

# briefing notes road safety issues

# Palmerston North City

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2002–2006 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 Palmerston North City.

This report is the eighth road safety report for Palmerston North City. Most of the data in this report applies to both local roads and state highways. Where relevant, the details of crashes on the local roads and state highways are discussed separately.

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 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, those that appear over-represented when Palmerston North City is compared to national average or similar local authorities or those with high social cost (mainly high numbers of fatal and serious crashes).

We have included a brief overview of crashes in the City for 2006.

# Major road safety issues2006 road traumaPalmerston North CityCasualtiesVulnerable road usersDeaths3IntersectionsSerious casualties37Loss of Control on BendsMinor casualties198

Nationally	Crashes	
Speed	Fatal crashes	3
Alcohol	Serious injury crashes	32
Failure to give way	Minor injury crashes	154
Restraints	Non injury crashes	477

### Overview of crashes in 2006

In 2006 on local roads in Palmerston North City there were 151 injury crashes and 394 non-injury crashes. In addition there were 38 injury crashes and 83 non-injury crashes on State Highways, as reported by the New Zealand Police.

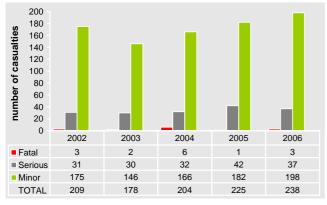
The table below shows the number of injuries in 2006 separated into rural and urban areas for both local roads and state highways (rural is defined as an area with a speed limit of 80km/h or more).

	Casualties in 2006			
	Fatalities	Serious injuries	Minor injuries	Total
Rural	2	14	44	60
Urban	1	23	154	178
Total	3	37	198	238

It should be noted that 13 out of 37 serious injuries (35 percent) in 2006 were sustained by vulnerable road users (pedestrians, cyclists and motorcyclists).

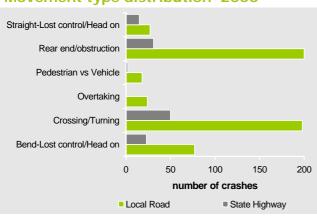
The number of casualties in 2006 was the highest in the last five years.

### Casualties trend 2002-2006



The following chart shows the distribution of the injury and non-injury crashes on local roads and state highways in 2006 by movement category.

### Movement type distribution 2006



Further information about 2006 injury and non-injury crashes on:

### Local roads

- Worst month March (12 percent), best month January (6 percent)
- Worst day Friday (19 percent), best day Sunday (8 percent)
- Wet road 22 percent
- Night time 27 percent
- Intersection 57 percent
- At fault male driver (injury crashes) 53 percent
- Full NZ licence (injury crashes) 51 percent of at fault drivers

### State highways

- Worst month September (14 percent), best month October (4 percent)
- Worst day Friday (24 percent), best day Sunday (9 percent)
- Wet road 27 percent
- Night time 31 percent
- Intersection 54 percent
- At fault male driver (injury crashes) 63 percent
- Full NZ licence (injury crashes) 69 percent of at fault drivers

It has been observed nationally that there is a growing group of drivers who have not been exiting the graduated licence system and who are choosing to stay on restricted licences. This is making it increasingly difficult to distinguish drivers who are truly inexperienced from those that should have moved to a full licence. As a consequence it is more difficult to target educational material.

During 2006 in Palmerston North City over a third (35 percent) of all at fault drivers in injury crashes hold either a learner or restricted driving licence, or have never been licensed.

Licence status	Injury crashes percentage of at fault drivers		
	Palmerston North City	New Zealand	
Full	54.9	58.4	
Learner	11.4	9.5	
Restricted	20.6	17.6	
Never licensed	3.4	2.2	
Disqualified	1.1	1.7	
Overseas	1.1	4.2	
Expired	0.6	0.5	
Other/unknown	6.9	5.6	

### Vulnerable road users

Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries.

On 24 February 2005, the Government launched *Getting there - on foot, by cycle*, its strategy to advance walking and cycling in New Zealand transport.

Getting there - on foot, by cycle aims to improve environments for walking and cycling, improve safety for pedestrians and cyclists, and increase the choice of walking and cycling for day-to-day travel.

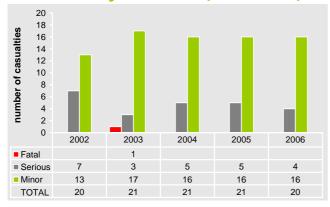
As a result Land Transport NZ expects local bodies to take a proactive approach to this subject. This should include the development of a walking and cycling strategy and making appropriate funding applications to progress that strategy.

