

# Land Transport NZ Ikiiki Whenua Aotearoa 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 2000–2004 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 Papakura District.

This is the sixth road safety issues report for the Papakura District. All the data in this report applies only to local roads and not to any state highway within the Papakura District. These are covered in separate Auckland state highways and Auckland motorways reports.

In each new report the current year's data is added to a five-year block and the oldest dropped, so it is unlikely that the core issues for any local body would change radically from report to report.

The issues chosen for this report are drawn from either the most common crash types or those that appear over-represented when the Papakura District is compared with similar local bodies.

A brief overview of crashes in the district for 2004 has been included.

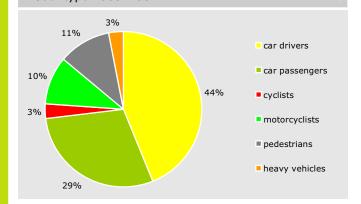
 Major road safety issues
Papakura District
Intersections
Wet road crashes
Crashes at night (urban)
Nationally
Speed
Alcohol
Failure to give way
Restraints

## $\mathbf{\Phi}$

#### 2004 road trauma for Papakura District

¥	Deaths Serious casualties Minor casualties	1 7 110
<b>—</b>	Fatal crashes Serious injury crashes Minor injury crashes Non-injury crashes	1 7 84 272

#### Fatal and serious casualties User type 2000–2004



#### Estimated social cost of crashes\* Social cost (\$ million)



\*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are expressed at June 2004 prices.

## **Overview of 2004**

In 2004, there were a total of 364 crashes on local roads reported by the New Zealand Police in the Papakura District. This included one fatal crash, seven serious crashes, 84 minor crashes and 272 non-injury crashes.

The table below indicates which road users were injured and how the Papakura District compares with similar local bodies.

	Fatal	Serious	Minor	%	similar local bodies
Driver	0	2	73	73%	52.2%
Passenger	1	2	23	23%	18.5%
Motorcyclist	0	0	3	3%	6%
Pedestrian	0	1	6	6.4%	11.4%
Cyclist	0	2	5	6.4%	11.7%

Within the Papakura District, injuries to drivers and their passengers is currently the most significant issue and addressing this will be crucial to reducing roadrelated trauma in the district. Nevertheless, pedestrian and cycling issues are a regional focus and increasing the use of these modes of travel is fundamental to achieving the objectives of the *New Zealand Transport Strategy*.

Useful links are:

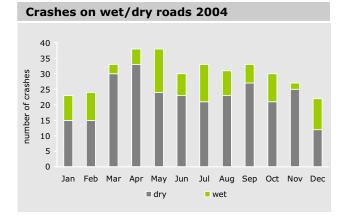
www.beehive.govt.nz/nzts/home.cfm

www.transport.govt.nz/business/land/gettingthere/strategy-0.php

Over half of the injury crashes in 2004 occurred at intersections. Intersection crashes remain an ongoing concern in the district.

Since 1997, there has been a general upward trend in the proportion of crashes occurring on wet roads, with 26 percent in 2004.

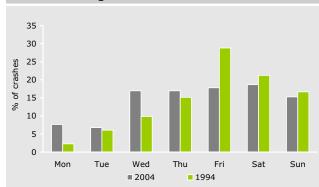
The same trend has been noted in similar local bodies but not across all local roads in New Zealand.



In 2004, 37 percent of injury crashes occurred at night and since 2001, the Papakura District has been consistently above both peer and national groups in the percentage of crashes occurring at night. It is quite interesting to note the shift in crash distribution compared with a decade ago. In 1994 there was a very strong bias to night-time crashes occurring on Friday through to Sunday, while in 2004 night-time crashes were more evenly spread through the week.

This shift in crash patterns is reflected across all urban areas in New Zealand and enforcement interventions (in particular) need to reflect this.

