

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 the Manawatu Wanganui Region.

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 all injury crashes 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 the Manawatu Wanganui Region during 2002 was:

- \$129.22 million on state highways
- \$130.05 million on local roads.

Compared with 2001, this is a decrease from \$162.13 million on state highways and an increase from \$116.36 million on local roads.

Major road safety issues

Manawatu Wanganui Region

Intersections

Motorcyclists

Fatigue

Loss of control

Nationally

Speed

Alcohol

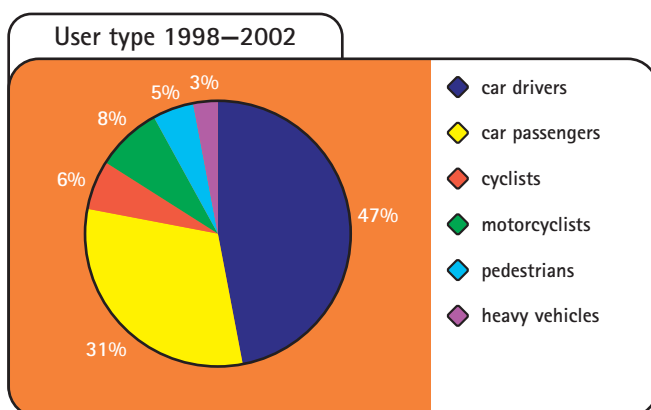
Failure to give way

Restraints

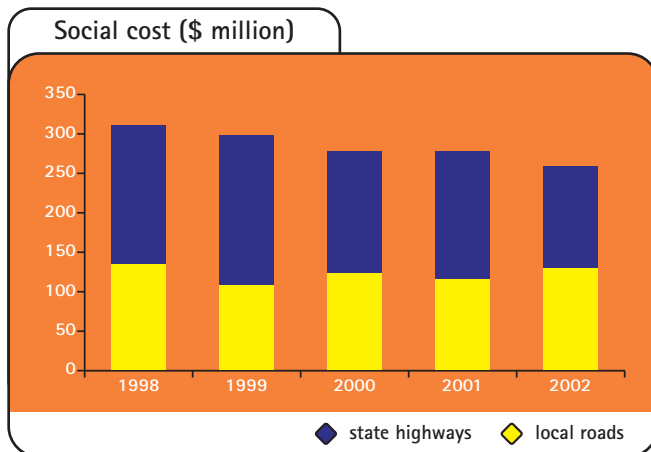
2002 road trauma for Manawatu Wanganui Region

Deaths	28
Serious casualties	176
Minor casualties	719
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Fatal crashes	27
Serious injury crashes	138
Minor-injury crashes	462
Non-injury crashes	1,585

Road user casualties 1998–2002



Estimated social cost of crashes*

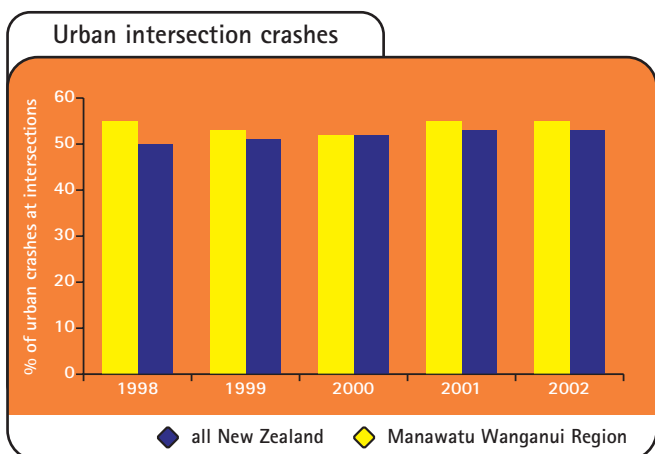


* The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are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

Intersections

In 2002, the number of urban intersection crashes in the Manawatu Wanganui Region increased to 158 reported crashes, from 127 in 2001, while rural intersection crashes increased to 59, up from 57 in 2001. The proportion of crashes occurring at intersections in the region was slightly above the average for all New Zealand for urban areas, while rural crashes were at about the expected level.

