



briefing notes - road safety issues

Waimakariri 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 Waimakariri 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 Waimakariri 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 Waimakariri 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

Note
Issues are not in
any order

Waimakariri District

Straight road - loss of control or head on
Intersections
Young drivers

2009 road trauma

Casualties

Waimakariri District

Deaths 3
Serious casualties 31
Minor casualties 87

Nationally

Speed
Alcohol / Drugs
Young Drivers
Roads and Roadsides
Motorcyclists

Crashes

Waimakariri District

Fatal crashes 3
Serious injury crashes 24
Minor injury crashes 55
Non-injury crashes 150

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 Canterbury / West Coast Region of the New Zealand Transport Agency.

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

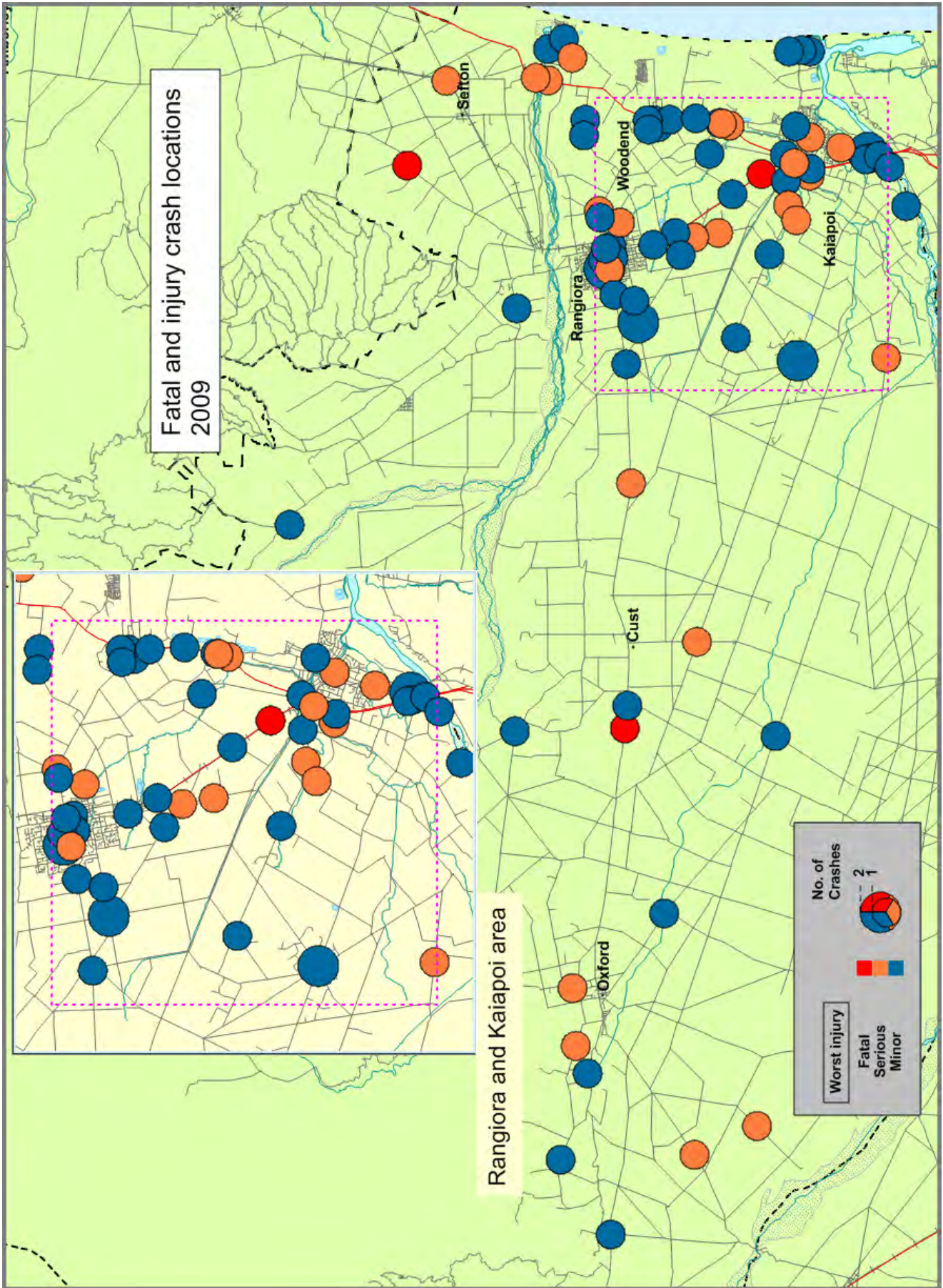
AREAS OF CONCERN WE WILL ADDRESS	WHERE WE WILL TAKE ACTION ACROSS THE SAFE SYSTEM			
	SAFE ROADS AND ROAD-SIDES	SAFE SPEEDS	SAFE VEHICLES	SAFE ROAD USE
Areas of high concern				
Reducing alcohol/drug impaired driving			✓	✓
Increasing the safety of young drivers	✓	✓	✓	✓
Safe roads and roadsides	✓			
Safe 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 - Canterbury / West Coast 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
Buller District	17	26	58	0	32	29
Grey District	20	23	49	1	29	31
Westland District	16	32	56	0	32	22
Kaikoura District	15	24	62	0	38	28
Hurunui District	18	21	64	0	34	16
Waimakariri District	20	32	50	3	17	15
Christchurch City	16	34	31	83	15	22
Selwyn District	20	26	45	5	16	17
Ashburton District	21	28	45	2	25	16
Timaru District	18	35	36	2	17	27
Mackenzie District	6	23	63	0	13	3
Waimate District	30	36	45	0	23	23
Chatham Islands	38	17	75	0	25	38
West Coast Region	17	34	55	1	31	27
Canterbury Region	17	31	39	95	18	20
New Zealand	23	34	45	446	23	18



