

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 Transit New Zealand (TNZ) Wanganui East Region. This region comprises the Rangitikei, Manawatu, Horowhenua and Tararua Districts, and Palmerston North City.

The number of people killed or seriously injured on state highways in the region has been decreasing over the past five years. In 2002, there were 10 deaths and 70 seriously injured casualties. Between 1998 and 2002, 80 percent of injury crashes occurred on the open road in the region.

Car and van occupants formed the largest casualty group between 1998 and 2002. While six percent of casualties were motorcyclists, their involvement in crashes has shown an overall downward trend over the past 10 years.

Sixty-two percent of rural crashes between 1998 and 2002 involved drivers losing control of a vehicle, either on a bend or a straight section of road. Crashes at intersections made up over a quarter of all crashes in the region, while poor driver observation skills and driver fatigue were contributory factors in many injury crashes.

The estimated social cost of crashes on the state highway network in the TNZ Wanganui East Region in 2002 was \$94.76 million.

Both national and local road safety issues are identified below with the specific issues for the region considered in detail overleaf.

Major road safety issues

TNZ Wanganui East Region

Loss of control

Intersections

Poor observation

Fatigue

Nationally

Speed

Alcohol

Failure to give way

Restraints



2002 road trauma for TNZ Wanganui East Region



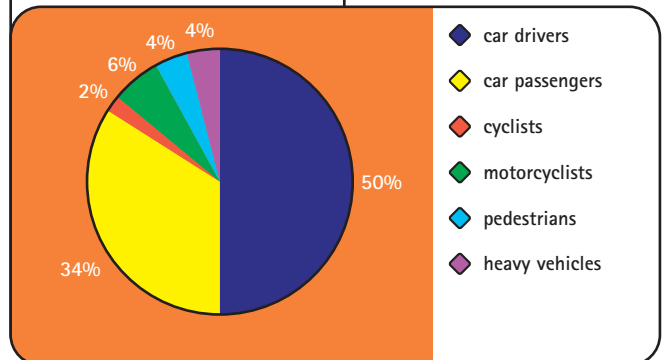
Deaths	10
Serious casualties	70
Minor casualties	246



Fatal crashes	9
Serious injury crashes	51
Minor-injury crashes	144
Non-injury crashes	421

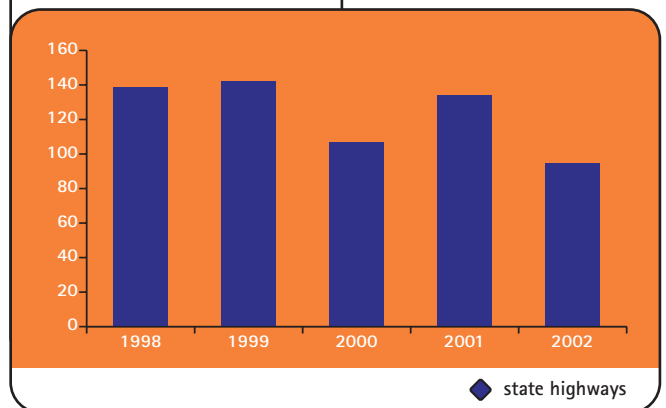
Road casualties 1998–2002

User type 1998–2002



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 2002 prices.

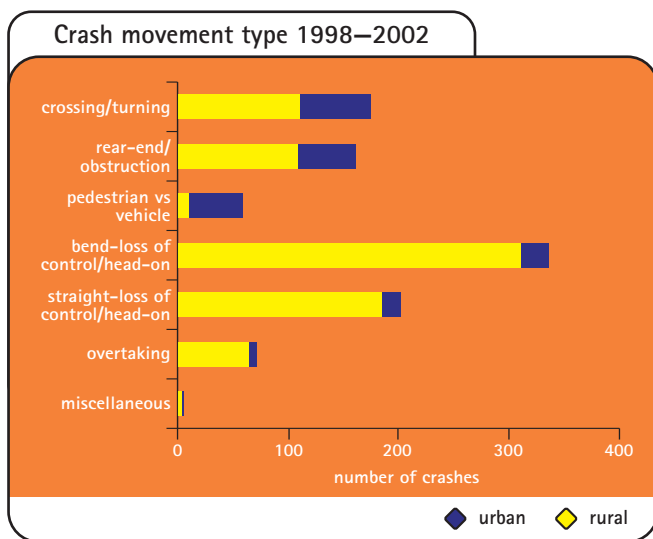


Loss of control

On the state highway network in the TNZ Wanganui East Region between 1998 and 2002, 53 percent of all injury crashes involved a driver losing control of a vehicle. Sixty-two percent of these occurred on a bend. Ninety-two percent of loss of control crashes occurred on the open road.

