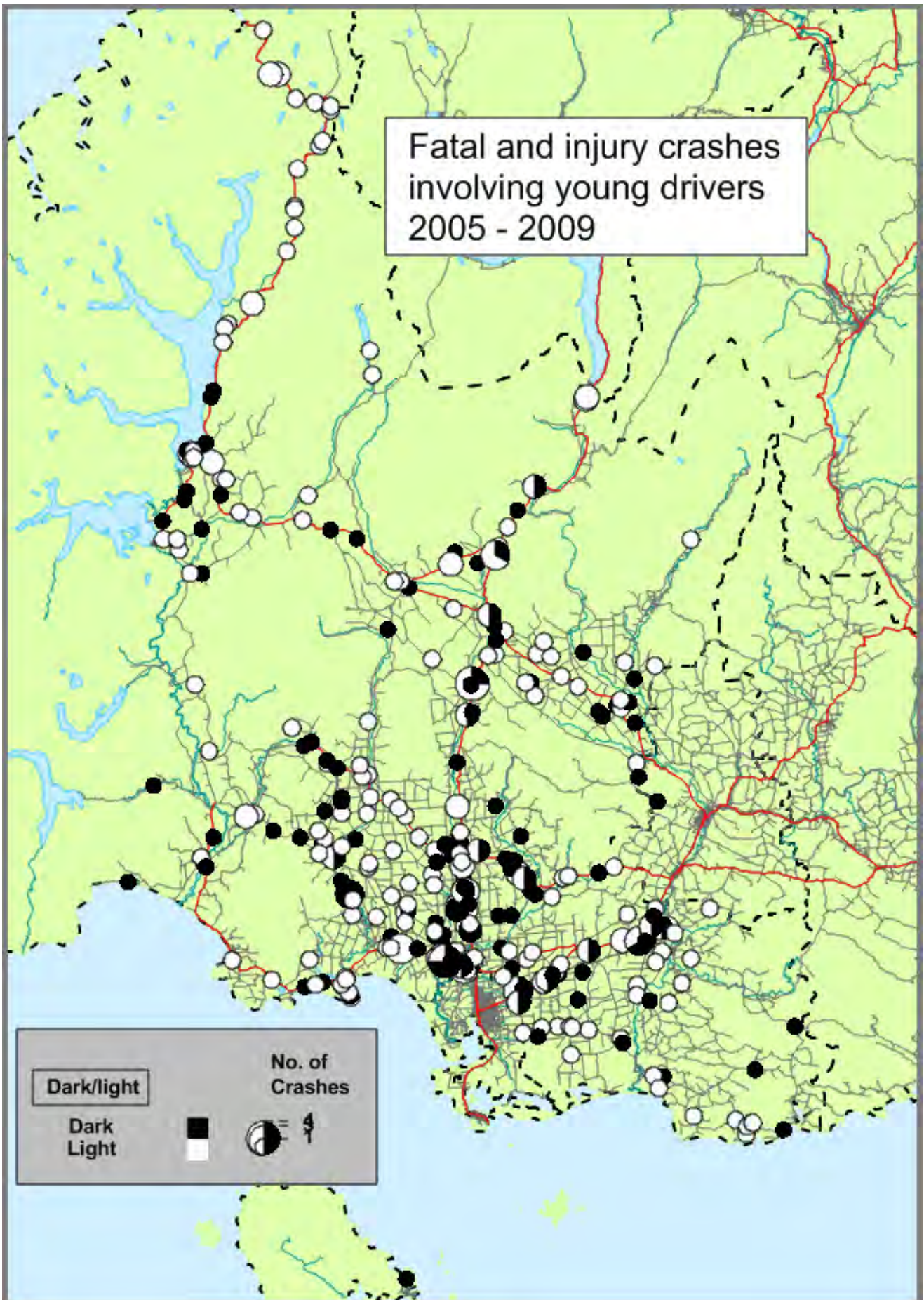
Ages of at fault drivers in straight road related crashes 2005 to 2009			
Ages	Male	Female	Total
15 to 19	38	23	61
20 to 24	21	16	37
25 to 29	17	17	34
30 to 39	13	19	32
40 to 49	14	14	28
50 to 59	12	7	19
60 to 69	14	7	21
70 and over	5	1	6
Total	134	104	238

Further information about the 88 injury straight road - loss of control or head on crashes on local roads in Southland District:(2005 to 2009)

