

New Zealand Government

briefing notes - road safety issues

Papakura District

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2003–2007 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 Papakura District.

This report is the ninth road safety report for Papakura District. All the material unless otherwise stated in this report applies only to local roads.

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 Papakura District 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 district.

We encourage Papakura District 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

Papakura District Speed Intersections Night time crashes

2007 road trauma

Casualties	Papakura Distri
Deaths	1
Serious casualties	11
Minor casualties	115

Nationally
Speed
Alcohol
Failure to give way
Restraints

Crashes	Papakura District
Fatal crashes	1
Serious injury crashes	10
Minor injury crashes	91
Non-injury crashes	294

Overview

In 2007 on local roads in Papakura District there were 102 injury crashes and 294 non-injury crashes. In addition there were 36 injury crashes and 100 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 396 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 injury type 2007

	Fatalities	Serious injuries	Minor injuries	Total
Rural	0	4	21	25
Urban	1	7	94	102
Total	1	11	115	127

The number of fatal and serious crashes reported in the district continue to fluctuate from year to year with less than half the number being reported in 2007 compared to 2006.

Reported minor injury crash numbers have remained fairly consistent over the last seven years, numbers in 2007 are however slightly higher than those recorded in the last ten years.

The number of reported non-injury crashes on local roads in Papakura District which showed an annual increase between 2003 and 2006 reduced slightly in 2007.

Crash trends in Papakura District

Crash trenas in rapakara District				
Year	Fatalities	Serious injuries	Minor injuries	Total
1998	3	7	78	88
1999	4	12	77	93
2000	1	13	63	77
2001	2	16	93	111
2002	0	20	108	128
2003	5	22	96	123
2004	1	7	113	121
2005	3	15	81	99
2006	7	23	110	140
2007	1	11	115	127

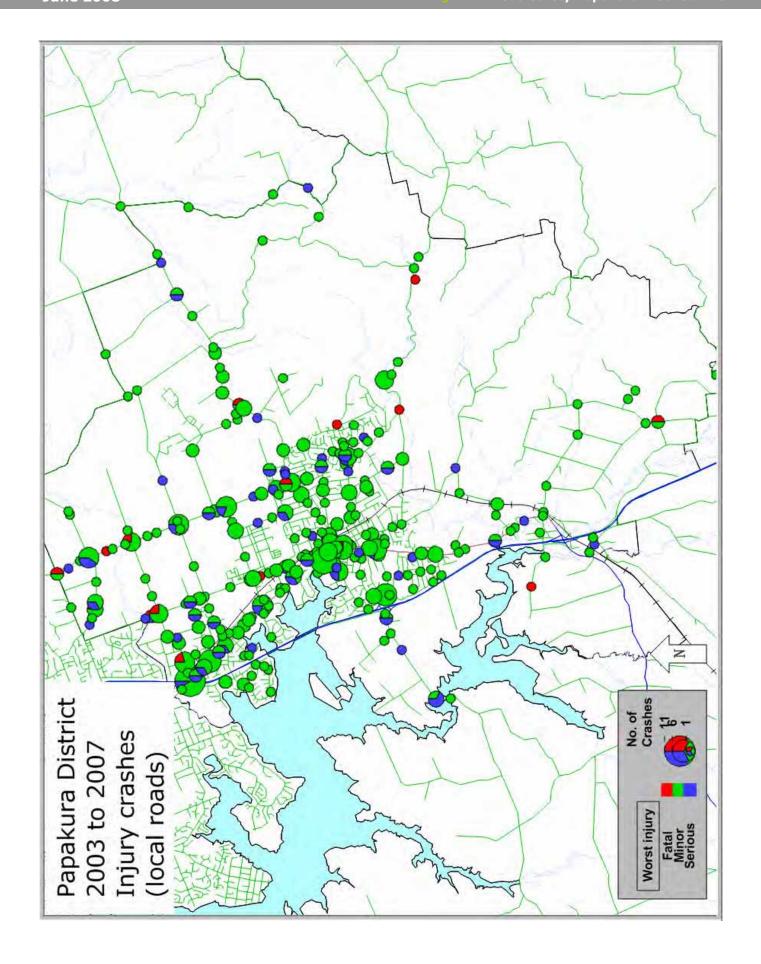
Local road crashes				
Crash type or contributory cause 2003 to 2007	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause		
Alcohol	28	21		
Too fast	27	17		
At bends	23	23		
At intersections	45	50		
Vulnerable road users (1-3 as below)	29	21		
1, Pedestrians	12	11		
2, Cyclists	9	5		
3, Motorcyclists	8	5		
Roadside hazard struck	49	40		
Road factors	12	9		
Night time	44	38		

