road safety issues

July 2002

he Land Transport Safety Authority (LTSA) has prepared this Road Safety Issues Report. It is based on reported crash data and trends for the 1997–2001 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 Masterton district.

The number of injury crashes in the district in 2001 was 59. This is the same number as last year. The 77 casualties recorded in 2001 reduced by 10 from the previous year. The trend over the past 10 years, from 1992 to 2001, indicates that the number of injury crashes and the number of casualties is not changing dramatically.

While the total crashes and casualties may be static, there is an underlying change occurring. Crashes in the urban environment are decreasing, but this improvement is offset by an increase in rural road crashes. The same situation occurs with casualties. Males still far outnumber females as casualties in rural crashes.

The trends for pedestrian and cyclist casualties show a decline, as do car and van passenger casualties. However, the casualty numbers for drivers of cars and vans are rising. Similarly the number of heavy vehicle casualties and motorcyclist casualties is increasing.

Major road safety issues:

Masterton district

Intersections

Cyclists

Bends on rural roads

Nationally

Speed

Alcohol

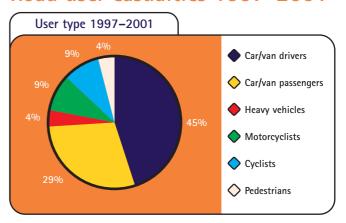
Failure to give way

Restraints

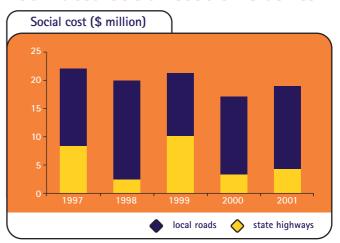
2001 road toll for Masterton district

A	Deaths	2
	Serious casualties	10
	Minor casualties	65
—	Fatal crashes	2
	Serious injury crashes	10
	Minor injury crashes	47
	Non-injury crashes	98

Road user casualties 1997-2001



Estimated social cost of crashes*



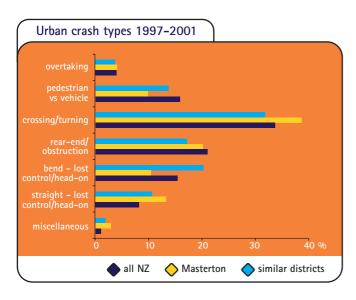
* The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are expressed at June 2001 prices.



Intersections

The predominant type of crash in Masterton within the urban environment was vehicles crossing or turning across one another at intersections.

In the five years between 1997 and 2001, there were 67 such crashes on urban roads. This constituted nearly 40 percent of the total of all urban crashes in the district. Such a high percentage of crashes attributed to this type of crash is significantly higher (in a formal statistical sense) than that expected nationally or for its peer group. Neighbouring districts in the same peer group are Horowhenua and Manawatu.



Last year, we reported that there was a drop in the number of intersection crashes, from 14 in 1999 to 10 in 2000. Unfortunately the number of such crashes in 2001 rose to 16. This total was still less than the 19 crashes of this type recorded in 1995 and 1997.

Crashes on urban roads in Masterton also showed a pattern of poor judgement on the part of the driver. Poor observation was another attribute often associated with these crashes.

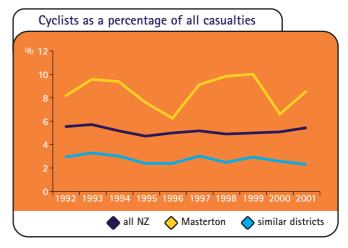
Recommended actions

- Increase awareness of:
 - right-of-way at intersections
 - the correct speed when approaching intersections
 - the use of indicators at roundabouts.
- Review the traffic controls at intersections to see if they are still appropriate.
- Ensure there is an effective programme to control vegetation at intersections and that signs and markings are in good condition.
- Ensure controls at intersections with regard to priority are consistent with overall traffic strategy.



Amongst the various urban road users in Masterton, cyclists had a casualty rate much higher than the national average. Throughout New Zealand, cyclists made up eight percent of all urban casualties. This was slightly higher than the average for districts similar to Masterton. The 39 cyclists injured in urban Masterton, however, made up 17 percent of the total casualties.

This is a significant difference. Looking at the graph below, it is noticeable that in the 10 years from 1992 to 2001, the casualty rate for cyclists in both rural and urban environments is higher than the national average and the average of similar districts for each year.



Between 1997 and 2001, only eight percent of the cycle crashes occurred during the night. The most common type of crash (63 percent) was associated with intersections, followed by rear-end and obstruction type crashes. Only 18 percent of crashes occurred over the weekend, which indicates that the type of cyclist at greatest risk in Masterton was the commuter cyclist, typically school children.

Recommended actions

- Where cyclists share the road with motor vehicles, consider marked cycle lanes and advanced stop lines at intersections. In other areas consider shared cycle/pedestrian facilities.
- Promote the establishment of 'safe' cycle ways.
- Investigate using coloured pavement for cycle lanes.
- Promote driver awareness of cyclists (particularly at intersections).
- Target increased enforcement to sites that are high risk at before and after school times.



