

# road safety issues

July 2003

The Land Transport Safety Authority (LTSA) has prepared this road safety issues report. It is based on reported crash data and trends for the 1998–2002 period. The intent of the report is to highlight the key road safety issues and to identify possible ways to reduce the number of road deaths and injuries in Palmerston North City.

During 2002, the Manawatu Wanganui Region experienced the lowest recorded number of road deaths in over 20 years (28 deaths from 27 fatal crashes). This result was largely due to the efforts of many motivated and keen individuals and organisations determined to improve road safety throughout the region. While the human cost of road deaths continues to be a major problem, it is hoped that 2002 saw the start of a sustained reduction in road trauma.

While the reduction in road deaths is welcomed, this report notes a small increase in injuries in most districts within the wider region. Planned implementation of road safety strategies would ideally lead to a reduction in all injury crashes. Practitioners should not, however, lose sight of the fact that reducing the severity of a crash can deliver significant safety benefits and is a legitimate measure of success.

The social cost of crashes in Palmerston North City during 2002 was:

- \$9.22 million on state highways
- \$33.19 million on local roads.

Compared with 2001 this is a decrease from \$16.82 million on state highways and an increase from \$21.08 million on local roads.

## Major road safety issues

### Palmerston North City

Intersections
Motorcyclists
Speed
Cyclists and pedestrians

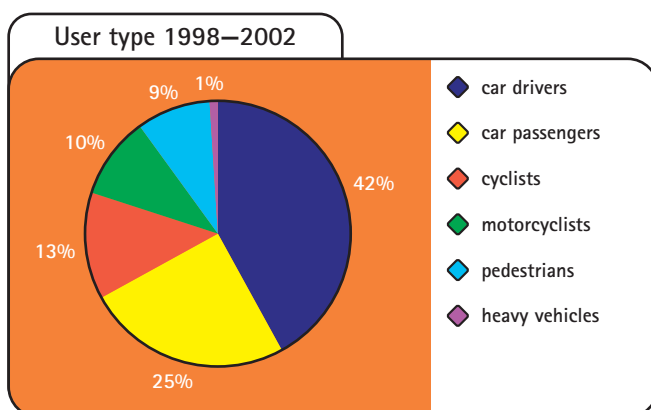
### Nationally

Speed
Alcohol
Failure to give way
Restraints

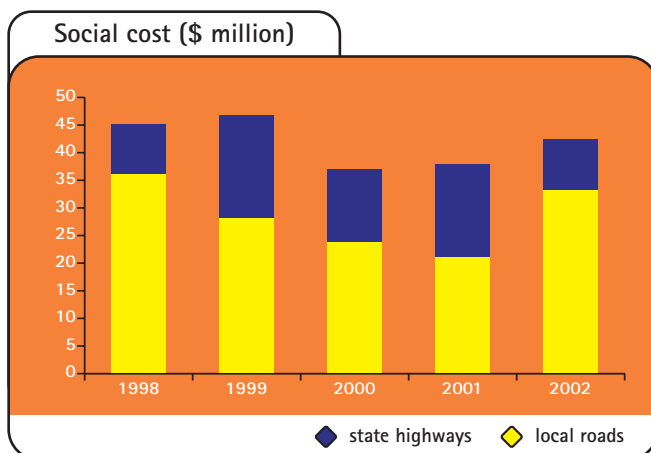
## 2002 road trauma for Palmerston North City

Deaths	3
Serious casualties	31
Minor casualties	174
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Fatal crashes	3
Serious injury crashes	25
Minor-injury crashes	137
Non-injury crashes	544

## Road user casualties 1998–2002



## Estimated social cost of crashes\*



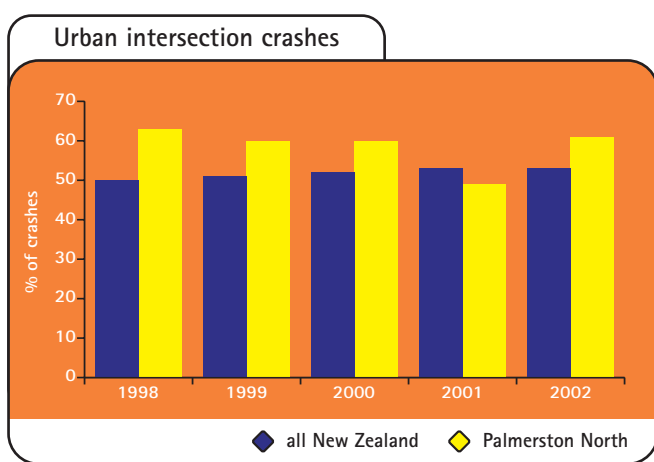
\* The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are expressed at June 2002 prices.

