

# briefing notes - road safety issues

# Regional overview Auckland and Northland

NZ Transport Agency (NZTA) Auckland has been preparing road safety issues reports (now part of the briefing note series) for ten years using data from the Ministry of Transport's Crash Analysis System (CAS). CAS holds records of over 850,000 crashes dating back to 1980.

This document takes the "overview" page from each of the fifteen reports prepared by the Performance Information Team in Auckland and brings them together as a handy quick reference for the whole region. Each overview is accompanied by a maps of 2008 crashes taken from the full report.

An important point to note is that the extent of the data in these overview pages is slightly different between the Northland and Auckland regions. This is explained below and in each full report:

- In the body of the overview text for the Northland Region, Far North, Kaipara and Whangarei Districts unless otherwise stated it contains information about both local roads and State Highways
- In the body of the overview text for the Auckland Region, North Shore, Waitakere, Auckland and Manukau Cities, the Papakura, Rodney and Franklin Districts unless otherwise stated it contains information only about local roads not State Highways
- In the body of the overview text for the Northland State Highway or Auckland State Highways and the Auckland Motorways reports unless otherwise stated it contains only information about State Highways

These differences are to prevent motorway crashes in particular overwhelming and skewing the true nature of crashes on local roads in individual local body reports.

# **Road toll information for 2008** (includes crashes on local roads and any State Highways within the local body) Extracted from CAS 22nd July 2009 -numbers may differ slightly from original reports

Local body Name	Deaths	Serious Injuries	Minor Injuries	Local Body Name	Deaths	Serious Injuries	Minor Injuries
Far North District	10	51	214	Rodney District	9	82	340
Kaipara District	4	29	73	North Shore City	4	34	448
Whangarei District	15	51	245	Waitakere City	3	46	518
				Auckland City	8	152	1272
				Manukau City	20	107	730
				Papakura District	2	25	153
				Franklin District	9	51	247
Northland Total	29	131	532	Auckland Total	55	497	3708

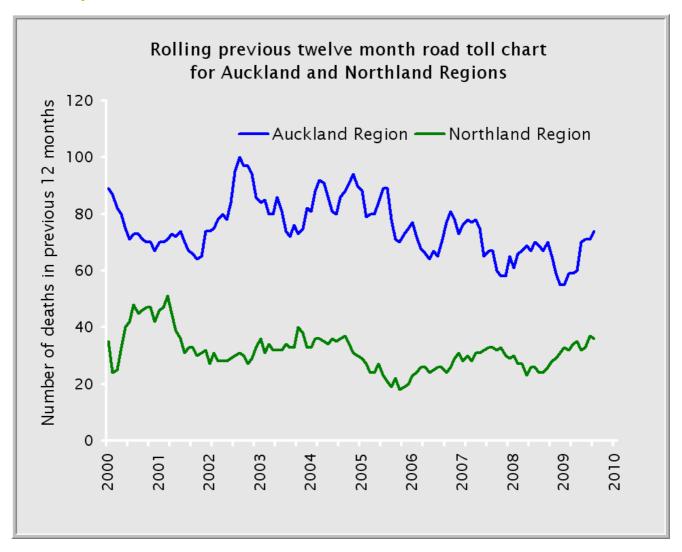
# Topics in the most recent Road Safety Issues Briefing Notes covering crash data for the period 2004 to 2008

Road Safety Issues in the Northland Region					
Local body	Bends	Road factors / roadside hazards	Speed	Alcohol	Wet roads
Northland Region	<b>√</b>	V	√	V	
Far North	√	<b>√</b>	√	√	
Whangarei	√	V		V	<b>√</b>
Kaipara	√	<b>√</b>		√	

Road Safety Issues for the Auckland Region								
Local body	Bends	Road factors / roadside hazards	Vulnerable road users	Speed	Intersections	Alcohol	Night	Straight roads
Auckland Region			√		√	√	√	
Rodney	√	√		√		√		
North Shore			√	<b>√</b>	<b>√</b>	√		
Waitakere	√			√		√	√	
Auckland			√		√	√	√	
Manukau				√	√	√	√	
Papakura		√				√	√	√
Franklin	<b>√</b>					√	√	

# Road Safety Issues for State Highways in Northland and Auckland Bends Rear end Speed Alcohol Road Factors / roadside hazards Night Intersections Northland State Highways ✓ ✓ ✓ ✓ ✓ Auckland State Highways ✓ ✓ ✓ ✓ ✓ Auckland Motorways ✓ ✓ ✓ ✓ ✓

# Fatality trends—Auckland and Northland



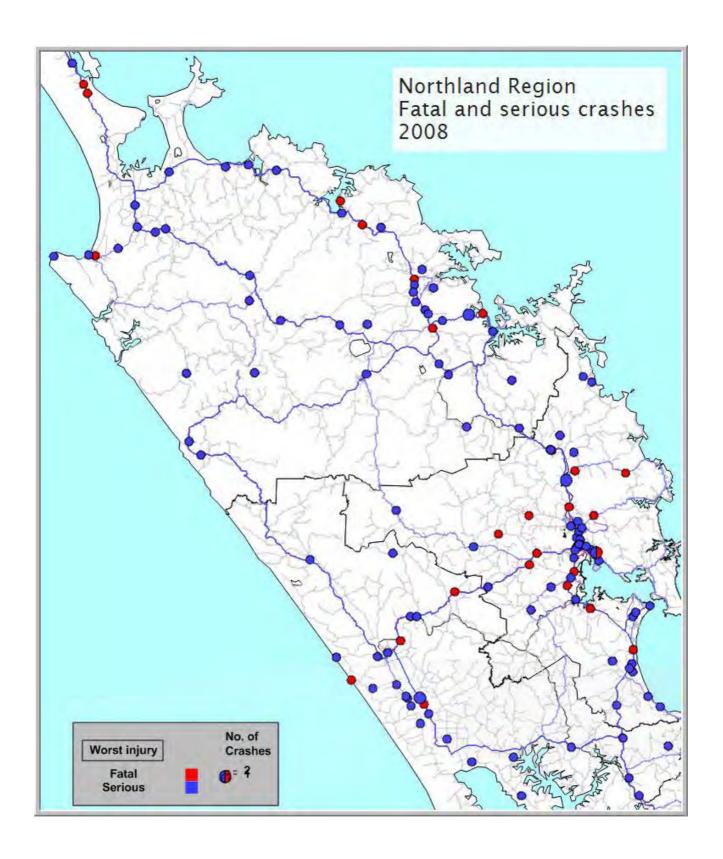
The chart above illustrates the fatality trends for the last decade for Auckland and Northland.

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 21 July 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 however the current rise should be of some concern because on the 21st of July in 2009 the toll for the region was already equal to that for all of 2008.



# Northland Region overview

In 2008 on local roads in Northland Region there were 276 injury crashes and 632 non-injury crashes. In addition there were 214 injury crashes and 424 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 490 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	28	94	352	474
Urban	1	37	179	217
Total	29	131	531	691

Over the past decade fatal and serious crashes have remained relatively stable while minor injury crashes have increased.

The most likely cause of this is an improvement in the Police reporting rate around 2003.

In 2008 minor injury crashes fell sharply while fatalities and to a lesser extent serious crashes did not, certainly NZTA would hope that this is a real drop rather than just a drop in reporting.