Further information about 2003 to 2007 injury and non-injury crashes on local roads:

- Worst month May, best February
- Worst day Saturday, best Monday
- 25 percent on wet roads
- 34 percent at night
- 54 percent at intersections
- 58 percent of at fault drivers in injury crashes held a full New Zealand drivers licence
- Social cost of crashes in 2007, \$22.3 m

Further information about 2003 to 2007 injury and non-injury crashes on State Highways:

- Worst month April, best June
- Worst day Friday, best Wednesday
- 29 percent on wet roads
- 28 percent at night
- 27 percent at intersections
- 60 percent of at fault drivers in injury crashes held a full New Zealand drivers licence
- Social cost of crashes in 2007 \$14.7 m



Speed

Nationally, speed is one of the major contributing factors to road crashes. For the 12 months to the end of December 2007, excessive speed contributed to around 31 percent of fatal crashes and 16 percent of injury crashes.

During 2007, nationally there were 1,899 injury crashes where the driver was travelling too fast for the conditions.

Reducing speeds to appropriate levels 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 hazardous situations and it also leads to more serious injuries. Research has shown that a one km/h reduction in mean speeds can produce up to a three percent reduction in injury crashes.

In Papakura District, excessive speed was a factor in 18 percent of all local road injury crashes in 2007. There were 72 speed-related injury crashes reported in the last five years.

Males represented 73 percent of at fault drivers in speed related crashes.

Speed related injury crashes

Road type	2003	2004	2005	2006	2007
Urban	6	5	12	7	14
Rural	13	4	4	2	5
Total	19	9	16	9	19

Age and gender of at fault drivers (note: age ranges are not equal)

Drivers at fault in speed related injury crashes (2003- 2007)	Male	Female
15 - 19 years	16	7
20 - 24	15	3
25 - 29	6	0
30 - 39	8	2
40 - 49	3	3
50 - 59	3	3
60 - 69	2	1
70+	0	0
Total	53	19

The top six roads for speed related crashes ranked by social cost are as follows:

Speed related crashes by location

Road name	Social cost (million) 2003 - 2007
Hunua Road	\$7.5
Alfriston Road	\$4.8
Mill Road	\$4.3
Porchester Road	\$4.1
Ranfurly Road	\$3.8
Quarry Road	\$3.6

Further information about speed related injury crashes in Papakura District on local roads (2003 to 2007):

- 7 deaths, 23 serious injuries and 88 minor injuries
- Most common crash type, loss of control on a right hand curve
- 58 percent mid-block
- 43 percent wet road
- 47 percent night time
- Worst month November
- 48 percent occurred during the weekend
- Worst day of week Saturday, best Monday

Further information about speed related injury crashes in Papakura District on State Highways (2003 to 2007):

- 3 deaths, 4 serious injuries and 32 minor injuries
- Most common crash type, rear end collision with a queue of traffic
- 89 percent mid-block
- 44 percent wet road
- 33 percent night time
- Worst month February
- 41 percent occurred during the weekend
- Worst day of week Friday, best Wednesday

Intersections

During the five year period 2003 to 2007 there were a total of 987 crashes at intersections within Papakura District. Of these crashes, 91 percent occurred in urban areas. Intersections conflicts resulted in 222 injury crashes and 765 non-injury crashes.

In these 6 people were killed, 36 received serious injuries and 272 received minor injuries.