# Intersections

In 2002 the number of urban intersection crashes in Palmerston North City rose significantly, with 86 reported casualties. This was an increase from 46 in 2001 and the highest level recorded since 1997. Intersection crashes accounted for 61 percent of all urban crashes.

The proportion of rural intersection crashes was at the level experienced in similar authorities and is a much smaller problem, with only seven recorded injury crashes in 2002.

Despite the overall lower numbers of crashes in the city, the percentage of crossing and turning type crashes remained above the national level. Failure to give way or stop and poor observation were the leading contributing factors.



Crossroads were the most common intersection type for urban crashes, while 131 reported crashes were at intersections controlled by Give Way signs. Sixty-eight crashes were recorded at intersections controlled by Stop signs while 74 injury crashes were recorded at traffic signal controlled intersections.

## Intersection black spots in Palmerston North

Crash road	Side road	Number of crashes 1998-2002 (includes non-injury)
Rangitikei Street	Featherston Street	39
Fitzherbert Avenue	Te Awe Awe Street	36
Ferguson Street	Fitzherbert Avenue	36
Church Street	Cook Street	32
Walding Street	Taonui Street	31
Main Street	Cook Street	31
Botanical Road	Ferguson Street	29
Pioneer Highway	Botanical Road	29
Victoria Avenue	Ferguson Street	26
Tremaine Avenue	Rangitikei Street	26

## Recommended actions

### Education

- Promote awareness of the risks of non-compliance with priority driving rules.
- Raise awareness of problems at crash black spots.
- Support public education campaigns.
- Advocate appropriate driving behaviour.

### Enforcement

- Target enforcement at high-risk sites with:
  - intersection enforcement at regular intervals.
- Support promotional activities and local campaigns.
- Report and remove obstacles to vision at intersections.

### Engineering

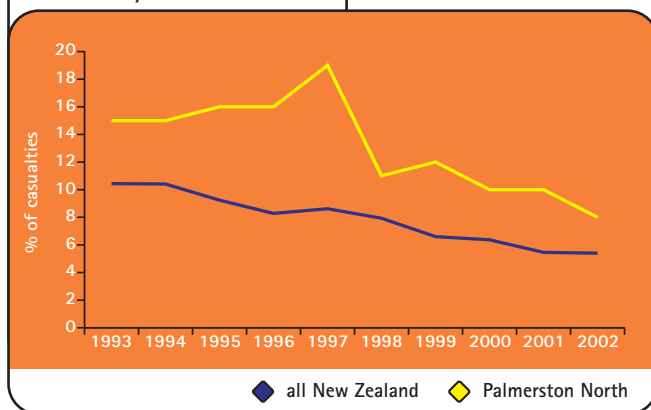
- Ensure sight lines at intersections are maintained.
- Ensure regular reviews of crash trends at intersections. Consider safer intersection design or controls where possible.
- Maintain good road surfaces and drainage.
- Support education programmes highlighting the need for care at intersections and emphasising correct signalling, lane position and give way rules.
- Utilise traffic calming measures to reduce traffic speeds where appropriate.



## Motorcyclists

In recent years the proportion of motorcycle casualties in urban areas of Palmerston North has been relatively high compared with similar authorities and all New Zealand. Since 1997, the number of motorcycle casualties has decreased, with casualty numbers in 2002 (17) being one third of the 1997 total of 52 casualties. Motorcycle casualties now account for about eight percent of all casualties, compared with about five percent for all New Zealand.