- 1 death, 37 serious injuries and 91 minor injuries
- Most common crash type "off road to left"
- 17 percent of crashes involved alcohol
- 22 percent of crashes involved speed
- 28 percent involved "road factors"
- 11 percent involved fatigue
- 66 percent resulted in a roadside hazard being struck
- Commonly struck objects were fences and trees
- 25 percent on wet or icy roads
- 32 percent at night
- Worst month June
- Worst day of week Saturday
- Worst time period 3 pm to 6 pm

Further information about the 152 injury straight road - loss of control or head on crashes on State Highways in Southland District (2005 to 2009):

- 4 deaths, 49 serious injuries and 177 minor injuries
- Most common crash type "off road to left"
- 15 percent of crashes involved alcohol
- 8 percent of crashes involved speed
- 26 percent involved "road factors"
- 30 percent involved fatigue
- 82 percent resulted in a roadside hazard being struck
- Commonly struck objects were fences, ditches and upright banks
- 34 percent on wet or icy roads
- 39 percent at night
- Worst months January, April
- Worst day of week Sunday
- Worst time period 3 pm to 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 Southland District between 2005 and 2009, 40 percent of injury crashes involved young drivers. These crashes resulted in 12 deaths, 127 serious injuries and 429 minor injuries.

The total number of injury crashes involving young drivers in 2009 was the lowest in the last five years after dropping each year since 2005. Almost a quarter of casualties from these crashes were fatal and serious.

Casualties from crashes involving young drivers Southland District				
	Fatal	Serious	Minor	Total
2005	5	31	99	135
2006	3	32	95	130
2007	0	30	85	115
2008	1	17	75	93
2009	3	17	75	75
Total	12	127	429	568

Fifty five percent of the 210 young drivers in these crashes had a learner or restricted licence. Nearly two thirds of these 115 drivers were males and

Over 80% of the young drivers were local residents.

Young drivers at fault in injury crashes Southland District (2005 - 2009)			
Licence type	Female	Male	Total
Full	16	45	61
Learner	11	20	31
Restricted	40	44	84
Overseas	3	3	6
Never licensed	5	5	10
Disqualified	2	6	8
Other (unknown, wrong class)	1	9	10
Total	78	132	210

Injury crashes involving young drivers Southland District (2005 - 2009)

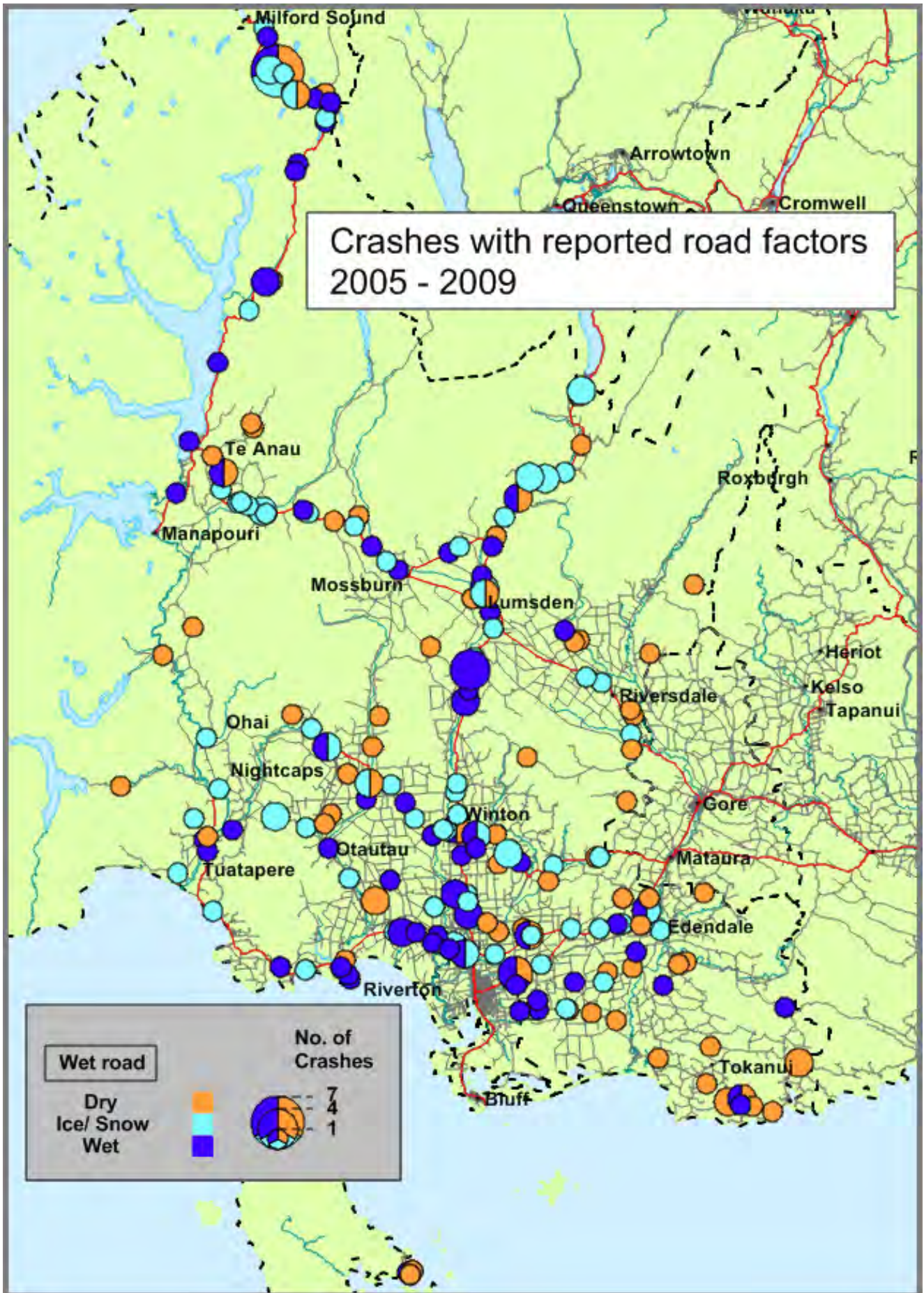
Crash type or contributory cause	Urban roads	Rural roads
Alcohol	14	58
Speed	17	88
Failed to stop/Give way	9	28
Poor handling	18	172
Poor observation	14	102
Lost control - straight	9	87
Lost control - bend	14	154
Crossing / turning	9	30