Crashes at intersections

Crash type	2003	2004	2005	2006	2007
Injury crash	34	49	38	49	52
Non- injury crash	132	128	163	178	164
Total	166	177	201	227	216

Locations with the most injury crashes

Intersection name (50 m Radius)	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total 2007
Great South Road / Spartan Road	44	10	11
East Street / Queen Street	22	8	3
Great South Road / Manuroa Road	21	6	4
Chichester Drive / Beach Road	18	6	2
Cosgrave Road / Walters Road	16	5	1

Junction type

Injury and non-injury crashes 2003-2007

Junction type	Rural	Urban
Roundabout	21	112
Tee	47	479
Cross (X)	18	247
Υ	5	9
Other (includes	2	47

The most common crash type at intersections is when a driver fails to stop or give way to another vehicle crossing at right angles.

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

- Failure to stop and / or give way
- Not checking adequately
- Being inattentive or attention being diverted
- Impaired by alcohol

Age and gender of at fault drivers (note: age ranges are not equal)

Drivers at fault in intersection related injury crashes (2003- 2007)	Male	Female
15 - 19 years	27	15
20 - 24	17	5
25 - 29	11	5
30 - 39	21	12
40 - 49	23	21
50 - 59	10	7
60 - 69	8	3
70+	8	3
Total	125	71

Further information about injury and non-injury crashes at intersections on local roads in Papakura District 2003 to 2007:

- 6 deaths and 36 serious injuries
- 19 percent injury crashes involved alcohol
- 25 percent wet roads
- 32 percent night time
- Worst month November, best February
- Worst day of week Friday, best Monday

Further information about injury and non-injury crashes at intersections on State Highways in Papakura District 2003 to 2007:

- 1 death and 7 serious injuries
- 7 percent injury crashes involved alcohol
- 28 percent wet roads
- 30 percent night time
- Worst month August, best December
- Worst day of week Friday, best Sunday

Night time crashes

The proportion of fatal and serious injury crashes occurring during the hours of darkness on local roads in Papakura District is higher than the New Zealand average.

Between 2003 and 2007 there were a total of 170 night time injury crashes and 456 non-injury crashes on local roads resulting in 7 fatalities, 33 serious injuries and 204 minor injuries.

Night time crashes on urban roads have generally increased between 2003 - 2007.

Night time crashes by road type Urban 79 94 110 118 119 Rural 28 23 14 23 18

Over half of the night time crashes (53 percent) occur during the weekend period when traffic volumes are generally less.

117

124

141

137

Total

107

The proportion of fatal and serious night time crashes occurring during the weekend is even higher (58 percent).

It is therefore important that appropriate enforcement resources are allocated during these less congested times.

Night time crashes by day of week

Worst injury	Weekend	Weekday
Fatal	5	2
Injury	92	71
Non-injury	237	219
Total	334	292

Younger drivers are highly represented in night times crashes on local roads in Papakura District.

Two factors can contribute to this:

- firstly younger people generally drive more at night
- secondly despite the fact that they see better at night than older drivers and have better glare recovery, they underestimate how difficult it can be to see traffic hazards at night.

Age and	gender	of at	fault	drivers
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Ages of drivers at fault in night time injury crashes	Male	Female
15- 19	36	17
20 - 24	28	3
25 - 29	10	5
30 - 39	18	5
40 - 49	10	9
50 - 59	4	3
60 - 69	3	1
70+	2	0
Total	111	43

Just over half of the night time crashes occur at intersections (51 percent).

