



briefing notes - road safety issues

Christchurch City

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 Christchurch City.

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 Christchurch City is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

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

We encourage Christchurch City 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 City. 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

Christchurch City

Intersections
Vulnerable Road Users

2008 road trauma

Casualties Christchurch City

Deaths	16
Serious casualties	218
Minor casualties	1067

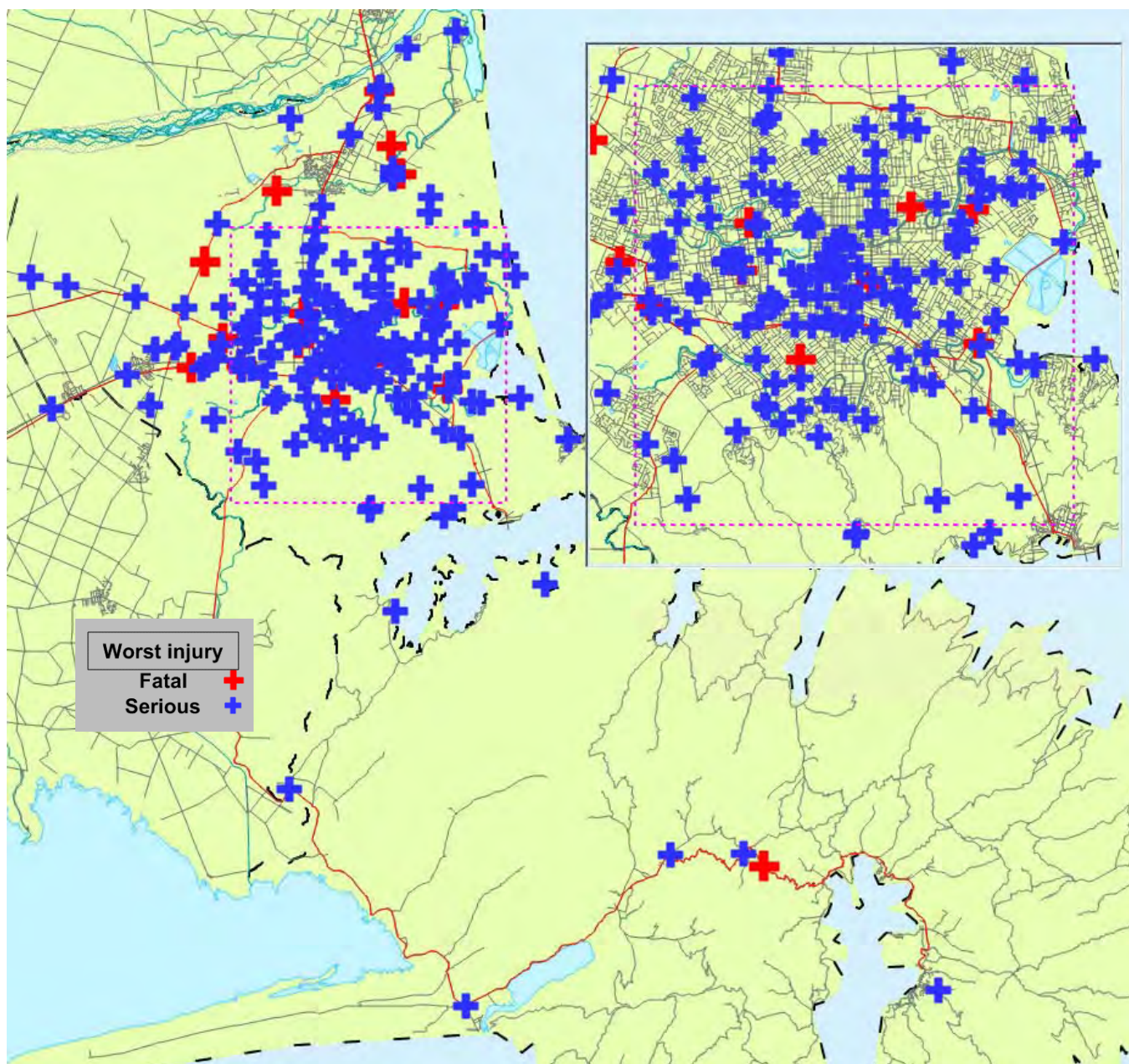
Nationally

Speed
Alcohol
Failure to give way
Restraints

Crashes Christchurch City

Fatal crashes	16
Serious injury crashes	201
Minor injury crashes	818
Non-injury crashes	1721

