



# briefing notes - road safety issues

## Waitakere 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 Waitakere City.

This report is the tenth road safety report for Waitakere City. All the material unless otherwise stated in this report applies only to local roads. Local roads are all non State Highway roads in the 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 Waitakere 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 Waitakere City to use its free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. All data and maps in this note are from CAS.

### Major road safety issues \*

#### Waitakere City

Alcohol

Speed

Bends

Night time crashes

#### Nationally \*

Speed

Alcohol

Failure to give way

Restraints

### 2008 road trauma

#### Casualties

#### Waitakere City

Deaths

2

Serious casualties

43

Minor casualties

440

#### Crashes

#### Waitakere City

Fatal crashes

2

Serious injury crashes

39

Minor injury crashes

338

Non-injury crashes

1258

\* not in any specific order of priority

## Overview

In 2008 on local roads in Waitakere City there were 379 injury crashes and 1258 non-injury crashes. In addition there were 61 injury crashes and 158 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 379 injury crashes by rural or urban areas for local roads (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	0	6	18	24
Urban	2	37	422	461
Total	2	43	440	485

Over the past decade the total number of injury crashes in Waitakere have changed little. Fatal crashes have fluctuated with 2008 having the least fatalities in the decade. However 2009 is already known to be a bad year with 13 fatalities (including those on State Highways) even before the end of June. Similarly serious and minor crashes show no firm trend.

On the other hand traffic volumes in the city have risen dramatically. On local roads for the 2003/4 year there were estimated to have been 698.7 million vehicle kilometres travelled (vkt) in the city, in 2007/8 this had risen to 964.3 million.

Crash trends in Waitakere City				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	5	52	284	341
2000	4	48	203	255
2001	3	62	214	279
2002	10	71	281	362
2003	5	69	301	375
2004	6	57	323	386
2005	6	46	291	343
2006	7	58	286	351
2007	5	43	310	358
2008	2	39	338	379

When Waitakere city is compared to similar cities crashes involving alcohol, speed, at night or at bends are all represented well above the average. Crashes on wet roads are also represented well above peer values.

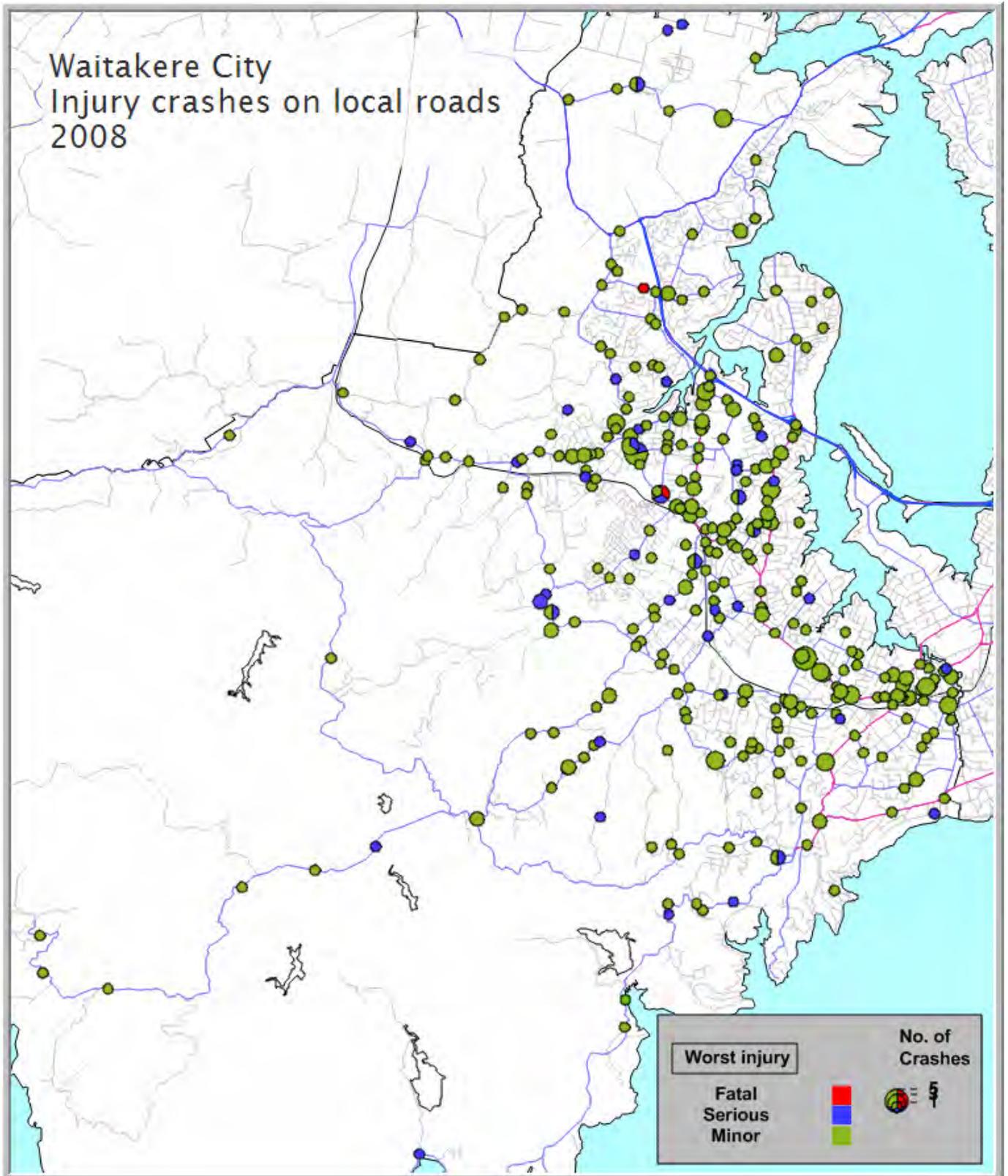
Local road crashes		
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	27	17
Too fast	26	20
At bends	36	27
At intersections	39	43
Pedestrians	17	11
Cyclists	7	5
Motorcyclists	13	9
Wet roads	27	29
Night time	45	37

