



# briefing notes - road safety issues

## Auckland Region

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 the Auckland Region (defined in this report as all the local bodies from Rodney in the north to Franklin in the south).

This report is the tenth road safety report for Auckland Region. All the material unless otherwise stated in this report applies only to local roads. Local roads are all non State Highway roads in the region. Information about State Highways can be found in the separate “Auckland State Highways” and “Auckland Motorways” reports.

In each new report one year’s data is added to a five year block and the oldest year dropped so it is unlikely that the core issues would change radically from report to report.

The issues chosen for this report are based on crashes with the highest numbers of fatal and serious injuries, those that may be over-represented and also to reflect issues identified in the seven local bodies in the region. Many of the issues have overlapping characteristics — for instance night time crashes might also include alcohol.

Local authorities are encouraged to use their free access to the Ministry of Transport’s Crash Analysis System (CAS) to delve deeper into all of the issues highlighted in the overview table and not just the four reported on in the body of this briefing note. All crash data and maps in this report are from CAS.

Major road safety issues *		2008 road trauma	
Auckland Region		Casualties	Auckland Region
Alcohol		Deaths	40
Night time crashes		Serious casualties	409
Vulnerable road users		Minor casualties	2802
Intersections			
Nationally *		Crashes	Auckland Region
Speed		Fatal crashes	34
Alcohol		Serious injury crashes	353
Failure to give way		Minor injury crashes	2169
Restraints		Non-injury crashes	8130

\* not in any specific order of importance

## Overview

In 2008 on local roads in the Auckland Region there were 2556 injury crashes and 8130 non-injury crashes. In addition there were 739 injury crashes and 2175 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 2556 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	19	74	368	461
Urban	21	334	2430	2785
Total	40	408	2798	3246

In 2004 the total distance travelled on local roads in the region was approximately 6,900 million vehicle kilometres with Auckland City alone accounting for 40 percent of this. In 2008 the total distance was 7,890 million kilometres approximately, with the Auckland City share dropping to 35 percent.

It is perhaps noteworthy then that fatalities have fallen over this time and that overall crash numbers have remained relatively stable.

Crash trends in Auckland Region				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	58	368	1641	2067
2000	42	366	1463	1871
2001	49	381	1488	1918
2002	62	423	1794	2279
2003	60	368	2050	2478
2004	58	383	2010	2451
2005	51	353	2065	2469
2006	58	417	2206	2681
2007	43	327	2232	2602
2008	34	353	2169	2556

Crash characteristics		
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	26	16
Too fast	22	16
At bends	28	22
At intersections	40	48
Pedestrians	18	12
Cyclists	8	7
Motorcyclists	15	9
Object struck	37	33
Night time	43	35

Further information about the 12,756 injury and 41,349 non-injury crashes on **local** roads in the Auckland Region 2004 to 2008:

- 266 fatalities, 2181 serious injuries and 14,024 minor injuries
- Worst month May, best January
- Worst day Friday, best Sunday
- 24 percent on wet roads
- 33 percent at night
- 51 percent at intersections
- 22,490 roadside objects struck
- Social cost of crashes in 2008 \$677.1 m

Further information about the 3562 injury and 11,661 non-injury crashes on **State Highways** in the Auckland Region 2004 to 2008:

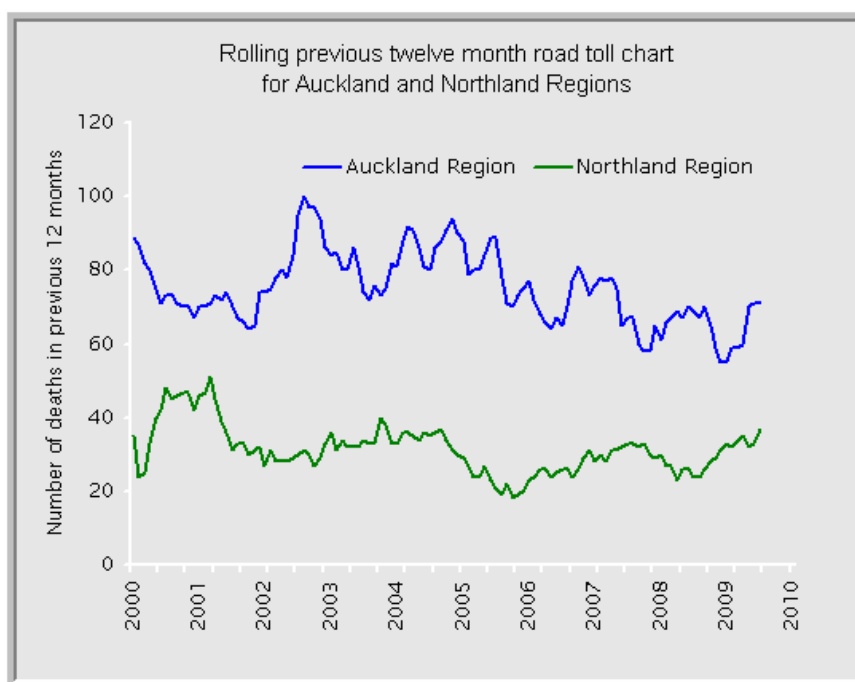
- 104 fatalities, 501 serious injuries and 4341 minor injuries
- Worst month July, best January
- Worst day Friday, best Sunday
- 28 percent on wet roads
- 30 percent at night
- 25 percent at intersections
- 4848 roadside objects struck
- Social cost of crashes in 2008 \$228.4m