Fatal and serious crashes
Christchurch City
2008



Overview

In 2008 on local roads in Christchurch City there were 864 injury crashes and 1434 non-injury crashes. In addition there were 171 injury crashes and 287 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 1035 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	6	30	85	121
Urban	10	188	982	1186
Total	16	218	1067	1307

In Christchurch City in 2008, 63 percent of deaths, 86 percent of serious injuries and 92 percent of minor injuries were sustained in crashes in urban areas of the City.

Overall there has been a reasonably steady increase in the reported number of fatal and injury crashes. In 2007 the total was the highest in the ten year period. There was a slight reduction in 2008, but in that year the number of fatal crashes was the highest since 2002.

Crash trends in Christchurch City

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	20	124	568	712
2000	15	112	588	715
2001	14	146	609	769
2002	16	137	654	807
2003	14	147	616	777
2004	10	125	585	720
2005	14	160	640	814
2006	10	159	777	946
2007	12	205	851	1068
2008	16	201	818	1035

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	13	11
Too fast	12	11
At bends	14	13
At intersections	55	61
Road factors	6	7

Vulnerable road users - casualties

Road user type	Local road Percentage of all casualties	State Highway Percentage of all casualties
Pedestrians	10	4
Cyclists	12	7
Motorcycles	9	10
Total vulnerable	31	21

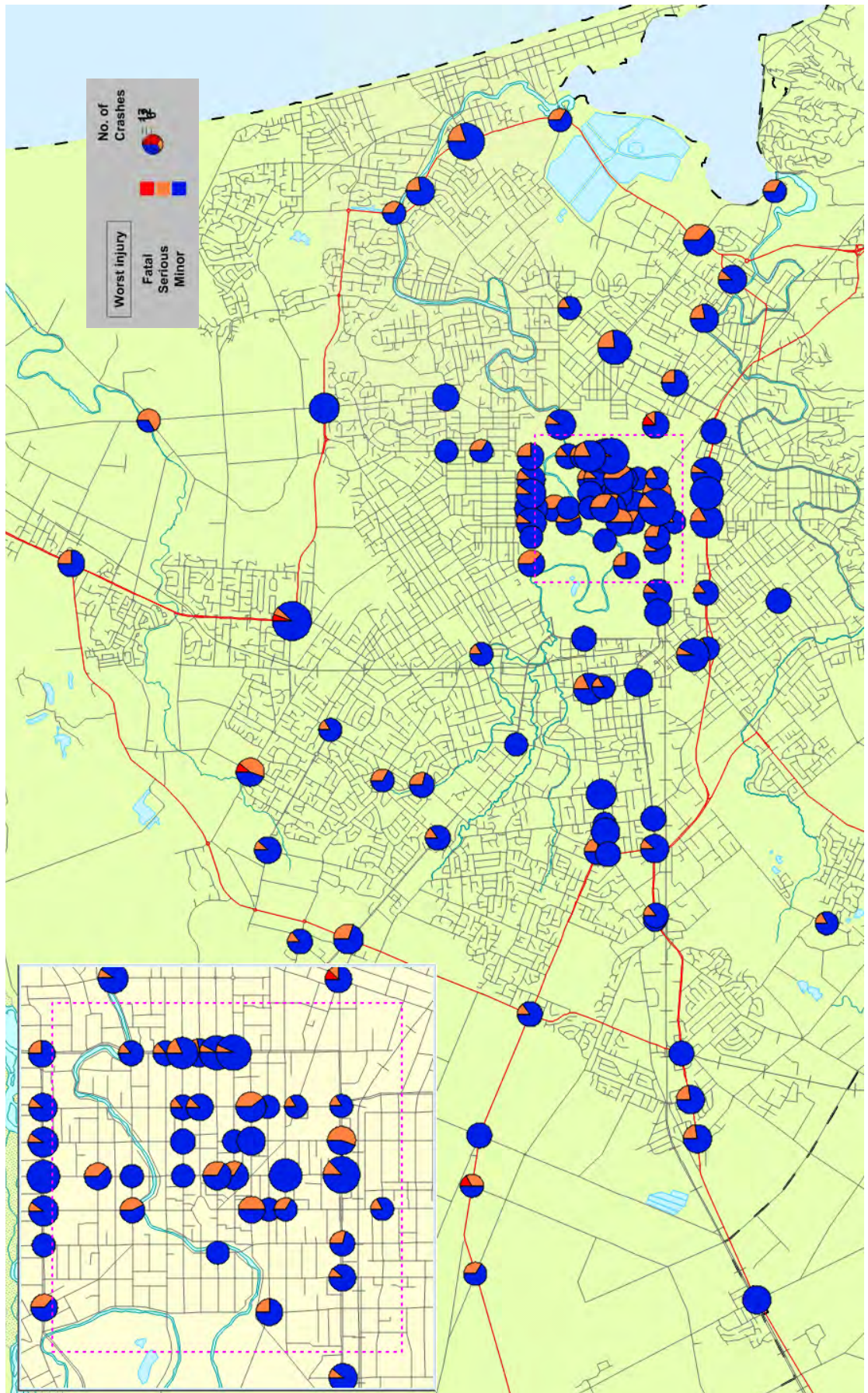
Further information about 2004 to 2008 injury crashes on local roads in Christchurch City :

