



briefing notes - road safety issues

Canterbury Region

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 Canterbury Region.

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 Canterbury Region 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 region.

We encourage Canterbury Region 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

Canterbury Region

Intersections

Straight road - loss of control or head-on

Bend - loss of control or head on

Cyclists

Motor cyclists

Nationally

Speed

Alcohol / Drugs

Young Drivers

Roads and Roadsides

Motorcyclists

2009 road trauma

Casualties

Canterbury Region

Deaths 32

Serious casualties 362

Minor casualties 1477

Crashes

Canterbury Region

Fatal crashes 29

Serious injury crashes 309

Minor injury crashes 1087

Non-injury crashes 2502

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

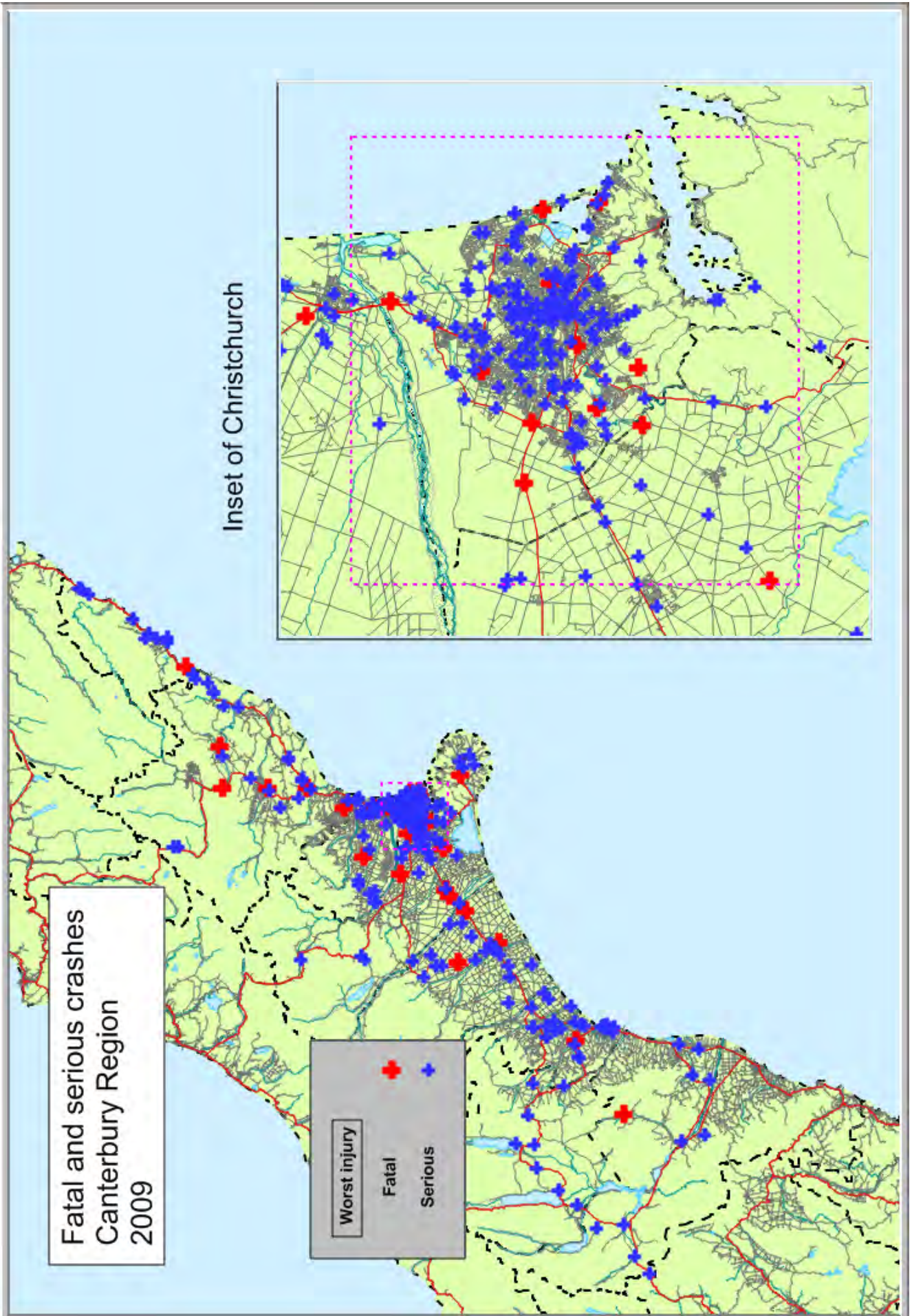
AREAS OF CONCERN WE WILL ADDRESS	WHERE WE WILL TAKE ACTION ACROSS THE SAFE SYSTEM			
	SAFE ROADS AND ROADSIDES	SAFE SPEEDS	SAFE VEHICLES	SAFE ROAD USE
Areas of high concern				
Reducing alcohol/drug impaired driving			✓	✓
Increasing the safety of young drivers	✓	✓	✓	✓
Safe roads and roadsides	✓			
Safe 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 - 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 Canterbury Region local roads there were 1058 reported injury crashes, of which 230 were fatal or serious. In addition, on State Highways there were 370 reported injury crashes of which 109 were fatal or serious.