#### Crash trends in Northland Region

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	27	94	172	293
2000	35	85	159	279
2001	23	92	161	276
2002	31	100	225	356
2003	31	90	390	511
2004	23	121	389	533
2005	22	108	366	496
2006	30	100	399	529
2007	28	116	408	552
2008	27	106	357	490

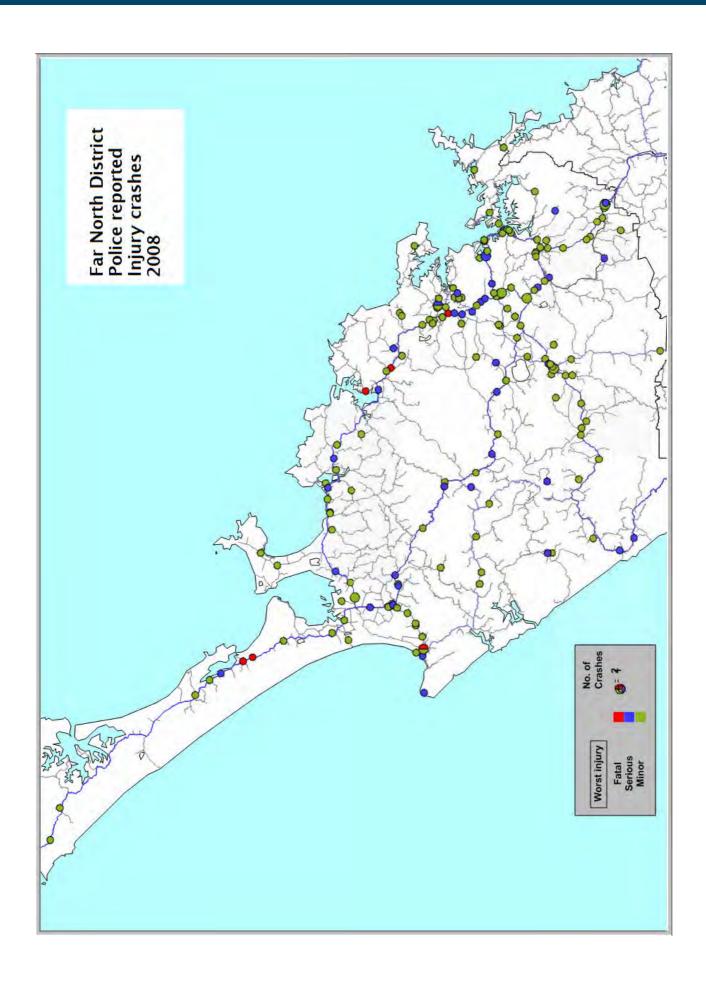
Main crash characteristics				
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause		
Alcohol	30	21		
Too fast	30	25		
At bends	54	50		
Roadside object hit	56	54		
Road factors	18	20		

Further information about the 1382 injury and 3138 non-injury crashes on **local** roads in Northland Region 2004 to 2008:

- 54 deaths, 356 serious injuries and 1485 minor injuries
- Worst month December, best April
- Worst day Saturday, best Sunday
- 27 percent on wet roads
- 31 percent at night
- 32 percent at intersections
- 5093 roadside objects struck
- Most common at fault driver age group in injury crashes 15 to 19 years (24 percent of all at fault drivers)
- Social cost of crashes in 2008 \$132.4m

Further information about the 1218 injury and 1993 non-injury crashes on **State Highways** in Northland Region 2004 to 2008:

- 88 deaths, 346 serious injuries and 1397 minor injuries
- Worst month December, best July
- Worst day Friday, best Monday
- 33 percent on wet roads
- 32 percent at night
- 25 percent at intersections
- 3714 roadside objects struck
- Most common at fault driver age group in injury crashes 15 to 19 years (16 percent of all at fault drivers)
- Social cost of crashes in 2008 \$142.4m



#### Far North District overview

In 2008 on local roads in Far North District there were 85 injury crashes and 171 non-injury crashes. In addition there were 97 injury crashes and 197 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 182 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	9	40	174	223
Urban	1	11	40	52
Total	10	51	214	275

Over the past decade fatal and serious crashes have fluctuated but remained on the whole relatively consistent. Minor injuries on the other hand have rises then remained relatively consistent, most probably as a result of improved reporting.

Alcohol remains an issue in the Far North with this factor being reported in crashes at higher degree than might be expected when the district is compared to similar local bodies or the all New Zealand values.

#### Crash trends in Far North District

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	14	37	66	117
2000	14	42	75	131
2001	7	40	69	116
2002	11	56	92	159
2003	9	47	190	246
2004	12	45	170	227
2005	11	46	125	182
2006	13	44	172	229
2007	13	61	176	250
2008	8	40	134	182

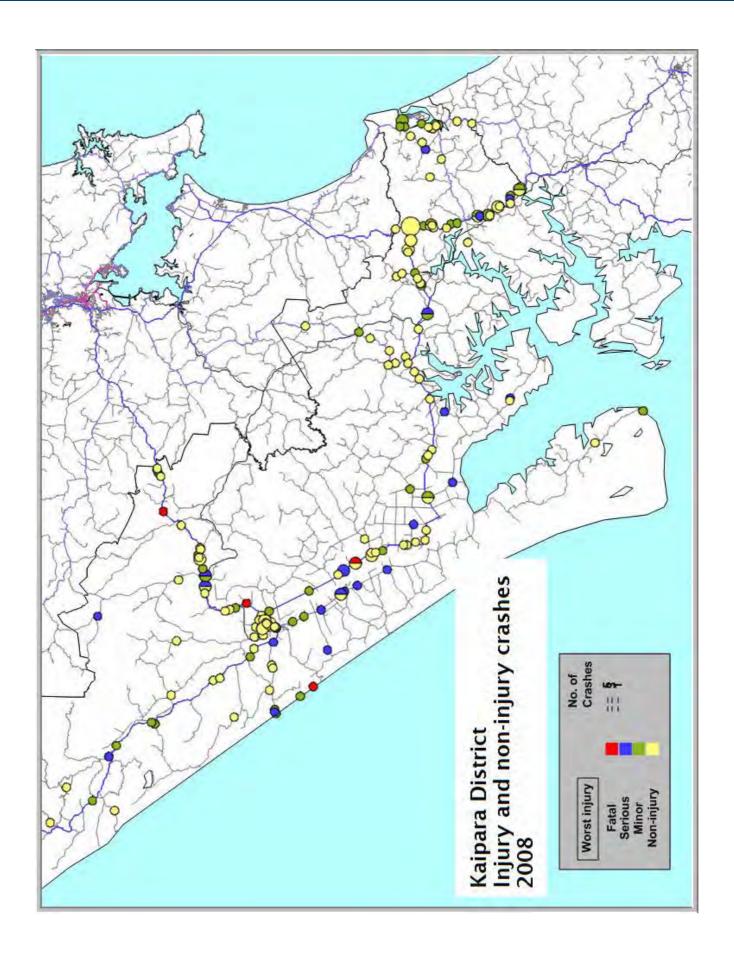
Crash characteristics				
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause		
Alcohol	32	25		
Too fast	34	28		
At bends	60	57		
Roadside object hit	57	57		
Road factors	18	21		
Night time	42	21		

Further information about injury and non-injury crashes on **local** roads in Far North District 2004 to 2008:

- Worst month January, best September
- Worst day Friday, best Monday
- 24 percent on wet roads
- 37 percent at night
- 21 percent at intersections
- 903 roadside objects struck
- Social cost of crashes in 2008 \$ 34.6m

Further information about injury and non-injury crashes on **State Highways** in Far North District 2004 to 2008:

- Worst month December, best September
- Worst day Saturday, best Monday
- 32 percent on wet roads
- 34 percent at night
- 21 percent at intersections
- 1096 roadside objects struck
- Social cost of crashes in 2008 \$61.4m



# Kaipara District overview

In 2008 on local roads in Kaipara District there were 37 injury crashes and 48 non-injury crashes. In addition there were 42 injury crashes and 74 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 79 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

Road type	Fatalities	Serious injuries	Minor injuries	Total
Rural	4	22	51	77
Urban	0	7	21	28
Total	4	29	72	105

The table below shows crash numbers over the last ten years. Fatalities and serious crashes (those most likely to be reported) have fluctuated but remained relatively constant over the ten year period. Minor crashes on the other hand have risen, which can be a sign of an improving reporting rate. It is therefore of some concern that minor crashes (but not fatal and serious crashes) have fallen sharply in 2008 as this potentially suggests a fall in the reporting rate—this effect is especially noticeable in the "bend" issue on page three of the full report.