- Worst month March
- Worst day Friday
- 17 percent on wet or icy roads
- 31 percent at night
- 55 percent at intersections
- 1408 roadside objects struck
- Social cost of crashes in 2008 \$227.9 m

Further information about 2004 to 2008 injury crashes on State Highways in Christchurch City :

- Worst month December
- Worst day Friday
- 19 percent on wet or icy roads
- 30 percent at night
- 61 percent at intersections
- 253 roadside objects struck
- Social cost of crashes in 2008 \$45.5 m

Intersections with 5 or more injury crashes
Christchurch City
2004 - 2008



Intersections

During the five year period 2004 to 2008 within Christchurch City there were a total of 7423 crashes at intersections, 2551 of these were injury crashes and 4872 non-injury.

94 percent of these were in urban areas and 29 people were killed, 477 received serious injuries and 2782 received minor injuries.

Crashes at Intersections					
	2004	2005	2006	2007	2008
Injury crash	396	443	553	601	558
Non-injury crash	868	939	1088	1072	905
Total	1264	1382	1641	1673	1463

After a reasonably steady increase in the number of crashes at intersections from 2004 to 2007, there was a drop in 2008.

Locations with the most injury crashes 2004 to 2008

Intersection name (Within a radius of 50m)	Injury crashes 2004 - 2008	Injury crashes 2008
Main North / QE II Drive	17	4
Pages Road / Anzac Drive	15	4
Moorhouse Avenue / Manchester Street	15	4
Fitzgerald Avenue / Cashel Street	14	3

These sites are listed irrespective on any works carried out in the last five years.

Junction control Injury and non-injury crashes

Junction control	Traffic signals	Nil	Give Way	Stop
Number of crashes	3123	1123	2289	871

The most common crash type at intersections is when two vehicles approaching each other at right angles collide.

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

- Failure to stop and give way
- Poor observation

Junction type Injury and Non-injury crashes		
Junction Type	Rural	Urban
Roundabout	158	499
Tee	154	2962
Cross (X)	105	3341
Multi-leg	1	84
Other (includes driveways)	4	115