#### Crashes at night 1994 and 2004

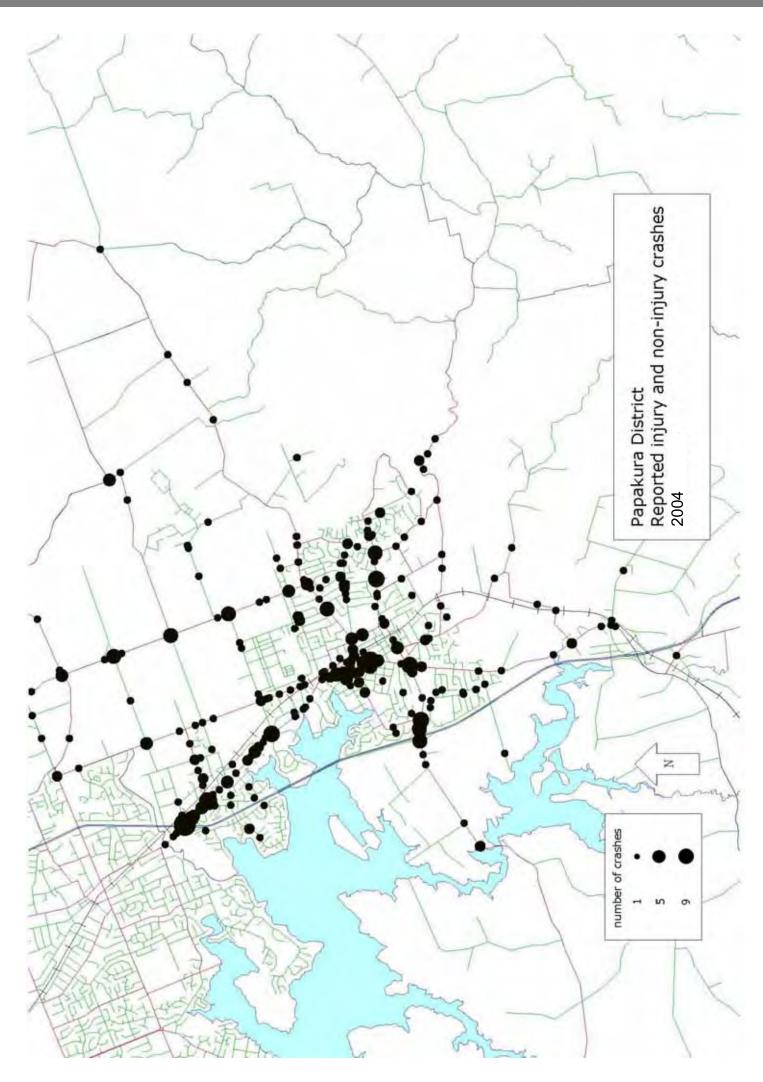


Last year, 53 percent of drivers involved in injury crashes in the Papakura District were residents of Papakura. An additional 42 percent lived nearby in Manukau City and Franklin District, giving a total of 95 percent of drivers in injury crashes that could be reasonably classified as 'locals'. This suggests that media campaigns utilising suburban newspapers are likely to reach most at-risk drivers.

As a high proportion of crashes in the Papakura District occurred at intersections, most of the contributing factors identified by the Police related to failure to stop or give way, not checking correctly and general driver errors. Alcohol continued to play a significant role in crashes, with 23 percent of crashes either proven or thought to have alcohol as a contributor for a driver or pedestrian.

A very significant proportion of the crashes involved either drivers who should not have been behind the wheel or inexperienced drivers.

Driver licence status (injury crashes)	Number of drivers	% of total
Disqualified	3	1.8%
Forbidden	3	1.8%
Full	78	47.6%
Learner	17	10.4%
Overseas	2	1.2%
Restricted	29	17.7%
Never licensed	5	3.0%
Unknown	27	16.5%

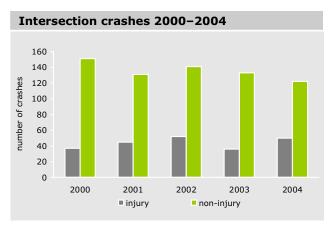


### Intersections

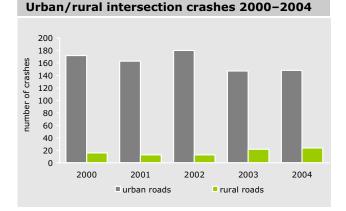
Last year, 172 crashes were reported at intersections in the Papakura District. Fifty of these involved injuries and 122 were classified as non-injury.

In 2004, one person died, five received serious injuries and 64 sustained minor injuries in intersection crashes.

In the five-year period 2000–2004, four people died, 36 received serious injuries and 283 received minor injuries.



Urban intersection crashes dominated the total picture. However, in a continuation of the trend noted last year, there was a general decrease in the number of crashes occurring in urban areas and an increase in rural areas.