The table below shows the number of casualties resulting from the 1428 injury crashes by rural or urban areas (rural is defined as an area with a speed limit of 80km/h or more).

Casualties 2009 Canterbury Region				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	25	187	450	662
Urban	7	176	1029	1212
Total	32	363	1479	1874

In 2009 nearly 80 percent of deaths, just over half of serious injuries and 30 percent of minor injuries were from crashes on roads in rural areas.

The 29 deaths in 2009 was the lowest in the last ten years. However in the last three years the number of fatal and serious crashes has been higher than the previous years. In 2006 and 2007 there were increases in the number of minor injury crashes, but this has since dropped slightly.

Crash trends in Canterbury Region				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	31	251	815	1097
2001	42	261	880	1183
2002	41	235	910	1186
2003	46	248	900	1194
2004	41	218	870	1129
2005	40	277	930	1247
2006	30	259	1115	1404
2007	48	330	1225	1633
2008	44	313	1171	1528
2009	29	310	1089	1428

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 Canterbury Region.

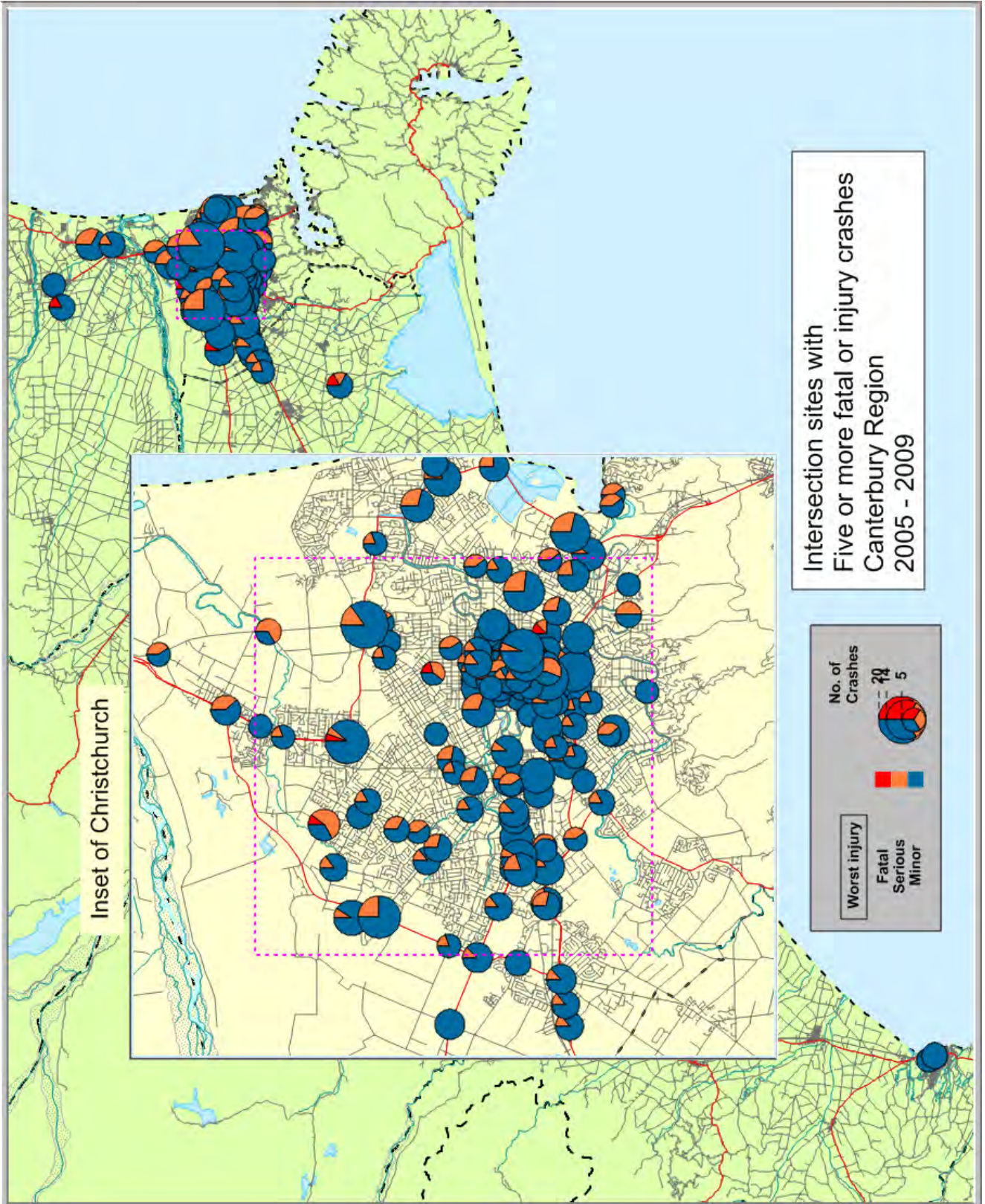
Crash characteristics (2005 to 2009) Canterbury Region				
Crash type or contributory cause	Percent fatal and serious crashes	Percent all injury crashes	No. of injury crashes	Safer Journeys priority
Alcohol	17	13	937	1
Too fast	18	14	1023	1
At bends	26	20	1428	1
On straights	17	14	1031	1
Intersections	39	47	3408	1
Road factors	9	8	606	1
Motorcycling	20	11	821	1
Young drivers	31	35	2459	1
Fatigue	6	5	374	2
Distraction	9	6	805	2
Pedestrians	11	8	570	2
Cycling	11	11	828	2
Heavy vehicles	10	9	640	2
Older road users	9	8	572	3
Overseas drivers	4	4	304	-