Overview

In 2009 on Waimakariri District local roads there were 68 reported injury crashes, of which 22 were fatal or serious. In addition, on State Highways there were 14 reported injury crashes of which 5 were fatal or serious.

The table below shows the number of casualties resulting from the 82 injury crashes by rural or urban areas (rural is defined as an area with a speed limit of 80km/h or more).

Casualties 2009 Waimakariri District				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	27	49	79
Urban	0	4	38	42
Total	3	31	87	121

All deaths, 87 percent of serious injuries and 56 percent of minor injuries were from crashes in rural areas of Waimakariri District.

Last year the number of fatal and serious casualties rose from 18 to 27, a 50 percent increase. This is the highest number since 2000. The number of minor injury crashes reported was the lowest since 2002. Overall, the number of fatal and injury crashes in the District has been generally increasing in the last ten years

Crash trends in Waimakariri District				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	3	29	32	64
2001	3	21	44	68
2002	4	11	48	63
2003	4	20	64	88
2004	7	15	63	85
2005	2	21	70	93
2006	1	19	61	81
2007	3	18	64	85
2008	3	15	63	81
2009	3	24	55	82

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 Waimakariri District

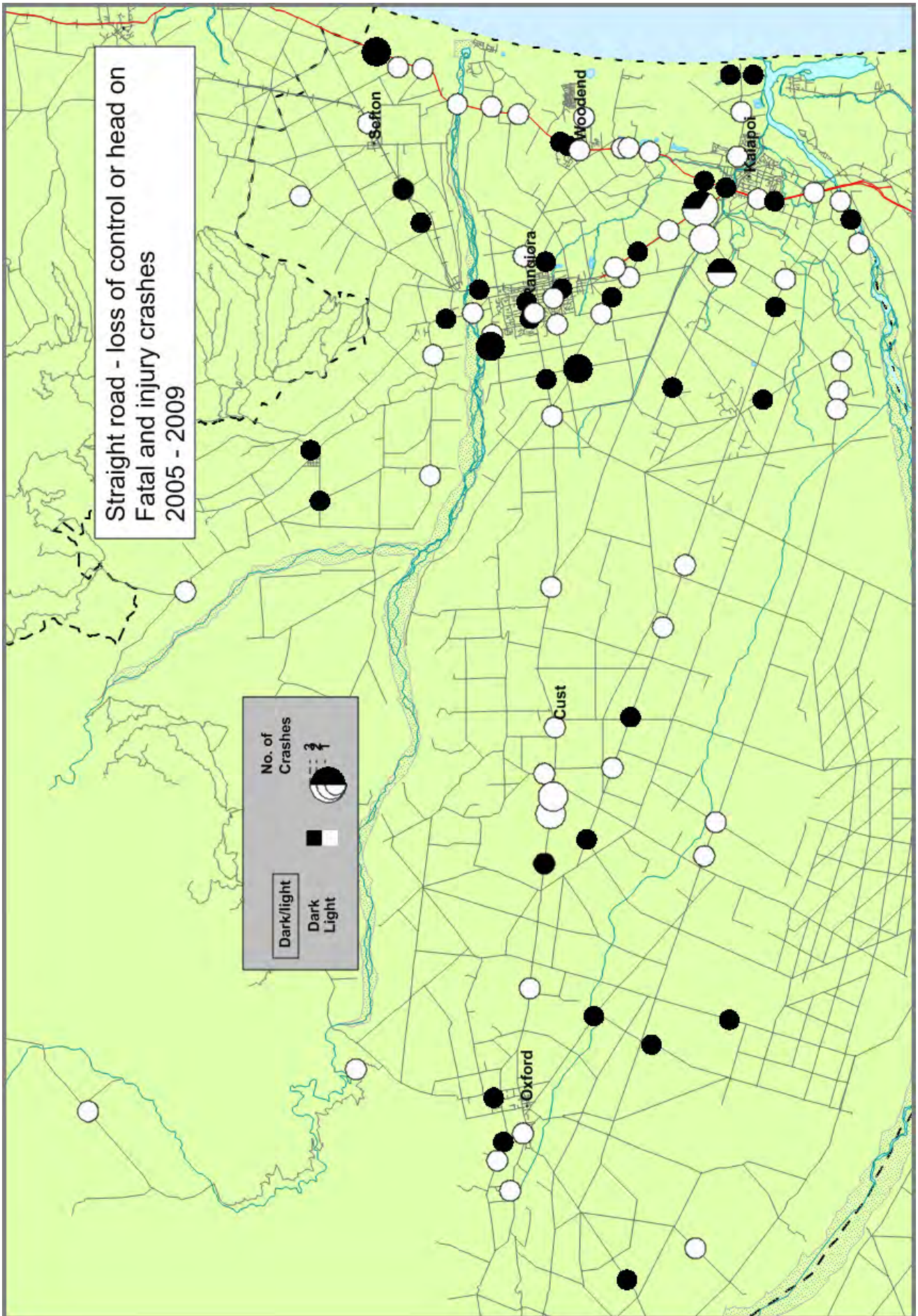
Crash characteristics (2005 to 2009) Waimakariri District				
Crash type or contributory cause	Percent fatal and serious crashes	Percent all injury crashes	No. of injury crashes	Safer Journeys priority