Motorcyclist casualties



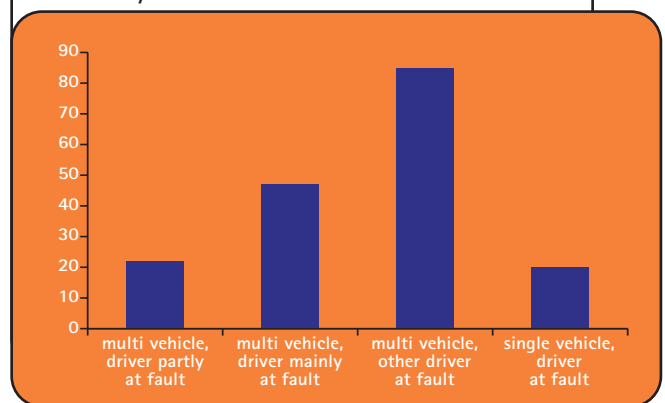
Compared with similar areas, the proportion of motorcycle casualties was very high in the 15 to 24 year age group. Most motorcycle crashes occurred at intersections. The next most frequent type was rear-end collisions, with bends and overtaking crashes also prevalent.

Most motorcycle crashes occurred under normal driving conditions, with only one crash in six occurring on a wet road, and one crash in 10 at night. Most crashes involved another vehicle, with about one crash in six being a single vehicle crash.

An important part of any effective road safety campaign is to have an understanding of the drivers that are primarily responsible for crashes. This allows decisions to be made on the type of safety programmes that will be most effective.

In Palmerston North City, motorcyclists are known to have been primarily or partly at fault in 89 cases, compared with 103 cases where another driver was at fault. Adherence to priority driving rules and adoption of safe driving speeds are critical in ensuring improved safety among this group.

Motorcyclists at fault in crashes 1993–2002



## Recommended actions

### Education

- Promote awareness of the use of driving lights and other aids to visibility.
- Emphasise the need to be fully alert when driving.
- Raise profile of education courses for motorcyclists, particularly novice riders.
- Raise awareness of problems at crash black spots.
- Support campaigns aimed at raising awareness of motorcycle safety issues.

### Enforcement

- Support education programmes aimed at motorcyclists.
- Maintain high visibility patrolling at identified high-risk locations.
- Undertake periodic monitoring of driver behaviour at intersections.
- Discourage unsafe driving practices among motorcyclists.

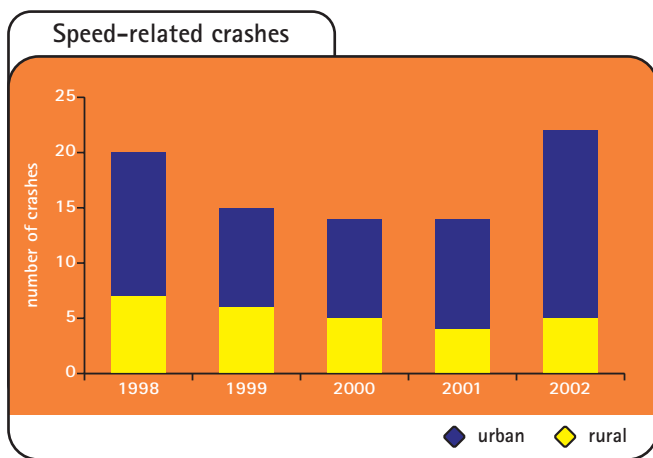
### Engineering

- Maintain signs and roadside delineation to an appropriate standard.
- Ensure roadside areas are kept clear of solid objects.
- Maintain good skid resistant road surfaces.
- Provide a 'no surprises' driving environment.

# 80 Speed

Driving at a speed too fast for the conditions was a significant contributory factor in rural and urban crashes for the 1998 to 2002 period. Speed contributed to 27 rural crashes (over 20 percent) and 58 urban crashes (12 percent). While the number of rural speed-related crashes has fallen, in line with the reduction in all crashes in the region, its involvement remains above the level experienced in similar regions and all New Zealand.

Speed is more likely to be a contributing factor for young drivers than older drivers. Most crashes where speed is a contributing factor involved a driver younger than 30 years of age.



Vehicle speed is a major determinant of the outcome of a crash. Research has shown that as speed increases the likelihood of a crash also increases. When a crash occurs, faster speeds will result in more severe injuries.

## Recommended actions

### Education

- Promote awareness of the risks of speeding.
- Identify appropriate speeds for conditions and the need to be fully alert when driving.
- Improve attitudes to fast driving.