Further information about the 5272 injury crashes on local roads in Canterbury Region, 2005 to 2009:

- 122 deaths, 1153 serious injuries and 5481 minor casualties
- Five year age group with most at fault drivers in injury crashes: 15 to 19 years (20 percent of at fault drivers)
- Social cost of crashes in 2009 \$297.59 m

Further information about the 1968 injury crashes on State Highways in Canterbury Region, 2005 to 2009:

- 95 deaths, 569 serious injuries and 2081 minor casualties
- Five year age group with most at fault drivers in injury crashes: 15 to 19 years and 20 to 24 years (each 15 percent of at fault drivers)
- Social cost of crashes in 2009 \$154.0.1 m



Intersections

During the five year period 2005 to 2009, on roads in Canterbury Region, there were a total of 3410 fatal and injury crashes at intersections.

Casualties in crashes at Intersections Canterbury Region (2005 - 2009)					
	2005	2006	2007	2008	2009
Deaths	14	10	16	7	8
Serious injury	132	122	145	146	142
Minor injury	595	759	886	791	733
Total	741	891	1047	944	883

In the last two years the number of deaths from crashes at intersections was lower than the previous years. Overall the number of casualties from crashes at intersections rose in 2007, but dropped in the last two years. For serious crashes there was a similar rise but not followed by a drop.

84 percent of crashes at intersections were in urban areas in the region

Young drivers accounted for 35 percent of at fault drivers in crashes at intersections

Ages of at fault drivers in straight road related crashes 2005 to 2009

Ages	Male	Female	Total
15 to 19	397	206	603
20 to 24	361	171	532
25 to 29	191	100	291
30 to 39	312	200	512
40 to 49	259	208	467
50 to 59	223	123	346
60 to 69	146	103	249
70 and over	177	161	338
Total	2066	1272	3338

Main characteristics of injury Intersection crashes Canterbury Region (2005-2009)

Crash characteristic	Percentage of crashes
Poor observation	59%
Failed to give way / stop	57%
Poor judgement	12%
Alcohol	11%
Speed	10%

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

In Canterbury Region there are 63 intersection sites which have had 8 or more injury crashes in the last five years, including 20 sites with 11 or more injury crashes in the past five years.

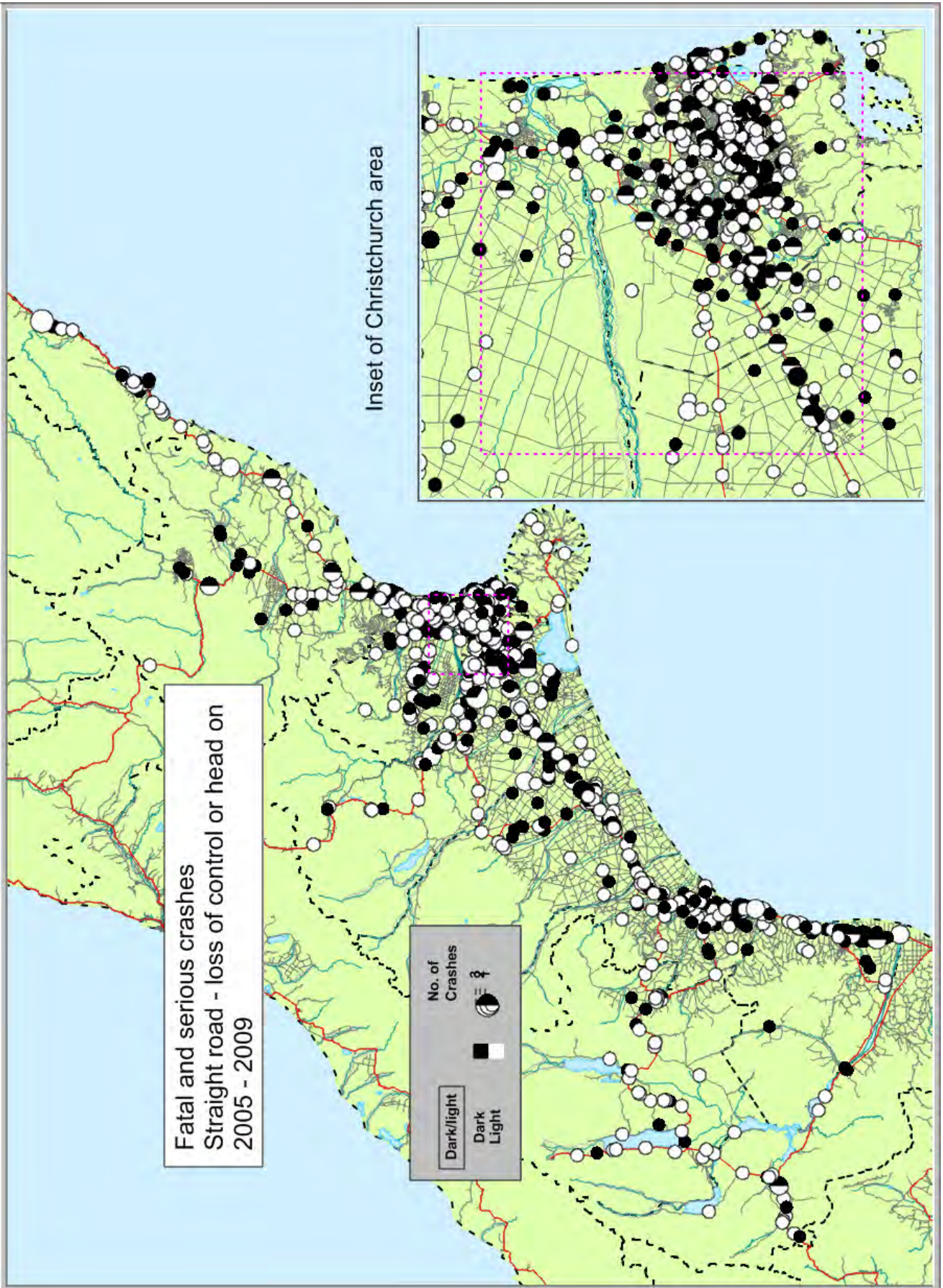
It is possible that some of these sites has had remedial work done in recent years.