Alcohol	20	14	61	1
Too fast	17	18	75	1
At bends	24	21	90	1
On straights	26	24	101	1
Intersections	28	36	152	1
Road factors / roadsides	7	9	40	1
Motorcycling	15	8	35	1
Young drivers	32	40	162	1
Fatigue	8	8	34	2
Distraction	7	6	61	2
Pedestrians	6	4	18	2
Cycling	6	5	22	2
Heavy vehicles	10	8	35	2
Older road users	7	9	35	3
Overseas drivers	2	2	10	-

Further information about the 344 injury crashes on local roads in Waimakariri District, 2005 to 2009:

- 9 deaths, 92 serious injuries and 376 minor casualties
- Five year age group with most at fault drivers in injury crashes: 15 to 19 years (26 percent of at fault drivers)
- Social cost of crashes in 2009 \$28.58 m

Further information about the 78 injury crashes on State Highways in Waimakariri District, 2005 to 2009:

- 4 deaths, 24 serious injuries and 78 minor casualties
- Five year age group with most at fault drivers in injury crashes: 15 to 19 years (23 percent of at fault drivers)
- Social cost of crashes in 2009 \$8.40 m



Straight road - loss of control or head on

Between 2005 and 2009, 24 percent of all fatal and injury crashes in Waimakariri District were straight road - loss of control or head on crashes. These 101 crashes resulted in 4 deaths, 27 serious injuries and 96 minor injuries.

Straight road - loss of control or head on crashes Waimakariri District				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	1	6	13	20
2006	0	7	15	22
2007	1	3	14	18
2008	0	1	12	13
2009	2	7	19	28
Total	4	24	73	101

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.