## Summary

Road safety issues for the Auckland Region — issues taken from the individual local body or State Highway briefing notes for the period 2004 to 2008

Briefing note title	Bends – lost control / head on	Road factors and roadside hazards	Speed	Alcohol	Night	Intersections	Vulnerable road users	Straight –head on	Rear end
Rodney District	✓	✓	✓	✓					
North Shore City			✓	✓		✓	✓		
Waitakere City	✓		✓	✓	✓				
Auckland City				✓	✓	✓	✓		
Manukau City			✓	✓	✓	✓			
Papakura District		✓		✓	✓			✓	
Franklin District	✓			✓	✓				
Auckland State Highways	✓		✓		✓	✓			
Auckland Police Motorway Patrol area				✓	✓				✓

## Fatality trends

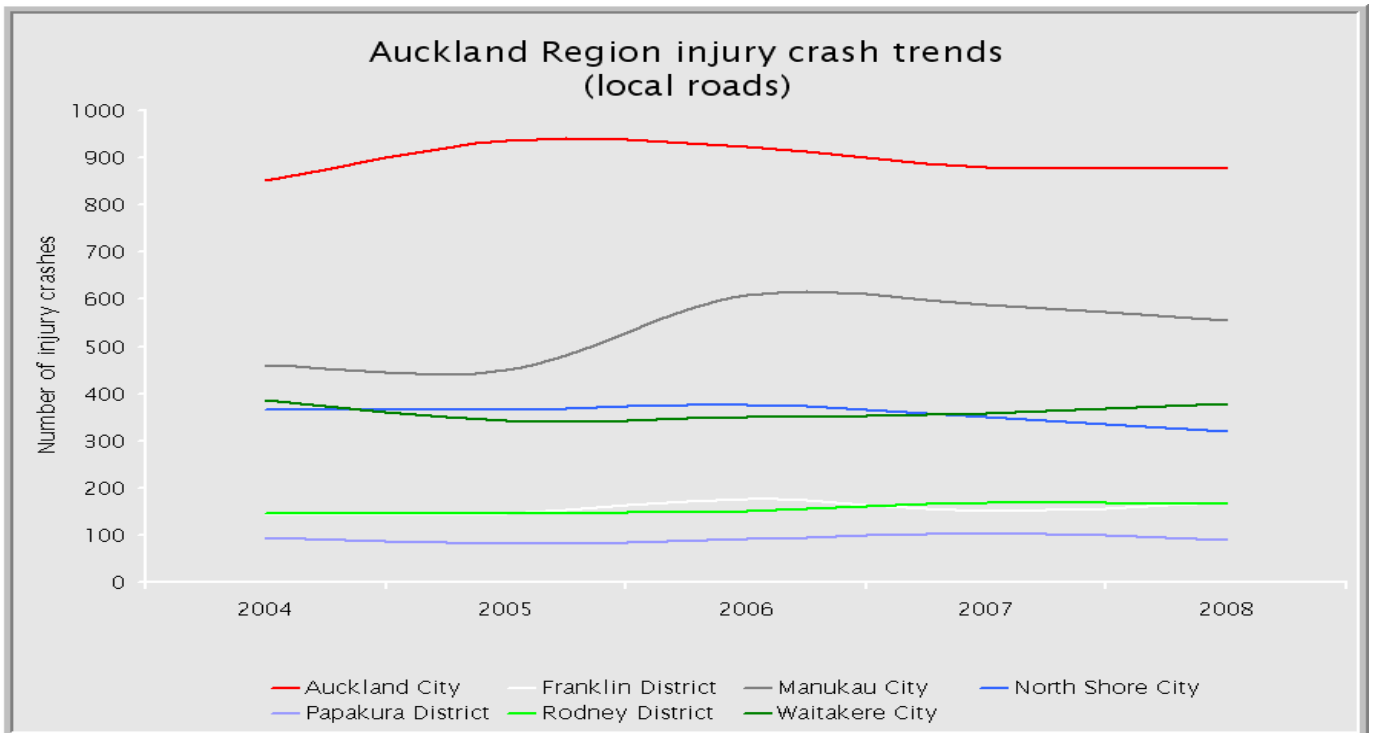
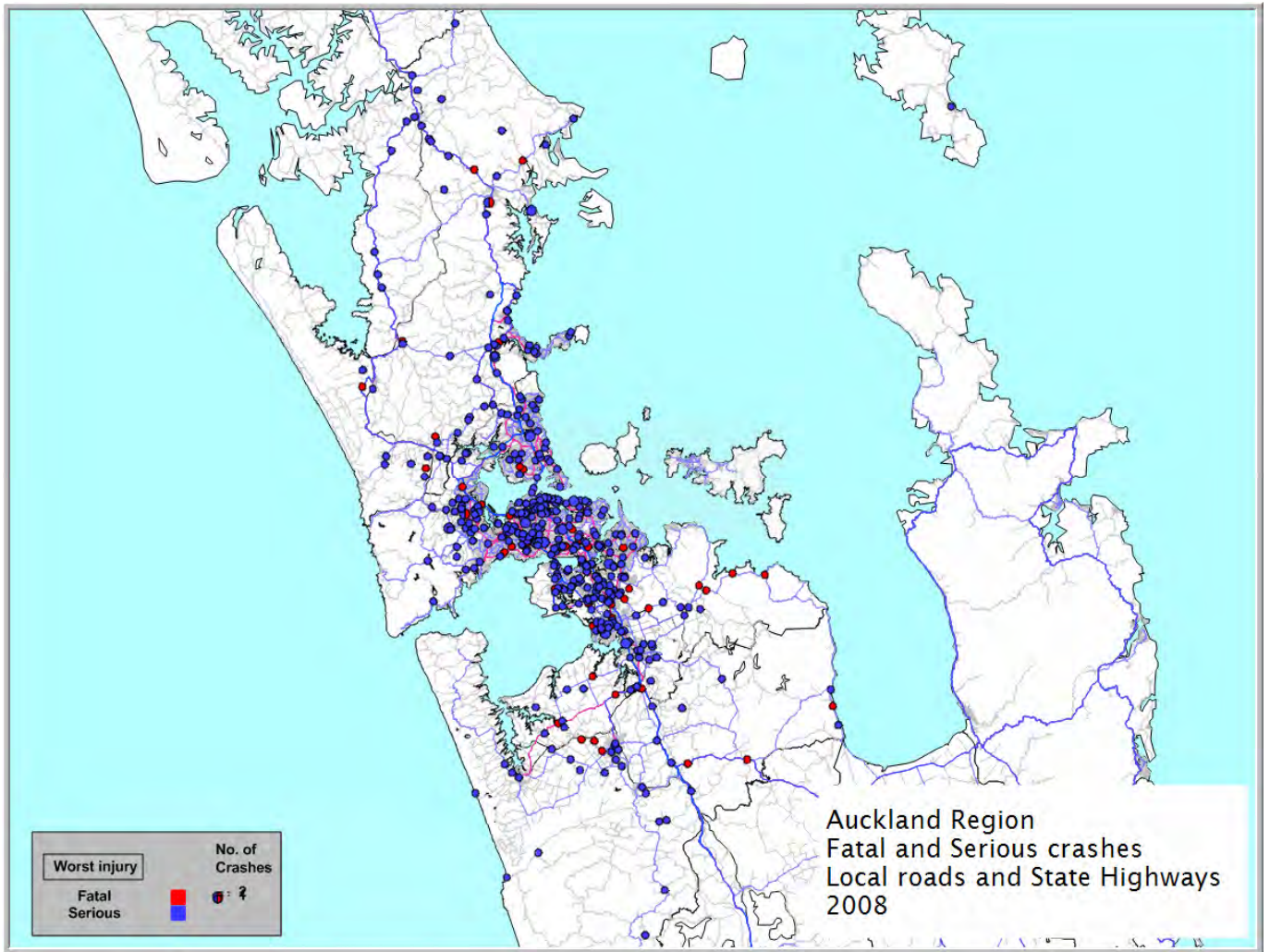


