

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 Canterbury Region.

Comparing the reported injury crashes and casualties in 2002 with 2001:

- the total number of injury crashes was about the same
- the total number of casualties decreased slightly
- there was a seven percent decrease in casualties in rural areas of the region
- the proportion of crashes at intersections decreased slightly
- the number of collisions with roadside hazards decreased slightly
- alcohol involvement increased especially in rural crashes
- speed involvement stayed about the same in both urban and rural crashes.

The number of reported non-injury crashes was about the same on both urban and rural roads.

Some characteristics of injury crashes and casualties in the five-year period were:

- crashes became less severe overall on both urban and rural roads
- around one third of crashes occurred in the dark and about one sixth on wet roads
- just under a third of all casualties were in the 15 to 24 year age group
- 68 percent of male casualties and 83 percent of female casualties were in a car or van
- cyclist and motorcyclist casualties were much more likely to be male than female.

Major road safety issues

Canterbury Region

Intersections

Speed

Roadside hazards

Alcohol

Nationally

Speed

Alcohol

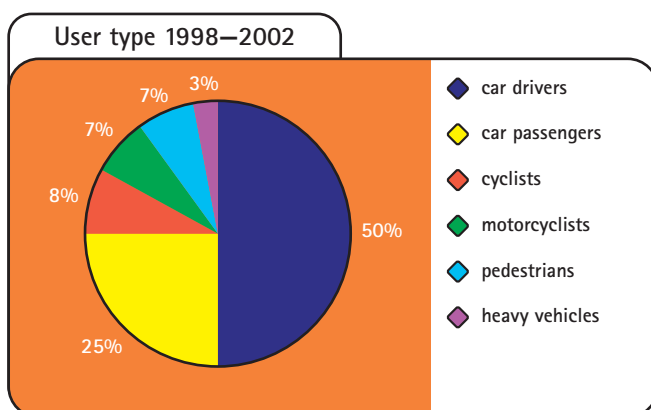
Failure to give way

Restraints

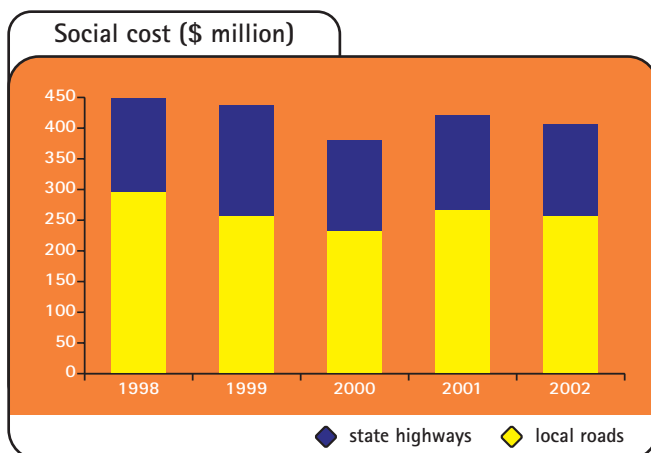
2002 road trauma for Canterbury Region

♀	Deaths	44
	Serious casualties	271
	Minor casualties	1,272
🚗	Fatal crashes	40
	Serious injury crashes	230
	Minor-injury crashes	901
	Non-injury crashes	2,488

Road 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

Nearly 60 percent of urban crashes and about 25 percent of rural crashes in Canterbury occur at intersections. Over 80 percent of these intersection crashes occur in urban areas. The nature of the road network in Canterbury with its large number of crossroads contributes to this. Crossroads are known to be more dangerous than T junctions.

Common reasons why vehicles fail to give way at intersections include:

- failure to see the other vehicle
- misjudgement of speed
- failure to notice the intersection or its control sign in time.

Most of the busiest crossroads in urban areas are controlled by traffic signals and measures are progressively being implemented to improve their safety.

In urban areas many risky intersections with modest traffic volumes would be considerably improved if converted to small roundabouts. Small roundabouts are also very effective in calming traffic in local areas.

Rural crossroads can be made safer by altering the layout (so that the straight-through path and view are interrupted for the side road approaches). This can vary from creating two separated T junctions to deviating the through path around central approach islands with extra control signs. There are many more rural intersections that would benefit from such treatment.

New Transfund procedures permit risky intersections to be identified and rectified, without waiting for crashes.

Recommended actions

- Conduct crash reduction studies to look at mass action opportunities for all crossroad types: rural, urban local and urban traffic signals.
- Continue education campaigns, backed by enforcement and based on proper analysis, to promote appropriate speed and behaviour at intersections.