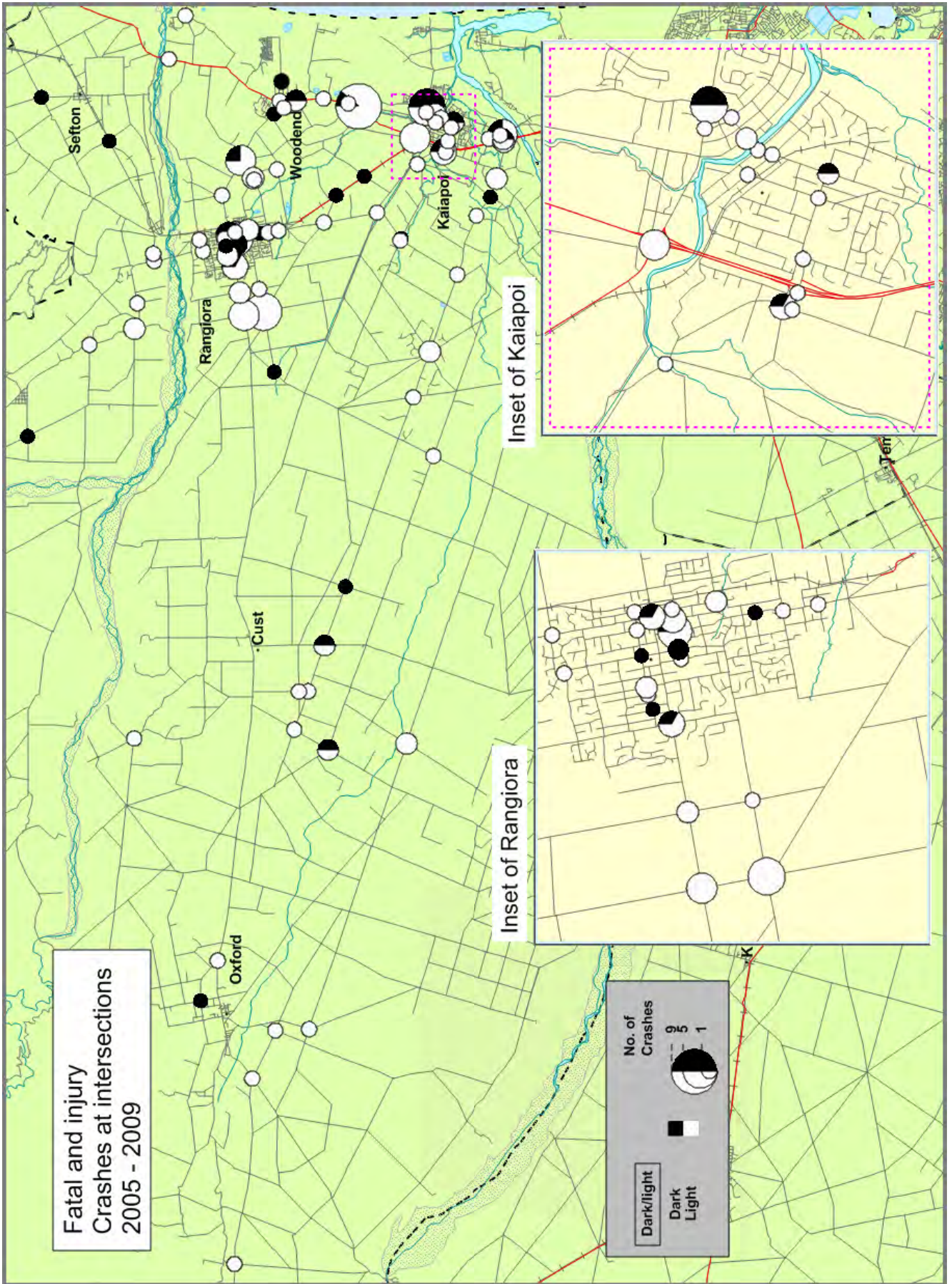
Ages of at fault drivers in straight road related crashes 2005 to 2009			
Ages	Male	Female	Total
15 to 19	12	13	25
20 to 24	11	8	19
25 to 29	2	5	7
30 to 39	10	6	16
40 to 49	8	5	13
50 to 59	4	4	8
60 to 69	3	4	7
70 and over	3	0	3
Total	53	45	98