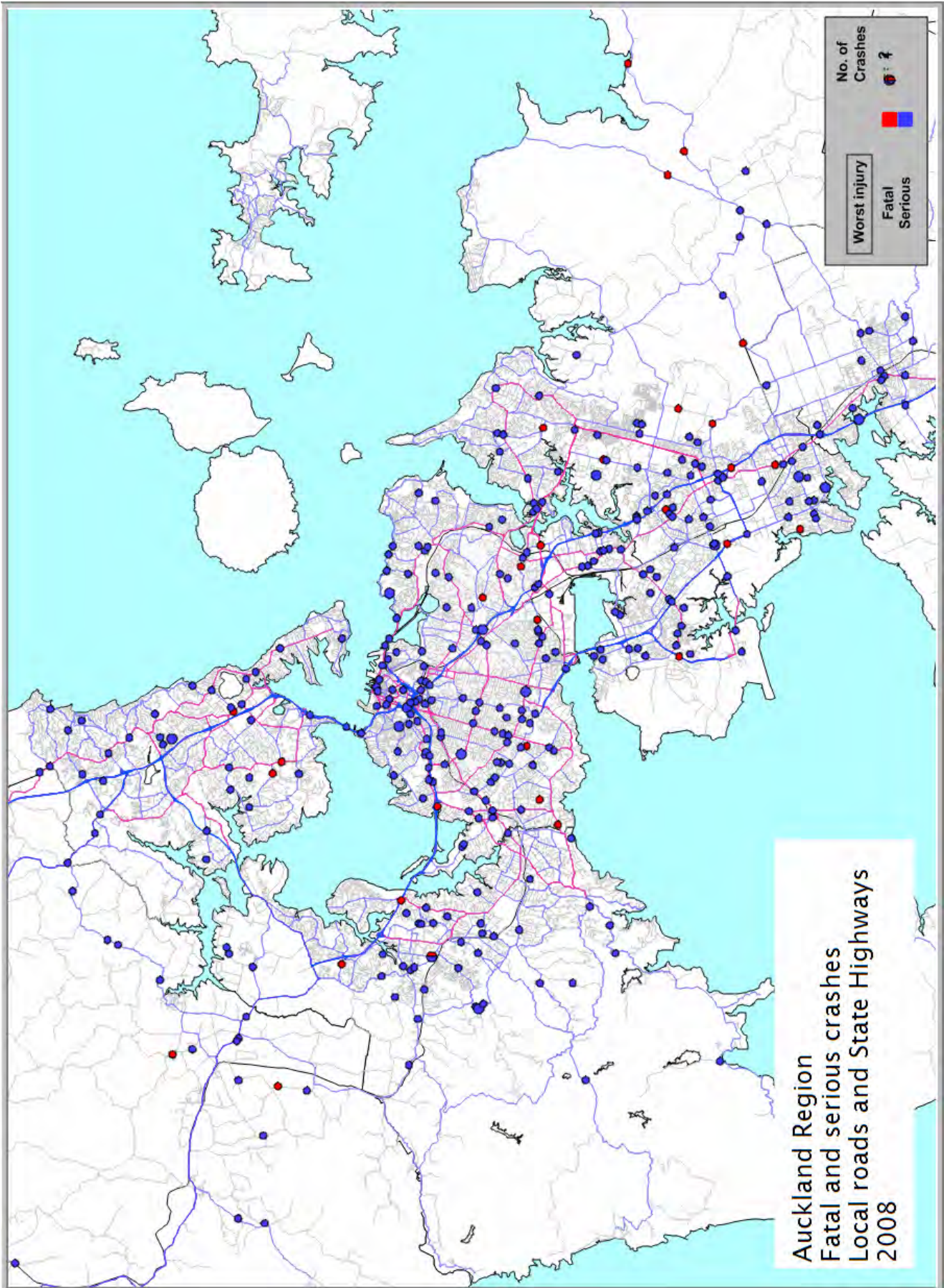
The chart on the left illustrates the fatality trends for the last decade for Auckland and Northland.