# Crash trends in Kaipara District

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	5	17	29	51
2000	7	16	26	49
2001	4	18	21	43
2002	6	12	34	52
2003	2	10	50	62
2004	5	20	65	90
2005	5	20	62	87
2006	5	16	71	92
2007	4	19	80	103
2008	4	25	50	79

Main crash characteristics				
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage <b>all injury</b> crashes of this type or contributory cause		
Alcohol	26	19		
Too fast	27	24		
At bends	58	55		
Fatigue	12	10		
Object hit	63	59		
Road factors	22	24		
Night time	38	33		

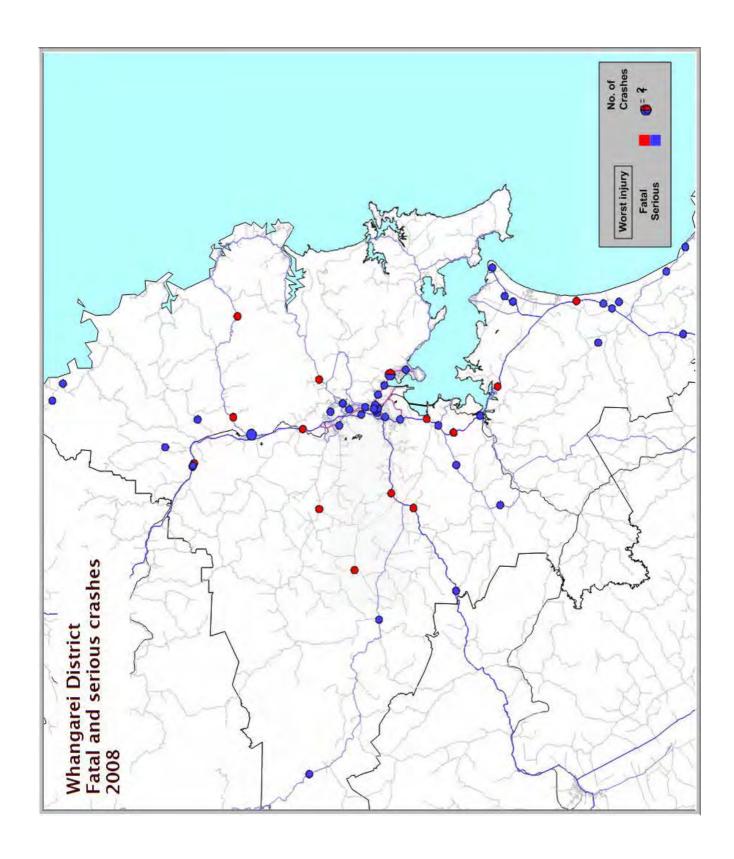
Although "fatigue" is not a specific issue in this briefing note it is mentioned above because at 12 percent involvement in fatal and serious crashes it is more than double the rate for local bodies that are similar to the district. It is also above the national fatal and serious value of eight percent. However actual numbers are small, 46 out of 807 injury crashes in five years.

Further information about the 203 injury and 244 non-injury crashes on **local** roads in Kaipara District 2004 to 2008:

- Worst month December, best July
- Worst day Saturday, best Wednesday
- 26 percent on wet roads
- 32 percent at night
- 19 percent at intersections
- 319 roadside objects struck
- Social cost of crashes in 2008 \$23.1 m

Further information about the 248 injury and 327 non-injury crashes on **State Highways** in Kaipara District 2004 to 2008:

- Worst month April, best July
- Worst day Saturday, best Tuesday
- 35 percent on wet roads
- 32 percent at night
- 19 percent at intersections
- 426 roadside objects struck
- Social cost of crashes in 2008 \$27.1m



# Whangarei District overview

In 2008 on local roads in Whangarei District there were 154 injury crashes and 413 non-injury crashes. In addition there were 75 injury crashes and 153 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 229 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	15	32	127	174
Urban	0	19	118	137
Total	15	51	246	311

In the last decade fatal crashes in Whangarei have fluctuated but the trend over the last five years is upwards. Serious crashes remain constant while minor injury crashes rose in 2003, perhaps reflecting an improvement in the report of the lower severity crashes.

Alcohol remains a problem in the district with little sign of diminishing as a crash problem.

Crashes in the wet present themselves at much higher rates than peer authorities, potentially just because Whangarei is wetter.

However the differences between Whangarei District and it peers was large enough to be considered worthy of flagging in this years full briefing note.

# Crash trends in Whangarei District

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	8	40	77	125
2000	14	27	58	99
2001	12	34	71	117
2002	14	32	99	145
2003	20	33	150	203
2004	6	56	154	216
2005	6	42	179	227
2006	12	40	156	208
2007	11	36	152	199
2008	15	41	173	229

#### Crash types or contributory causes

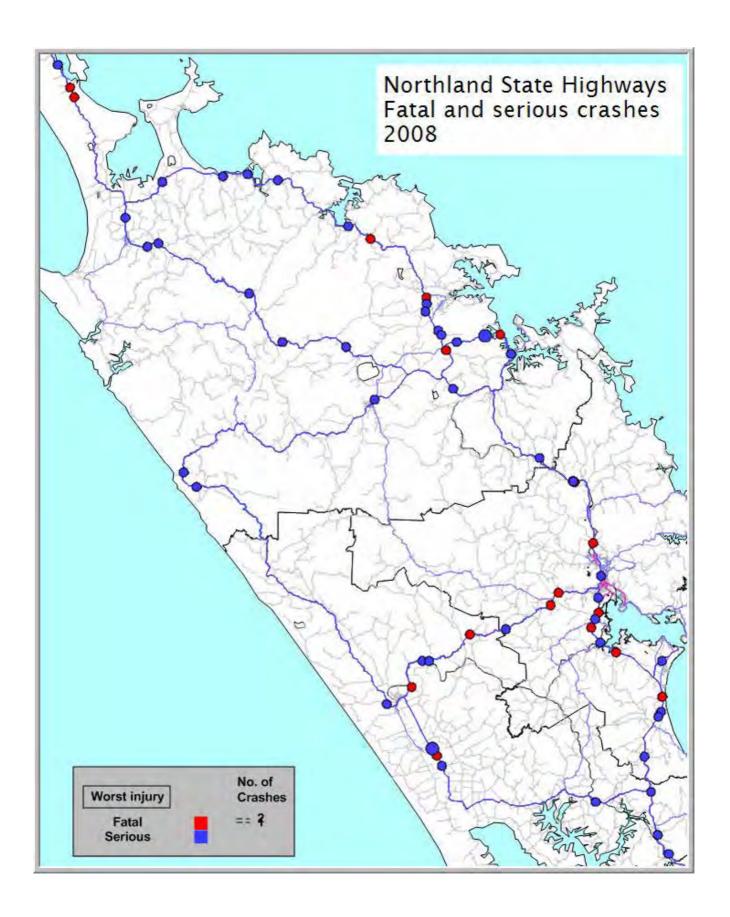
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	28	17
Too fast	28	22
At bends	46	40
At intersections	23	30
Wet roads	28	30
Roadside object struck	51	48
Road factors	15	17
Night time	38	32

Further information about injury and non-injury crashes on **local** roads in Whangarei District 2004 to 2008:

- Worst month December, best January
- Worst day Friday, best Sunday
- 28 percent on wet roads
- 29 percent at night
- 39 percent at intersections
- 1488 roadside objects struck
- Social cost of crashes in 2008 \$74.7m

Further information about injury and non-injury crashes on **State Highways** in Whangarei District 2004 to 2008:

- Worst month January, best August
- Worst day Friday, best Monday
- 32 percent on wet roads
- 29 percent at night
- 33 percent at intersections
- 620 roadside objects struck
- Social cost of crashes in 2008 \$53.8m



Key crash characteristics

# Northland State Highways overview (formerly Transit Region One)

At bends

Road factors

Night time

Roadside object hit

In 2008 on State Highways in Northland there were 214 injury crashes and 424 non-injury crashes as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 214 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	17	54	195	266
Urban	1	7	38	46
Total	18	61	233	312

Between 2002 and 2003 there was a large rise in the numbers of minor injury crashes being reported on State Highways in Northland.

There was not however a corresponding large rise in serious crashes, the most likely reason being a lifting of the reporting rate in Northland.

Fatal crashes rose a little in 2008 while serious and minor crashes fell, it is hoped this is not a reversal of previous reporting rate trends

#### Northland State Highways

Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
22	48	93	163
25	51	88	164
16	51	89	156
18	50	98	166
20	41	198	259
13	58	190	261
13	38	167	218
18	46	190	254
16	63	192	271
18	45	151	214
	22 25 16 18 20 13 13 18 16	Crashes         Crashes           22         48           25         51           16         51           18         50           20         41           13         58           13         38           18         46           16         63	Crashes         Crashes         Crashes           22         48         93           25         51         88           16         51         89           18         50         98           20         41         198           13         58         190           13         38         167           18         46         190           16         63         192