Further information about the 79 injury straight road - loss of control or head on crashes on local roads in Waimakariri District:(2005 to 2009)

- 2 deaths, 22 serious injuries and 78 minor injuries
- Most common crash type "off road to left"
- 20 percent of crashes involved alcohol
- 24 percent of crashes involved speed
- 15 percent involved "road factors"
- 14 percent involved fatigue
- 82 percent resulted in a roadside hazard being struck
- Commonly struck objects were fence, ditch, post, tree
- 26 percent on wet or icy roads
- 41 percent at night
- Worst month September
- Worst day of week Saturday
- Worst time period 6 pm to 9 pm

Further information about the 22 injury straight road - loss of control or head on crashes on State Highways in Waimakariri District (2005 to 2009):

- 2 deaths, 5 serious injuries and 18 minor injuries
- Most common crash type "off road to left"
- 18 percent of crashes involved alcohol
- 5 percent of crashes involved speed
- No crashes involved "road factors"
- 32 percent involved fatigue
- 68 percent resulted in a roadside hazard being struck
- Commonly struck objects were post, tree
- 5 percent on wet or icy roads
- 41 percent at night
- Worst month November
- Worst day of week Friday
- Worst time period 6 am to 9 am



Intersections

During the five year period 2005 to 2009, on roads in Waimakariri District, there were a total of 152 fatal and injury crashes at intersections.

Casualties in crashes at Intersections Waimakariri District (2005 - 2009)					
	2005	2006	2007	2008	2009
Deaths	0	0	1	0	0
Serious injury	8	8	5	9	9
Minor injury	46	28	30	41	44
Total	54	36	36	50	53

Forty one percent of crashes at intersections were at intersections in urban areas of the district.

In 2007 and 2007 the number of reported injury crashes at intersections dropped, but rose again to the former level in 2008 and 2009.

Ages of at fault drivers in intersection related crashes 2005 to 2009			
Ages	Male	Female	Total
15 to 19	21	7	28
20 to 24	13	10	23
25 to 29	4	5	9
30 to 39	7	5	12
40 to 49	7	9	16
50 to 59	10	7	17
60 to 69	9	10	19
70 and over	13	8	21
Total	84	61	145

Main characteristics of injury Intersection crashes Waimakariri District (2005-2009)

Crash characteristic	Percentage of crashes
Single vehicle	16 %
Alcohol	11 %
Excessive speed for the conditions	8 %
Failed to stop or give way	60 %
Poor observation	68 %

The most common crash type at intersections was when a driver travelling straight through is struck on the right by another vehicle travelling straight through from the right, followed by when a vehicle turns right and is hit by a vehicle approaching from the opposite direction.

