road safety issues

July 2003

he 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 Horowhenua District.

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 the Horowhenua District during 2002 was:

- \$26.11 million on state highways
- \$14.35 million on local roads.

Compared with 2001, the 2002 social cost figures represent an increase of \$20.40 million on state highways and a decrease of \$17.33 million on local roads.

Major road safety issues

Horowhenua District

Intersections

Older road users

Speed in rural areas

Nationally

Speed

Alcohol

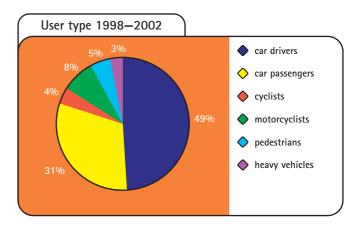
Failure to give way

Restraints

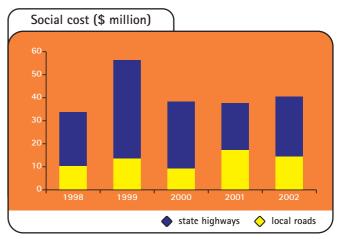
2002 road trauma for Horowhenua District

Q	Deaths Serious casualties Minor casualties	3 36 94
	Fatal crashes	3
	Serious injury crashes	29
	Minor-injury crashes	52
	Non-injury crashes	149

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.

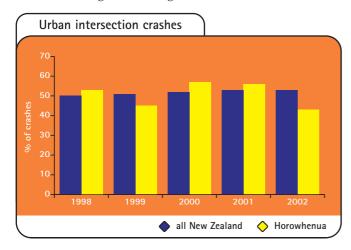




The number of urban intersection crashes in the Horowhenua District dropped in 2002, resulting in 13 reported casualties, down from 20 in 2001. Intersection crashes accounted for 43 percent of all urban crashes, below the national average of 53 percent.

Rural intersection crashes were also down from 2001 and were a much smaller problem, with only six recorded injury crashes.

Despite the lower numbers of crashes, the percentage of crossing and turning type crashes remains above that of similar authorities. Failure to give way or stop and poor observation were the leading contributing factors.



Crossroads and T junctions were the most common intersection types for urban crashes. Sixty-one reported crashes were at intersections controlled by Give Way signs. Intersections controlled by Stop signs had 38 crashes and traffic signals had 11 injury crashes.

Intersection black spots in the Horowhenua District

Crash road Side road Number of crashes 1998-2002 (includes non-injury)

Urban intersections

SH 1	Bath Street	25
SH 1	Queen Street East	20
Queen Street West	Weraroa Road	14
Cambridge Street	Queen Street	14
SH 1	Stanley Street	13
Salisbury Street	Bath Street	11

Rural intersections

SH 1	SH 57	28
SH 1	Vista Road	12
SH 1	Kuku Beach Road	11

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.
- Target intersection enforcement at regular intervals.
- Support promotional activities and local campaigns.
- Encourage reporting and removal of obstacles to visibility at intersections.

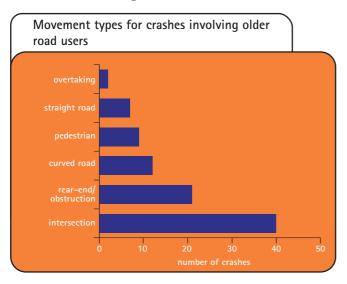
Engineering

- 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, emphasising correct signalling, lane position and give way rules.
- Utilise traffic calming measures to reduce traffic speeds where appropriate.

Older road users

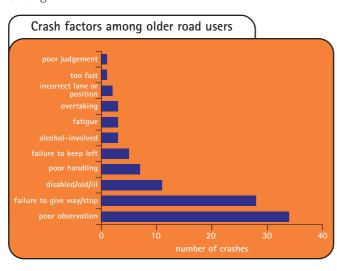
Older road users, particularly those aged over 65 years, were over-represented in the crash data in the Horowhenua District. This applies to both males and females, with 48 male casualties and 38 female casualties in the five years from 1998 to 2002.

The leading contributory factors in crashes involving older drivers were failure to give way or stop (28 instances) and poor observation (34). Crossing and turning was the leading crash movement type among older drivers, with rear-end collisions also featuring.



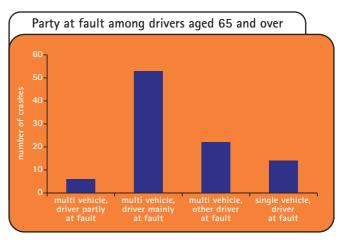
Periodic campaigns to address intersection problems in the Horowhenua District have met with mixed results. It seems clear that older drivers in particular are experiencing difficulty at intersections and local efforts to improve this need to continue. Failure to stop at Stop signs and proceeding before the way is clear at Give Way signs remain prevalent factors in the crash data.

Other contributory factors of significance in crashes were illness, failure to keep left, poor handling and incorrect lane driving.



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 the Horowhenua District, older drivers are known to have been primarily or partly at fault in 73 crashes, compared with 22 crashes where no driver fault was found. While these figures include crashes of all types, intersection crashes and those involving poor observation were most common. Adherence to priority driving rules by older drivers is critical to ensuring improved safety among this group.



Recommended actions

Education

- Promote awareness of the risks of non-compliance with priority driving rules.
- Emphasise the need to be fully alert when driving.
- Raise the profile of education courses for older road users such as Safe with Age and Road Rules Refreshers.
- Raise awareness of problems at crash black spots.