Further information about the 2680 injury crashes at intersections on local roads in Canterbury Region 2005 to 2009:

- 44 deaths, 517 serious injuries and 2927 minor injuries
- 17 percent wet or icy roads
- 28 percent night time
- Worst month May
- Worst day of week Friday
- Worst time 3 pm till 6 pm

Further information about the 730 injury crashes at intersections on State Highways in Canterbury Region 2005 to 2009:

- 11 deaths, 170 serious injuries and 837 minor injuries
- 13 percent wet or icy roads
- 29 percent night time
- Worst month December
- Worst day of week Friday
- Worst time 3 pm till 6 pm



Straight road -loss of control or head on

Between 2005 and 2009, 14 percent of all fatal and injury crashes in Canterbury Region were straight road - loss of control or head on crashes. These 1032 crashes resulted in 62 deaths, 293 serious injuries and 1013 minor injuries.

Straight road - loss of control or head on crashes Canterbury Region				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	10	51	137	198
2006	8	40	142	190
2007	9	48	176	233
2008	11	47	157	215
2009	10	49	137	196
Total	48	235	749	1032

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.

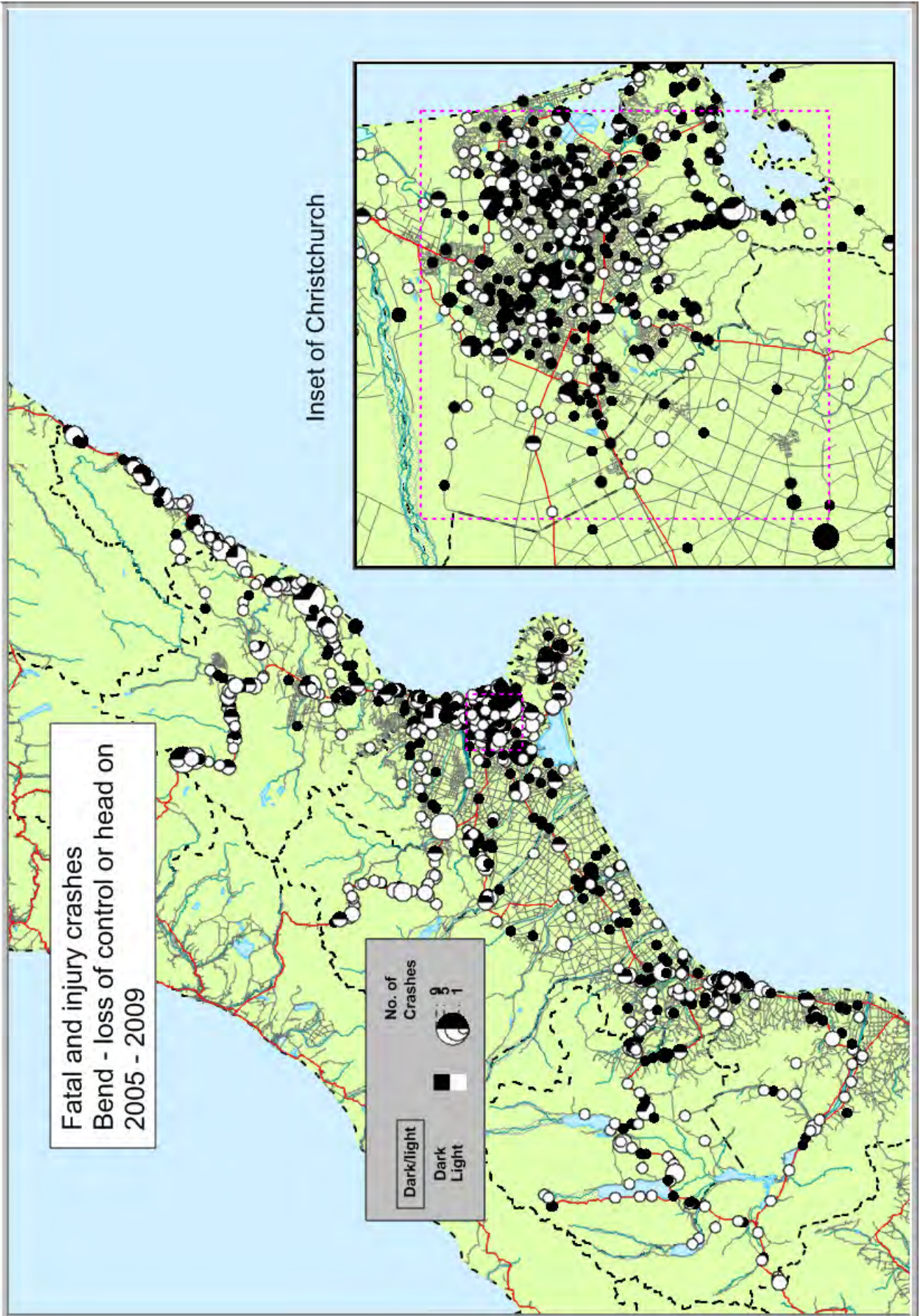
Ages of at fault drivers in straight road related crashes 2005 to 2009			
Ages	Male	Female	Total
15 to 19	143	86	229
20 to 24	122	59	181
25 to 29	65	25	90
30 to 39	114	56	170
40 to 49	99	30	129
50 to 59	55	38	93
60 to 69	29	19	48
70 and over	44	19	63
Total	671	332	1003