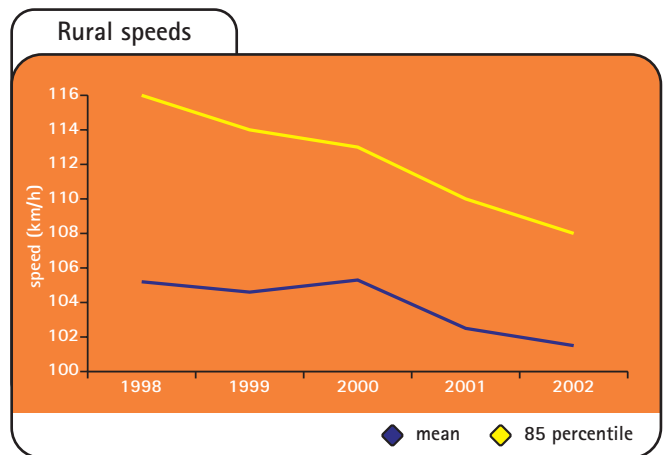
Speed

Speed remains the single biggest killer on Canterbury roads. In crashes involving speed too fast for conditions in the last five years:

- 89 people died (36 percent of deaths)
- 312 people received serious injuries
- 1,059 received minor injuries.

When travelling faster, a driver:

- has less control
- has less time to react to the unexpected
- is more likely to have speed misjudged by others
- is more likely to crash
- is more likely to be seriously injured.



The introduction of the State Highway Patrol has reduced highway traffic speeds. Urban speed tolerances have also reduced and urban speeds have also decreased.

As speeding above the limit is coming under control, more attention should now be focused on speeds too fast for the conditions.