Further information about the 171 injury crashes involving young drivers on local roads in Southland District 2005 to 2009:

- 8 deaths, 66 serious injuries 193 minor injuries
- 72 percent were single vehicle crashes
- 13 percent were on urban roads
- 18 percent at intersections
- 44 percent at night
- 25 percent wet or icy roads
- Worst month April
- Worst day of week Saturday, Sunday
- Worst time 3 pm to 6 pm

Further information about the 187 injury crashes involving young drivers on State highways in Southland District 2005 to 2009:

- 4 deaths, 61 serious injuries 236 minor injuries
- 67 percent were single vehicle crashes
- 10 percent were on urban roads
- 18 percent at intersections
- 41 percent at night
- 40 percent on wet or icy roads
- Worst month May
- Worst day of week Sunday
- Worst time 3 pm to 6 pm



Road Factors - including roadside hazards

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

In 2009 in Southland District, "road factors" were a contributing factor in 28 percent of fatal and injury crashes.

Road factor related injury crashes Southland District					
Road type	2005	2006	2007	2008	2009
Urban	3	4	2	5	3
Rural	46	57	56	31	35
Total	49	61	58	36	38

Types of road factors in injury crashes Southland District (2005-2009)

Road factor type 2005 to 2009	Number reported
Slippery road *	199
Road surface in poor condition	61
Road obstructed	1
Visibility limited	28
Signs or signals (needed or faulty)	8
Markings (needed or faulty)	2

* NZTA does not assume that a wet road is necessarily "slippery". A "slippery" factor is added only if the attending Police Officer specifically mentions "slippery road".

Between 2005 and 2009, in Southland District, 61 percent of all fatal and injury crashes involved a roadside hazard being struck.

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

In the injury crashes in Southland District where a roadside hazard was struck 12 people died, 187 received serious injuries and 673 minor injuries.

The object most commonly struck in injury crashes in Southland District from 2005 to 2009 are shown below.