Further information about the 641 injury straight road - loss of control or head on crashes on local roads in Canterbury Region:(2005 to 2009)

- 30 deaths, 156 serious injuries and 623 minor injuries
- Most common crash type "off road to left"
- 29 percent of crashes involved alcohol
- 19 percent of crashes involved speed
- 14 percent involved "road factors"
- 14 percent involved fatigue
- 77 percent resulted in a roadside hazard being struck
- Commonly struck objects were , post or pole, fence, tree, and parked vehicle
- 21 percent on wet or icy roads
- 45 percent at night
- Worst month January, November
- Worst day of week Saturday
- Worst time period 3 pm to 6 pm

Further information about the 391 injury straight road - loss of control or head on crashes on State Highways in Canterbury Region (2005 to 2009):

- 32 deaths, 137 serious injuries and 390 minor injuries
- Most common crash type "off road to left"
- 18 percent of crashes involved alcohol
- 9 percent of crashes involved speed
- 11 percent involved "road factors"
- 34 percent involved fatigue
- 70 percent resulted in a roadside hazard being struck
- Commonly struck objects were fence, post or pole, tree, and ditch
- 20 percent on wet or icy roads
- 36 percent at night
- Worst month December
- Worst day of week Saturday
- Worst time period 3 pm to 6 pm



Bend - loss of control or head on

Between 2005 and 2009, 20 percent of all injury crashes in Canterbury Region were bend - loss of control or head on crashes. These crashes resulted in 83 deaths, 445 serious injuries and 1456 minor injuries.

Bend - loss of control or head on crashes Canterbury Region (2005 - 2009)				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	15	79	184	278
2006	9	66	209	284
2007	23	74	235	332
2008	19	67	172	258
2009	10	77	190	277
Total	76	363	990	1429

Crash numbers rose in 2007 and fell again in 2008. This was across all severities. The numbers of fatal and serious crashes at bends is not reducing.

Of the drivers at fault, 43 percent were young drivers. Of these drivers, 73 percent were males. Overall males made up 73 percent of at fault drivers

At fault drivers in Bend - loss of control or head on crashes 2005 to 2009			
Ages	Male	Female	Total
15 to 19	257	98	355
20 to 24	188	64	252
25 to 29	98	35	133
30 to 39	174	58	232
40 to 49	150	56	206
50 to 59	80	37	117
60 to 69	33	12	45
70 and over	37	22	59
Total	1017	382	1399

If drivers lose control, their vehicles 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.

The most common roadside hazards struck in injury bend - loss of control or head on crashes in Canterbury Region were fence (260), post or pole (222), tree (168), and cliff or bank (141) from a total of 1406 objects struck.