Crashes at T junctions in urban areas were the most common type of intersection crash reported, followed by crashes at urban crossroads.

Junction type	Rural	Urban
Roundabout	18	83
T junction	39	408
Crossroad	23	245
Y junction	4	14
Other (include driveways)	4	25

Since 1997, the percentage of urban crashes in the Papakura District where failure to stop or give way was listed as the contributory cause has consistently remained above both peer group and national values.

In 2004, the Papakura District Council undertook a crash reduction study, which identified and studied in detail a number of the more problematic intersections in the district. Great South Road in particular, with its high volumes of traffic, featured prominently in this study.

While the Police commonly reported a driver fault as the cause of an intersection crash, crash reduction studies (and the 2004 study is no exception) often identify less obvious potential crash contributors. Worn markings, signs hidden by vegetation, poor sight lines across approaching legs at intersections and poor street lighting were all identified in this study.

The Papakura District is not alone in uncovering these types of problems during a crash reduction study and implementing remedial measures at the identified sites as soon as practicable is encouraged.

The Papakura District Council has recently agreed to implement a safety management system (SMS), which it is hoped will put in place a formalised process for identifying below-acceptable standard signs and markings and for undertaking remedial work. Further information about SMSs can be found at:

www.landtransport.govt.nz/roads/sms/index.html

Analysis of the 2004 injury and non-injury intersection crash data showed:

- the worst month was April (20 crashes) and the best was January (8 crashes)
- the worst days of the week were Thursday and Friday (29 crashes each) and the best days were Sunday and Tuesday (19 crashes each)
- 31 percent occurred during the weekend
- 27 percent occurred in wet conditions
- 30 percent happened at night
- 86 percent occurred in urban areas
- the most common crash type was a right turning vehicle being hit by an approaching through-traffic vehicle and the second most common was a right angle crash, typically found at crossroads.

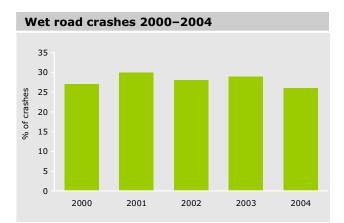
Additional information relating to 2004 injury-only intersection crashes showed:

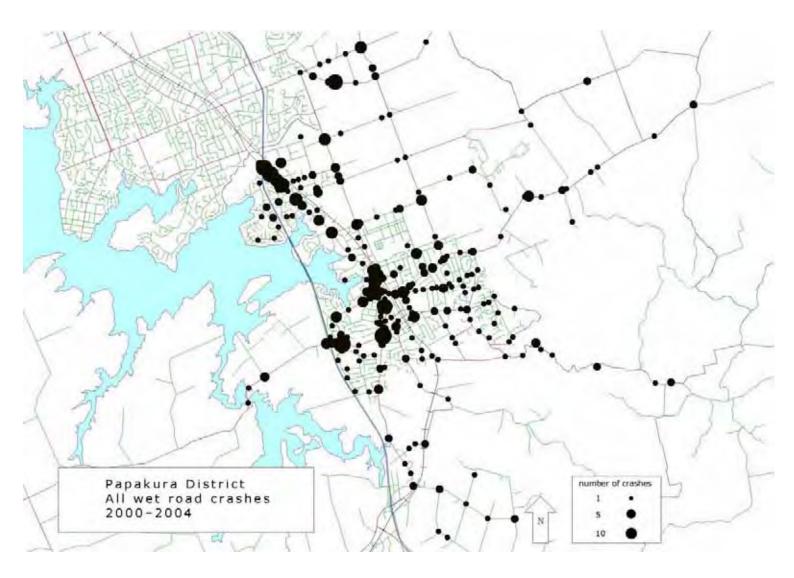
- 13 percent (at least) of vehicles had no warrant of fitness (WoF)
- of the 93 vehicles involved, 41 received extensive damage
- over 60 percent of drivers were male
- nine percent of crashes involved alcohol
- driver error accounted for approximately 90 percent of crashes.

#### Wet road crashes

Since 1999, with the exception of 2001 (urban) and 2003 (rural), the percentage of crashes occurring in wet conditions in the Papakura District has been higher than might be expected when the district is compared with peer group local bodies and all of New Zealand. This is most notable in urban crashes, and in four of the past six years, rates of wet road crashes have been between six and 13 percent higher than peer group local bodies.