The toll shown on the chart represents the toll each month for the previous twelve months, in this way emerging trends can be shown more quickly. (The chart is up to date to the end of June 2009).

As can be seen the road toll fell slowly in the Northland Region to mid 2005 and has been very gradually rising ever since.

In contrast the corresponding toll in the Auckland Region although fluctuating is generally trending down.





Auckland Region  
Fatal and serious crashes  
Local roads and State Highways  
2008

## 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 the Auckland Region, alcohol was a factor in 26 percent of fatal and serious crashes and 16 percent of injury crashes between 2004 and 2008.

Number of alcohol related injury crashes			
Crash year	Open road	Urban road	Total
2004	54	307	361
2005	67	308	375
2006	53	448	501
2007	63	348	412
2008	71	372	443
Total	308	1783	2092

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

From the beginning of 2007 NZTA 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 the Auckland Region in 2007 there were 849 non-injury alcohol related crashes reported by the Police with a further 885 in 2008.

It would appear that despite the significant efforts of the Police and their specialist alcohol targeting programs in the region and constant national television advertising that almost no progress has been made managing alcohol related crashes.

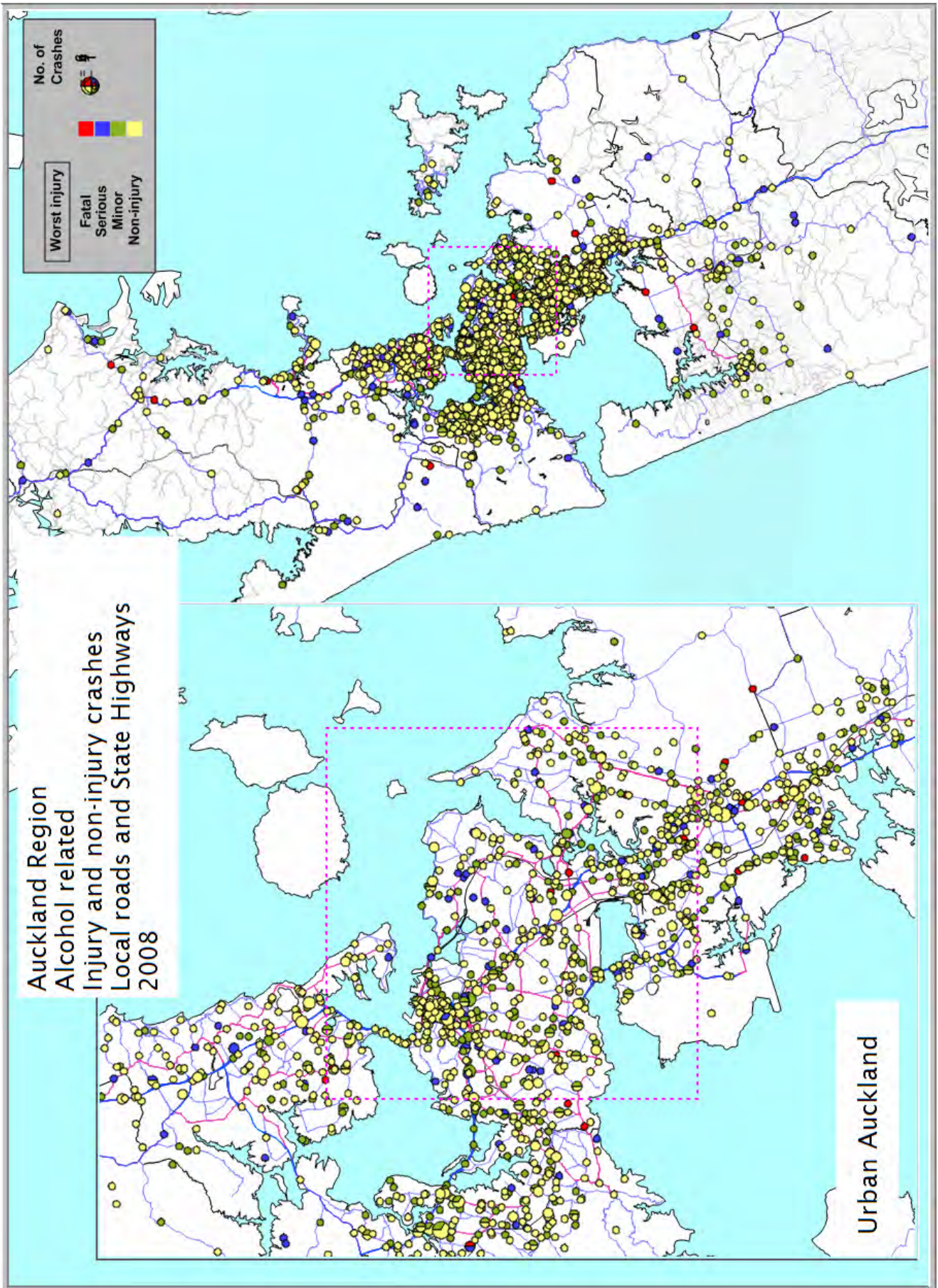
The location of alcohol related injury and non-injury crashes for just one year, 2008, are shown on the following map. This aptly demonstrates the scale of this issue.