The percentage of crossing and turning type crashes remained above the trend for similar authorities in 2002, while failure to give way or stop and poor observation were the leading contributing factors. Failure to give way was a factor in 418 urban crashes and 150 rural crashes in the five years from 1998 to 2002. Poor observation was the most common crash factor in the region in both rural and urban areas, occurring in 433 urban crashes and 375 rural crashes in the same five-year period.



Crossroads and T junctions are the most common intersection types for urban crashes. The most common movement types associated with intersection crashes were:



Intersection black spots in the Manawatu Wanganui Region

Crash road	Side road	Number of crashes 1998-2002 (includes non-injury)
Dublin Street	Victoria Street	48
Victoria Avenue	Glasgow Street	41
SH 3	Featherston Street	39
SH 1N	SH 3	37
Ferguson Street	Fitzherbert Avenue	36
Fitzherbert Avenue	Te Awe Awe Street	36

Rural intersections

SH 1N	Onslow Street	30
SH 1N	SH 57	23
SH 2	Wi Duncan Road	22
SH 54	Waughs Road	20

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.
- Implement intersection enforcement at regular intervals.
- Support promotional activities and local campaigns.
- Report and remove obstacles to vision at intersections.

Engineering

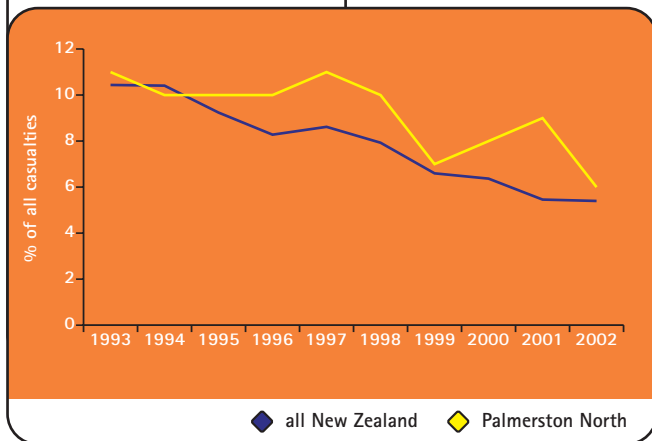
- Ensure sight lines at intersections are maintained.
- Ensure crash trends at intersections are reviewed regularly.
- Consider safer intersection design or controls where possible.
- Maintain good road surfaces and drainage.
- Support education programmes highlighting the need for care at intersections 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 the Manawatu Wanganui Region has been relatively high compared with all New Zealand. Since 1997, casualty numbers have been trending downward, with 55 in 2002 being less than half the 1997 number of 119. Motorcycle casualties now account for about six percent of all casualties, compared with about five percent for all New Zealand.

Motorcyclist casualties



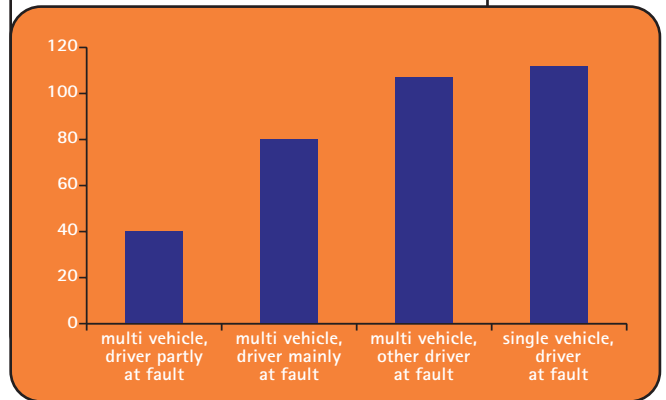
In common with similar areas, motorcycle casualty rates were very high for the 15 to 24 year age group. Most motorcycle crashes occurred at intersections. The next most frequent type was rear-end collisions, with bends and overtaking crashes also prevalent.