It is vitally important to recognise that promotion alone of cycling and walking is not going to be effective at increasing their mode share unless they can be made safer.

### **Pedestrians**

Pedestrian injuries feature highly in the total road injury picture in Palmerston North City, representing 10 percent of all casualties in the last five years. They account for 13 percent of all fatal and serious injuries and 7 percent of all fatalities.

### Pedestrian injuries trend (2002 -2006)



Most (97 percent) pedestrian crashes occurred on urban roads, 70 percent occurred away from intersections and 31 percent occurred during hours of darkness.

A significant number of pedestrian crashes involved younger people crossing the road. More than half (54 percent) of pedestrians injured are under the age of 24 years. Forty-one percent of pedestrians injured during this five-year period were between 5 and 19 years of age. Young people under 15 years of age constitute over a quarter (27 percent) of the pedestrians injured in crashes between 2002 and 2006.

### Pedestrian injuries by age 2002 -2006



The recent decision by Police to enforce a lower speed tolerance around schools is a strong step in creating a safer lower speed environment for young pedestrians.

Following are the non driver crash factors involved in pedestrian crashes:

- 43 percent involved pedestrians *crossing roads* heedless of traffic
- 5 percent involves pedestrians stepping out from behind a parked vehicle
- 16 percent of pedestrians were *visibly intoxicated*
- 10 percent involved pedestrians crossing road without following traffic signal or failing to use a pedestrian crossing (within 20 metres)

Further information regarding 2002 -2006 pedestrian injury crashes:

### Local roads

- The most common crash type was for a pedestrian crossing the road being hit by a driver approaching from their right (34 percent). The second most common crash type was pedestrian crossing the road and being hit by a driver approaching for the left (27 percent)
- 1 death, 19 serious injuries and 66 minor injuries
- Worst day of week Thursday (22 percent), best day Tuesday (7 percent)
- Number of at fault drivers—60

- The most common crash type was for a pedestrian crossing the road being hit by a driver approaching from their left (36 percent). The second most common crash type was crossing the road and being hit by a driver approaching for the right (18 percent)
- 3 serious injuries and 8 minor injuries
- Worst day of week Monday (55 percent), best days Friday and Saturday (none)
- Number of at fault drivers in injury crashes 5

## Cyclists

Between 2002 and 2006 cyclists accounted for 13 percent of all casualties in Palmerston North City and 11 percent of all fatal and serious injuries. Most (93 percent) cycling crashes occurred on urban roads, 66 percent at intersections and 90 percent during daylight hours.

### Cyclist injuries trend (2002 -2006)



During 2006 more cycles than cars were imported into New Zealand. It is certainly noticeable in many areas across the country that there are many more cyclists using the roads than in past years. Consequently the number of casualties have been found to be increasing.

Cyclist injuries are not spread evenly across all age distributions as shown in the chart below. Approximately a half of all the injured cyclist were aged between 10-24 years, and the 15-19 years age group accounted for 20 percent of all injuries.

### Cyclist casualties by age in 2002 -2006



Further information regarding 2002 to 2006 cycling crashes between 2002 and 2006:

### Local roads

- 1 death, 13 serious injuries and 100 minor injuries
- The most common crash type was a crossing or turning movement. The next most common crash type was rear end or overtaking types
- 90 percent at intersections
- 11 percent at night time
- Worst month March (17 percent), best month June (5 percent)
- Worst days of the week Wednesday and Friday (21 percent), best day Sunday (5 percent)
- 6 percent of crashes involving riding on the footpath
- 63 percent of cyclists injured were male
- The most common factors are failing to give way and did not see or look for other party until too late

- 6 serious injuries and 13 minor injuries
- The most common crash type was a crossing or turning movement. The second most common crash was rear end types
- 61 percent were at intersections
- 9 percent at night time
- Worst month was March (26 percent), best months May and September (none)
- Worst day of the week Wednesday (23 percent)
- 67 percent of cyclists injured were male
- The most common factors were failing to give way and/or did not see or look for other party until too late

# Motorcyclists

Motorcyclist injuries in Palmerston North City represent 10 percent of all injuries and also make up 12 percent of all fatal and serious injuries. Total injuries and serious injuries have been remaining fairly constant year to year.

Nationally motorcycling fatalities dropped from a high of 20 percent of all fatalities in 1988 to just six percent in 2003. Since then there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2006 motorcyclists accounted for 9.5 percent of road fatalities in New Zealand.