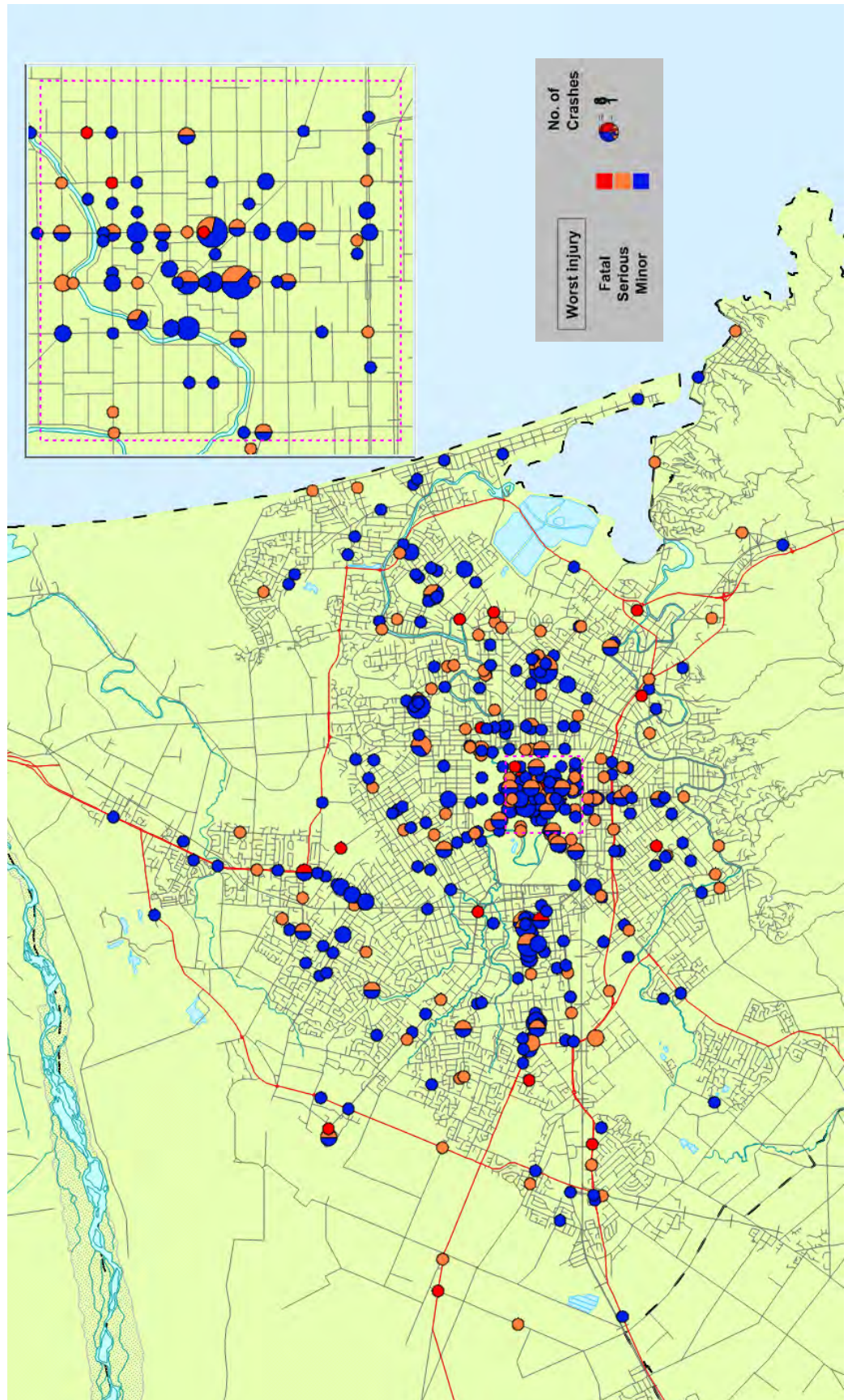
Further information about the 2087 injury crashes at intersections on local roads in Christchurch City 2004 to 2008:

- 24 deaths, 384 serious injuries and 2263 minor injuries
- 17 percent wet or icy roads
- 29 percent night time
- Worst month May
- Worst day of week Friday
- Worst time 3 pm till 6 pm

Further information about the 464 injury crashes at intersections on State Highways in Christchurch City 2004 to 2008:

- 5 deaths, 93 serious injuries and 519 minor injuries
- 15 percent wet or icy roads
- 33 percent night time
- Worst month March
- Worst day of week Friday
- Worst time 3 pm till 6 pm

Injury pedestrian crashes
Christchurch urban area
2004 - 2008



Vulnerable road users

(Pedestrians, Cyclists and Motorcyclists)

Vulnerable road users are those who have little physical protection in the event of a crash and are more susceptible to severe injuries.

