MANAWATU WANGANUI STATE HIGHWAYS

road safety issues

July 2002

The 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 identify possible ways of reducing the number of road deaths and injuries on state highways in the Manawatu Wanganui region.

The area covered by this report includes state highways in the seven local authorities that make up the Manawatu Wanganui region. Tables and charts used in this report originate from the Road Safety Report for TNZ Manawatu Wanganui state highways.

There were 262 casualty crashes on state highways in the Manawatu Wanganui region in 2001, resulting in a total of 439 casualties. This compares with 240 crashes and 427 casualties in 2000.

The social cost of crashes on the Manawatu Wanganui state highways during 2001 was $158.51 million. This equates to 11.3 percent of national road trauma occurring on state highways, compared with 8.89 percent of the New Zealand highway network. Total trauma was up on 2000 but remains well below the level of the period 1997 to 1999.

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Major road safety issues:

Manawatu Wanganui state highways

- Crashes on bends
- Head-on crashes

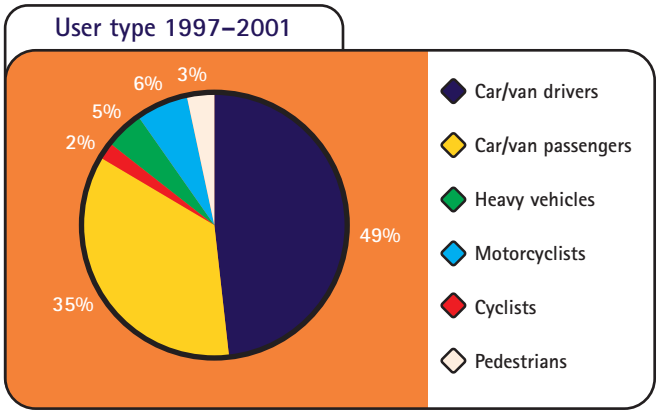
Nationally

- Speed
- Alcohol
- Failure to give way
- Restraints

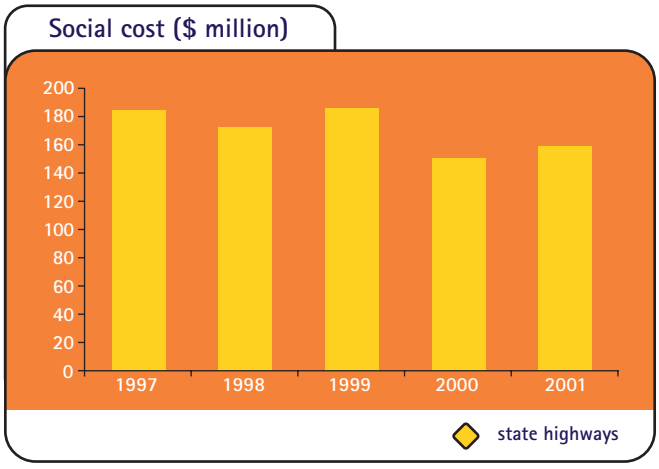
2001 road toll for Manawatu Wanganui state highways

Deaths	30
Serious casualties	93
Minor casualties	316
Fatal crashes	25
Serious injury crashes	62
Minor injury crashes	175
Non-injury crashes	554

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.

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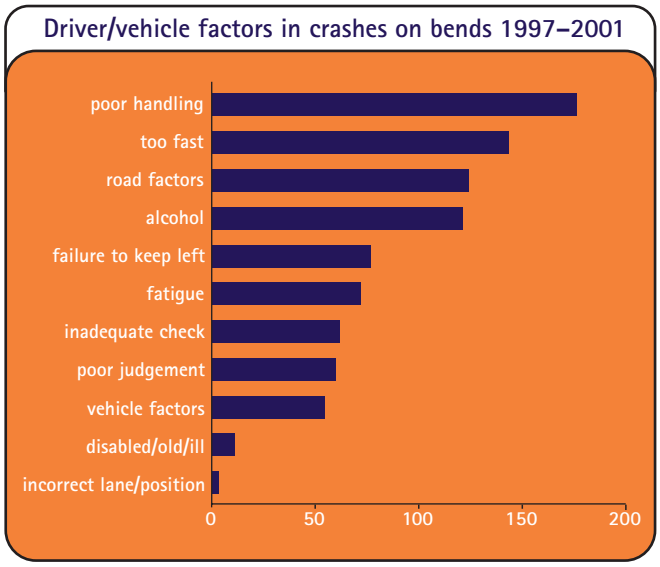
Crashes on bends