Most motorcycle crashes occurred under normal driving conditions, with only one crash in six happening 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 understanding which drivers are primarily responsible for crashes. This allows decisions to be made on the type of safety programme that is likely to be effective.

In the Manawatu Wanganui Region, motorcyclists were known to have been primarily or partly at fault in 232 cases, compared with 107 cases where another driver was at fault. Eliminating poor adherence to priority driving rules and adoption of safe driving speeds are critical in ensuring improved safety among this group.

Party at fault in motorcycle crashes



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

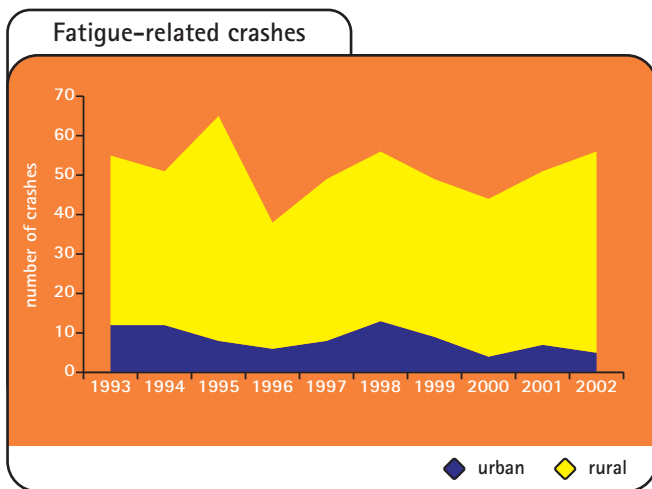
- Maintain signs and roadside delineation to an appropriate standard.
- Ensure roadside areas are kept clear of solid objects.
- Maintain good skid resistant road surfaces.
- Provide a 'no surprises' driving environment.



Fatigue

Of all driver factors in crashes, fatigue is one of the least understood and most widely under-reported. Long periods of driving, insufficient rest stops and driving at certain times of the day are all known to contribute to driver fatigue and to crashes.

In the Manawatu Wanganui Region, fatigue was identified as a contributing factor in 218 rural crashes and 38 urban crashes from 1998 to 2002. It was a factor in about 13 percent of rural crashes and is significantly higher than the rate experienced throughout New Zealand. The 56 fatigue crashes recorded in 2002 were the highest number of such crashes reported in the last five years.



The proximity of SH 1 and the travelling distance to major traffic generators (Wellington to the south, Taupo and Tongariro National Park to the north) mean that the Manawatu Wanganui Region is exposed to high levels of long distance driving. Crashes involving fatigue tend to be more widely reported in areas that are more than two hours' driving time from a major traffic generator. Local efforts to support driver fatigue stops are likely to be very beneficial.

Recommended actions

Education

- Promote awareness of fatigue as a safety issue.
- Raise the profile of education courses for professional drivers.
- Promote fatigue stops and use of roadside facilities.

Enforcement

- Support education programmes aimed at fatigue.
- Maintain high-visibility patrolling at identified high-risk locations.
- Support fatigue stops at holiday times and at high-risk locations.
- Monitor driving hours among commercial drivers.

Engineering

- Maintain signs and roadside delineation to an appropriate standard.
- Ensure roadside areas are kept clear of solid objects.
- Support local efforts to curb fatigue.
- Investigate audible edge markings in high-risk locations.
- Maintain roadside facilities such as rest areas.
- Provide a 'no surprises' driving environment.