Pedestrians

Although pedestrian crashes do not feature highly in the overall crash numbers in Christchurch City, representing only 10 percent of all injury crashes, they make up 17 percent of fatal and serious injuries in the last five years.

Pedestrian injuries 2004 to 2008					
Pedestrian injuries	2004	2005	2006	2007	2008
Fatal	2	1	5	3	6
Serious	26	23	29	31	32
Minor	62	69	64	64	59
Total	90	93	98	98	97

The most common type of pedestrian crash is when a pedestrian is crossing the road and is hit by a vehicle approaching from their right.

In 2008 the number of pedestrians killed in Christchurch was the highest in the last five years. Overall the number of pedestrians injured is not reducing

Major crash causes in pedestrian crashes, Christchurch City, 2004-2008

Cause	Pedestrian at fault	Other road users at fault
Pedestrian factors	409	N/A
Poor observation	2	109
Failed to give way or stop	N/A	78
Alcohol	43	11
Disabled / old / ill	14	4
Too fast	1	14
Incorrect lane or position	N/A	15

Ages of pedestrian casualties

Ages	Female	Male	Total
0 to 4	2	9	11
5 to 9	13	16	29
10 to 14	26	24	50
15 to 19	37	33	70
20 to 24	23	32	55
25 to 29	4	15	19
30 to 34	15	11	26
35 to 39	9	13	22
40 to 44	9	12	21
45 to 49	7	14	21
50 to 54	9	5	14
55 to 59	9	4	13
60 to 64	6	5	11
65 to 69	10	10	20
70 to 74	11	6	17
75 and over	30	22	52

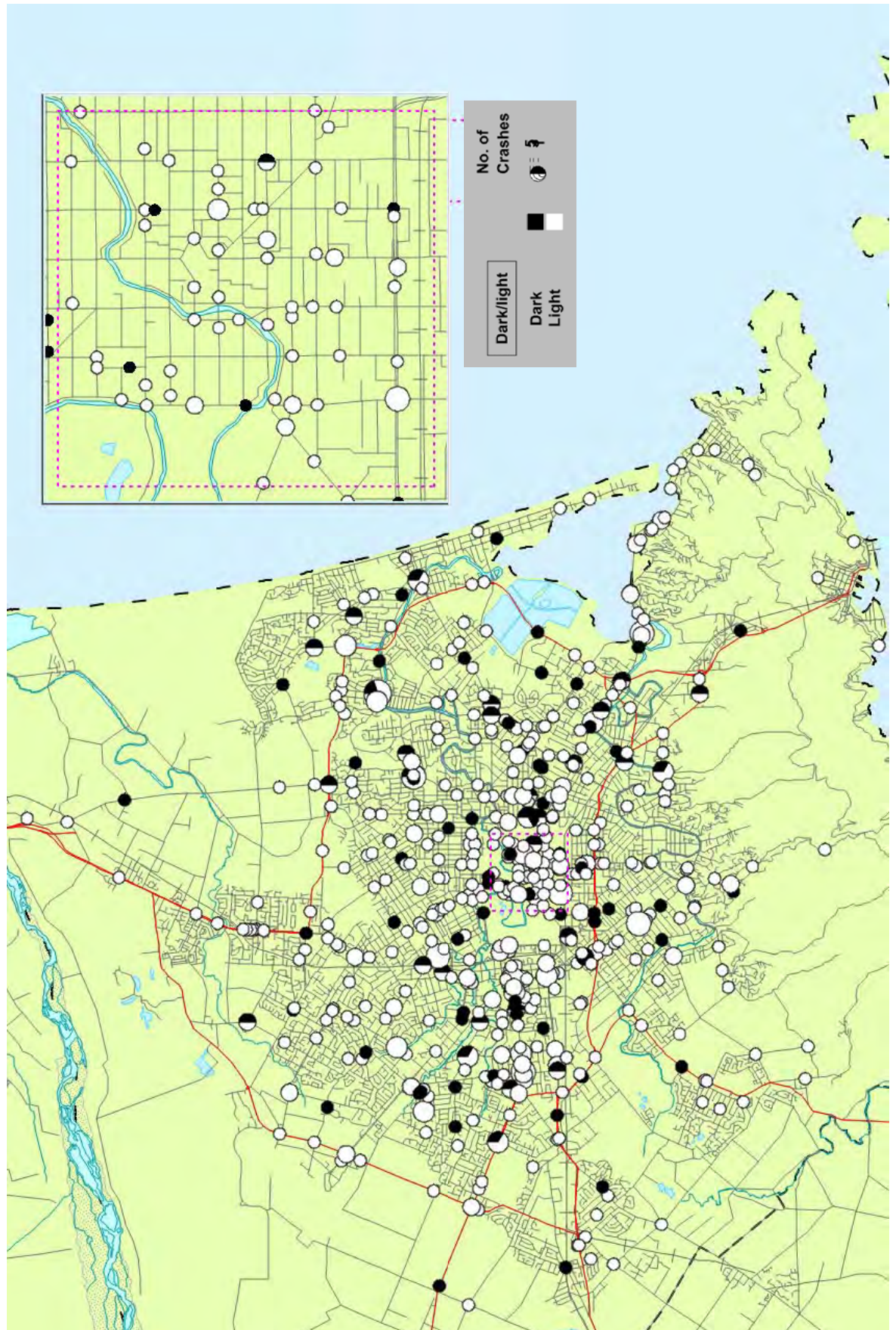
Further information about the 461 injury pedestrian crashes on local roads in Christchurch City 2004 to 2008:

- 44 percent at intersections
- 25 at night
- Worst month July,
- Worst day of week Wednesday, Friday,
- Worst time 3 pm - 6 pm

Further information about the 35 injury pedestrian crashes on State Highways in Christchurch City 2004 to 2008:

- 46 percent at intersections
- 26 at night
- Worst month June
- Worst day of week Wednesday
- Worst time 3 pm - 6 pm

Injury cyclist crashes
Christchurch urban area
2004 - 2008



Cyclists

Although cyclist injuries do not feature highly in the overall crash numbers in Christchurch City, representing only 11 percent of all injuries, they made up 15 percent of fatal and serious injuries in the last five years.

The number of cyclists being injured in crashes in Christchurch City is increasing.

Cyclist injuries					
Cyclist injuries	2004	2005	2006	2007	2008
Fatal	2	1	0	2	0
Serious	19	24	23	40	36
Minor	68	76	111	125	130
Total	89	101	134	167	166

The most common type of cyclist crash was when a cyclist travelling straight through an intersection is struck by a vehicle turning right across the cyclist's path. Other common crash types were right angle collisions at intersections, and cyclists being struck by opening doors of parked vehicles.

Major crash causes in cycle crashes, Christchurch City, 2004-2008

Cause	Cyclist at fault	Other road users at fault
Poor observation	98	360
Failed to stop or give way	66	231
Incorrect lane or position	67	32
Poor judgement	14	21
Failed to keep left	15	5
Overtaking	7	12

Ages of cyclist casualties

Ages	Female	Male	Total
0 to 4	2	0	2
5 to 9	4	16	20
10 to 14	18	49	67
15 to 19	20	55	75
20 to 24	29	22	51
25 to 29	33	35	68
30 to 34	15	33	48
35 to 39	18	49	67
40 to 44	18	49	67
45 to 49	16	41	57
50 to 54	19	20	39
55 to 59	4	24	48
60 to 64	2	7	9
65 to 69	0	8	8
70 to 74	5	8	13
75 and over	1	11	12