Further information about the 1817 injury crashes and 5631 non-injury crashes on **local** roads in Waitakere City 2004 to 2008:

- Worst month June, best January
- Worst day Friday, best Monday
- 28 percent on wet roads
- 34 percent at night
- 46 percent at intersections
- 2635 roadside objects struck
- Social cost of crashes in 2008 \$83.2 m

Further information about the 258 injury crashes and 766 non-injury crashes on **State Highways** in Waitakere City 2004 to 2008:

- Worst month August, best September
- Worst day Friday, best Sunday
- 28 percent on wet roads
- 31 percent at night
- 32 percent at intersections
- 328 roadside objects struck
- Social cost of crashes in 2008 \$14.2 m



## Alcohol

Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver’s blood alcohol level rises.

A driver over the legal limit (80mg of alcohol per 100ml of blood) is sixteen times more likely to be involved in a fatal crash than a sober driver.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than a sober driver in the same crash, and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2008, alcohol-affected drivers contributed to 34 percent of all fatal crashes (the same as 2007) and 15 percent of all injury crashes (the same as 2007).

In Waitakere City, alcohol was a factor in 33 percent of fatal and serious crashes and 17 percent of injury crashes in 2008.

Number of alcohol related injury crashes			
Crash year	Open road	Urban road	Total
2004	2	56	58
2005	6	54	60
2006	1	70	71
2007	2	44	46
2008	2	64	66
Total	13	288	301

(Open road is classified as any area with a speed limit of 80km/hr or more).

From the beginning of 2007 NZ Transport Agency has been adding driver factor codes to all non-injury crashes for the northern district.

This will allow the Police and other agencies to target alcohol related crashes more quickly and with even more geographic accuracy than ever before.

In 2008 there were 130 non-injury alcohol related crashes reported by the Police in the Waitakere City.

There are 10 sites with 3 or more alcohol related crashes between 2004 and 2008. Five of these had crashes in 2008 and these are shown in the following table.

The locations of alcohol related injury crashes occurring between 2004 and 2008 on local roads are shown on the map on the following page.