In Palmerston North City, 92 percent of motorcycling crashes occurred on urban roads, and half the crashes were at intersections.

### Motorcyclist injuries trend (2002 -2006)



Almost half (47 percent) of motorcycle casualties were in the 15-24 year age group, the majority of which were males.

### Motorcyclist injuries by age in 2002 -2006



Further information regarding 2002 to 2006 motorcycling crashes:

### Local roads

- 1 death, 19 serious injuries and 65 minor injuries
- The most common crash type was a crossing or turning movement (46 percent). The second most common crash type was rear end/ obstruction (21 percent) followed by loss of control at bend (14 percent)
- 53 percent at intersections
- 18 percent at night time
- 14 percent on the wet roads
- Worst month October (12 percent), best months June and November (4 percent each)
- Worst day of week Friday (21 percent), best day Wednesday (8 percent)
- 71 percent of motorcyclists injured were male
- 8 percent of crashes involved road factors which were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance

- 3 serious injuries and 7 minor injuries
- The most common crash type was rear end/ obstructions (50 percent). The second most common crash type was crossing/turning crashes (38 percent) followed by bend - loss of control (12 percent)
- 44 percent at intersections
- 31 percent at night time
- 19 percent on the wet roads
- Worst month August (19 percent ), best month November (none)
- Worst day of the week Friday (38 percent), best day Monday (10 percent)
- 45 percent of motorcyclists injured were male
- 19 percent of crashes involving road factors which were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance

### Intersections

Crashes at intersections are the most common type of crash in Palmerston North City with 248 reported crashes during 2006. These resulted in 1 death, 25 serious injuries and 123 minor injuries.

During the five year period from 2002 to 2006 there were 1816 *intersection* crashes resulting in 3 fatal, 61 serious and 379 minor injury crashes. There were 4 deaths, 69 serious injuries and 484 minor injuries as a result of these crashes. Almost half (48 percent) involved *poor observation*.

Poor observation includes not only failing to look for or see other road users but also being distracted and not seeing other road user until too late.

### Injury trend 2002-2006



The table below shows the location of the five intersections with the highest number of crashes between 2002 and 2006.

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
No.1 Line / Longburn Ron- gotea Rd	8	4 (2 fatal 3 serious)	3
Ruahine St / Ferguson St	15	4 (3 serious)	4
Ferguson St / Fitzhertbert Ave	31	8 (1 fatal)	6
Cook St/ Fergu- son St	45	10 (2 serious)	12
Main St and Cook St	49	13	11

Failure to give way is the most common factor in the intersection crashes in the city.

Crashes at cross (x) roads in urban areas are the most common type of intersection crash reported where the vehicles were *crossing/turning*, followed by T-junction crashes in *urban* areas as shown in the following table.

Junction Type	Rural	Urban
T—junction	33	250
Driveways	15	163
Crossroads (X)	36	653
Y—junction	4	4
Roundabout	0	93
Multi Rd Join	0	2
Unknown	2	11

The following table lists the licence status of at fault drivers in *intersection* crashes.

Licence status	Injury crashes percentage of at fault or part fault drivers		
	Palmerston North City	New Zealand	
Full	61.6	65.3	
Learner	10.7	7.9	
Restricted	14.2	13.8	
Never licensed	2.5	1.6	
Disqualified	2.1	0.9	
Overseas	4.1	4.3	
Expired	0.9	0.8	
Other/unknown	3.9	5.4	

Further facts about *intersection* crashes in Palmerston North City 2002 to 2006:

### Local roads

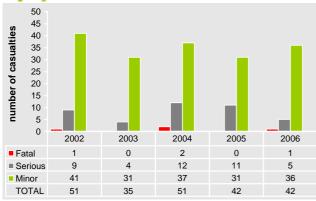
- 4 deaths, 53 serious injuries and 396 minor injuries
- Male driver at fault in injury crashes 60 percent
- Most common crash factor is failing to give way
- 10 percent alcohol over limit in injury crashes
- 96 percent on urban roads
- 21 percent on wet roads
- 28 percent at night time
- Worst month May (10percent)
- Worst day of week Friday (18 percent), best day Sunday (10 percent)

- 16 serious injuries and 88 minor injuries
- Male driver at fault in injury crashes 55 percent
- Most common crash factor is failing to give way
- 5 percent alcohol over limit in injury crashes
- 76 percent on urban roads
- 25 percent on wet roads
- 28 percent at night time
- Worst month September (11 percent)
- Worst day of week Friday (21 percent), best day Sunday (8 percent)

### Loss of control on bends

Between 2002 and 2006, 16 percent of all crashes in Palmerston North City occurred at bends. These crashes resulted in 4 fatalities, 41 serious injuries and 176 minor injuries. There were also 379 non-injury crashes reported.