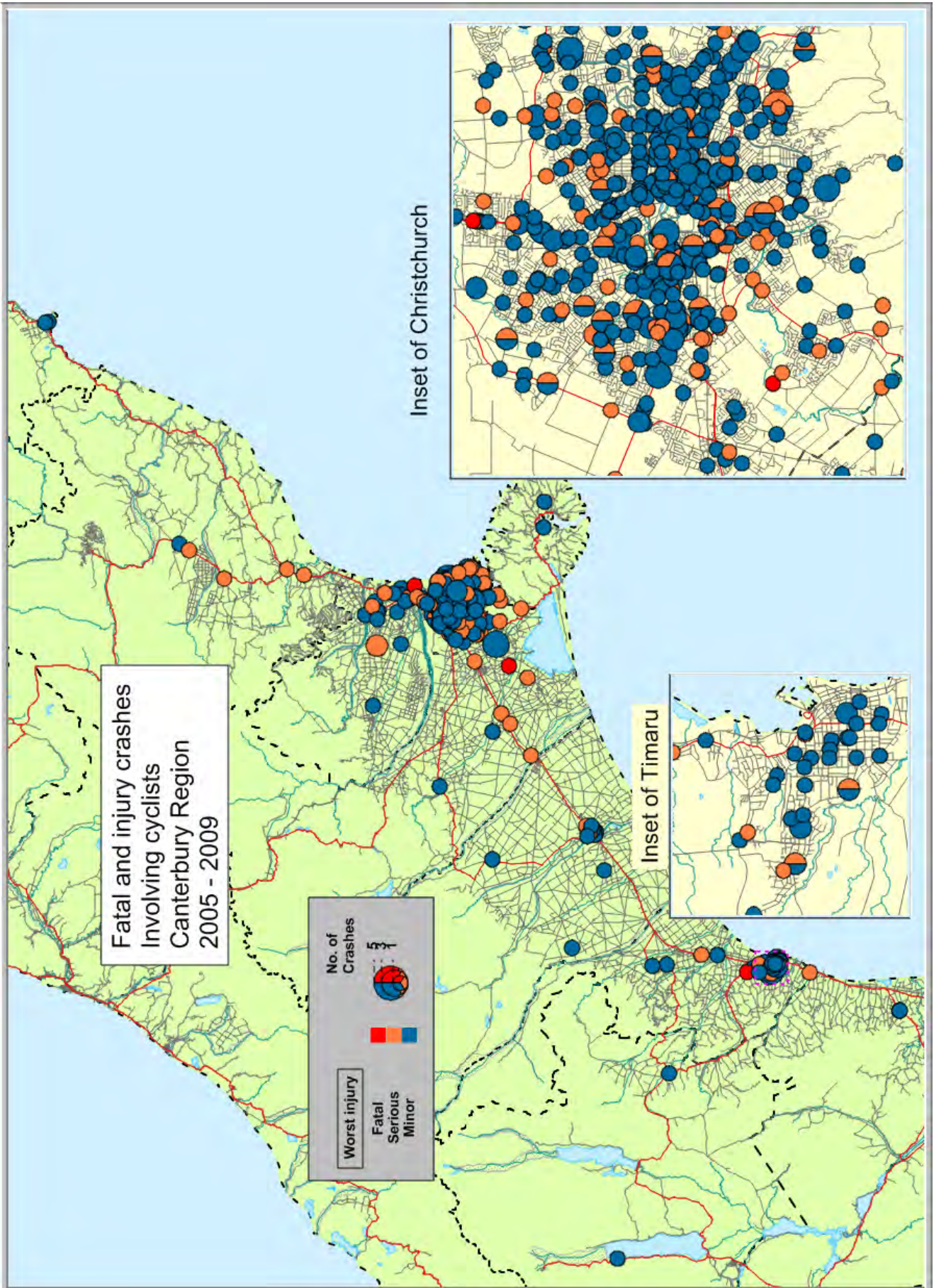
A roadside hazard was struck in 73 percent of bend - loss of control or heads on crashes in the region.

Further information about the 889 injury bend - loss of control or head on crashes on local roads in Canterbury Region, (2005 to 2009):

- 42 deaths, 255 serious injuries and 910 minor injuries
- 34 percent of crashes involved alcohol
- 48 percent of crashes involved speed too fast for the conditions
- 16 percent involved road factors
- 56 percent involved poor handling
- 40 percent were on rural roads
- 23 percent were on wet or icy roads
- 54 percent were at night
- Worst month March
- Worst day of week Saturday
- Worst time period 9 pm till midnight

Further information about the 540 injury bend - loss of control or head on crashes on State Highways in Canterbury Region, (2005 to 2009):

- 41 deaths, 190 serious injuries and 546 minor injuries
- 15 percent of crashes involved alcohol
- 40 percent of crashes involved speed too fast for the conditions
- 21 percent involved road factors
- 58 percent involved poor handling
- 88 percent were on rural roads
- 31 percent were on wet or icy roads
- 36 percent were at night
- Worst month January
- Worst day of week Sunday
- Worst time period midday till 3 pm



Cyclists

Although cyclist injuries do not feature highly in the overall crash numbers in Canterbury Region, representing 8.5 percent of all casualties, they made up ten percent of fatal and serious casualties in the last five years.

The number of cyclists killed or seriously injured in crashes in Canterbury Region rose in 2007, stayed high in 2008, but in 2009, returned to close to the previous level

Cyclist casualties, (2005-2009) Canterbury Region					
Cyclist injuries	2005	2006	2007	2008	2009
Fatal	1	0	2	1	2
Serious	31	29	51	47	34
Minor	94	137	150	153	116
Total	126	166	203	201	152

91 percent of cyclist crashes were on urban roads.