Wet road crashes were slightly more frequent at intersections than at mid-block locations, but the difference was not large. Both urban and rural areas recorded similar numbers of crashes in wet conditions, at around 36 percent.





Locations of wet road crashes from 2000 to 2004 are illustrated on the map, however some key locations which had crash concentrations are:

Great South Rd between Taka St and Spartan Rd

Great South Rd between Coles Cres and Queen St Beach Rd between Elliot St and the north-bound motorway on ramp

Alfriston Rd between Wastney and Ranfurly Rds

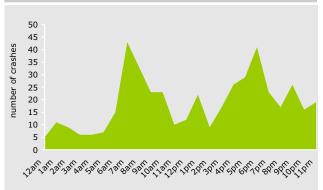
- Great South and Beach Rds
- East and Wood Sts
- Clevedon and Marne Rds

Walters and Great South Rds

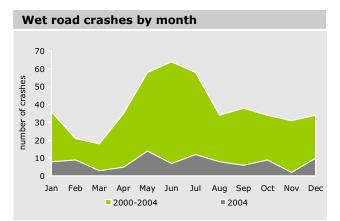
Porchester and Popes Rds

Hunua Rd from 900 to 1,400 m east of Dominion Rd

#### Wet road crashes by hour 2000-2004



A slightly higher proportion of wet road crashes occurred at night than during the day, with marked increases around the morning and evening peak hours.



The distribution of wet road crashes throughout the year was a little different in 2004 compared with the five-year period 2000–2004.

Driver licence status (wet road injury crashes 2004)	Number of drivers	Percentage of total
Forbidden	1	2.3%
Full	19	43.2%
Learner	8	18.2%
Overseas	1	2.3%
Restricted	9	20.5%
Unknown	6	13.5%

Alcohol or speed or both were a factor in around 18 percent of wet road injury crashes from 2000 to 2004. In addition, in 10 percent of crashes the Police Officer commented on how slippery the roads were. (Note: the crash analysis system does not assume that a wet road is necessarily slippery.)

Analysis of the 2004 injury and non-injury wet road crashes showed:

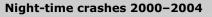
- the worst day of the week was Wednesday (18 crashes), the best was Tuesday (eight crashes)
- the worst month was May (14 crashes) and the best was November (two crashes)
- there were 25 injury and 68 non-injury crashes
- there were 74 urban (16 injury) and 19 rural (nine injury) crashes
- 37 occurred in the dark (40 percent)
- 59 occurred on straight roads and 34 on corners (seven with existing advisory speed signs)
- 46 occurred at intersections (50 percent)
- loss of control turning right was the most common crash type.

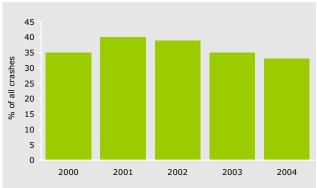
Wet road injury crash data for 2004 also recorded:

- 36 cars and five vans and SUV's (large 4x4s) were involved
- one fatality, one serious injury and 28 minor injuries
- three pedestrians injured (aged 13, 41 and 76)
- 12 female drivers and 10 male.

### Crashes at night (urban)

Since 2001, the proportion of crashes occurring during the hours of darkness in urban areas has been consistently higher than might be expected when the Papakura District is compared with both peer group and all New Zealand values. In rural areas during the same period, the Papakura District has recorded either the same or higher values than peer group authorities or all of New Zealand.

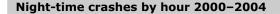


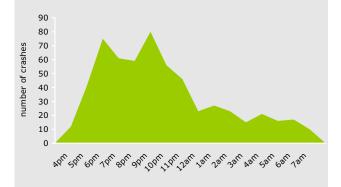


From 2000 to 2004 there were a total of 598 nighttime crashes (148 injury crashes and 450 non-injury crashes) resulting in six fatalities, 39 serious injuries and 175 minor injuries.

During this period, 18 locations recorded six or more crashes during the hours of darkness. The top five of these were:

Location	Crashes
Beach, Elliot and Chichester Rds	12
Great South, Beach and Settlement Rds	12
Great South Rd, Taka St and Walter Strevens Dr	11
Cosgrave, Walters and Mill Rds	11
Grove and Old Wairoa Rds	10





Twenty-six percent of night-time crashes in the Papakura District occurred between midnight and 7 am. During this late period, 75 percent of drivers involved in injury crashes were aged 34 or less and 45 percent were 24 years old or less. These late night/early morning crashes were concentrated north of the town centre especially at the intersections of:

- Great South, Inlet and Walters Roads
- Porchester and Walters Roads
- Porchester Road, Manuroa Road and Berwyn Avenue.