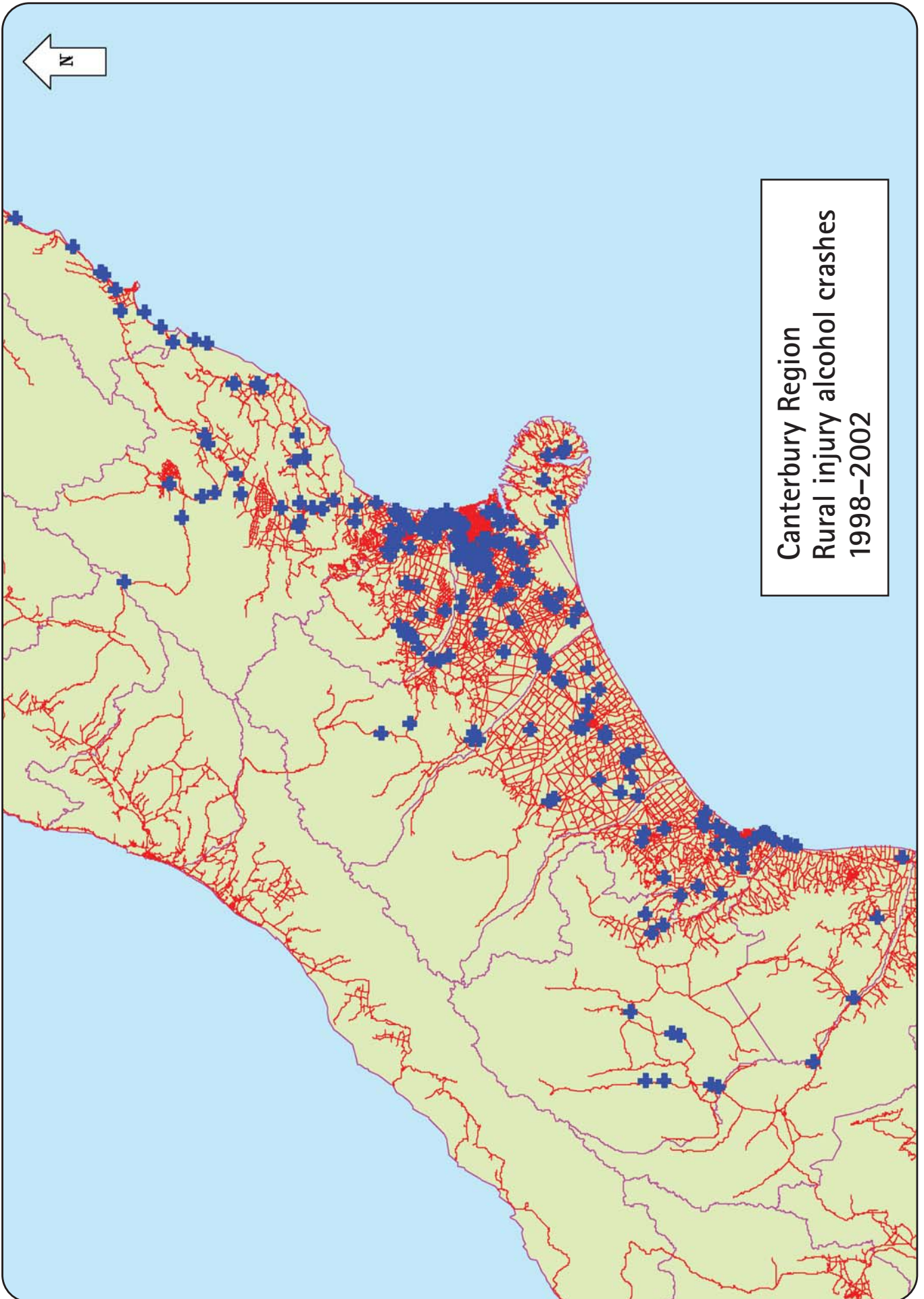
Recommended actions

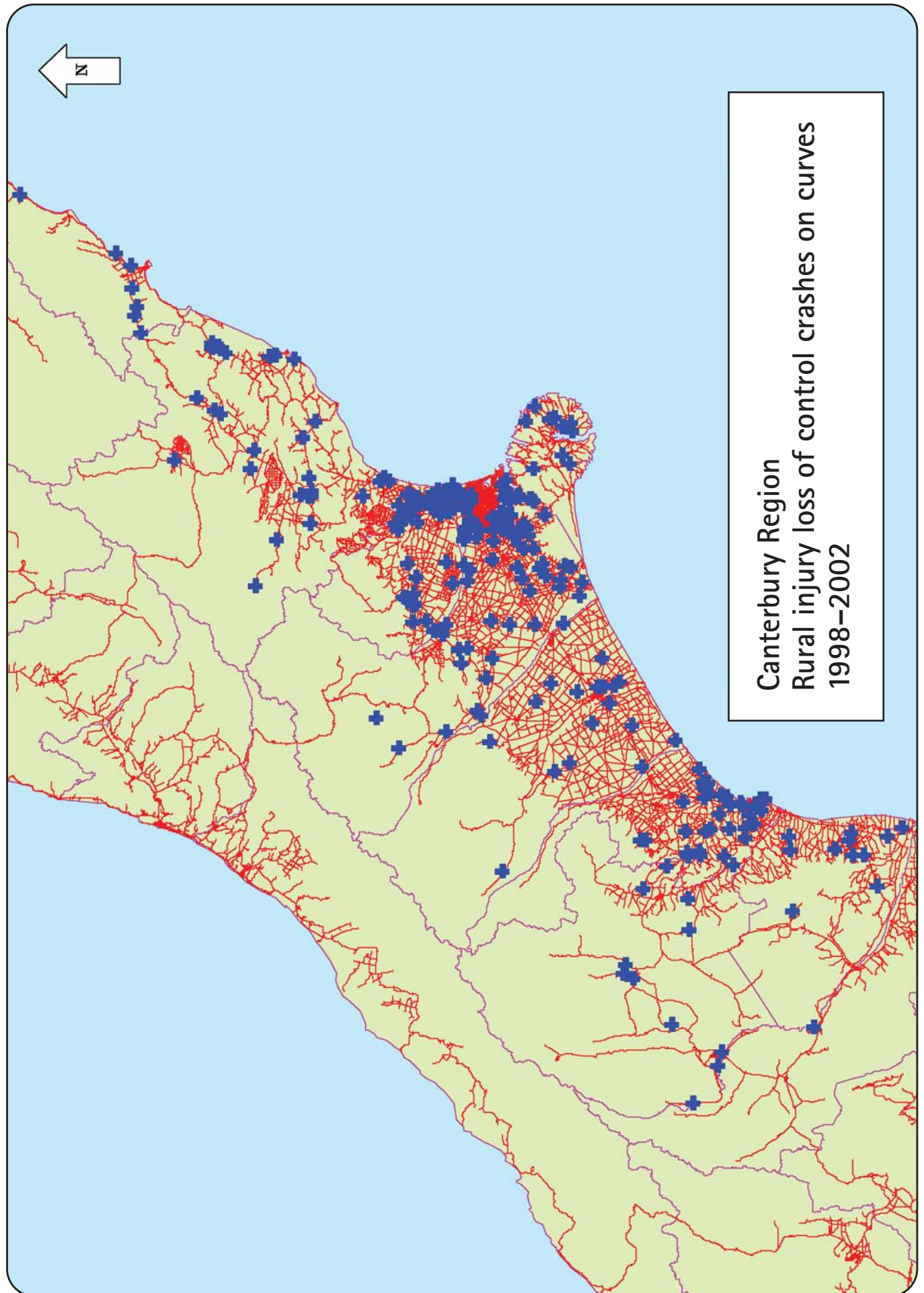
Promotional activities

- Educate the public to:
 - be more aware of the risks of speeding
 - advocate for stricter enforcement of speed limits
 - better identify the appropriate speed in adverse conditions, eg on wet roads, through commercial areas with extra pedestrian activity, and in the suburbs after school.