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	24	16
Too fast	26	21

53

53

18

38

49

55

20

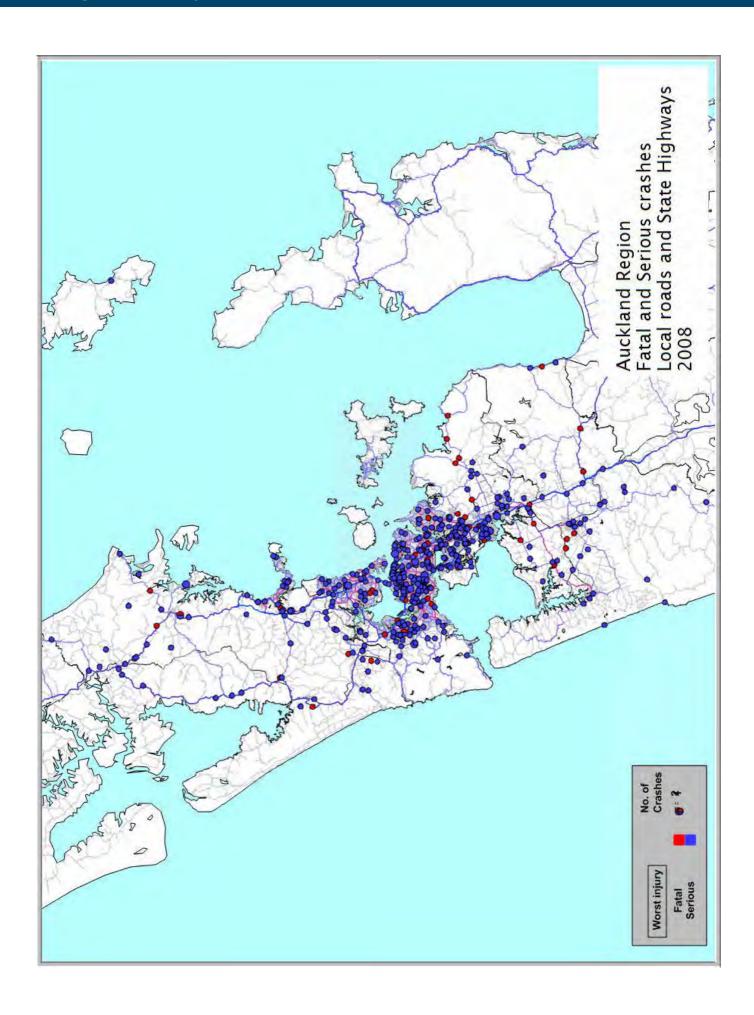
33

#### Injury and non-injury crashes by State Highway number 2004 to 2008

	Rural	Urban	Total
SH 10	337	63	400
SH 11	145	56	201
SH 12	363	178	541
SH 14	160	96	256
SH 15A	10	2	12
SH 1N	1338	461	1799

Further information about the 1218 injury and 1991 non-injury crashes on State Highways in Northland 2004 to 2008:

- Worst month December, best July
- Worst day Friday, best Monday
- 33 percent on wet roads
- 32 percent at night
- 25 percent at intersections
- 2142 roadside objects struck
- Social cost of crashes in 2008 \$142.4m



# Auckland Region 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

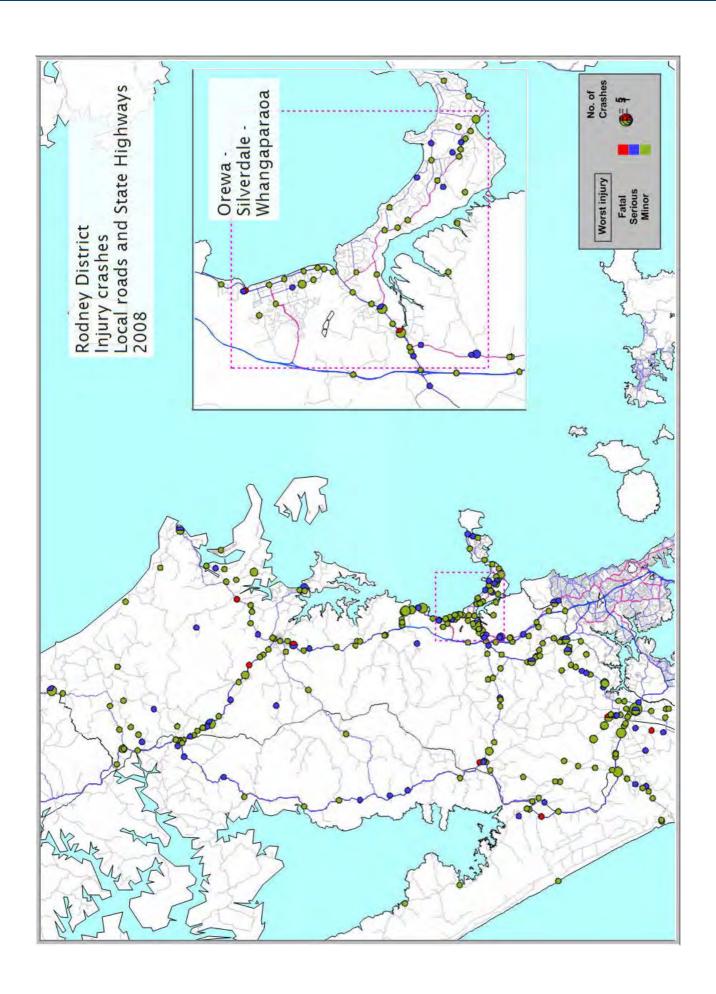
Crash characteristics					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause			
Alcohol	26	16			
Too fast	22	16			
At bends	28	22			
At intersections	40	48			
Pedestrians	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



# Rodney District overview

In 2008 on local roads in Rodney District there were 167 injury crashes and 315 non-injury crashes. In addition there were 133 injury crashes and 211 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 167 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	2	25	118	145
Urban	1	25	54	80
Total	3	50	172	225

In 2008 Rodney District had the lowest local road toll since 1992. Serious crashes have fluctuated and minor crashes have risen slowly.

Traffic volumes have been rising in the district with 524.4 million vehicle kilometres travelled (VKT) in 2003/4 and 585.6m VKT in 2007/8.

When Rodney was compared to similar districts crashes at bends appear over represented.

The other issues in the full note are all found more strongly represented than similar local bodies but only just so.

# Crash trends in Rodney District

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	8	29	72	109
2000	8	30	61	99
2001	5	36	63	104
2002	8	22	79	109
2003	4	28	89	121
2004	9	37	101	147
2005	8	28	109	145
2006	6	34	111	151
2007	7	33	127	167
2008	3	40	124	167

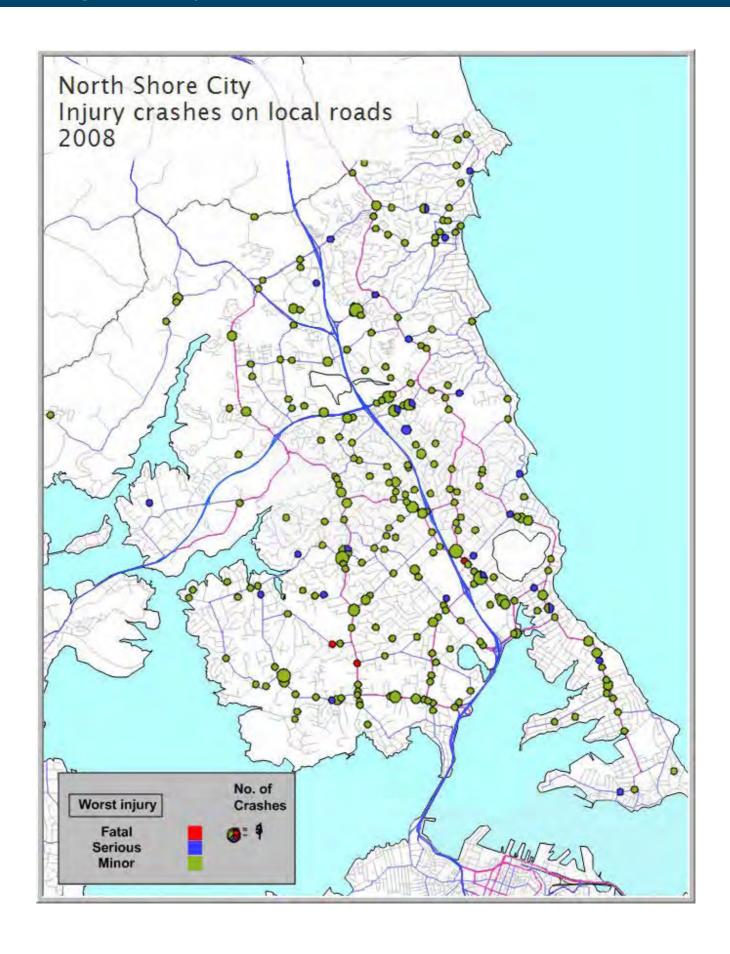
Local road crash characteristics					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause			
Alcohol	27	19			
Too fast	28	26			
At bends	54	51			
With objects	47	50			
Road factors	19	19			
Night time	38	34			