### Alcohol related injury crashes (three or more crashes in the five years and at least one crash in 2008)

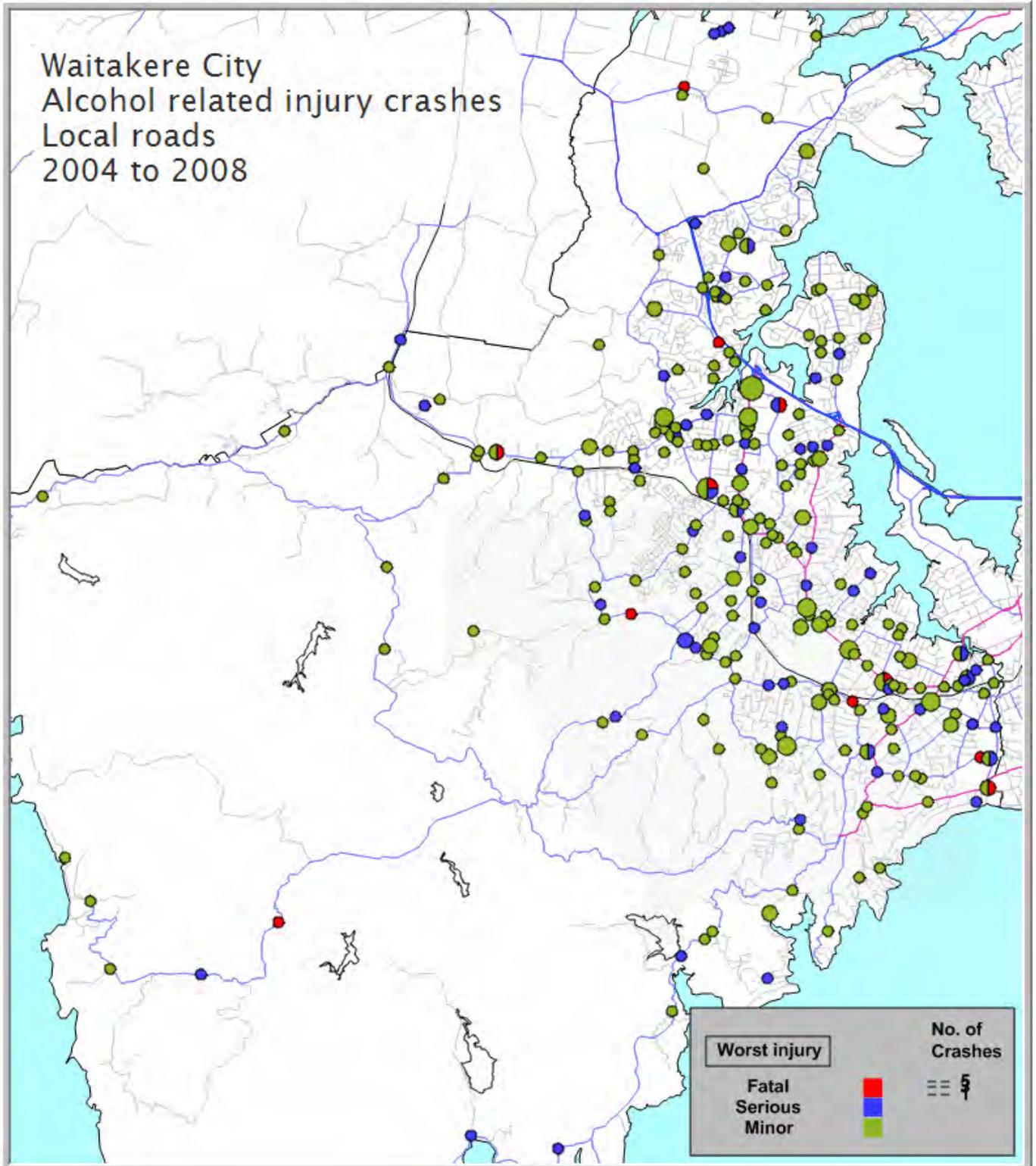
Location	Total
Lincoln Road / Triangle Road	5
Swanson Road / Rathgar Road	4
Sabulite Road / Great North Road	3
Glengarry Road / Matama Road	3
Lincoln Road / Universal Drive	3

Further information about the 301 alcohol related injury crashes in Waitakere City on **local** roads 2004 to 2008:

- 14 deaths, 73 serious injuries and 353 minor injuries
- 84 percent of at fault drivers were male
- Most common crash type “loss of control turning right”
- 96 percent urban
- 27 percent wet road
- 77 percent night time
- Worst three hour time period 9pm till midnight
- Worst month June, best March
- Worst day Saturday, best Monday

Further information about the 36 alcohol related injury crashes in Waitakere City on **State Highways** 2004 to 2008:

- 1 death, 7 serious injuries and 36 minor injuries
- 86 percent of at fault drivers were male
- Most common crash type “off road to right”
- 28 percent urban
- 31 percent wet road
- 69 percent night time
- Worst three hour time period Midnight till 3am
- Worst month November, best September
- Worst days Saturday and Sunday (equal), best Monday



## Speed

Nationally, speed is one of the major contributing factors to road crashes. Reducing speeds is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for drivers to respond to situations and it leads to more serious injuries. Research has shown that a one km/h reduction in mean speed can produce a three percent reduction in injury crashes.