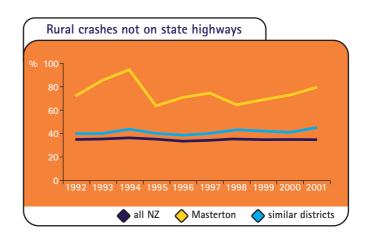
Bends on rural roads

In the rural environment, most of the crashes occur at bends. These crashes are associated with loss of control or head-on incidents between vehicles.

Such crashes accounted for nearly 60 percent of all crashes on rural roads in Masterton from 1997 to 2001. Nationally, the percentage was only 45 percent, while the average for similar districts was only slightly higher, at 46 percent. A high proportion of crashes on rural roads in Masterton was due to poor handling. Nationally, the percentage of such crashes was 19 percent, while for similar districts it was slightly less at 17 percent. But in Masterton, the 42 crashes of this type made up around 48 percent of all crashes on rural roads.

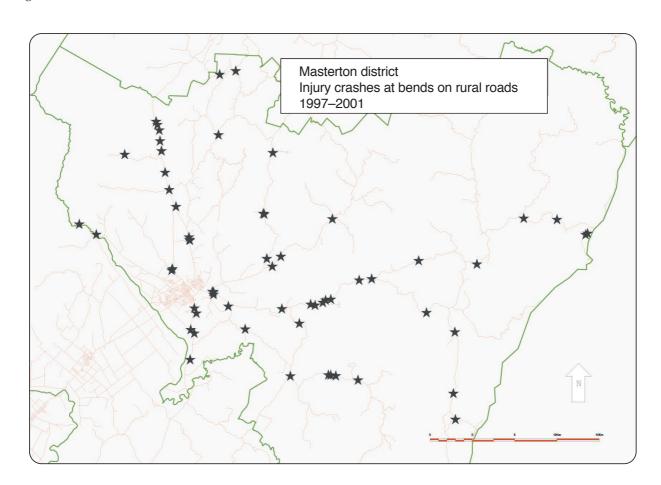
Speed is also often a contributing factor that has a great effect on crashes at bends. Over the last 10 years, more crashes on rural roads in Masterton involved speed as a factor than the national and similar districts average. In the last four years, however, this has decreased to just below the national average. Alcohol and fatigue are other factors associated with this type of crash.

A high proportion of the crashes on rural roads did not occur on the state highway system but on the local rural network. As most people entered the district via the state highway system, the explanation could be that they had not adjusted to the driving conditions of the local rural roads.



Recommended actions

- Monitor skid resistance and review intervention levels for skid resistance on severe bends.
- Encourage shoulder widening to ensure roads are the appropriate width.
- Provide sealed road shoulders where appropriate.
- Support campaigns on adjusting drivers' speed for different visibility levels and road conditions.



New Zealand Road Safety Programme

Reducing trauma involves a multi-pronged approach, which includes education, engineering and enforcement. The New Zealand Road Safety Programme (NZRSP) provides funding to educate road users to change their behaviour through projects delivered by road safety co-ordinators and community groups. The programme also funds the New Zealand Police for their targeted enforcement activities and support of community road safety projects. Transfund New Zealand provides funding to local authorities for roading projects through its National Roading Programme.

Community projects

Community funding of road safety projects aims to encourage local involvement and ownership of issues, and target local resources and effort to local risks. Central to community programmes is the need to develop and motivate local partnerships in road safety to help reduce the number of deaths and injuries in the Masterton district.

Funding for community projects in the Wairarapa region (which includes the Masterton district) from the NZRSP for the 2002/2003 year has been confirmed as follows:

Project	Funding
Road safety co-ordinator	\$27,000
Down with speed	\$3,000
Cycle in safety	\$1,000
Wairarapa intersection week	\$1,000
Stop and refresh stops	\$2,000
Be seen be safe	\$1,300
Be lady-bug safe	\$2,000

Where to get more information

For more specific information relating to road crashes in the Masterton district, please refer to the 1997 to 2001 Road Safety Data Report or the Land Transport Safety Authority Accident Investigation System, or contact the people or organisations listed below:

Land Transport Safety Authority Regional Manager Demetra Kennedy Phone 04 382 6421

Regional Engineer Alan Dixon Phone 04 382 6441

Regional Educational Advisor Roy Hitchcock Phone 04 382 6428

Road Safety Co-ordinator Brian Barnes PO Box 444, Masterton Phone 06 378 9666

New Zealand Police Sgt. Mike McRandle PO Box 443, Masterton Phone 06 378 6166

Masterton District Council Hamish Pringle PO Box 444, Masterton Phone 06 378 9666

Transit New Zealand Regional Highways Manager Stanley Chesterfield PO Box 27-477, Wellington Phone 04 801 2580

Police enforcement

In the Wairarapa region (which includes the Masterton district) during 2002/2003, police will deliver 12,910 hours as follows:

Project	Police hours
Strategic — alcohol/drugs, speed, restraints and visible road safety enforcement	9,170
Traffic management including crash attendance, incidents, emergencies and events	2,540
Road safety education	720
Police community services	480

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