Further information about the 777 injury and 1461 non-injury crashes on **local** roads in Rodney District 2004 to 2008:

- 37 deaths, 228 serious injuries and 820 minor injuries
- Worst month March, best September
- Worst day Friday, best Tuesday
- 27 percent on wet roads
- 36 percent at night
- 26 percent at intersections
- 1460 roadside objects struck
- Most represented five year age block in at fault drivers in injury crashes: 15 to 19 years (23 percent of at fault drivers)
- Social cost of crashes in 2008 \$55.7 m

Further information about the 571 injury and 1167 non-injury crashes on **State Highways** in Rodney District 2004 to 2008:

- 46 deaths, 167 serious injuries and 663 minor injuries
- Worst month December, best June
- Worst day Saturday, best Tuesday
- 33 percent on wet roads
- 29 percent at night
- 30 percent at intersections
- 923 roadside objects struck
- Most represented five year age block in at fault drivers in injury crashes: 15 to 19 years (19 percent of at fault drivers)
- Social cost of crashes in 2008 \$55.1m



# North Shore City overview

In 2008 on local roads in North Shore City there were 319 injury crashes and 1088 non-injury crashes. In addition there were 91 injury crashes and 337 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 319 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	0	12	12
Urban	4	28	335	367
Total	4	28	347	369

In the table below it can be seen that over the last decade crash numbers in the various injury categories have fluctuated.

Even though crash numbers in 2008 were the lowest in the last five years they were still higher than any year in the first five years of the decade.

However to put this in context, traffic volumes on local roads in the city have risen substantially from 760 million vehicle kilometres travelled in 2003/4 to 1047 million in 2007/8.

When the list of safety matters which are significant for North Shore City (in the table opposite) is compared to the same issues in similar cities, North Shore City is very much on or just below the "average" found elsewhere.

#### Crash trends in North Shore City

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	5	44	255	304
2000	4	43	225	272
2001	7	36	219	262
2002	6	56	242	304
2003	4	40	244	288
2004	1	56	309	366
2005	3	61	304	368
2006	6	50	321	377
2007	4	36	312	352
2008	3	27	289	319

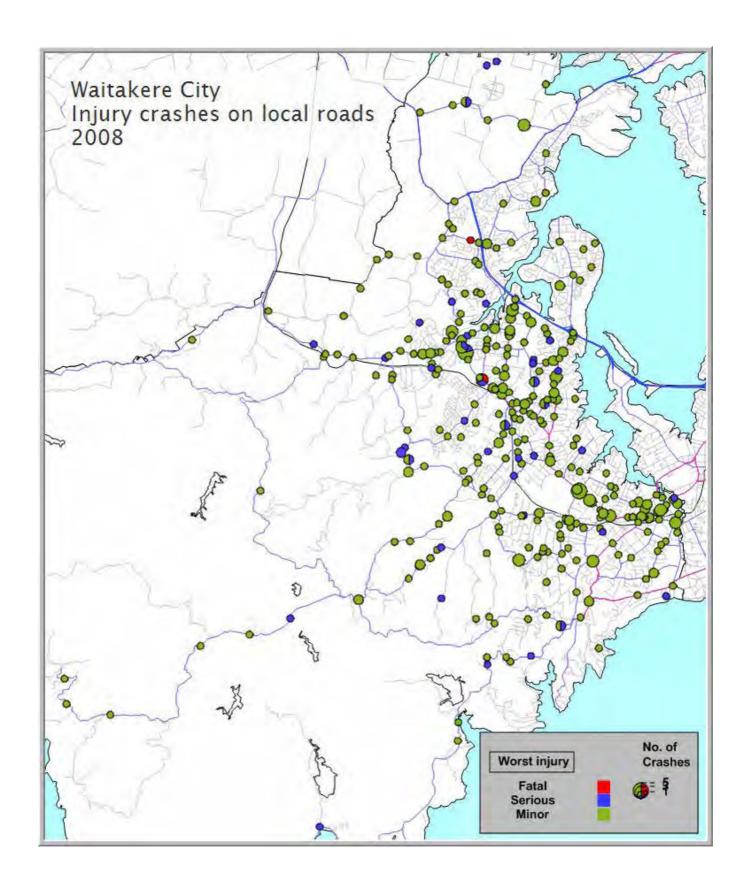
Crash characteristics - local roads					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage <b>all injury</b> crashes of this type or contributory cause			
Alcohol	21	13			
Too fast	17	12			
At bends	22	19			
At intersections	43	49			
Pedestrians	19	10			
Cyclists	17	10			
Motorcyclists	14	8			
Night time	38	33			

Further information about the 1782 injury and 5719 non-injury crashes on **local** roads in North Shore City 2004 to 2008:

- Worst month August, best January
- Worst day Friday, best Sunday
- 25 percent on wet roads
- 31 percent at night
- 47 percent at intersections
- 3240 roadside objects struck
- 15 to 19 years was the most commonly reported five year age group of at fault drivers in injury crashes (21 percent)
- Social cost of crashes in 2008 \$70.0 m

Further information about the 469 injury and 1886 non-injury crashes on **State Highways** in North Shore City 2004 to 2008:

- Worst month July, best February
- Worst day Friday, best Sunday
- 26 percent on wet roads
- 27 percent at night
- 24 percent at intersections
- 518 roadside objects struck
- 20 to 24 years was the most commonly reported five year age group of at fault drivers in injury crashes (20 percent)
- Social cost of crashes in 2008 \$21.3m



# Waitakere City 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 fatals 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.

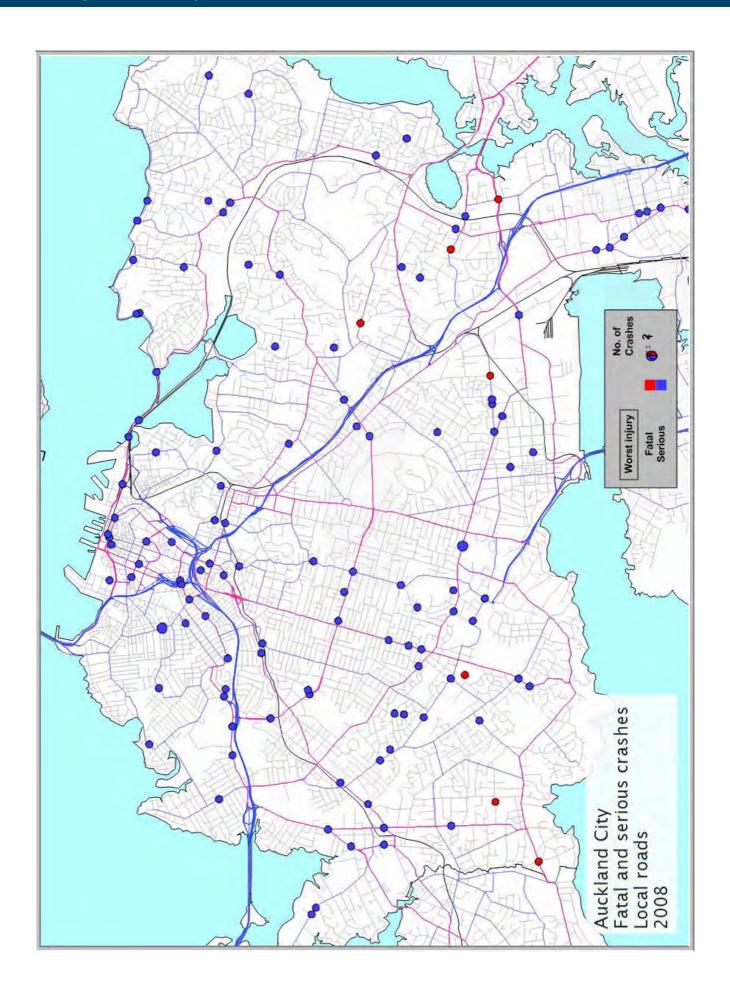
Local road crashes					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause			
Alcohol	27	17			
Too fast	26	20			
At bends	36	27			
At intersections	39	43			
Pedestrians	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



# **Auckland City overview**

In 2008 on local roads in Auckland City there were 878 injury crashes and 2887 non-injury crashes. In addition there were 276 injury crashes and 938 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 878 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	1	19	20
Urban	7	132	929	1068
Total	7	133	948	1088

Crash numbers in the city rose in the first half of the last decade but have been relatively stable around the 900 mark in the second half. This is consistent with the vehicle kilometres driven in the city. In the 2003 / 2004 financial year there were approximately 2793 million vehicle kilometres driven on local roads in the city and in the 2007 / 2008 year 2,765 million.

