



# Land Transport NZ Ikiiki Whenua Aotearoa 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 2001–2005 period. The intent of the report is to highlight the key road safety issues in Palmerston North City.

In 2005, 226 people were killed or injured on the road network in Palmerston North City. This was the highest annual number of deaths and injuries over this five-year period and the 42 serious casualties were also the highest for this five-year period. However, the one fatality was the lowest recorded for the last 25 years.

Between 2001 and 2005, car occupants were the largest casualty group, accounting for twothirds of all casualties in Palmerston North City. Fifteen percent of urban casualties were cyclists, 14 percent were pedestrians and 11 percent were motorcyclists.

Twenty percent of urban and 27 percent of rural injury crashes involved drivers with a learner or restricted licence. Crashes involving crossing and turning movements comprised 37 percent of all injury crashes. Between 2001 and 2005, 51 percent of injury crashes occurred at intersections.

The estimated social cost of crashes in Palmerston North City in 2005 was \$47 million. Both national and local road safety issues are identified below. Specific issues relating to Palmerston North City are considered overleaf. National issues are discussed on the back page.

#### Major road safety issues

#### Palmerston North City

Intersections Loss of control on bends Vulnerable road users

Nationally

Speed

Alcohol Failure to give way

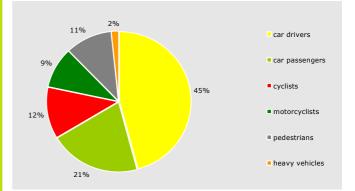
Restraints

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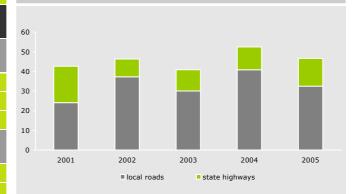
2005 road trauma for Palmerston North City

¥	Deaths Serious casualties Minor casualties	1 42 183
<b>—</b>	Fatal crashes Serious injury crashes Minor injury crashes Non-injury crashes	1 37 145 531

#### Road casualties 2001–2005 User type 2001–2005



#### 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 2005 prices.

## Intersections

Between 2001 and 2005, there were 394 injury crashes (or 51 percent of all injury crashes) at intersections in Palmerston North City. An additional 74 injury crashes (or 10 percent) occurred at private driveways and accesses.

Crashes at intersections and driveways made up 72 percent of all urban injury crashes and 35 percent of all rural injury crashes in Palmerston North City between 2001 and 2005.

On average, there were 94 injury crashes a year at intersections and driveways during this five-year period resulting in a total of seven deaths, 71 serious injuries and 504 minor injuries.



The main types of intersection crashes involved a collision between vehicles making either a crossing or turning movement (63 percent), a vehicle losing control on a bend (11 percent) or a vehicle being hit from behind, for example, when in a queue while waiting to pass through an intersection (10 percent of intersection crashes).

Forty-five percent of all intersection crashes between 2001 and 2005 occurred at crossroads, 41 percent at a T junction and 10 percent at roundabouts. Forty-six percent of the intersections were recorded as having Give Way signs and markings, 19 percent had Stop signs and markings and 20 percent had traffic signals.

Thirty-one percent of all road users injured at intersection crashes were pedestrians, cyclists or motorcyclists. Failure to give way or stop was a factor in 63 percent of injury crashes at intersections and poor observation was a factor in 46 percent. The next most common factors were travelling too fast for the conditions, alcohol and poor judgement.

Twenty-three percent of crashes at intersections occurred between the hours of 3 pm and 5 pm, and 14 percent occurred between the hours of 7 am and 9 am. Seventy-one percent of the injury crashes at intersections occurred on a weekday. Twenty-two percent of those injured at intersections were aged between 15 and 19 years. Twenty percent of drivers involved in injury crashes at intersections held a learner or restricted licence.

## Loss of control on bends

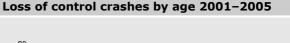
Between 2001 and 2005, 19 percent of all crashes in Palmerston North City involved a driver losing control of their vehicle on a bend. In rural areas 46 percent of crashes were of this type. This was significantly higher than similar districts and all of New Zealand.

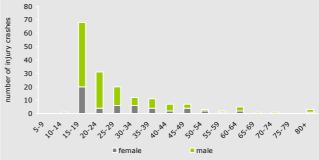
Between 2001 and 2005, there were 147 loss of control injury crashes on bends in Palmerston North City, resulting in four deaths, 75 serious casualties and 175 minor casualties.

Loss of control crashes can result in either a head-on collision with another vehicle or the vehicle leaving the road, potentially resulting in a collision with a roadside object. Such an occurrence may increase the severity of a crash. The most common roadside objects hit in urban areas of Palmerston North City were fences, trees, parked vehicles and posts/poles and in rural areas of Palmerston North City were ditches, fences, cliffs and banks.



Travelling too fast for the conditions, alcohol, poor handling, road factors and poor observation were the main contributory factors in loss of control injury crashes in Palmerston North City between 2001 and 2005.