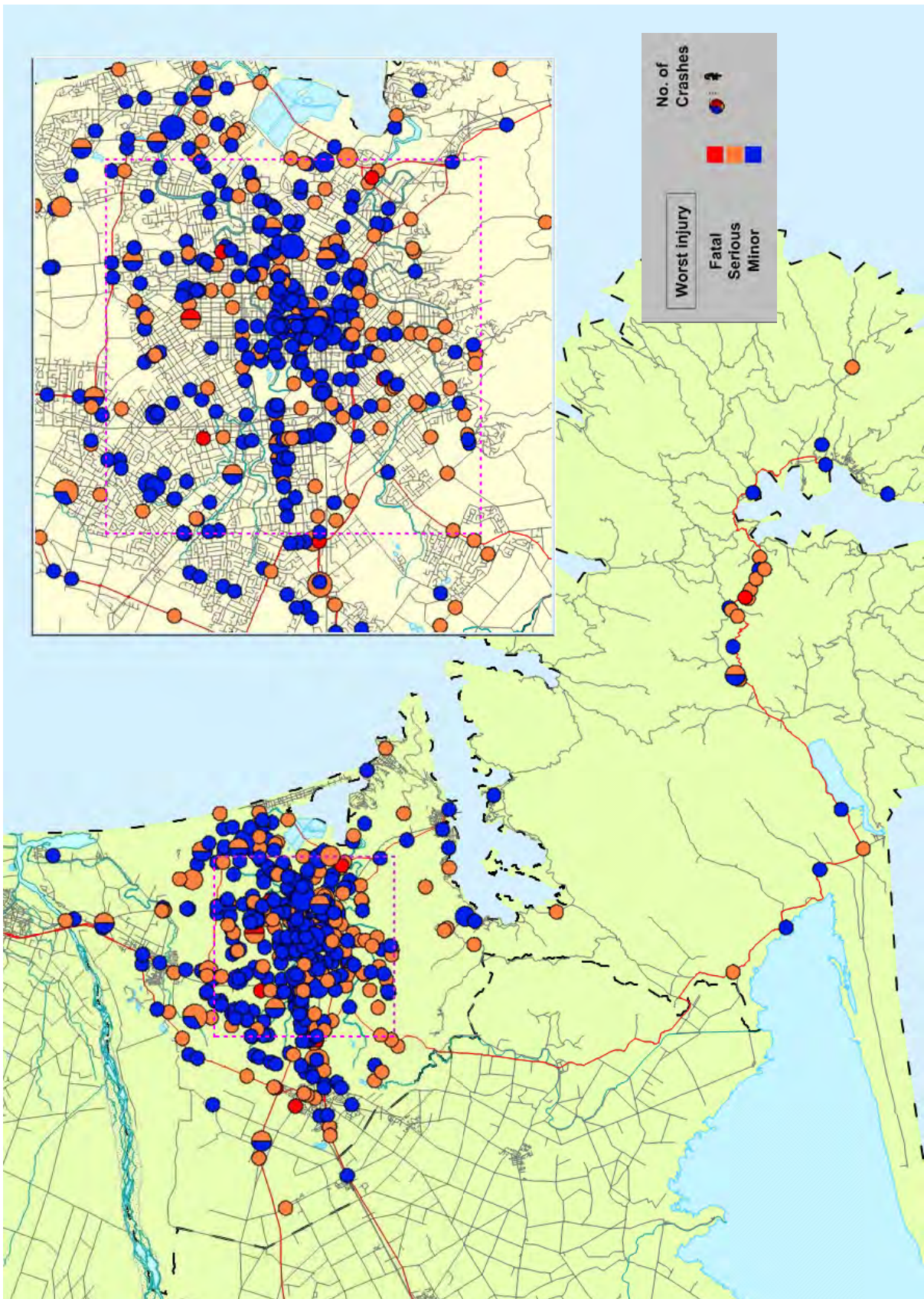
Further information about the 579 injury cyclist crashes on local roads in Christchurch City 2004 to 2008:

- 60 percent at intersections
- 15 percent at night
- Worst month March
- Worst day of week Wednesday
- Worst time 3 pm - 6 pm

Further information about the 69 injury cyclist crashes on State Highways in Christchurch City 2004 to 2008:

- 62 percent at intersections
- 14 percent at night
- Worst month October, November
- Worst day of week Wednesday, Friday
- Worst time 3 pm - 6 pm

Injury motorcycle crashes
Christchurch City
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 in Christchurch City, representing only 9 percent of all casualties. However, they make up 19 percent of fatal and serious injuries.