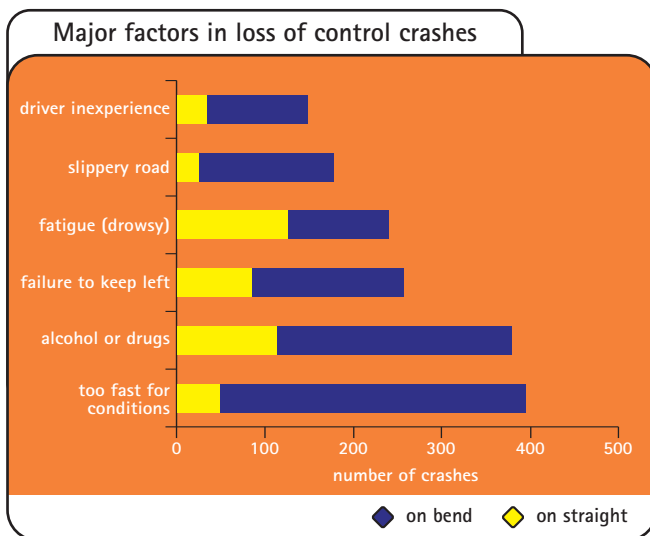
Loss of control

Nearly 70 percent of rural crashes in the Manawatu Wanganui Region from 1998 to 2002 involved drivers either losing control of their vehicle or colliding head-on with a vehicle travelling in the opposite direction. Most of these crashes occurred on bends, with 783 such crashes reported. There were 319 of these crashes on straight sections of road in the same period.

From 1998 to 2002, the main contributing factors leading to loss of control crashes on rural roads in the region were:

Poor observation	23%
Excessive speed	22%
Poor vehicle handling	22%
Road conditions	20%
Alcohol	16%

Loss of control crashes involving either speed or alcohol have been relatively stable over the last four years, and are lower than the 1993 to 1997 period. In 2002 there were 74 speed-related crashes on rural roads and 46 alcohol crashes.



Recommended actions

Education

- Highlight the need to drive to the conditions and to be fully alert while driving.
- Raise awareness of problems at crash black spots.
- Support public education campaigns.
- Advocate appropriate driving behaviour.
- Teach drivers techniques to handle differing road conditions.

Enforcement

- Target enforcement at high-risk sites.
- Support promotional activities and local campaigns.
- Focus enforcement on speed and alcohol.
- Identify best practice methods for enforcing overtaking and cross-centre line breaches.

Engineering

- Ensure advisory speed signs are of an appropriate, consistent standard.
- Consider safer road design and better delineation techniques where possible.
- Maintain good road surfaces and drainage.
- Support education programmes highlighting the need for care on bends and emphasising correct lane position and speed control.
- Ensure roadside areas are kept clear of solid objects.
- Provide sealed shoulders where appropriate.

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 in 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 the Manawatu Wanganui Region (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

The Manawatu Wanganui Region 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 the Manawatu Wanganui Region, 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
Darryl Harwood
Phone 06 350 1889

Road Safety Engineer
David Lane
Phone 06 350 1883

CRSP Regional Liaison Officer
Barbara Broederlow
Phone 06 350 1899

Regional Road Safety Co-ordinator
(Manawatu, Horowhenua, Palmerston North and Tararua)

Sharon Vera
Public Health Unit
Mid Central Health
PO Box 2056
Palmerston North
Phone 06 350 8463

(Wanganui, Rangitikei and Ruapehu)

Judith Pene-Jones
Public Health Unit
Private Bag 3003
Wanganui
Phone 06 348 1779

New Zealand Police
Strategic Traffic Manager
Inspector Neil Wynne
Central District
Headquarters
Private Bag 11-040
Palmerston North
Phone 06 351 3600

Transit New Zealand
Regional Manager
Errol Christiansen
Seddon House
Park Place
PO Box 345, Wanganui
Phone 06 345 4173

Palmerston North Regional Office

71 Queen Street

PO Box 1947, Palmerston North

Phone 06 356 5016, Fax 06 356 5017

www.ltsa.govt.nz

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