Enforcement

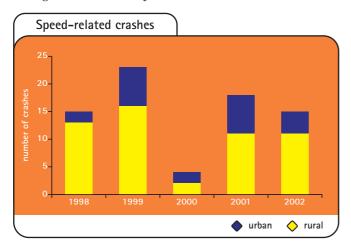
- Promote targeted enforcement at high-risk sites with:
 - intersection enforcement at regular intervals
 - monitoring of lane driving at merge situations.
- Support promotional activities and local campaigns.
- Encourage reporting and removal of obstacles to visibility at intersections.

Engineering

- Ensure sight lines at intersections are maintained.
- Ensure crash trends at intersections are regularly reviewed. 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.

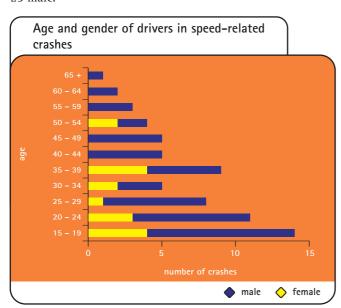
80 Speed in rural areas

Drivers travelling at a speed too fast for the conditions was a significant contributory factor in rural and urban crashes from 1998 to 2002. Speed contributed to 53 rural crashes (over 20 percent) and 22 urban crashes (12 percent). While rural speed-related crashes have fallen, in line with the reduction in all crashes in the region, their proportional involvement in the crash statistics remain at the level experienced in similar regions and all of New Zealand. The 15 speed-related crashes recorded in the Horowhenua District in 2002 equalled the average for the last five years.



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. High speeds on rural roads tend to lead to higher severity of injuries when crashes occur.

Speed is more likely to be a contributory factor in crashes for young drivers than older drivers. Most crashes where speed is a contributory factor involved a driver younger than 30 years of age. In the Horowhenua District for the period 1998 to 2002, there were 34 speed-related crashes involving a driver younger than 30 years. Of these, nine were female and 25 male.



Recommended actions

Education

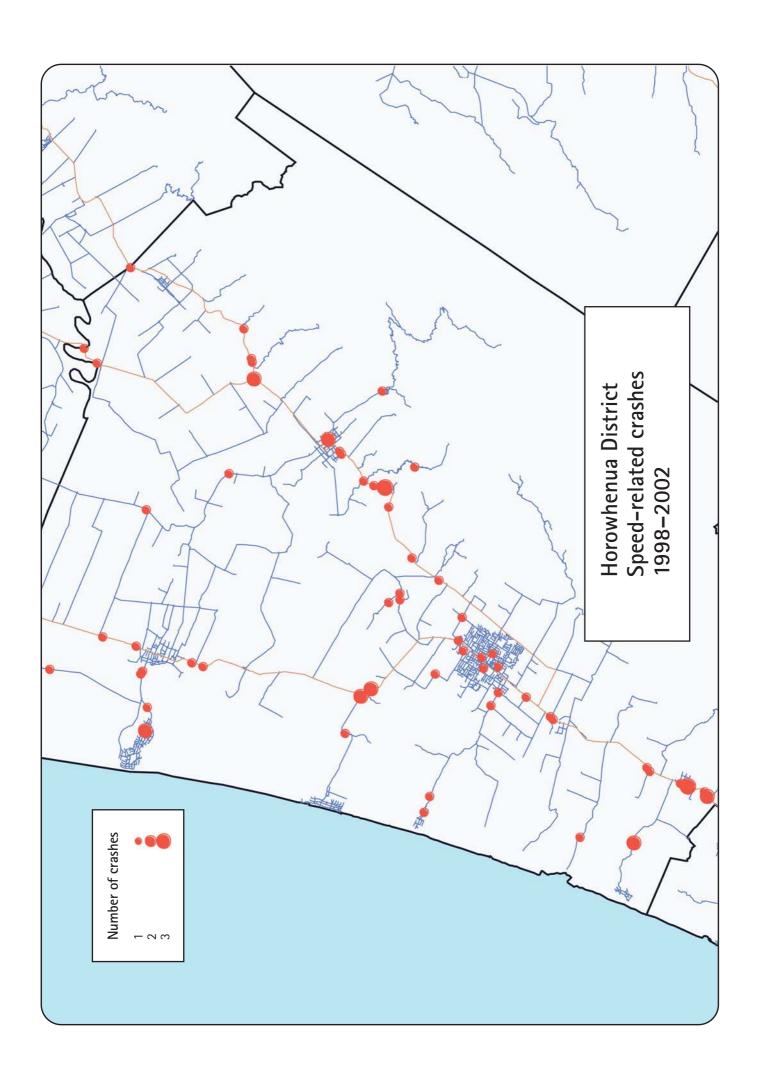
- Promote awareness of the risks of speeding.
- Identify appropriate speeds for conditions and the need to be fully alert when driving.
- Improve attitudes to fast driving.

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, including:
 - 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, consistent standard and are in the correct position.
- Review crash black spots to identify whether further advisory speed signage is necessary.
- 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.



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 and include programmes such as 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 11,260 hours of road policing in the Horowhenua District (the same as in 2002/2003) as follows:

Project Po	lice hours
Strategic – alcohol/drugs, speed, restraints and visible road safety enforcement	8,090
Traffic management including crash attendance, incidents, emergencies and events	2,400
School road safety education	450
Police community services	320

Road environment

The Horowhenua District 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 Horowhenua District, 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

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

Horowhenua District Council Cat Hancock PO Box 4002, Levin Phone 06 949 4949

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