### Enforcement

- Focus on speed enforcement at high-risk times and places.
- Ensure a low enforcement tolerance is observed.
- Conduct targeted enforcement at high-risk sites. This includes:
  - controlling speed at bends with advisory speed signs
  - identifying crash black spots
  - monitoring travelling speeds and following distances during wet weather.

### Engineering

- Ensure clear delineation of curves.
- Ensure advisory speed signs are of an appropriate and consistent standard and are in the correct position.
- Maintain good road surfaces and drainage.
- Ensure roadside areas are kept clear of solid objects.
- Provide sealed road shoulders where appropriate.
- Continue realignment projects where possible.



## Cyclists and pedestrians

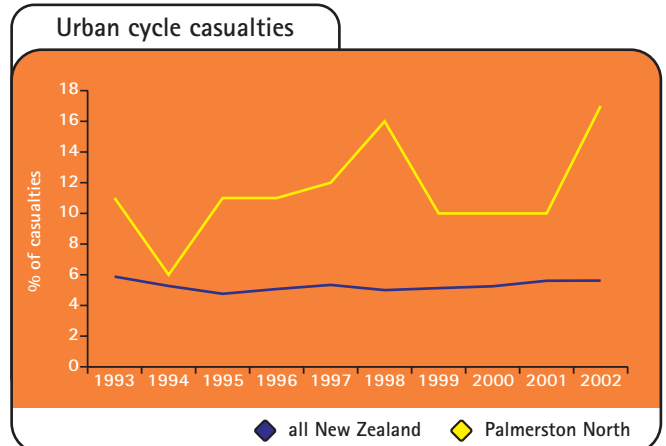
Of all road users, cyclists and pedestrians are particularly vulnerable and often suffer death or serious injury when hit by a motor vehicle. Safety issues for these road users are largely confined to urban centres such as Palmerston North. In recent years cyclist and pedestrian safety has been recognised as an important and often neglected road safety issue.

The proportion of cyclist casualties in Palmerston North City has been relatively high compared with all New Zealand and similar authorities. In 2002, the number of cyclist casualties was more than double the level seen in the previous three years, with 35 casualties reported. This was the highest number recorded since 1995 and accounted for over 16 percent of all casualties in the district. This percentage of casualties was well above the national level and the level experienced in similar authorities.

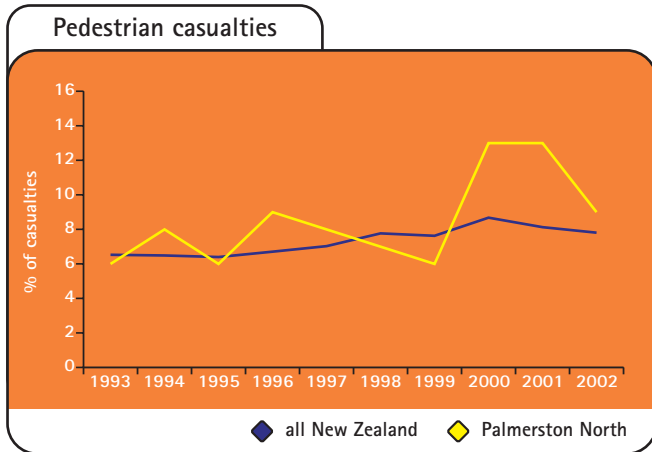
In common with similar areas, the percentage of cycle casualties was high for cyclists aged 15 to 24 years. The 10 to 14 year age group also remains a risk group, but their involvement has decreased recently and is now below the rate experienced in similar authorities.

Most cycle crashes occurred at intersections, with T junctions, crossroads and roundabouts being most common. Mid-block collisions were less common.

Leading contributory factors in cycle crashes were similar to those found with other road users, with failure to give way and poor observation being leading causes. Overtaking on the left at intersections was a problem among cyclists.



Urban crashes involving pedestrians in Palmerston North City decreased in 2002 but their involvement remained above the level experienced in similar authorities and all New Zealand. In 2002 there were 18 crashes involving pedestrians. Pedestrian factors have been reported in 59 crashes since 1998. Raising awareness of safety issues among these vulnerable road users is critical to achieving improved safety.