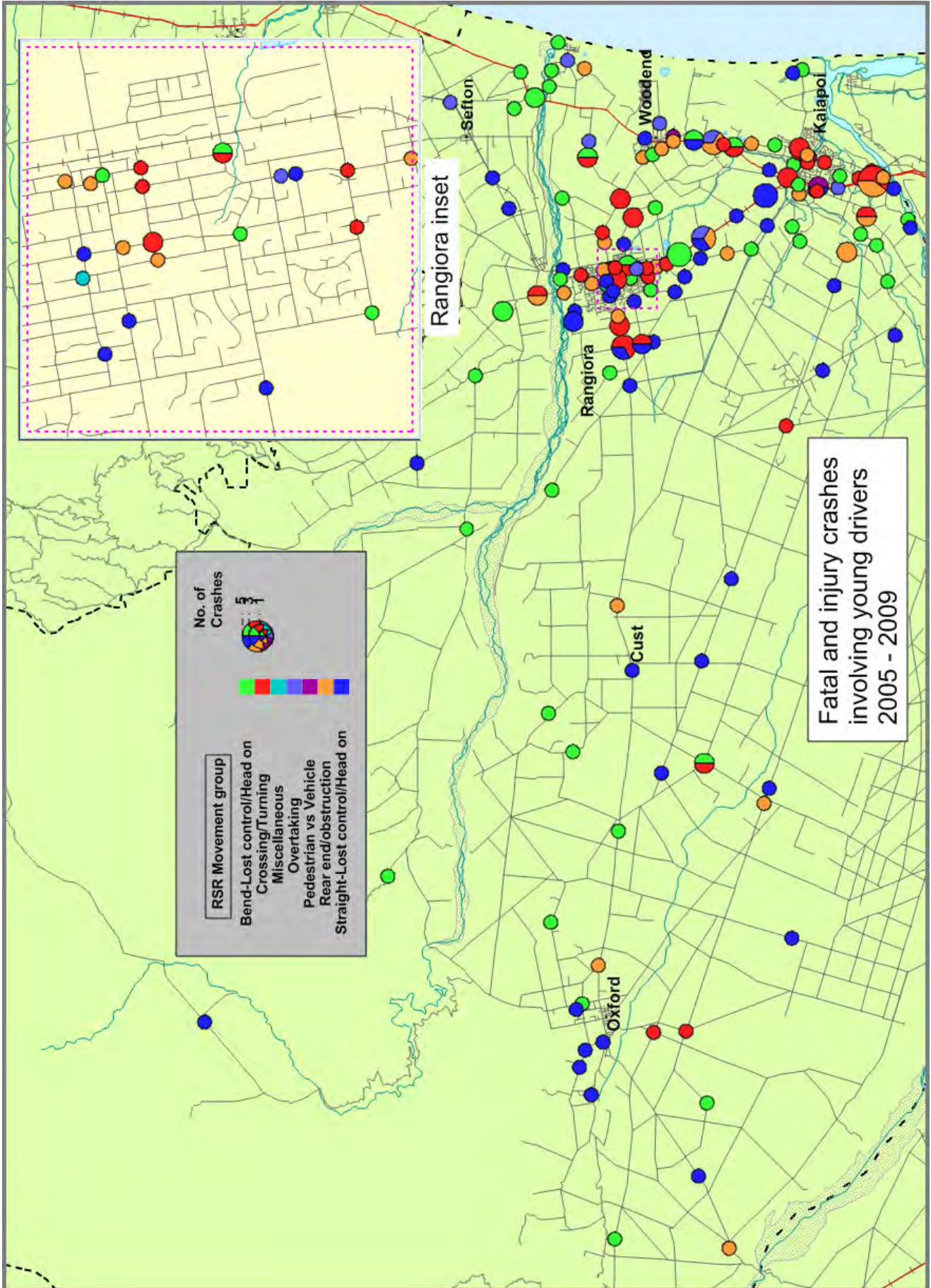
In Waimakariri District there are 12 intersection sites that have had 3 or more injury crashes in the last five years, including 4 sites with 5 or more injury crashes in the past five years. If sites have multiple crashes with common factors, remedial treatments are likely to improve the safety of the intersection.

Further information about the 130 injury crashes at intersections on local roads in Waimakariri District 2005 to 2009:

- 1 death, 28 serious injuries and 162 minor injuries
- 21 percent wet or icy roads
- 21 percent night time
- Worst month January, February, November
- Worst day of week Thursday
- Worst time 3 pm till 6 pm

Further information about the 22 injury crashes at intersections on State Highways in Waimakariri District 2005 to 2009:

- 11 serious injuries and 27 minor injuries
- 14 percent wet or icy roads
- 23 percent night time
- Worst month February
- Worst day of week Thursday, Friday, Saturday
- Worst time 9 am till midday



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 Waimakariri District between 2005 and 2009, 40 percent of injury crashes involved young drivers. These crashes resulted in 5 deaths, 45 serious injuries and 216 minor injuries.

The total number of people injured in crashes involving young drivers has varied from a high of 62 in 2007 and a low of 42 in 2008. There is no obvious trend in the annual number of crashes involving young drivers.

Casualties from crashes involving young drivers Waimakariri District				
	Fatal	Serious	Minor	Total
2005	1	8	52	61
2006	0	8	41	49
2007	1	10	51	62
2008	2	7	33	42
2009	1	12	39	52
Total	5	45	216	266

Just over half of the 195 young drivers in these crashes had a learner or restricted licence. Almost two thirds of these 102 drivers were males.

Most young drivers were local residents, but a significant number were from Christchurch.