Motorcyclist casualties					
	2004	2005	2006	2007	2008
Fatal	1	1	3	1	3
Serious	21	38	34	47	38
Minor	40	47	65	93	79
Total	62	86	102	141	120

Overall the number of casualties from motor cycle crashes in the city is increasing, although the number in 2008 was lower than 2007.

The most common type of motor cycle crash is when a vehicle turns right across the path of a motor cycle proceeding straight through.

Major crash causes in motorcycle crashes, Christchurch City, 2004-2008		
Cause	Motorcyclist at fault	Other road users at fault
Poor observation	51	252
Failed to Give way or stop	30	192
Poor handling	70	9
Poor judgement	44	21
Incorrect lane or position	38	19
Overtaking	33	3
Alcohol	32	2
Too fast	31	1

Ages of motorcycle casualties

Ages	Female	Male	Total
Under 15	2	2	4
15 to 19	24	84	108
20 to 24	22	70	92
25 to 29	10	37	47
30 to 34	10	36	46
35 to 39	8	31	39
40 to 44	9	48	57
45 to 49	8	34	42
50 to 54	4	33	37
55 to 59	4	11	15
60 to 64	3	6	9
65 to 69	0	1	0
70 to 74	0	0	0
75 and over	2	2	4

Further information about the 397 injury motorcyclist crashes on local roads in Christchurch City 2004 to 2008:

- 6 people died, 138 received serious injuries and 288 minor injuries
- 13 percent were on wet or icy roads
- 24 percent at night
- Worst month April
- Worst day of week Thursday
- Worst time 3 pm - 6 pm

Further information about the 95 injury motorcyclist crashes on State highways in Christchurch City 2004 to 2008:

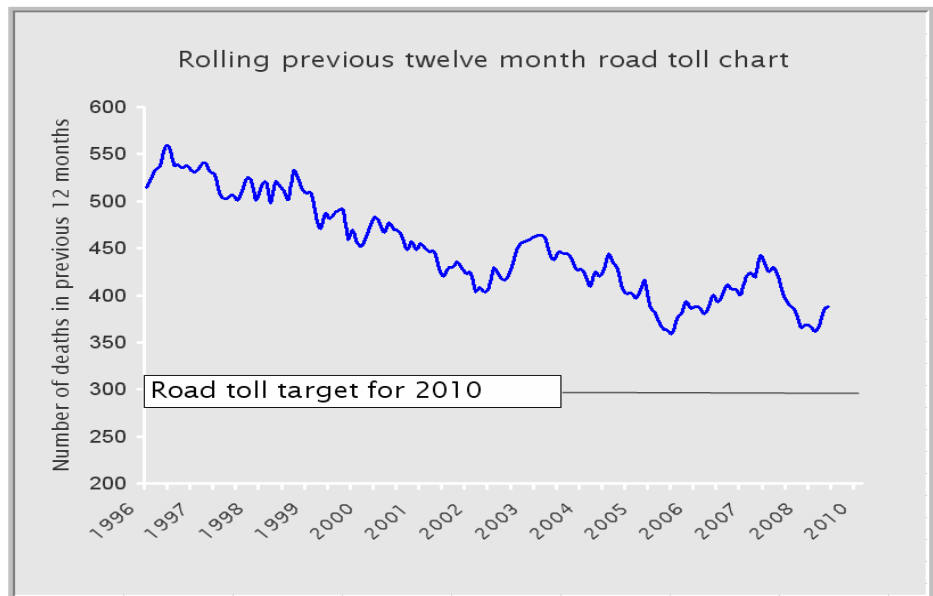
- 3 people died, 42 received serious injuries and 60 minor injuries
- 7 percent were on wet or icy roads
- 18 percent at night
- Worst month January
- Worst day of the week Sunday
- Worst time 3 pm - 6 pm

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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