Further information about the 2092 alcohol related injury crashes in Auckland Region on **local** roads 2004 to 2008:

- 113 deaths, 579 serious injuries and 2253 minor injuries
- 81 percent of at fault drivers were male
- Most common crash type “loss of control at a bend” (903 crashes)
- 38 percent at intersections
- 25 percent wet road
- 76 percent night time
- 15 to 19 was the most common age group in at fault drivers representing 22 percent of all at fault drivers
- 42 percent of at fault drivers held a full drivers licence
- Worst three hour time period 9pm to midnight
- Worst month December, best March
- Worst day Saturday, best Monday

Further information about the 412 alcohol related injury crashes in Auckland Region on **State Highways** 2004 to 2008:

- 28 deaths, 124 serious injuries and 507 minor injuries
- 78 percent of at fault drivers were male
- Most common crash type “loss of control at a bend” (141 crashes)
- 25 percent at intersections
- 32 percent wet road
- 75 percent night time
- 20 to 24 was the most common age group in at fault drivers representing 20 percent of all at fault drivers
- 45 percent of at fault drivers held a full drivers licence
- Worst three hour time period Midnight till 3pm
- Worst month June, best May
- Worst day Sunday, best Monday



## Night time crashes

Between 2004 and 2008 there were a total of 4483 night time injury crashes on local roads. These crashes resulted in 133 fatalities, 942 serious injuries and 4943 minor injuries.

The number of crashes occurring at night in the region has remained relatively constant over the last five years.

Night time injury crashes by road type					
Road type	2004	2005	2006	2007	2008
Open road	128	112	128	123	113
Urban road	742	741	868	771	756
Total	870	853	996	894	870
Percentage of injury crashes	35	35	37	34	34

Night time crashes in each local body are shown in the table below in general the five year trend in Auckland, Waitakere, North Shore and Papakura is downward and Manukau, Franklin and Rodney upwards.

Night time injury crashes by local body					
Local body	2004	2005	2006	2007	2008
Rodney	48	50	52	57	60
North Shore	119	121	132	128	91
Waitakere	139	132	136	118	141
Auckland	287	293	339	273	271
Manukau	174	181	236	226	212
Papakura	37	31	36	39	27
Franklin	66	45	65	53	68

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

Ages of drivers	Male	Female	Total
15 - 19 *	716	243	959
20 - 24	686	216	902
25 - 29	384	128	512
30 - 39	533	201	734
40 - 49	395	147	542
50 - 59	188	70	258
60 - 69	80	30	110
70+	45	16	61
Total	3027	1051	4078

\* note age ranges are not equal

Further information about the 4483 injury night time crashes in Auckland Region on **local** roads 2004 to 2008:

- Most common crash type was loss of control at a bend (1390 crashes)
- 36 percent injury crashes include alcohol
- 23 percent injury crashes speed related
- 15 to 19 was the most common age group in at fault drivers representing 24 percent of all at fault drivers
- As could be reasonably expected worst month July, best January
- Worst day Saturday, best Tuesday

Further information about the 1214 injury night time crashes in Auckland Region on **State Highways** 2004 to 2008:

- Most common crash type was "rear end" (391 crashes)
- 25 percent injury crashes include alcohol
- 19 percent injury crashes speed related
- 20 to 24 was the most common age group in at fault drivers representing 21 percent of all at fault drivers
- As could be reasonably expected worst month June, best January
- Worst day Friday, best Monday



## 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 Auckland Region, representing 12 percent of all injury crashes, they make up 18 percent of fatal and serious injuries in the last five years.