As may be anticipated, the number of crashes at intersections in the city are high and they are present in slightly higher numbers than might be expected when Auckland City is compared to other major cities in New Zealand. The same is true for pedestrian crashes, crashes involving alcohol and crashes at night.

# Crash trends in Auckland City

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	13	117	612	742
2000	10	135	542	687
2001	9	138	530	677
2002	12	152	604	768
2003	20	109	821	950
2004	13	119	719	851
2005	9	123	805	937
2006	12	117	795	924
2007	4	108	769	881
2008	7	116	755	878

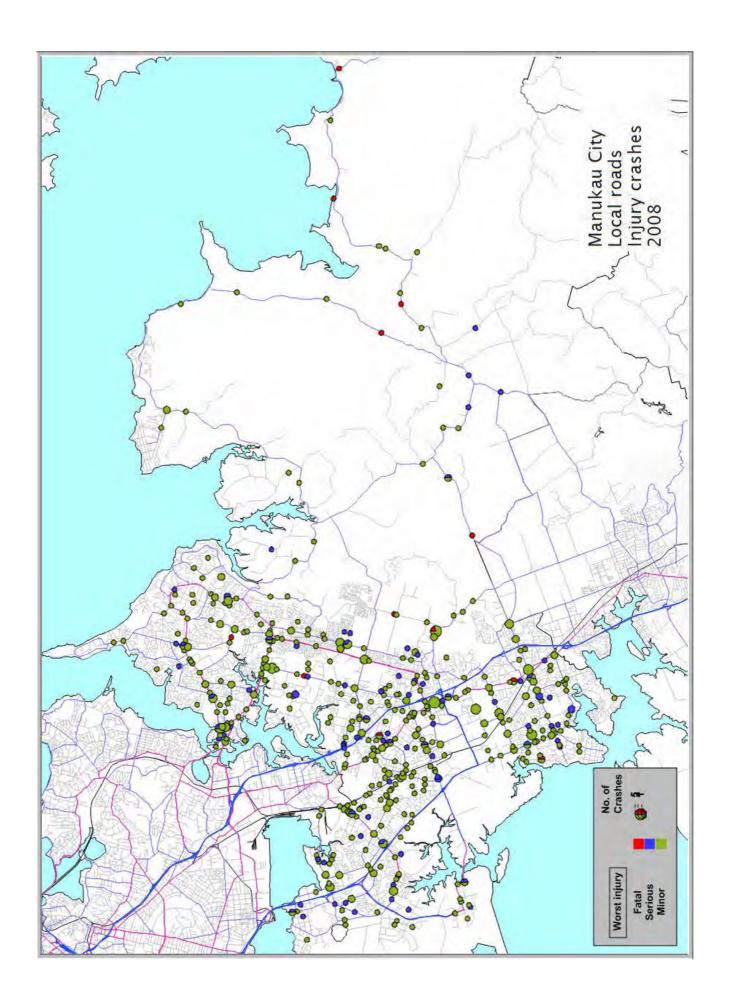
Local road crashes					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage <b>all injury</b> crashes of this type or contributory cause			
Alcohol	23	13			
Too fast	16	10			
At intersections	49	56			
Pedestrians	26	15			
Cyclists	9	10			
Motorcyclists	18	10			
Night time	42	33			

Further information about the 4471 injury and 16,053 non-injury crashes on **local** roads in Auckland City 2004 to 2008:

- Worst month May, best January
- Worst day Friday, best Sunday
- 22 percent on wet roads
- 32 percent at night
- 57 percent at intersections
- 6878 roadside objects struck
- 20 to 24 years was the most represented five year age group in at fault drivers in the city representing 20 percent of all at fault drivers (injury crashes)
- Social cost of crashes in 2008 \$678.7m

Further information about the 1328 injury and 5299 non-injury crashes on **State Highways** in Auckland City 2004 to 2008:

- Worst month June, best January
- Worst day Friday, best Sunday
- 26 percent on wet roads
- 29 percent at night
- 20 percent at intersections
- 1494 roadside objects struck
- 20 to 24 years was the most represented five year age group in at fault drivers in the city representing 18 percent of all at fault drivers (injury crashes)
- Social cost of crashes in 2008 \$228.6m



# Manukau City overview

In 2008 on local roads in Manukau City there were 557 injury crashes and 2030 non-injury crashes. In addition there were 537 injury crashes and 1677 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 557 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	10	9	46	65
Urban	7	89	550	646
Total	17	98	596	711

Over the last ten years, fatal crashes along with serious injuries have been relatively steady, averaging 13 and 81 crashes per year respectively. A large rise in the number of serious crashes in 2006 but no corresponding rise in fatal crashes could suggest improvements in Police reporting.

In contrast traffic volumes have risen significantly in the city. In the years 2003/4 there were an estimated 1568.6 million vehicle kilometres travelled (vkt) in the city and by 2007/8 this had risen to a vkt of 1774.1 million.

# Crash trends in Manukau City

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	15	82	308	405
2000	12	77	332	421
2001	14	79	345	438
2002	14	82	418	514
2003	13	85	423	521
2004	15	74	371	460
2005	15	58	378	451
2006	11	108	491	610
2007	13	75	504	592
2008	12	85	460	557

Crash characteristics					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage <b>all injury</b> crashes of this type or contributory cause			
Alcohol	31	21			
Too fast	29	18			
At bends	25	20			
At intersections	39	49			
Pedestrians	23	12			
Cyclists	5	5			
Motorcyclists	11	7			
Road factors	8	7			

Further information about injury and non-injury crashes on **local** roads in Manukau City 2004 to 2008:

48

- Worst month May, best January
- Worst day Friday, best Sunday
- 23 percent on wet roads
- 35 percent at night

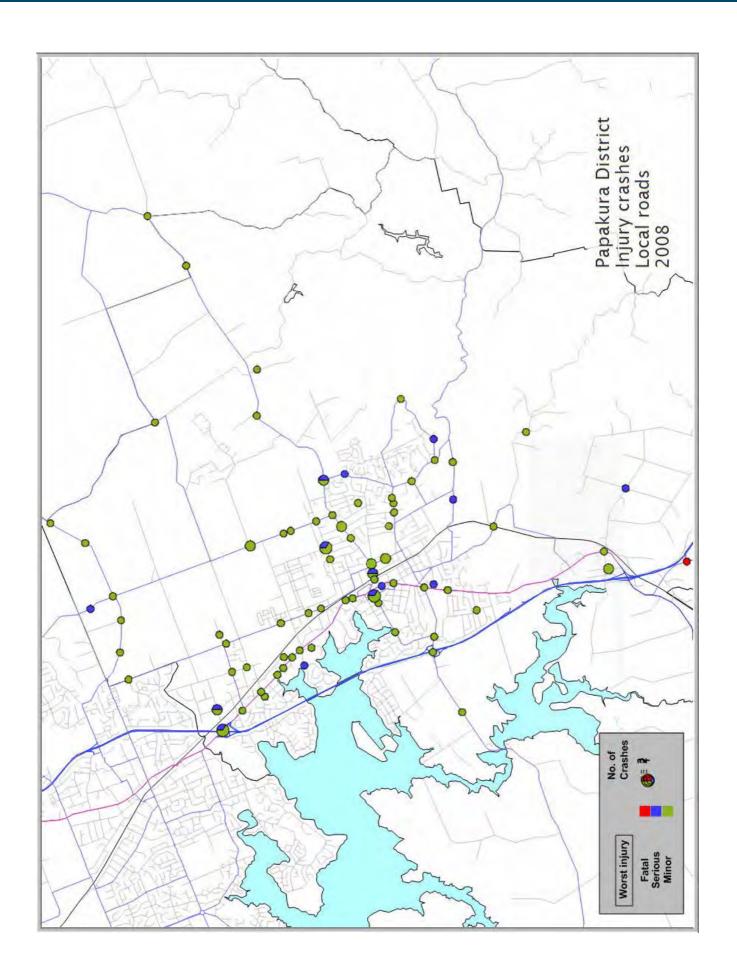
Night time

- 53 percent at intersections
- 5198 roadside objects struck
- Social cost of crashes in 2008 \$133 m

Further information about injury and non-injury crashes on **State Highways** in Manukau City 2004 to 2008

- Worst month May, best January
- Worst day Friday, best Sunday
- 27 percent on wet roads
- 34 percent at night
- 34 percent at intersections
- 742 roadside objects struck
- Social cost of crashes in 2008 \$35m

Social cost measures the total cost of road crashes to the nation, including loss of life and life quality, loss of productivity, medical, legal, court and property damage costs.