Factors contributing to loss of control crashes included speed too fast for the conditions, fatigue, poor handling and alcohol. Forty-six percent of loss of control crashes on a bend occurred on a wet or icy road, compared with 32 percent of all crashes in the region. A high proportion of all loss of control crashes occurred during the hours of darkness.

Loss of control crashes can result in either a head-on collision with another vehicle or the vehicle leaving the road, which may increase the severity of the crash. Objects commonly struck were fences or vehicles crashing into ditches.



Recommended actions

- Support campaigns on adjusting drivers' speed for different driving conditions.
- Encourage campaigns on the need to be fully alert when driving.
- Support strategic enforcement campaigns targeting speed and alcohol.
- Ensure roadside areas are kept clear of solid objects.
- Provide sealed road shoulders where appropriate.
- Investigate sites where neither speed nor alcohol has played a part in the crashes. Signing, road markings or surface faults could be identified.

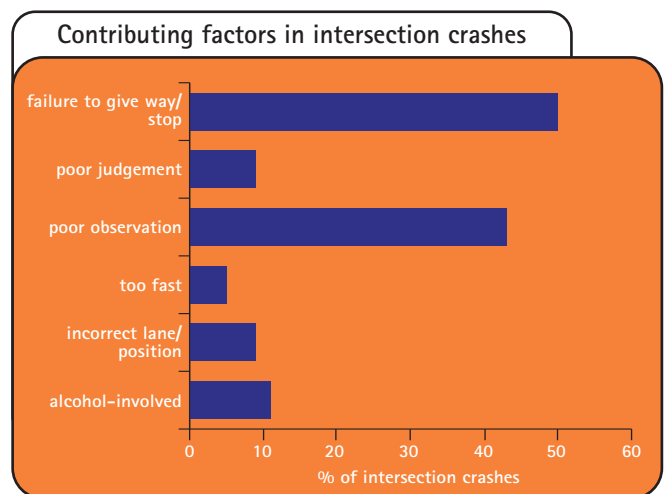


Intersections

Intersections are particularly dangerous locations as vehicles must pass through conflict points. On the state highway network in the TNZ Wanganui East Region, 27 percent of all injury crashes occurred at intersections. The majority (58 percent) of these intersection crashes occurred on the open road.

Half of all intersection crashes in the region between 1998 and 2002 were due to drivers failing to give way or stop, while 43 percent involved poor observation skills by the driver. This included drivers not seeing another vehicle or misjudging the speed of an approaching vehicle.

One half of intersection crashes occurred at Give Way controlled T junctions or crossroads. A further 17 percent occurred at intersections without any formal control such as Give Way or Stop signs and markings, and nine percent occurred at traffic signal controlled intersections.



Recommended actions

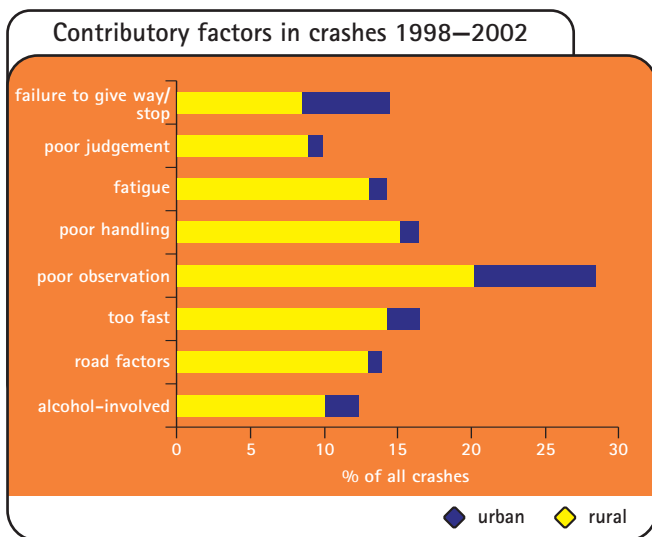
- Initiate and support campaigns on the need to give way at intersections.
- Encourage enforcement campaigns targeting drivers who fail to stop or give way.
- Encourage crash reduction studies of known black spots.
- Investigate the level of control at T junctions.
- Install splitter islands on rural crossroads.
- Remove any vegetation that might make signs, signals, vehicles and markings difficult to see and ensure signs and markings are up to the appropriate standard.