Pedestrian injuries 2004 to 2008					
Pedestrian injuries	2004	2005	2006	2007	2008
Fatal	10	8	12	12	3
Serious	79	74	89	59	78
Minor	280	257	257	218	237
Total	369	339	358	289	318

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 (654 crashes).

Injury pedestrian crashes by local body					
Local body	2004	2005	2006	2007	2008
Rodney	13	8	10	5	11
North Shore	52	45	34	35	46
Waitakere	56	37	50	35	34
Auckland	160	169	159	106	132
Manukau	58	54	74	78	70
Papakura	7	6	9	14	7
Franklin	7	10	14	4	8

### Ages of pedestrian casualties

(note that the ages of 137 pedestrians was not known)

Ages	Female	Male	Percentage of total
0 to 4	26	39	4.2
5 to 9	68	113	11.8
10 to 14	89	119	13.6
15 to 19	83	107	12.4
20 to 24	73	80	10.0
25 to 29	50	36	5.6
30 to 34	32	32	4.2
35 to 39	48	36	5.5
40 to 44	34	43	5.0
45 to 49	26	27	3.5
50 to 54	32	33	4.2
55 to 59	34	25	3.8
60 to 64	34	15	3.2
65 to 69	39	18	3.7
70 to 74	24	28	3.4
75 and over	55	39	6.1

Further information about the 1617 injury pedestrian crashes on **local** roads in Auckland Region 2004 to 2008:

- 41 percent at intersections
- 27 percent at night
- Worst month May, best January
- Worst day Thursday, best Sunday

Further information about the 44 injury pedestrian crashes on **State Highways** in Auckland Region 2004 to 2008:

- 8 deaths, 16 serious injuries and 28 minor injuries
- 27 percent at intersections
- 55 percent at night
- Worst month June, best September
- Worst day Friday, best Monday

## Cyclists

Although cyclist injuries do not feature highly in the overall crash numbers in the Auckland region, representing only 7 percent of all injuries, they do make up 8 percent of fatal and serious injuries in the last five years.

Cyclist injuries					
Cyclist injuries	2004	2005	2006	2007	2008
Fatal	0	1	2	0	1
Serious	40	31	28	29	35
Minor	132	180	157	152	164
Total	172	212	187	181	200

The table opposite illustrates the ages of cyclists injured in crashes. This age distribution is different to that found two decades ago when there were significantly more injuries in the lower age brackets and very few in the 50 plus bracket.

A number of potential issues arise from this. The first is that as less children appear to be learning to ride it may be difficult to attract riders to cycling as an alternative travel mode later on. In addition it may be that as young people get a drivers licence and join the motoring public they will have had less prior on-road experience and could be less aware of, or sympathetic to, the issues faced by cyclists.

Cycling injury crashes by local body					
Local body	2004	2005	2006	2007	2008
Rodney	2	4	7	3	8
North Shore	31	44	38	27	26
Waitakere	18	20	18	17	25
Auckland	82	103	82	96	95
Manukau	28	27	31	26	30
Papakura	8	4	3	5	5
Franklin	2	5	5	6	9

### Ages of cyclist casualties

(Additionally there were 66 cyclists where age was not known)

Ages	Female	Male	Percentage of total
0 to 4	0	3	0.33
5 to 9	7	28	3.9
10 to 14	19	95	12.7
15 to 19	18	76	10.5
20 to 24	14	45	6.5
25 to 29	30	59	10.0
30 to 34	33	64	10.9
35 to 39	17	74	10.3
40 to 44	23	77	11.3
45 to 49	9	56	7.3
50 to 54	11	36	5.3
55 to 59	5	31	4.1
60 to 64	4	19	2.6
65 to 69	1	12	1.5
70 to 74	1	9	1.1
75 and over	0	10	1.1

Further information about the 940 injury cyclist crashes on **local** roads in Auckland Region 2004 to 2008:

- 57 percent at intersections
- 16 percent at night
- Worst month March, best December
- Worst day Tuesday and Thursday (equal), best Sunday

Further information about the 48 injury cyclist crashes on **State Highways** in Auckland Region 2004 to 2008:

- 60 percent at intersections
- 25 percent at night
- Worst month November, best June
- Worst day Wednesday and Saturday (equal), best Friday

## 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 2008 motorcyclists accounted for 14 percent of road fatalities in New Zealand.

Motorcyclist injuries do not feature highly in the overall crash statistics in the Auckland Region, representing 9 percent of all injuries but they do make up 15 percent of fatal and serious injuries.

Motorcyclist injuries					
	2004	2005	2006	2007	2008
Fatal	7	9	6	2	6
Serious	44	44	61	50	53
Minor	87	119	130	166	194
Total	138	172	197	218	253

The table opposite illustrates the ages of motorcyclists injured in crashes.

This age distribution is very different to that found two decades ago. Between 1984 and 1989 seventy percent of motorcycling casualties in the region were aged between 15 and 24, however between 2004 and 2008 this had fallen to 31 percent.