The most common type of cyclist crash is a right turn against crash, typically when a vehicle turns right across the path of a through cyclist

Major causes in cycle crashes, Canterbury Region, (2005-2009)		
Cause	Cyclist at fault	Other road users at fault
Did not see	76	361
Failed to give way	56	314
Forbidden movement	68	0
Distraction	11	53
Inattention	32	30
Failed to keep left	32	30
Misjudged speed	18	23
Lost control	19	3
Wrong lane / position	12	8

Age and gender of cyclist casualties 2005 to 2009 and 1980 to 1984 (20 years ago)

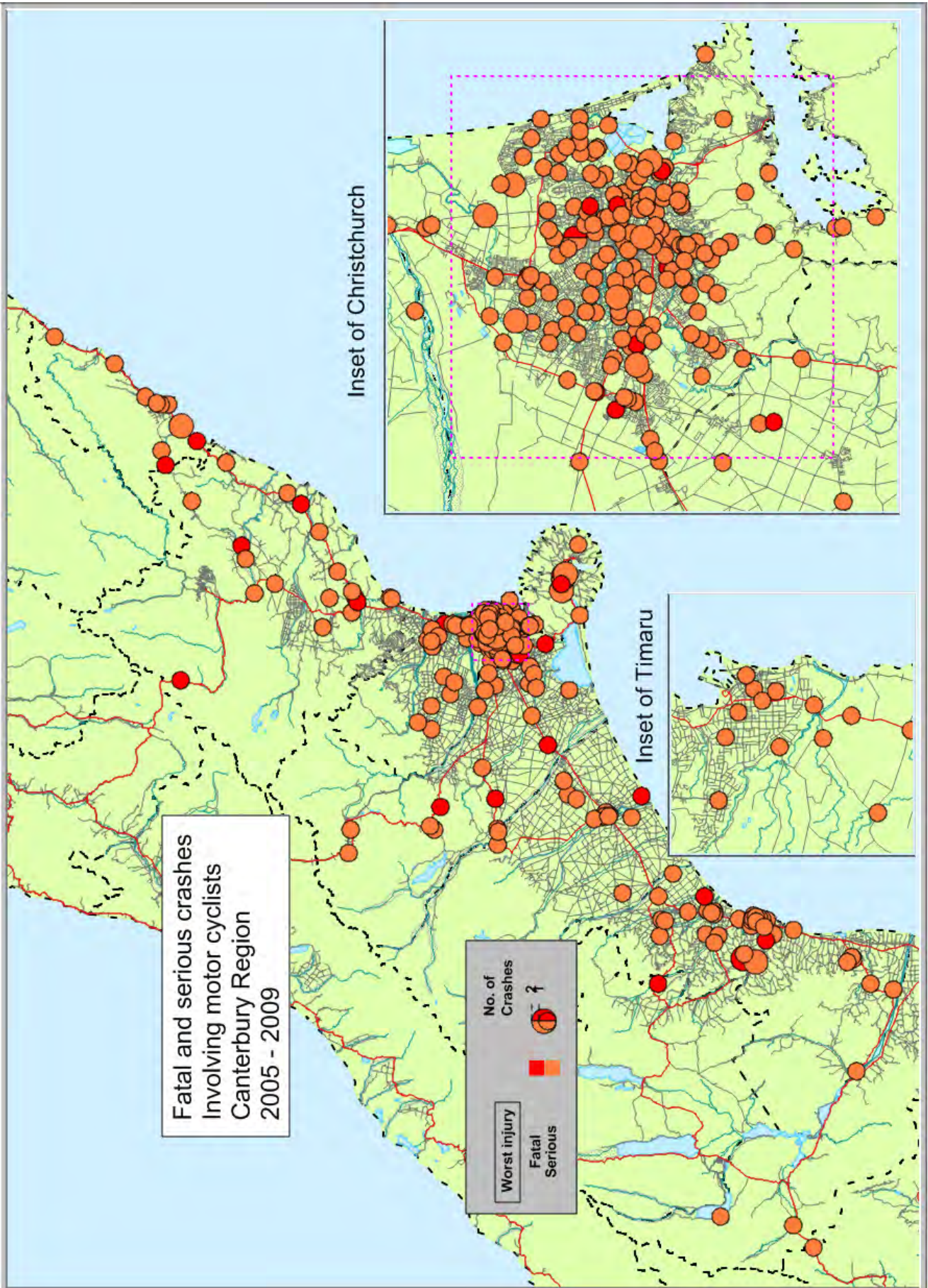
Ages	Female 2005 to 2009	Male 2005 to 2009	Total 2005 to 2009	25 years ago
0 to 4	1	0	1	3
5 to 9	6	14	20	70
10 to 14	28	66	94	311
15 to 19	26	67	93	284
20 to 24	33	30	63	139
25 to 29	44	37	82	47
30 to 34	21	43	64	29
35 to 39	23	56	79	20
40 to 44	24	51	75	26
45 to 49	25	50	75	28
50 to 54	26	36	62	22
55 to 59	10	31	41	18
60 to 64	3	12	15	13
65 to 69	0	6	6	21
70 to 74	4	9	13	16
75 plus	0	13	13	18

Further information about the 710 injury cyclist crashes on local roads in Canterbury Region 2005 to 2009:

- 58 percent at intersections
- 9 percent on wet or icy roads
- 14 percent at night
- Worst month March
- Worst day of week Wednesday
- Worst time 3 pm to 9 pm

Further information about the 98 injury cyclist crashes on State Highways in Canterbury Region 2005 to 2009:

- 59 percent at intersections
- 12 percent on wet or icy roads
- 17 percent at night
- Worst month May, June
- Worst day of week Tuesday
- Worst time 3 pm to 6 pm



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. In 2009, motorcyclists accounted for 13 percent of road fatalities in New Zealand. In early 2010 this had risen to over 16 percent.

In Canterbury Region, motorcyclist casualties represented only 9 percent of all casualties. However, they make up 18 percent of fatal and serious casualties.