During 1997 to 2001 this crash movement type was the highest recorded percentage of all crash types occurring on rural roads. During this five-year period, crashes on bends accounted for 44 urban crashes and 488 of those recorded on rural roads. Most crashes on bends involved a loss of control or head-on type crash.

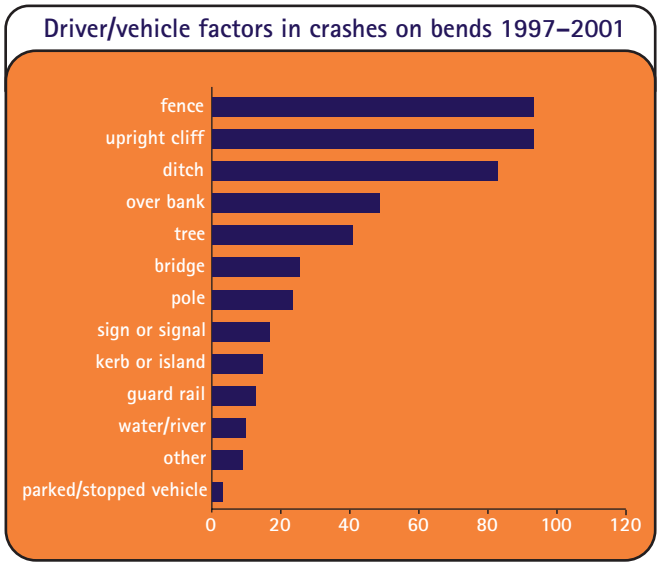
While the number of crashes on bends were similar in the Manawatu Wanganui region to other parts of the country, they accounted for nearly half of all rural crashes and were a leading road safety problem in the area. Attention must still be given to identifying and rectifying outstanding problems on rural roads.

The trend for this movement on rural roads is generally downward, with each of the last three years recording less than 100 crashes, well below the 148 crashes recorded in 1995.



An aggravating feature of many rural crashes is that of collisions with roadside objects. On the Manawatu Wanganui state highways, crashes on bends included collisions with 486 roadside obstacles. The most prevalent of these were fences (96 instances), cliffs or banks (96), ditches (85), over banks (50) and trees (42).

The Wanganui Office of Transit New Zealand has initiated a project to examine the application of clear zone principles to rural state highways. If approved, this study will be based around SH1 where it passes through Rangitikei district, and will aim to determine the feasibility of funding remedial measures on sections of highway with a clear zone of less than the recommended nine metres. Engineering solutions such as the construction of guard rails and removal of unnecessary roadside furniture will be considered as part of the remedial measures.



Recommended actions

Education

- Promote awareness of the risks of speed.
- Identify appropriate speeds for conditions and emphasise the need to be fully alert when driving.
- Improve attitudes to fast driving.
- Raise awareness of fatigue issues.

Enforcement

- Focus on speed and alcohol.
- Implement targeted enforcement at high-risk sites. This includes:
  - speed at bends with advisory speed signs
  - cross centre line breaches
  - inappropriate overtaking on bends.