Most common types of hazard struck (Injury crashes in Southland District 2005 - 2009)

Type of hazard	Number of times hazard struck
Fence	211
Ditch	110
Upright bank	108
Tree	91
Over bank	67
Post or pole	66

Further information about the 97 road factor related injury crashes in Southland District on local roads (2005 to 2009):

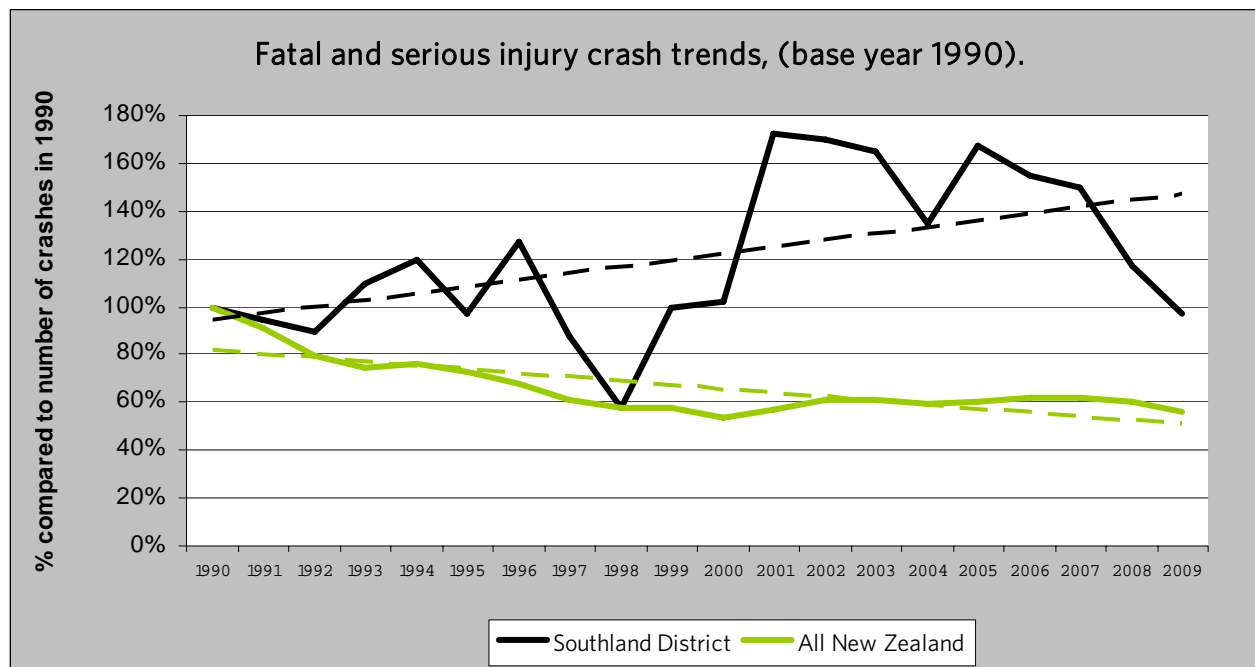
- 40 serious injuries and 107 minor injuries
- Most common crash type, bend - loss of control or head-on
- 14 percent at intersections
- 12 percent urban
- 45 percent wet or icy road
- 25 percent night time
- Worst month January
- Worst day of week Sunday

Further information about the 145 road factor related injury crashes in Southland District on State Highways (2005 to 2009):

- 8 deaths, 39 serious injuries and 214 minor injuries
- Most common crash type, Bend - loss of control or head-on
- 7 percent at intersections
- 3 percent urban
- 84 percent wet or icy road
- 39 percent night time
- Worst month July
- Worst day of week Tuesday, Sunday

Looking back - the last two decades.

The vision of the Government's "Safer Journeys" road safety strategy is "A safe road system that is increasingly free of road deaths and serious injuries". The chart below illustrates the progress made in reducing fatal and serious casualties since 1990, for both Southland District and for the country as a whole.



Contacts

New Zealand Transport Agency

Performance Information Manager (Southern)
 Geoff Holland
 PO Box 13364
 Christchurch
 03 964 2845
Geoff.Holland@nzta.govt.nz

Regional Communications Advisor
 Bob Nettleton
 PO Box 9058
 Dunedin
 03 951 3005
Bob.Nettleton@nzta.govt.nz

www.nzta.govt.nz

New Zealand Police

Road Policing Manager Southern District
 Andrew Burns
 New Zealand Police
 Private Bag 1924
 Dunedin
 Phone 03 471 4838

www.police.govt.nz

Local Authority

Community Advisor Road Safety
 Jane Ballantyne
 03 211 2502

Roading Engineer
 Rochelle Leach
 0800 732 732

Southland District Council
 PO Box 903
 Invercargill 9840
 Phone 0800 732 732

www.southlanddc.govt.nz