Between 2004 and 2008 20 percent of injury crashes on local roads in Waitakere City involved travelling too fast for the conditions. These crashes resulted in 14 fatalities, 76 serious injuries and 444 minor injuries.

Speed related injury crashes					
Road type	2004	2005	2006	2007	2008
Rural	11	13	5	8	4
Urban	62	64	69	58	69
Total	73	77	74	66	73

The crash locations of speed related injury crashes 2004 to 2008 on local roads are shown on the map on the following page. Additionally in 2008 there were 164 non-injury speed related crashes reported by the Police on local roads in Waitakere City.

There are nine sites with three or more speed related injury crashes. Five of these had crashes in 2008 and these are shown in the following table.

Speed related injury crashes by location. (at least three and one in 2008)	
Location	Number of crashes
Don Buck Road 160 metres north Glen Road	8
Piha Road 410 metres west Anawhata Road	3
Great North Road / West Coast Road	3
Candia Road 150 metres south Burtons Road	3
Glendale Road 100 metres south Oates Road	3

### Age and gender of at fault drivers in speed related crashes 2004 to 2008

Driver age	Male	Female	Total
15-19 years *	105	22	127
20 - 24	80	5	85
25 - 29	42	4	46
30 - 39	45	11	56
40 - 49	12	9	21
50 - 59	8	5	13
60 - 69	3	0	3
70+	3	1	4
<b>Total</b>	<b>298</b>	<b>57</b>	<b>355</b>