Engineering

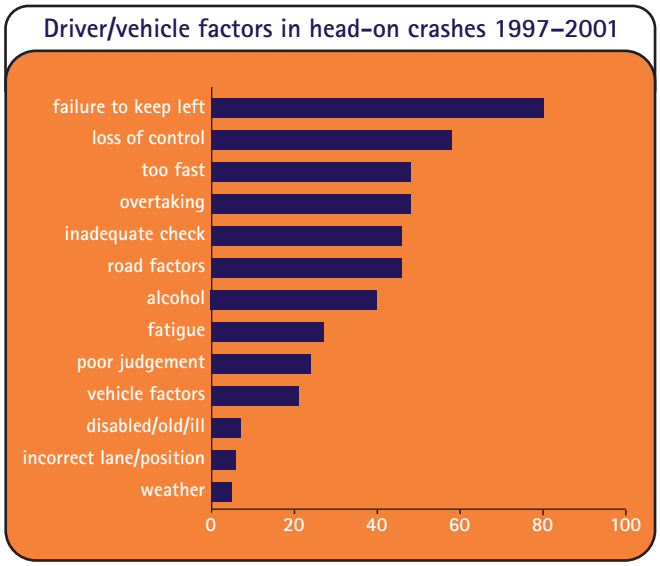
- Ensure clear delineation of curves.
- Ensure advisory speed signs are of an appropriate and consistent standard and are in the correct position.
- Maintain good road surfaces and drainage.
- Ensure roadside areas are kept clear of solid objects.
- Provide sealed road shoulders where appropriate.
-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

Head-on crashes

On the open road, loss of control and head-on crashes accounted for the majority of crashes, with poor handling, speed and fatigue being significant driver factors. Road factors were recorded at a high rate, well above the expected rate for similar areas, with 215 recorded crashes having at least one road factor contributing to the crash.

Most head-on crashes result from a loss of control of one vehicle or a failure to keep left. Most of these crashes had at least one other supplementary cause, with speed, alcohol, fatigue and inexperience being common. There were 211 recorded head-on crashes from 1997 to 2001. Of these, 111 occurred on bends, with 50 involving overtaking and another 50 involving a loss of control or failure to keep left on a straight road.

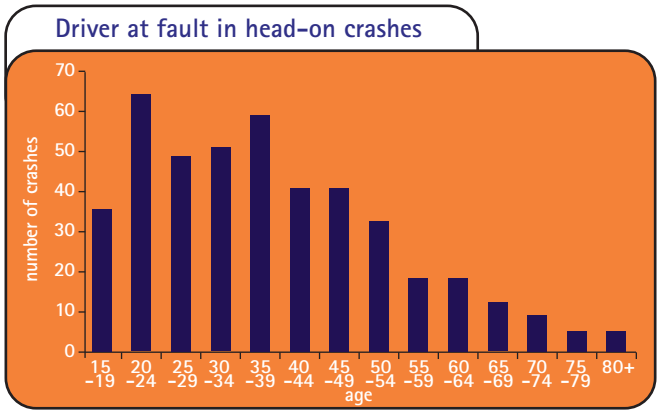
Of head-on crashes on bends, only 34 (30 percent) occurred on bends with an advisory speed sign posted. The majority of crashes occurred on corners classified as easy or moderate bends.



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 programmes that will be most effective.

On state highways in the Manawatu Wanganui region, young drivers are known to have been primarily or partly at fault in a majority of cases. Speed is a leading cause of head-on crashes involving young drivers. This trend is consistent with other areas in New Zealand.

While there is a slight over-representation among young drivers, there is a fairly even spread among all adult drivers when looking at primary fault. The shape of the following graph closely follows the age distribution for all drivers involved in crashes. This suggests that driver fault is following the overall crash trend and that age is not necessarily a good indicator of crash potential.



Recommended actions

Education

- Increase awareness of the risks of speed.
- Advocate for stricter enforcement of limits.
- Identify appropriate speeds for conditions.
- Improve attitudes to fast driving.
- Deliver education programmes targeted at driving in the wet and in darkness.
- Continue with alcohol awareness programmes.
- Raise awareness of fatigue issues.