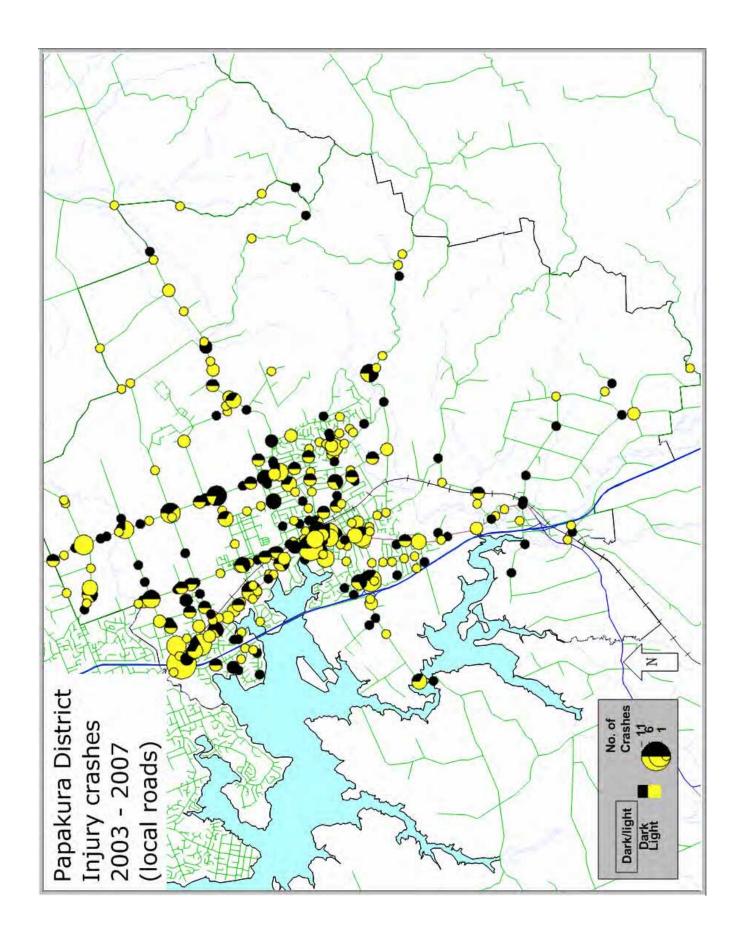
Half of the 106 rural night time crashes occurred on curves while in urban areas only 27 percent of the 520 crashes occurred on curves.

Further information about night time injury and non-injury crashes in Papakura District on local roads 2003 to 2007:

- Most common crash type was loss of control on a right hand curve
- 44 percent of injury crashes alcohol related
- 30 percent wet road
- 21 percent injury crashes speed related
- Worst month, May
- Worst day of week, Saturday

Further information about the 195 night time injury and non-injury crashes in Papakura District on State Highways 2003 to 2007:

- 3 deaths, 10 serious injuries and 63 minor injuries
- Most common crash type, rear end collision with a queue of traffic
- 19 percent of injury crashes alcohol related
- 34 percent wet road
- 17 percent injury crashes speed related
- Worst month July
- Worst day of week Friday



National issues

This section contains some brief information on the key national road safety issues as measured on local roads in Papakura District. They may have been covered elsewhere in this document or not be a specific issue.

Speed

'Too fast' was recorded in 17 percent of injury crashes in the District in the last five years resulting in 7 deaths and 111 other injures. Speed as a factor in crashes is not reducing in the District.

Seventy two percent of speed-related crashes were 'loss of control on bends'. Alcohol and poor handling were the other driver factors often associated with speed.

At fault male drivers aged less than 25 were the most highly represented in speed-related crashes.

Alcohol

Alcohol was involved in 28 percent of injury crashes in the District in the last five years resulting in 5 deaths and 122 other injuries. The number of injury crashes involving alcohol is not decreasing.

Most alcohol crashes were in the urban areas of the District.

Speed and poor handling were the other factors often associated with alcohol.

Failure to give way

Failure to give way or stop was reported in 33 percent of all reported injury crashes in the District for the last five years resulting in 4 deaths and 196 other injuries.

Forty five percent of crashes were on the major urban roads of the District.

Sixty two percent of at fault drivers were male.

Restraints

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a Regional Council Police District and local body level. The front seat belt wearing rate in Papakura District was 94 percent in 2007.

The results are obtainable from the Ministry of

The results are obtainable from the Ministry of Transport website:

http://www.transport.govt.nz/assets/NewPDFs/ Front-seatbelt-survey-results-2007.pdf

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