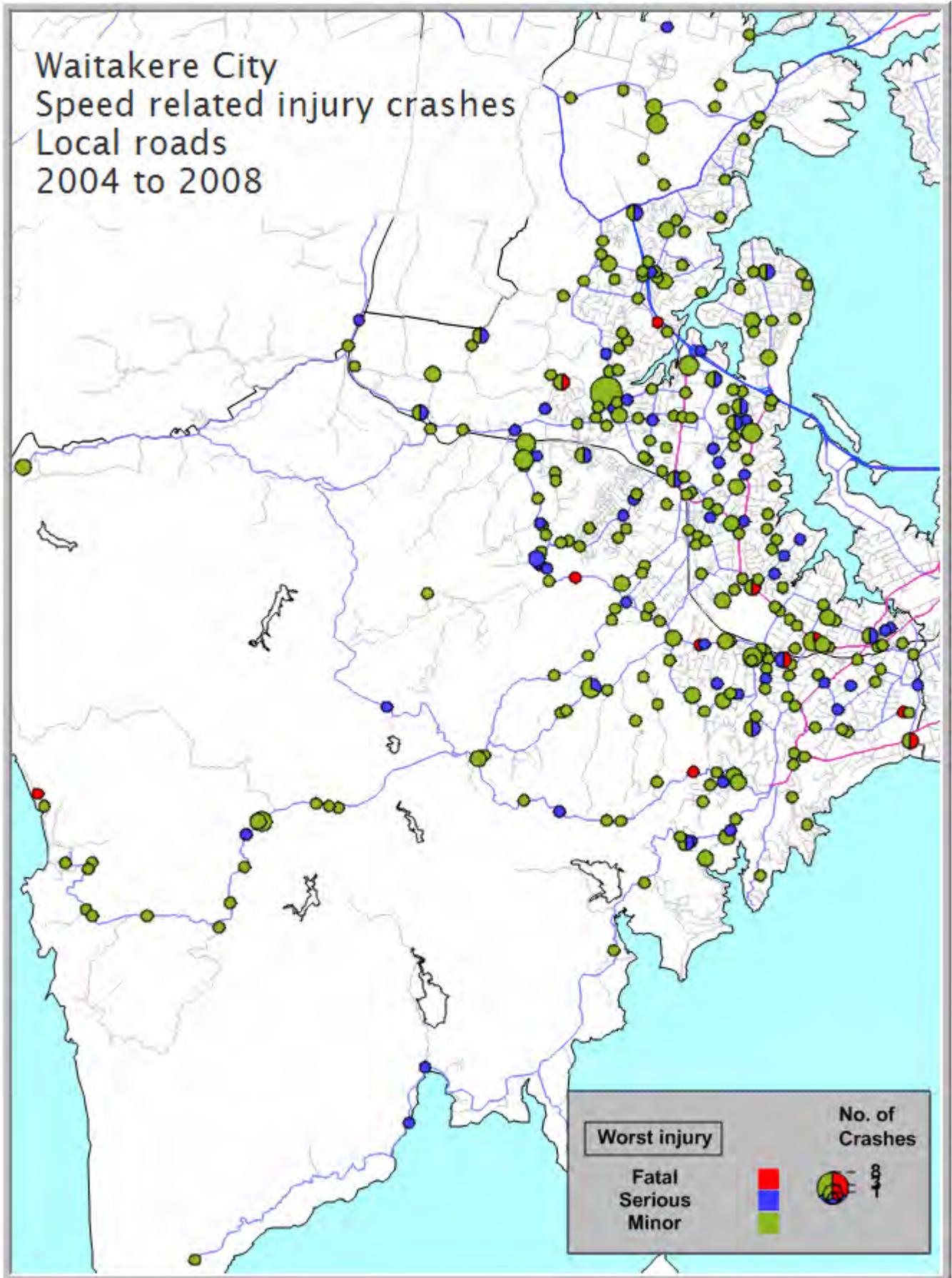
\* note age ranges are not equal

Further information about the 362 speed related injury crashes in Waitakere City on **local** roads 2004 to 2008:

- 14 deaths, 76 serious injuries and 444 minor injuries
- Most common crash type “Lost control turning right”
- 68 percent mid-block
- 40 percent wet road
- 54 percent night time
- Worst month April, best September and November (equal)
- Worst day Saturday, best Tuesday
- Worst three hour time period 3pm till 6pm

Further information about the 38 speed related injury crashes in Waitakere City on **State Highways** 2004 to 2008:

- No deaths, 6 serious injuries and 41 minor injuries
- Most common crash type “Lost control turning left”
- 76 percent mid-block
- 42 percent wet road
- 61 percent night time
- Worst months February and March, best January, April, July and November (equal)
- Worst day Saturday, best Thursday
- Worst three hour time period 9pm till midnight



## Bend - loss of control or head on

Between 2004 and 2008 27 percent of all injury crashes in Waitakere City were loss of control or head on bends.

These crashes resulted in 14 fatalities, 105 serious injuries and 573 minor injuries.

Injury crashes at bends 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	3	16	78	97
2005	4	16	73	93
2006	2	19	74	95
2007	3	13	82	98
2008	0	21	89	110
Total	12	85	396	493

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 loss of control or head on crashes on bends in Waitakere City were cliffs or banks (64), trees (93), fences (69), posts or poles (81) and ditches (45) from a total of 513 objects struck.

Main characteristics of injury lost control or head on crashes at bends	
Crash characteristic	Percentage of crashes
Single vehicle	69
Alcohol	30
Excessive speed for the conditions	52
Road factors	15
Poor handling	53
Rural road	16
Wet road	39
Night time	49

There are five sites with four or more injury crashes at bends for the years 2004 to 2008. These sites are shown in the following table. Two of these five sites had crashes in 2008.

### Locations with four or more injury crashes at bends 2004 to 2008

Location name	Total
Don Buck Road 160m north Glen Road	8
Titirangi Road / Margan Avenue	5
Candia Road 200m north Vineyard Road	4
Swanson Road / Universal Drive	4
Glengarry Road 100m east Autumn Avenue	4

Further information about the 493 injury loss of control or head on crashes on bends on **local** roads in Waitakere City 2004 to 2008:

- 14 deaths, 105 serious injuries and 573 minor injuries
- 80 percent of at fault drivers were male
- Most common at fault driver age group 15 -19 years (31percent of all at fault drivers)
- 30 percent of crashes involved alcohol
- 52 percent of crashes involved speed too fast for the conditions
- Worst month January, best August and September
- Worst day Sunday, best Tuesday
- Worst three hour time period 3pm till 6pm

Further information about the 31 injury loss of control or head on crashes on bends on **State Highways** in Waitakere City 2004 to 2008:

- No deaths, 6 serious injuries and 34 minor injuries
- 79 percent of at fault drivers were male
- Most common at fault driver age group 20-24 years (29 percent of at fault drivers)
- 32 percent of crashes involved alcohol
- 35 percent of crashes involved speed too fast for the conditions
- Worst month November, best April
- Worst day Saturday, best Monday, Wednesday and Thursday (equal)
- Worst three hour time period midnight till 3am and 6am till 9am (equal)

## Night time crashes

Between 2004 and 2008 there were a total of 666 night time injury crashes on local roads. These resulted in 17 fatalities, 128 serious injuries and 776 minor injuries.

The proportion of fatal and serious crashes and all injury crashes occurring during the hours of darkness on local roads in Waitakere City is higher than the average for similar local bodies.