Enforcement

- Maintain high enforcement levels in rural areas.
- Maintain strict enforcement tolerance for speed and restraints.
- Maintain high visibility patrolling at identified high-risk locations.

Engineering

- Maintain signs and roadside delineation to an appropriate standard.
- Ensure sight lines at bends are maintained.
- Consider no passing lines where appropriate.
- Maintain good skid resistant road surfaces.
- Provide a no surprises driving environment.

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 Land Transport Programme.

Community projects

Community funding of road safety projects aims to encourage local involvement and ownership of issues, and targets 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.

Funding for Manawatu/Wanganui regional community projects from the NZRSP for the 2002/2003 year has been confirmed as follows:

Project	Funding
Regional	
Road safety co-ordinator (joint Wanganui and Manawatu)	$76,000
Open road campaign	
– speed	$36,000
– alcohol	$36,000
– restraints	$36,000
– fatigue	$36,000
– driver knowledge	$36,000
Safety Link newsletter	$4,000
Driver licensing courses	$18,000
Safe with age	$14,000
Committee-run projects	$50,000

Project	Funding
Palmerston North LTSA region Maori road safety community programme	
Maori road code learner licence programme – 160 learners	$13,300
Community road safety initiatives	$35,000
The Ngati Uenuku Whanau development project	$5,500
Hapu-based learner licence programme	$3,700
He Taonga Te Tamaiti car restraints plus a driver licence programme	$15,000
Maori road safety programme	$7,000
Whanganui River – road safety project	$15,000

Police enforcement

In addition to the nationally delivered outputs, the provisional 2002/2003 New Zealand Road Safety Programme of police hours shows that the New Zealand Police will deliver hours for the Manawatu Wanganui region as follows:

Project	Police hours
Strategic – alcohol/drugs, speed, restraints and visible road safety enforcement	72,450
Traffic management including crash attendance, incidents, emergencies and events	15,590
School road safety education	3,570
Police community services	1,710
Community projects	860

The LTSA will liaise with district councils, Transit New Zealand and the New Zealand Police to develop and implement Road Safety Action Plans and Risk Targeted Patrol Plans.

Where to get more information

For more specific information relating to road crashes in the Transit New Zealand Taranaki Region, 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
John Kay
Phone 06 350 2342

Regional Education Advisor
Darryl Harwood
Phone 06 350 1889

Road Safety Analyst
David Lane
Phone 06 350 1883

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

Regional Road Safety Co-ordinator
(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

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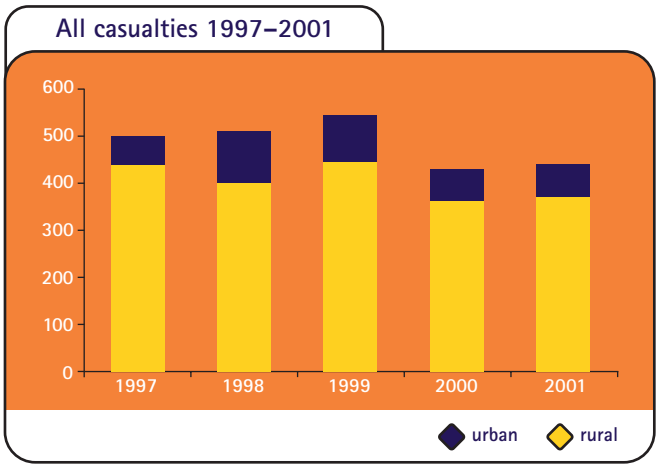
The graph below shows the changes in casualty numbers over the last five years.



A measure of how an area is performing is the number of casualties per 10,000 people. Manawatu Wanganui state highways data shows 20 casualties for 2001 compared with an average value of 17 for similar regional networks.

A sustained effort from all road safety partners is needed this year to further improve the information base used to target and evaluate road safety programmes.

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