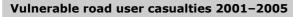


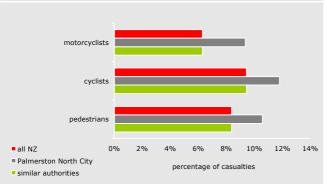
Sixty-two percent of casualties from loss of control crashes on bends were male. Forty-three percent of casualties were aged 15–19 years and 60 percent were aged 15–29 years. Where driver licence type was recorded, nearly a third held learner or restricted licences.

# **Vulnerable road users**

### Pedestrians

Between 2001 and 2005, pedestrian injury crashes made up 13 percent of all injury crashes in Palmerston North City. Over this period, there were 100 injury crashes that injured 104 pedestrians. Of these, 25 pedestrians were seriously injured (one fatally) and 79 received minor injuries. An additional five wheeled-pedestrians were injured (all minor injuries) during the 2001–2005 period.





Ninety-six percent of these pedestrian injuries occurred in the Palmerston North City urban area. Forty-four percent of pedestrians injured in crashes during this five-year period were aged under 19 years, while a further 18 percent were aged 60 years and over.

Seventeen percent of these pedestrian injury crashes occurred between 3 pm and 4 pm, 15 percent between 4 pm and 6 pm and nine percent between 8 am and 9 am.

Sixty-eight percent of pedestrian injury crashes occurred at mid-block locations away from an intersection or driveway.

Typically, pedestrians were injured crossing the road away from formal facilities such as pedestrian crossings or raised islands. Twelve percent of injury crashes were recorded on a formal pedestrian crossing, and 17 percent occurred where there was a painted or raised island.

Six of the pedestrians injured were under the influence of alcohol.

## **Cyclists**

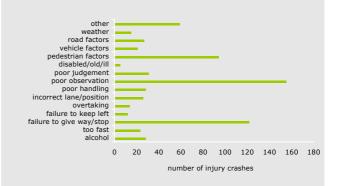
Cyclists made up the third highest casualty group in Palmerston North City. Twelve percent of all recorded casualties between 2001 and 2005 were cyclists and 15 percent of urban casualties were cyclists. Cyclist crashes have generally experienced a downward trend over the past five years. However, the proportion of cyclist casualties over this time was significantly greater than nationally or in other similar local authorities. There were 116 injury crashes involving cyclists in Palmerston North City between 2001 and 2005 with one cyclist killed, 20 seriously injured and 96 receiving minor injuries.

Three-quarters of all cycle crashes happened at an intersection or driveway. Of the intersection crashes, 57 percent occurred at a T junction, 24 percent at a roundabout and 19 percent at crossroads. Seventeen injury crashes occurred at a driveway.

Sixty-nine percent of all cyclist casualties were male. Thirty-five percent of cyclists involved in injury crashes between 2001 and 2005 were aged between 10 and 19 years.

Eighty-four percent of injury crashes involving cyclists occurred on a weekday, and of these, 19 percent occurred between 8 am and 9 am and 31 percent between 3 pm and 5 pm. Sixteen percent of injury crashes between 2001 and 2005 involving cyclists occurred in March.

# Factors in vulnerable road user crashes 2001–2005



## **Motorcyclists**

While there has been a downward trend in the number of motorcyclist casualties in Palmerston North City over the past 10 years, the proportion of motorcyclist casualties is greater than similar local authorities and all of New Zealand.

Motorcyclists made up nine percent of all casualties in Palmerston North City between 2001 and 2005 and 11 percent of casualties in the urban area. Eightyseven percent of motorcycle crashes between 2001 and 2005 in Palmerston North City occurred on roads in the urban area.

Seventy-three percent of motorcyclist casualties between 2001 and 2005 were male. Twenty-six percent of motorcyclist casualties were in the 15–19 year age group, the majority of which were male. Twenty-one percent were aged between 20 and 24 years.

Twenty-two percent of crashes involving motorcyclists occurred on a Friday and 28 percent during the weekend. Eighteen percent of weekday motorcycle crashes occurred between 3 pm and 4 pm.

## **National issues**

#### Speed

The faster drivers go, the more likely they are to crash and the greater the risk of serious injury or death.

During this five-year period, speed too fast for the conditions was a factor in 14 percent of injury crashes in Palmerston North City, which is lower than for all roads in New Zealand, and higher when compared to similar authorities.

### **Alcohol**

Alcohol has a big effect on the way people drive. People that drink and drive (with a blood alcohol level over 80 mg per 100 ml) are three times more likely to be involved in a crash than a sober driver.

Between 2001 and 2005, alcohol was identified as a factor in 10 percent of crashes on roads in Palmerston North City, which is lower than for all of New Zealand and similar authorities.

### Failure to give way

While most failure to give way crashes result in noninjury or minor injury crashes, many can have serious consequences. Thirty-six percent of injury crashes on roads in Palmerston North City between 2001 and 2005 involved drivers failing to give way.



## Restraints

Wearing a safety belt reduces your chance of death or serious injury in a crash by 40 percent. Whether you sit in the front or the back seat, the risk of serious or fatal injury is virtually the same.

Results from the 2005 national restraint wearing survey showed that the national average of front seat safety belt wearing was 95 percent, compared to 93 percent for Palmerston North City.

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