Night time crashes					
Road type	2004	2005	2006	2007	2008
Open road	8	8	10	8	4
Urban road	131	124	126	110	137
Total	139	132	136	118	141

Night time crashes are a weekend problem in the city as illustrated in the table below.

Night time injury crashes		
Worst injury	Weekend (Friday 6pm to Monday 6am)	Weekday (Monday 6am to Friday 6pm)
Fatal	9	5
Injury	327	325
Total	336	330

There are seven sites with six or more night time injury crashes for the years 2004 to 2008. Four of these sites had crashes in 2008 and these are shown in the following table.

Locations with six or more night time injury crashes 2004 to 2008 (Including at least one crash in 2008)	
Location name	Total
Great North Road / Swanson Road	11
Sabulite Road / Great North Road	8
Lincoln Road / Central Park Drive	8
Great North Road / West Coast Road	6

## Age and gender of at fault drivers in night time injury crashes

Ages of at fault drivers	Male	Female
15 - 19 years *	124	33
20 - 24	104	21
25 - 29	66	21
30 - 39	77	27
40 - 49	57	27
50 - 59	16	7
60 - 69	10	6
70+	4	2
Total	458	144

\* note age ranges are not equal

Further information about the 666 injury night time crashes in Waitakere City on **local** roads 2004 to 2008:

- Most common crash type is "loss of control turning right"
- 35 percent include alcohol
- 33 percent wet road
- 29 percent are speed related
- Worst month June, best February
- Worst day Saturday, best Monday

Further information about the 93 night time injury crashes in Waitakere City on **State Highways** 2004 to 2008:

- Most common crash types is "rear end queue"
- 28 percent include alcohol
- 34 percent wet road
- 25 percent are speed related
- Worst months June, best January and December
- Worst day Friday, best Monday

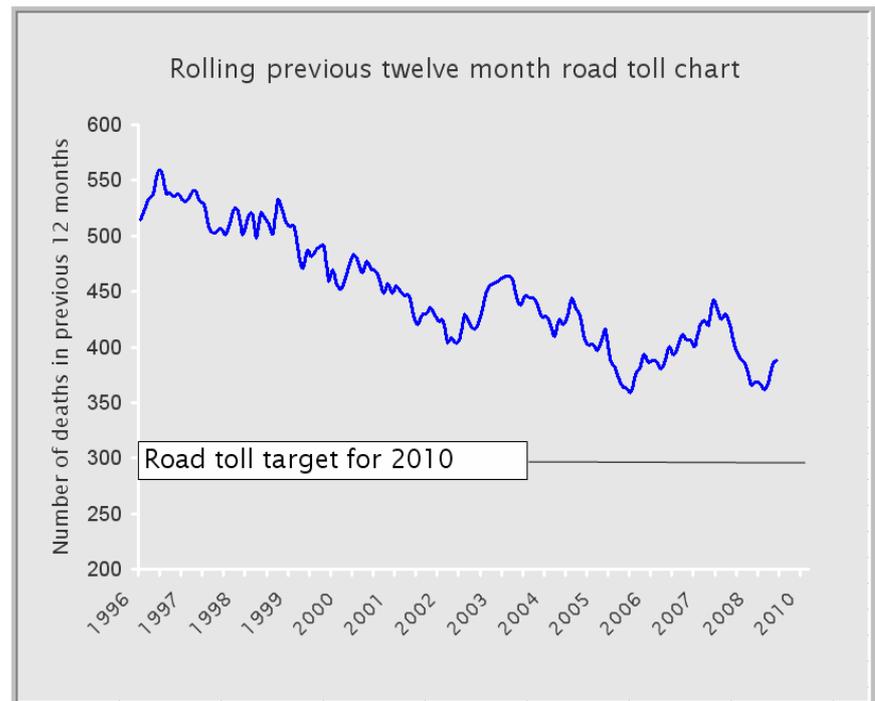
## The next ten years—moving beyond Road Safety 2010

In August this year the Ministry of Transport will embark on a nationwide road safety consultation programme as it moves to formulate priorities for the next ten years.

Information will be published on their 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/>

The chart on the right illustrates the progress made during the life of the Road Safety 2010 strategy. Although progress has been made it would seem highly unlikely that the target of 300 or fewer fatalities will be met.



### Restraints

The Ministry of Transport (MoT) conducts surveys of restraint use. Results are available for front, rear and child restraints although not all at a local authority level.

See the MoT website: <http://www.transport.govt.nz/research/safetybeltstatistics/>

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