# Papakura District overview

In 2008 on local roads in Papakura District there were 90 injury crashes and 259 non-injury crashes. In addition there were 36 injury crashes and 77 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 90 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	1	ī	18	20
Urban	0	13	85	98
Total	1	14	103	118

Over the last five years the total number of crashes in the district have fluctuated and no specific trends have emerged. On the other hand traffic volumes on local roads have risen substantially in the district from 202.8 million vehicle kilometres travelled (VKT) in 2003/4 to 276.4 million VKT in 2007/8.

When Papakura District is compared with similar local bodies crashes in the dark, crashes involving alcohol, crashes involving struck objects and crashes on straights are all represented above the average for the peer group.

# Crash trends in Papakura District

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	4	9	49	62
2000	Т	13	44	58
2001	2	12	67	81
2002	0	18	80	98
2003	5	16	57	78
2004	Т	7	86	94
2005	3	11	67	81
2006	6	17	70	93
2007	1	12	93	106
2008	1	14	75	90

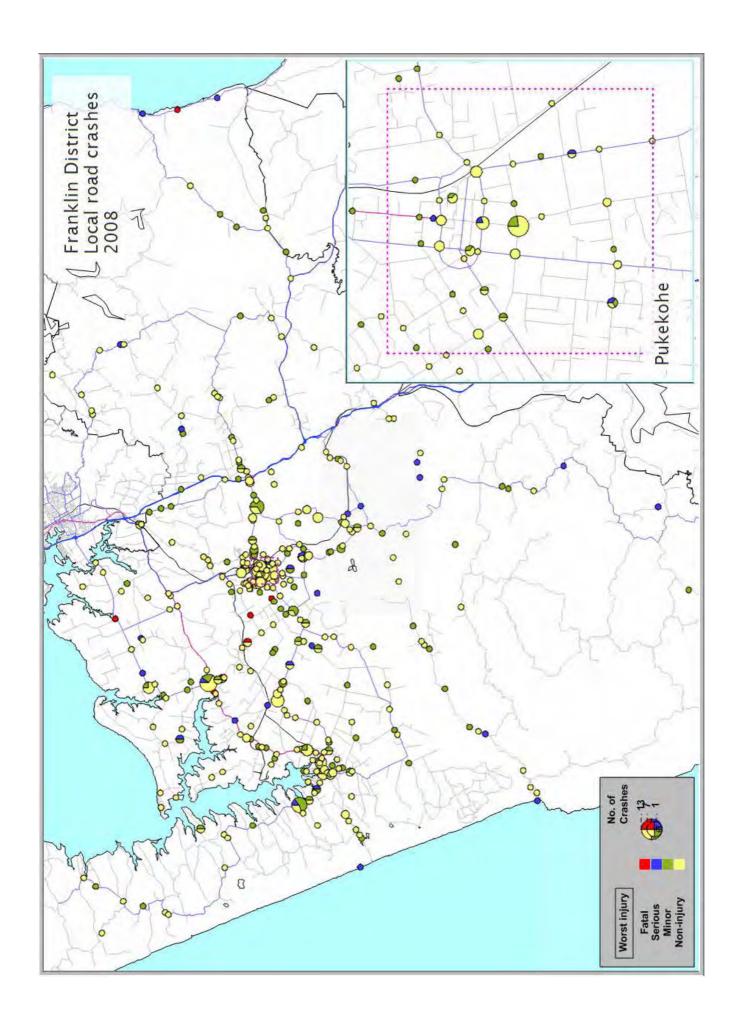
Local road crashes					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage <b>all injury</b> crashes of this type or contributory cause			
Alcohol	22	19			
Too fast	18	14			
At bends	16	22			
At intersections	42	52			
Pedestrians	5	8			
Cyclists	10	5			
Motorcyclists	16	8			
Road factors	7	10			
Night time	40	37			

Further information about the 464 injury and 1443 non-injury crashes on **local** roads in Papakura District 2004 to 2008:

- Worst month May, best January
- Worst day Friday, best Monday
- 23 percent on wet roads
- 34 percent at night
- 54 percent at intersections
- 876 roadside objects struck
- Social cost of crashes in 2008 \$24.1 m

Further information about the 183 injury and 466 non-injury crashes on **State Highways** in Papakura District 2004 to 2008:

- Worst month February, best June
- Worst day Friday, best Wednesday
- 27 percent on wet roads
- 30 percent at night
- 25 percent at intersections
- 304 roadside objects struck
- Social cost of crashes in 2008 \$12.5 m



#### Franklin District overview

In 2008 on local roads in Franklin District there were 169 injury crashes and 310 non-injury crashes. In addition there were 33 injury crashes and 70 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 169 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	6	32	137	175
Urban	0	13	61	74
Total	6	45	198	249

In the last decade there had been a general rise in the number of crashes being reported in Franklin District. This rise is made up mainly of a lift in the numbers of minor injury crashes. This may in part be due to an improved reporting rate and an increase in the urban areas of the district—which tend to have less serious crashes because of the lower speed profile.

There has also been a significant rise in the vehicle kilometres travelled in the district (on local roads) from 419.3 million in 2003/4 to 485.8 m in 2007/8.

#### Crash trends in Franklin District

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	8	35	61	104
2000	3	20	56	79
2001	9	18	50	77
2002	12	22	90	124
2003	9	21	116	146
2004	13	33	101	147
2005	7	26	112	145
2006	10	34	132	176
2007	9	21	121	151
2008	6	33	130	169

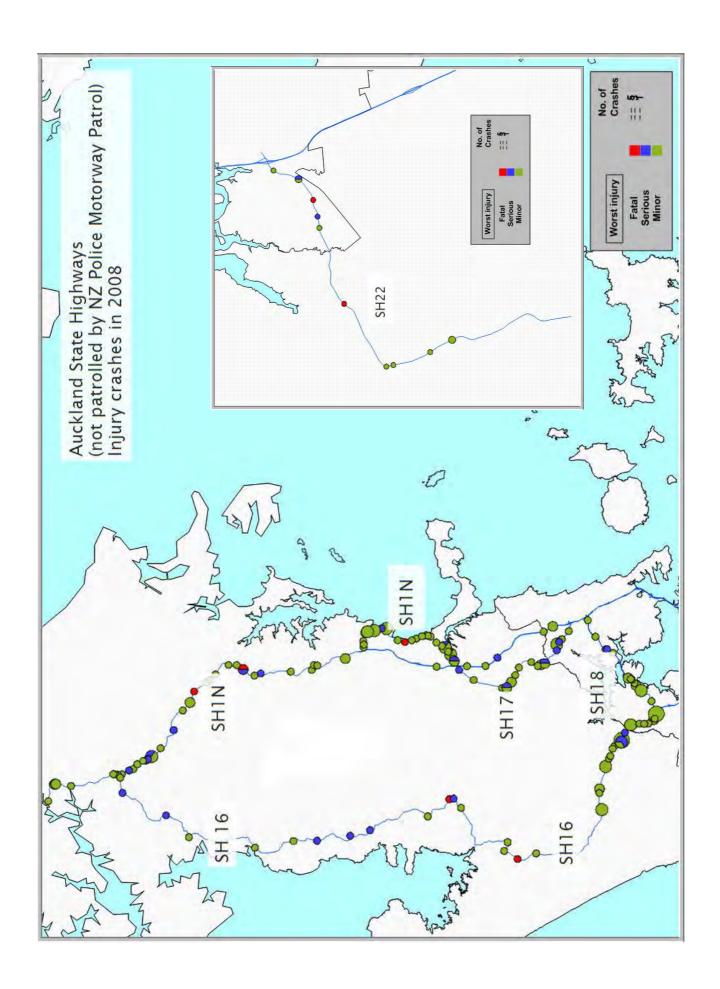
Local road crashes					
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause			
Alcohol	30	19			
Too fast	26	25			
At bends	47	46			
At intersections	29	30			
Motorcyclists	19	8			
Road factors	13	16			
Night time	45	38			

Further information about the 789 injury and 1344 non-injury crashes on **local** roads in Franklin District 2004 to 2008:

- Worst month April, best November
- Worst day Friday, best Monday
- 31 percent on wet roads
- 38 percent at night
- 36 percent at intersections
- 1538 roadside objects struck
- Social cost of crashes in 2008 \$65.9 m

Further information about the 210 injury and 397 non-injury crashes on **State Highways** in Franklin District 2004 to 2008:

- Worst month December, best April
- Worst day Friday, best Tuesday
- 34 percent on wet roads
- 40 percent at night
- 20 percent at intersections
- 462 roadside objects struck
- Social cost of crashes in 2008 \$19.4 m



# Auckland State Highways overview (excluding the Police Motorway patrol area)

In 2008, on Auckland State Highways (excluding the Police Motorway patrol area), there were 185 injury crashes and 316 non-injury crashes as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 185 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	7	41	174	222
Urban	1	3	57	61
Total	8	44	231	283

Crash numbers in 2008 were the highest reported in the past ten years which is a reflection of minor injuries increasing in the past four years. As might be expected most crashes occur in rural areas. Between 2004 and 2008, 73 percent of all injury crashes on the Auckland State Highway network (excluding the Motorways) occurred in areas with a speed limit of 80km/hr or more. Intersection crashes occur in much higher proportions than the average for rural highways in NZ; while crashes involving speed or at night are slightly above the average. Bend crashes are included in the full note because although they occur in slightly lower proportions than elsewhere, they are still highly represented in fatal and serious crashes in particular.

#### **Auckland State Highways**

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	8	42	96	146
2000	11	32	68	111
2001	12	32	92	136
2002	6	42	91	139
2003	10	22	118	150
2004	9	39	91	139
2005	12	25	100	137
2006	10	35	120	165
2007	6	28	135	169
2008	8	27	150	185

ı racı	1 <i>C</i> P	nara	$CT\Delta I$		$\boldsymbol{c}$
Crash		пага	LUEI	II O U I	

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	22	13
Too fast	22	16
At bends	42	32
At intersections	23	32
Motorcyclists	16	9
Road factors	13	12
Night time	34	30

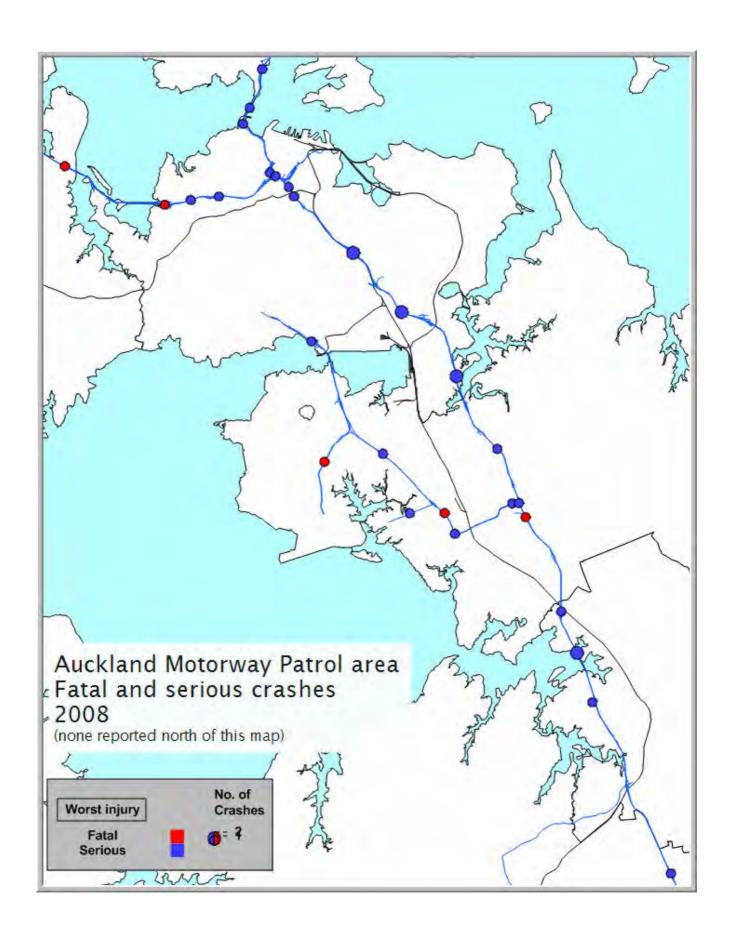
Social cost measures the total cost of road crashes to the nation, including loss of life and life quality, loss of productivity, medical, legal, court and property damage costs.

# Social cost by State Highway Injury and non-injury crashes 2004 to 2008

State Highway	Number of fatal and serious crashes	Social cost (\$)(m)
SH 1N	66	154
SH 16	55	90
SH 17	45	54
SH 22	24	46
SH 18	9	14

Further information about 2004 to 2008 injury and non-injury crashes on Auckland State Highways:

- Worst month December, best May
- Worst day Friday, best Tuesday
- 31 percent on wet roads
- 29 percent at night
- 33 percent at intersections
- 1234 roadside objects struck



# Auckland Motorways (those managed by the NZ Police Motorway Patrol)

In 2008 on Auckland Motorways (those managed by the NZ Police Motorway Patrol), there were 521 injury crashes and 1806 non-injury crashes. The table below shows the number of injuries resulting from the 521 injury crashes by rural or urban (mainly ramps) 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	5	22	515	542	
Urban	0	3	108	111	
Total	5	25	623	653	

Over the last decade, fatal and serious crashes on the motorway have been trending down while crashes involving minor injury have been steadily increasing. During the same period non-injury crashes have been very stable at around 2000 a year.

Given the traffic volumes and the shear scale of the Auckland Motorway network comparisons are difficult. Never-the-less when Auckland motorway fatal and serious crashes were compared with other NZ motorways "rear-end", "alcohol" and "night time" crashes were found on Auckland motorways to be represented in higher proportions. The first and the last of these possibly being connected with traffic volumes and peak traffic extending into darkness at either end of the day.

These three crash types were also represented more highly than the all NZ average for fatal and serious crashes.

#### Crash trends Auckland Motorways

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	12	56	325	393
2000	8	29	307	344
2001	5	36	406	447
2002	6	59	363	428
2003	7	43	460	510
2004	8	36	475	519
2005	4	40	506	550
2006	9	39	443	491
2007	4	35	471	510
2008	5	23	493	521

#### Crash characteristics 2004 to 2008

Crash type or contributory cause	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	32	12
Too fast	17	12
At bends	17	8
Motorcyclists	12	6
Rear end	20	53
Night time	53	35

Further information about the 2004 to 2008 injury and non-injury crashes on Auckland Motorways:

- Most common crash type "rear end or hitting an obstruction" (7084 crashes)
- Worst month May, best January
- Worst day Friday, best Sunday
- 27 percent on wet roads
- 30 percent at night
- 23 percent at intersections
- 3314 roadside objects struck
- 65 percent of at fault drivers held a full drivers licence
- Social cost of crashes in 2008 \$141m\*

\*Social cost measures the total cost of road crashes to the nation, including loss of life and life quality, loss of productivity, medical, legal, court and property damage costs.

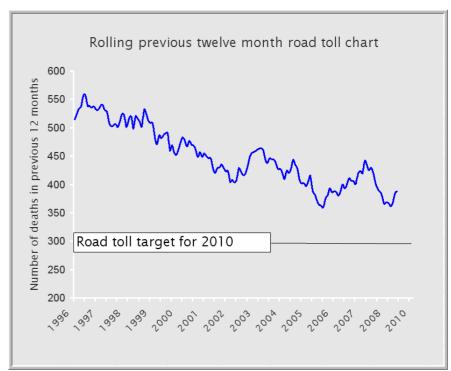
# The next ten years—moving beyond Road Safety 2010

In August 2009 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.



#### **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

Senior Program Advisor (Education — Northland)
Paul Scott
Phone 06 459 6314

Auckland Media Manager Ewart Barnsley Phone 09 368 2142

www.nzta.govt.nz

#### **Road Safety Co-ordinators**

Auckland Regional Transport Authority: Andrew Bell Private Bag 92012 Auckland Phone 09 366 4422

www.roadsafeauckland.org.nz

#### **Road Safety Co-ordinators**

Far North: Kiri Sloane PO Box 200, Kaitaia Phone 09 408 1380

Whangarei/Kaipara: Gillian Archer PO Box 1124, Whangarei Phone 0274 938703

#### **New Zealand Police**

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

Phone DDI: (09) 488-9756

Inspector Clifford Paxton Road Policing Manager Private Bag 9016 Whangarei

Phone 09 430 4500