The table below lists the driver licence status of at-fault drivers involved in night-time crashes between 2000 and 2004, as well as the licence status of drivers where alcohol levels tested over the limit in these crashes.

At-fault driver licence status (injury crashes)	At-fault drivers	Alcohol tested above limit
Disqualified	8.2%	21.7%
Expired	1.6%	8.7%
Forbidden	1.6%	8.7%
Full	42.1%	30.4%
Learner	12.4%	4.3%
Overseas	1.6%	4.3%
Restricted	27.3%	21.7%
Never licensed	5.0%	0%

As alcohol or drugs were represented (even if not over the limit) in almost 40 percent of injury crashes at night, the associated driver licence status clearly points to the potentially lethal combination of inexperience, night driving and alcohol.

Additional information from 2004 injury and noninjury night-time road crash data showed:

- there were 34 injury and 84 non-injury crashes
- the worst month was May (20 crashes) and the best was November (two crashes)
- the worst day was Saturday (22 crashes) and the best was Tuesday (eight crashes)
- the highest number of crashes occurred between 11 pm and midnight (21 crashes)
- 66 percent of crashes involved more than one vehicle
- 32 percent occurred in wet conditions
- 44 percent occurred at intersections
- 16 parked vehicles, 19 fences and nine poles were hit.

Night-time injury-only crashes in 2004 included:

- one fatality, two serious injuries and 41 minor injuries sustained
- at least 30 percent of vehicles with no WoF
- 29 vehicles with extensive damage
- 44 percent with some mention of alcohol or drugs including 24 percent returning positive breath or blood tests
- all positive alcohol results were well over the blood or breath limits, with 63 percent of positive result drivers registering almost three times the legal limit.

# Road safety initiatives in the Papakura District

The Papakura District Council takes a proactive approach to road safety and projects are underway which will undoubtedly address many of the issues highlighted in this and previous reports. The following is a selection of some of the projects underway.

All fatal crashes are thoroughly investigated by suitably qualified engineering consultants to consider what, if any, engineering measures might assist in reducing crashes and injury severity at the site in the future.

A speed limit savings bylaw was passed by the Papakura District Council in December 2004. A speed limit review is being conducted district-wide and speed limits will be amended where warranted.

The Papakura District Council is in constant liaison with the Police on the subject of speeding and alcohol enforcement (and other road safety issues) via the six-weekly Papakura Police liaison meetings.

The district's walking and cycling strategy is almost complete and will be released for public consultation in late 2005.

The Papakura District Council is improving street lighting and correcting deficiencies throughout the district, particularly at critical rural junctions.

The Papakura District Council is developing a safety management system (SMS). The initial meetings and discussions were held in early 2005 and it is anticipated that the operational version of the SMS will be completed by late 2005.

The road safety co-ordinator in the Papakura District has a number of education projects planned for 2005/06 including child restraints, intersection safety, speed, designated drivers, cycle safety, Safe with Age and pedestrian safety. Community groups funded by the Community Road Safety Programme will be focusing on road safety decision-making, unlicensed drivers, youth (speed and safe driving choices), Asian migrant road safety and child restraints for Pacific Island families.

Level-crossing study – long-term improvement including grade separation or closures of some crossings will continue to be investigated in two integrated projects. The level-crossing study will consider safety aspects and the transportation study will consider the wider implications of likely delays for all road users resulting from the increase in train frequency and population growth in the district.

### **Road environment**

The Land Transport New Zealand crash reduction monitoring database shows that works implemented as a result of crash reduction studies have reduced crashes at the study sites by 34 percent in the Papakura District. Recommendations from recent studies should be implemented as soon as possible. Analysis of the crashes at all completed sites should be undertaken regularly to ensure that safety has been improved and sites re-examined if no improvement has occurred. Further crash reduction studies should be undertaken to continue the reduction of crashes.

#### Where to get more information

For more specific information relating to road crashes in the Papakura District, please refer to the 2000 to 2004 road safety data report, the Land Transport New Zealand crash analysis system or contact the office listed below.

#### Contacts

Land Transport New Zealand

Partnership Manager Northern Peter Kippenberger See contact details at bottom of the page.

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