Poor observation

Poor observation skills by drivers were recorded as being a contributory factor in 29 percent of all injury crashes on state highways in the TNZ Wanganui East Region between 1998 and 2002. Seventy percent of these were on rural roads. Two thirds of rural crashes involving poor observation occurred at mid-block locations. This compares with 45 percent of urban crashes involving poor observation as a contributory factor at mid-block locations.

At mid-block locations, drivers often did not check for other vehicles when changing lanes, failed to notice other vehicles slowing, or had their attention diverted for various reasons.

Thirty-seven percent of all crashes in the region between 1998 and 2002, with poor observation as a contributory factor, involved a collision with the rear-end of a vehicle or some other obstruction.



Recommended actions

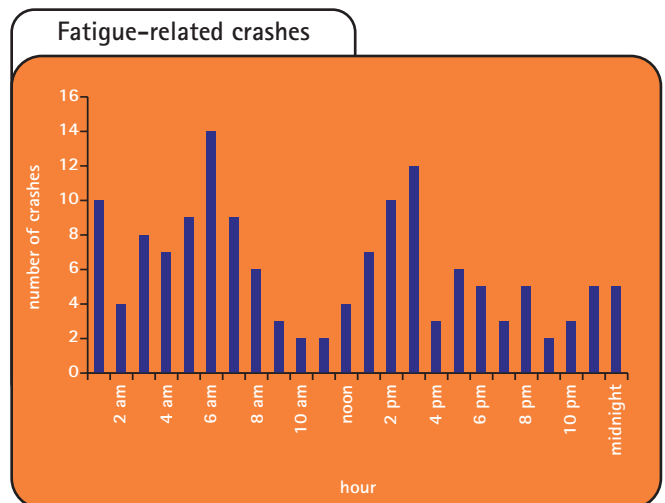
- Support education/publicity campaigns aimed at increasing driver awareness of the problem.
- Ensure the monthly Code Red articles are displayed on community notice boards etc.
- Conduct crash reduction studies for areas, routes and black spots.
- Carry out road safety audits for sight distances and controls at intersections.

Fatigue

Fatigue was reported as a contributory factor in 14 percent of all injury crashes in the TNZ Wanganui East Region between 1998 and 2002. Fatigue is difficult to report because drivers are often unaware of losing concentration, or are unwilling to admit it. This means that there is probably a higher incidence of fatigue-related crashes than the figures indicate.

Fatigue-related crashes often resulted in loss of control/head-on crashes, particularly on straight sections of road.

Between 1998 and 2002, 57 percent of the fatigue-associated crashes in the TNZ Wanganui East Region occurred between 9 pm and 9 am. Similarly, 47 percent of fatigue-related crashes occurred between 6 pm on a Friday and 6 am on a Monday morning and tended to occur more frequently during the summer months.



Recommended actions

- Raise awareness of fatigue issues by increasing the number of fatigue stops.
- Use community projects to raise awareness of fatigue issues.
- Encourage drivers travelling on holiday to travel after a night's sleep.
- Continue to install textured edge lines (rumble strips) on state highways.
- Provide safe clear zones (ie remove roadside hazards) to reduce the seriousness of any run-off-the-road crashes.
- Provide good rest areas to encourage drivers to take a break.

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 involved 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 projects will need to be negotiated by the road safety co-ordinator.

In the TNZ Wanganui East Region during 2003/2004, the Police will deliver 64,890 hours as follows:

Project	Police hours
Strategic – alcohol/drugs, speed, restraints and visible road safety enforcement	50,060
Traffic management including crash attendance, incidents, emergencies and events	10,740
School road safety education	2,760
Police community services	1,330

In addition, the Central Police District Highway Patrol Group is dedicated to the delivery of high-visibility interventions on the major highways in the region.

Where to get more information

For more specific information relating to road crashes in the TNZ Wanganui East 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:

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