Motorcycling injury crashes by local body					
Local body	2004	2005	2006	2007	2008
Rodney	13	13	21	28	27
North Shore	13	34	31	42	36
Waitakere	25	20	29	38	43
Auckland	71	84	102	82	118
Manukau	19	28	35	44	53
Papakura	5	8	2	10	11
Franklin	10	11	14	16	15

## Ages of motorcycle casualties

Ages	Rider	Pillion	Total
5 to 9	0	1	1
10 to 14	8	3	11
15 to 19	122	14	136
20 to 24	222	5	233
25 to 29	153	5	158
30 to 34	135	7	142
35 to 39	177	6	123
40 to 44	199	3	122
45 to 49	105	1	106
50 to 54	60	2	62
55 to 59	36	1	37
60 to 64	14	1	15
65 to 69	11	0	11
70 to 74	4	0	11
75 and over	3	0	3

Further information about the 1151 injury motorcyclist crashes on **local** roads in Auckland Region 2004 to 2008:

- 33 motorcyclists died, 307 received serious injuries and 941 minor injuries
- 15 percent were in the wet
- 9 percent involved "too fast for conditions"
- Worst month May, best September
- Worst day Friday, best Tuesday and Sunday (equal)

Further information about the 243 injury motorcyclist crashes on **State Highways** in Auckland Region 2004 to 2008:

- 8 motorcyclists died, 63 received serious injuries and 204 minor injuries
- 16 percent were in the wet
- 12 percent involved "too fast for conditions"
- Worst month February, best July
- Worst day Friday, best Monday

## Intersections

During the five year period 2004 to 2008 within Auckland Region there were a total of 27,558 crashes at intersections, 6091 of these were injury crashes and 21,467 non-injury.

Crashes at Intersections					
	2004	2005	2006	2007	2008
Injury	1140	1142	1290	1257	1262
Non-injury	4268	4185	4295	4380	4339
Total	5408	5327	5585	5637	5601

In the Auckland region there are 25 intersections with 10 or more injury crashes in the last five years. There are 173 with six or more injury crashes.

The normally accepted threshold for a site to be considered worthy of investigating as a potential black spot is three or more injury crashes in five years.

The locations of the sites with ten or more injury crashes is shown in the map on the following page and includes any State Highway sites.

Intersection injury crashes by local body					
Local body	2004	2005	2006	2007	2008
Rodney	36	35	38	34	32
North Shore	166	165	204	174	157
Waitakere	162	157	138	156	160
Auckland	463	506	506	503	518
Manukau	217	202	304	291	288
Papakura	50	38	49	54	49
Franklin	56	39	51	45	58

The most common crash type at intersections is when a driver turns right into a side road or driveway and is hit by a vehicle approaching on the same road.

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

- Failure to stop and give way
- Not checking properly
- General errors of judgement

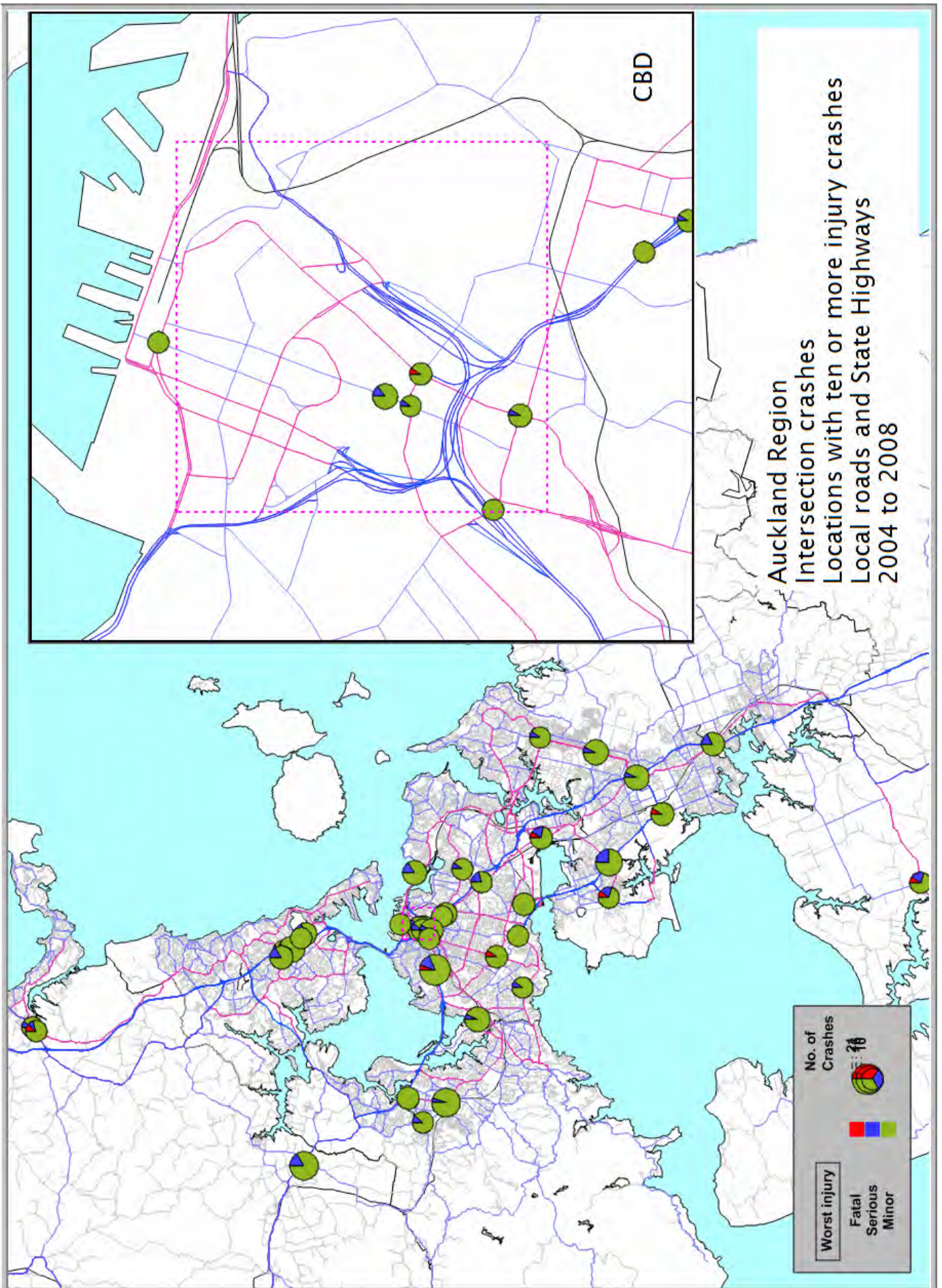
Junction type Injury crashes		
Junction Type	Rural	Urban
Roundabout	10	398
Tee	188	3386
Cross (X)	91	1411
Y	41	186
Other (includes driveways)	11	369