Injury crashes at bends 2002-2006



Most crashes at bends involved a driver losing control of their vehicle and either running off the road or colliding with another vehicle.

After drivers lose control their vehicles often crash into roadside hazards such as ditches, banks, poles or trees. Hitting these objects can result in a relatively minor off-road event turning into something far more serious.

The most common roadside hazards struck during crashes in Palmerston North City were fences (157), trees (72), Poles (55) and ditches (52) out of a total of 623 reported objects struck.

The following table lists the main characteristics related to Loss of control crashes on bends in Palmerston North City.

Crash characteristic	
Single vehicle	78 percent
Roadside object struck	81 percent (623 in Total)
Alcohol (injury crashes)	32 percent
Too fast for the conditions (injury crashes)	51 percent
Road factors	15 percent
Poor handling (injury crashes)	40 percent
Rural road	35 percent
Wet road	33 percent
Night time	51 percent

The percentage of at fault or part fault drivers with learner and restricted license involved in injury crashes in Palmerston North City is higher than the national average.

Licence Status	Injury crashes—percentage of at fault or part fault drivers		
	Palmerston North City	New Zealand	
Full	45.3	51.1	
Learner	14.0	10.7	
Restricted	26.0	17.9	
Never Licensed	6.7	4.1	
Disqualified	2.0	2.8	
Overseas	1.3	5.6	
Expired	1.3	0.9	
Unknown	3.3	6.8	

Further information about loss of control crashes on bends in Palmerston North City (2002—2006):

### Local roads

- 3 deaths, 31 serious injuries and 139 minor injuries
- Male drivers at fault in 72 percent of injury crashes
- Most common injury crash factor—excessive speed
- Most common age group drivers 15-19 year olds
- 37 percent drivers over alcohol limit in injury crashes
- Worst month March (10 percent), best month February (7 percent)
- Worst day of week Thursday (19 percent), best day Monday (8 percent)

- 1 death, 10 serious injuries and 37 minor injuries
- Male drivers at fault in 68 percent of injury crashes
- Most common crash factor poor handling
- Most common age group of drivers 20-24 years
- 14 percent drivers over alcohol limit in injury crashes
- Worst months June and September (12 percent), best month July (4 percent)
- Worst day of week Sunday (18 percent), best day Tuesday (10 percent)

### **National issues**

### **Speed**

Speed *too fast* for the conditions was recorded in 17 percent of all nationally reported injury crashes in the last five years. In Palmerston North City, this factor was recorded in 14 percent of injury crashes, resulting in 6 deaths, 37 serous and 128 minor injures. There were also 241 speed-related noninjury crashes. Speed as a factor in crashes is not reducing in the region.

Sixty-eight percent of speed-related injury crashes were *bend-lost control/head on*. Male drivers aged less than 25 years were overly represented in speed related crashes.

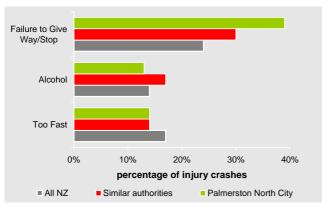
### **Alcohol**

Alcohol was involved in 14 percent of all nationally reported injury crashes in the last five years. In Palmerston North City, alcohol was involved in 13 percent of injury crashes during this period resulting in 3 deaths, 39 serious injuries and 84 minor injuries. The number of injury crashes involving alcohol is not reducing in the region.

Eighty-four percent of alcohol related crashes were in urban areas. Half (almost 50 percent) of alcohol related crashes were loss of control at bends.

### Failure to give way

Failure to give way or stop was reported in 24 percent of all nationally reported injury crashes for the last five years. In Palmerston North City, this factor was recorded in 39 percent of injury crashes during this period, resulting in 3 deaths and 58 serious and 372 minor injuries. There were also 950 non-injury crashes reported with failure to give way factor. Ninety-four percent of the crashes were in urban areas of the region.



### Restraints

The Ministry of Transport conducts surveys of restrain use. The results of these surveys are at a regional level, and may not be fully appropriate to a Territorial Authority. The results are obtainable from the Ministry of Transport website.

http://www.transport.govt.nz/belts-index/

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