Young drivers at fault in injury crashes Waimakariri District (2005 - 2009)			
Licence type	Male	Female	Total
Full	52	23	75
Learner	15	11	26
Restricted	50	26	76
Overseas	1	1	2
Never licensed	3	5	8
Disqualified	1	0	1
Other (unknown, wrong class)	6	1	7
Total	128	67	195

Injury crashes involving young drivers Waimakariri District (2005 - 2009) (% of injury crashes)

Crash type or contributory cause	Urban roads	Rural roads
Alcohol	17	17
Speed	19	31
Failed to stop/Give way	16	26
Poor handling	14	36
Poor observation	33	54
Lost control - straight	11	38
Lost control - bend	12	37
Rear end / obstruction	13	18
Crossing / turning	18	26

Further information about the 155 injury crashes involving young drivers on local roads in Waimakariri District 2005 to 2009:

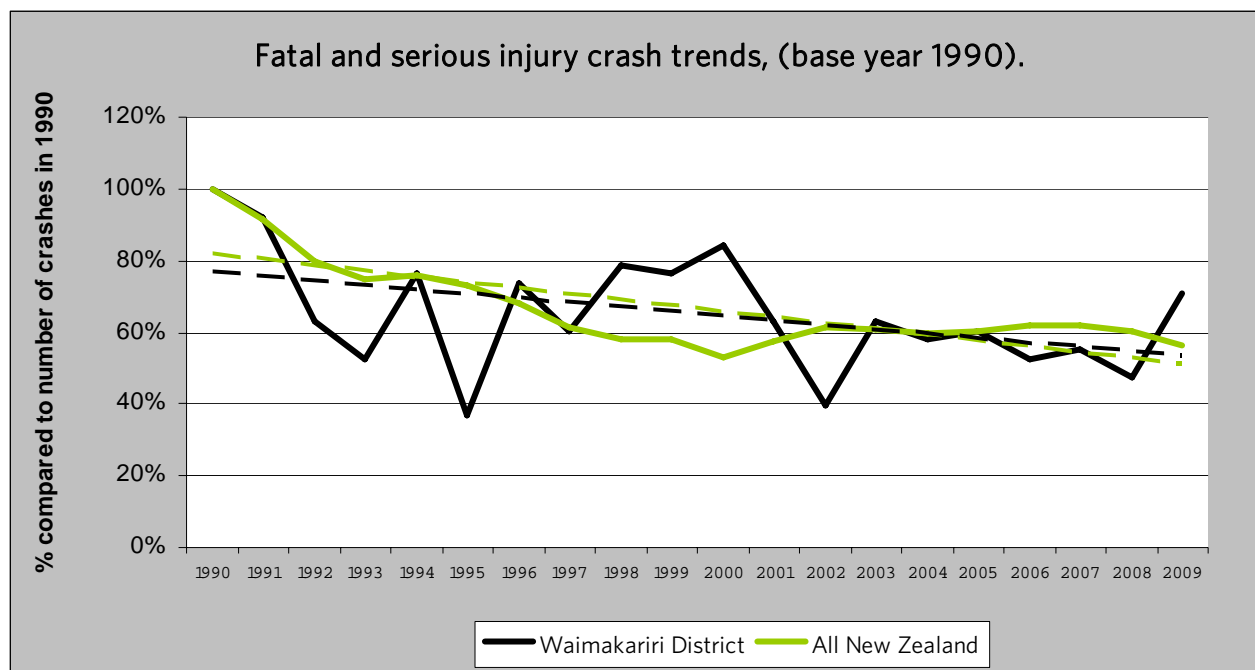
- 3 deaths, 41 serious injuries 184 minor injuries
- 52 percent were single vehicle crashes
- 37 percent were on urban roads
- 37 percent at intersections
- 39 percent at night
- 23 percent wet or icy roads
- Worst month April, June
- Worst day of week Saturday
- Worst time 3 pm to 6 pm

Further information about the 30 injury crashes involving young drivers on State highways in Waimakariri District 2005 to 2009:

- 2 deaths, 4 serious injuries 32 minor injuries
- 33 percent were single vehicle crashes
- 7 percent were on urban roads
- 23 percent at intersections
- 30 percent at night
- 20 percent on wet or icy roads
- Worst month February
- Worst day of week Saturday
- Worst time 3 pm to 6 pm

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 Waimakariri District and for the country as a whole.



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