Local initiatives may be necessary to address trends in pedestrian crashes. Most pedestrian crashes occurred in the afternoon and early evening, with Friday being the most common day. Pedestrians injured in crashes are mostly younger than 20 or over the age of 65. In particular, the percentage in the five to nine year age group was well above the national level, with 18 recorded injury crashes since 1998.

## Recommended actions

### Education

- Raise the profile of education courses for older road users such as Safe with Age and Road Rules Refreshers.
- Raise awareness of problems at pedestrian crossings.
- Promote road safety education aimed at school age children.
- Promote awareness of the use of cycle lights and other aids to visibility.
- Emphasise the need to be fully alert when driving.
- Raise profile of education courses for cyclists, particularly novice riders.
- Continue with school-based education programmes.
- Continue with programmes supporting helmet use.

### Enforcement

- Promote targeted enforcement at high-risk sites with:
  - intersection enforcement at regular intervals
  - monitoring driving at pedestrian crossings.
- Support promotional activities and local campaigns.
- Report and remove obstacles to vision at intersections and crossings.
- Support education programmes aimed at cyclists.
- Maintain high visibility patrolling at identified high-risk locations.

- Undertake periodic monitoring of driver behaviour at intersections.
- Discourage unsafe driving practices among cyclists.

### Engineering

- Ensure sight lines at road crossing points are maintained.
- Ensure crossings are appropriately sited and remain conspicuous.
- Ensure regular review of crash trends.
- Consider safer crossing design or controls where possible.
- Support education programmes highlighting the need for care at intersections, with an emphasis on correct signalling, lane position and give way rules.
- Consider curb extensions at crossings to improve visibility.
- Support use of cycle lanes where possible.
- Provide cycle facilities at intersections.
- Continue work with urban schools to support safe cycling facilities.
- Consider dedicated cycle phases at traffic signals.

# New Zealand Road Safety Programme

Reducing road trauma involves a multi-pronged approach, which includes education, engineering and enforcement. The New Zealand Road Safety Programme (NZRSP) is the primary planning and funding programme for road safety activity undertaken by the New Zealand Police, LTSA and community groups. Transfund New Zealand provides funding to Transit New Zealand and local authorities for roading projects through its National Land Transport Programme.

## Community Road Safety Programme

Through the Community Road Safety Programme (CRSP) the NZRSP provides funding for community development and community programmes to support road safety and to bring about positive and sustainable changes in community attitudes and behaviours. CRSP funding of community development aims to encourage local involvement and ownership of road safety issues. This year's review of the programme initiates a re-focus of effort and funding into community development. This involves working with and within different communities of people to assist them in becoming aware of their own local road safety issues and developing solutions to achieve better road safety outcomes.

There is a community development general fund allocation for the Manawatu Wanganui Region of \$271,500, as well as a community development dedicated fund of \$61,500. Road Safe Central, the inter-agency group responsible for regional road safety, has developed a road safety action plan for 2003/2004, where projects and initiatives will be developed and funding will be allocated to them during the year.

CRSP programmes are established, community-based road safety initiatives, which meet community needs. They address road safety issues and enhance road safety in the community, eg Safe with Age, child restraints and driver licence schemes. The LTSA's general and dedicated programme allocation for the Manawatu Wanganui Region is \$178,000. The LTSA allocates funds upon application.

## Road policing

Police enforcement hours to support community projects are now allocated to police community services hours rather than to individual projects. The delivery of these hours to support community initiatives will need to be negotiated by the road safety co-ordinator.

In 2003/2004 the Police are funded to deliver 23,350 hours of road policing in Palmerston North City (the same as in 2002/2003) as follows:

Project	Police hours
Strategic – alcohol/drugs, speed, restraints and visible road safety enforcement	18,090
Traffic management including crash attendance, incidents, emergencies and events	3,700
School road safety education	1,200
Police community services	360

## Road environment

Palmerston North City has an allocation for minor safety projects on local roads in Transfund New Zealand's National Land Transport Programme 2003/2004.

## Where to get more information

For more specific information relating to road crashes in Palmerston North City, please refer to the 1998 to 2002 Road Safety Data Report or the LTSA Crash Analysis System, or contact the people or organisations listed below:

## Contacts

Land Transport Safety Authority

Regional Manager  
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