Casualties from motorcyclist crashes Canterbury Region (2005-2009)					
	2005	2006	2007	2008	2009
Fatal	5	6	10	10	5
Serious	60	47	82	68	73
Minor	64	87	139	119	127
Total	129	140	231	197	205

Almost 70 percent of motorcycle crashes were in urban areas of the region. The most common crash types in urban areas were the right turn against crash and the right angle crash. In rural areas the common crash types were loss of control on right and bends and on left hand bends

Major causes in motorcycle crashes, Canterbury Region, (2005-2009)		
Cause	Motorcyclist at fault	Other road users at fault
Lost control	210	5
Alcohol / drugs	89	10
Too fast for conditions	75	3
Too fast	75	3
Inexperience	71	23
Inattention	53	26
Failed to notice	17	286
Failed to give way	17	241
Distraction	25	28

Age and gender of motorcycle and moped casualties between 2005 and 2009 and 25 years ago in Canterbury Region

Ages	Female	Male	Total	20 years ago
Under 10	3	2	5	4
10 to 14	6	10	16	36
15 to 19	35	115	150	1628
20 to 24	28	102	130	847
25 to 29	15	58	73	263
30 to 34	16	69	85	124
35 to 39	13	54	67	89
40 to 44	16	77	93	44
45 to 49	20	77	97	38
50 to 54	8	49	57	33
55 to 59	5	22	27	28
60 to 64	6	18	24	8
65 to 69	1	7	8	8
70 and over	2	9	11	12

Further information about the 585 injury motorcyclist crashes on local roads in Canterbury Region 2005 to 2009:

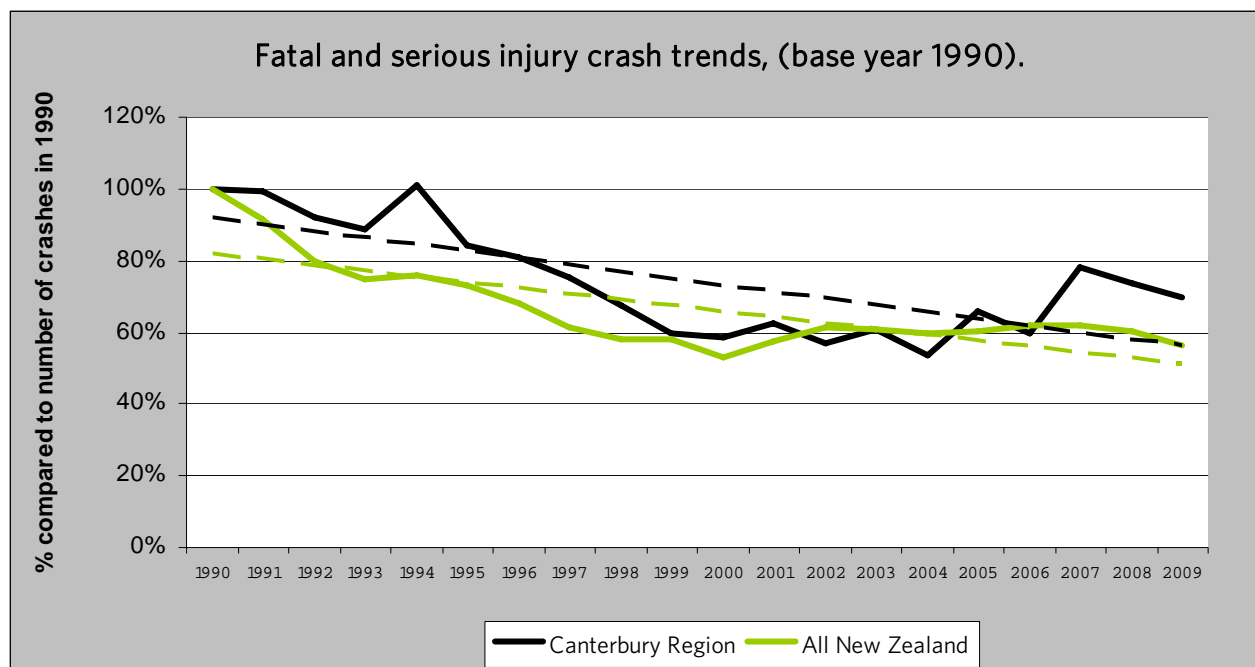
- 14 deaths, 236 serious injuries and 399 minor injuries
- 11 percent were on wet or icy roads
- 25 percent at night
- Worst month March
- Worst day of week Thursday
- Worst time 3 pm - 6 pm

Further information about the 212 injury motorcyclist crashes on State highways in Canterbury Region 2005 to 2009:

- 22 deaths, 94 serious injuries and 137 minor injuries
- 8 percent were on wet or icy roads
- 17 percent at night
- Worst month March, December
- Worst day of week Sunday
- Worst time midday - 3 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 Canterbury Region 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 Canterbury
 Al Stewart
 New Zealand Police
 PO Box 2109
 Christchurch
 Phone 03 363 7417

www.police.govt.nz

Local Authority

Regional Road Safety Coordinator
 Maureen Bishop
 PO Box 419
 Ashburton
 03 308 8377

Canterbury Regional Council
 PO Box 345
 Christchurch 8140
 Phone 03 365 3828

www.ecan.govt.nz