Further information about the 6091 injury crashes at intersections on **local** roads in the Auckland Region 2004 to 2008:

- 65 deaths, 875 serious injuries and 6936 minor injuries
- 24 percent wet roads
- 34 percent night time
- Worst month May, best January
- Worst day Friday, best Sunday
- Worst time three hour period 3pm till 6pm

Further information about the 849 injury crashes at intersections on **State Highways** in the Auckland Region 2004 to 2008:

- 13 deaths, 135 serious injuries and 1019 minor injuries
- 25 percent wet roads
- 35 percent night time
- Worst month March, best January and September (equal)
- Worst day Friday, best Monday
- Worst time three hour period 3pm till 6pm



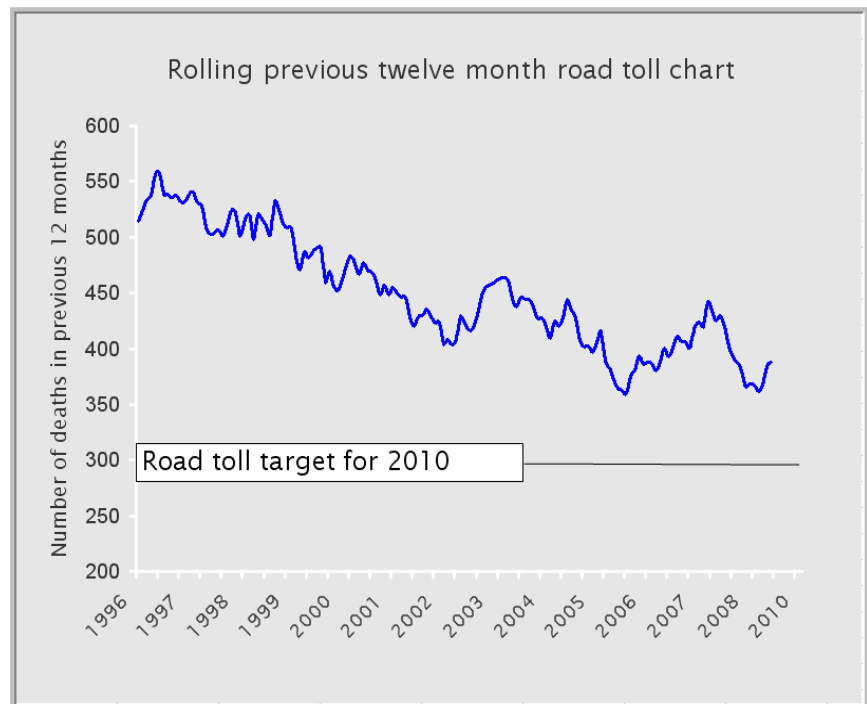
## The next ten years—moving beyond Road Safety 2010

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/>

## Contacts

### New Zealand Transport Agency

Manager Performance Information (Northern)  
Chris Hewitt

Senior Programme Advisors (Education — Auckland)  
Jill Stoker  
Denise Henigan

Private Bag 106 602  
Auckland

Phone 09 969 9800

Auckland Media Manager  
Ewart Barnsley  
Phone 09 368 2142

[www.nzta.govt.nz](http://www.nzta.govt.nz)

### Auckland Regional Transport Authority

Road Safety Co-ordinator  
Andrew Bell  
Private Bag 92012  
Auckland

Phone 09 366 4422

[www.roadsafeauckland.org.nz](http://www.roadsafeauckland.org.nz)

### New Zealand Police

Superintendent John Kelly  
Road Policing Manager  
New Zealand Police  
Waitematā  
Private Bag 33 1046  
North Shore City

Phone DDI: (09) 488-9756