Enforcement

- Consider how to better target speed too fast for conditions.







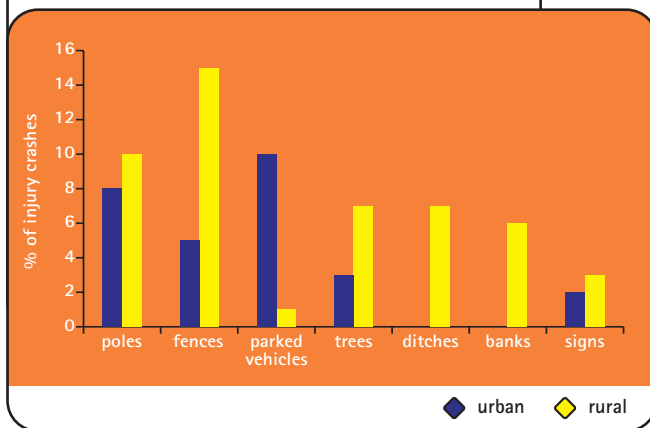
Roadside hazards

About 25 percent of urban injury crashes and 50 percent of rural injury crashes in Canterbury involve a collision with a roadside hazard. Roadside hazards turn incidents where vehicles leave the road into crashes with potentially serious consequences. In the period 1998–2002, as a result of collisions with roadside hazards:

- 112 people were killed
- 585 people were seriously injured
- 2,170 people received minor injuries.

The hazard is greatest on busiest roads, the outside of bends and the departure side of intersections, particularly at roundabouts.

Roadside hazards struck in injury crashes
1998–2002



Effective treatments for the types of roadside hazards shown in the graph vary and can be expensive. It is therefore especially important not to make roadsides more hazardous by, for example, planting trees, installing deep water tables or building obstructions in hazardous locations. Recommending cost-effective treatments for existing roadside hazards is a priority project now under way as part of the Road Safety to 2010 strategy.

Recommended actions

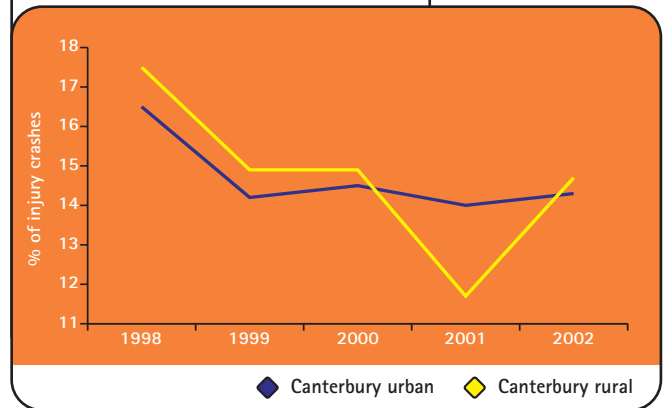
- Enhance the programme to relocate utilities underground.
- Identify the most hazardous locations for pole and tree crashes and develop appropriate countermeasures for those sites.
- Develop and adopt policies for safe planting of roadsides.
- Develop and adopt policies for roadside hazard clear zones.



Alcohol

Alcohol continues to be involved in about 15 percent of urban and rural injury crashes in Canterbury.

Alcohol-related injury crashes



In the period 1998–2002, in crashes where alcohol was a contributing factor:

- 64 people were killed
- 307 people were seriously injured
- 946 people received minor injuries.

Of injury crashes involving alcohol in rural areas:

- 70 percent were single vehicle, loss of control crashes
- 74 percent occurred in the dark.

Engineering measures at rural curves and intersections can therefore be effective in addressing these crashes.

Existing anti-drink driving campaigns have been running for a long time now and may be losing their impact. The challenge is to find new ways to affect the behaviour of the hard-core drivers who are not responding to existing programmes.

Recommended actions

- For young people, maintain support for peer pressure groups like SADD.
- Keep up activities that reinforce the decisions of those choosing not to drink and drive.
- Develop new initiatives to target those who are not responding to existing campaigns.
- Ensure a good standard of signing and delineation is maintained on rural roads.
- Provide safe clear zones (ie remove roadside hazards) to reduce the seriousness of any run off the road crashes.

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) 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

NZRSP funding of road safety initiatives aims to encourage local involvement and ownership of issues, and target local resources and effort to local risks. 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.

Funding from the NZRSP for community projects in the Canterbury Region for the 2003/2004 year has been confirmed as follows:

Project	General funding
Regional road safety co-ordinator	\$42,000
Small project fund	\$76,720
Fatigue	\$40,000
A & P show displays	\$24,000
Regional billboard project	\$18,000

In addition to project funding a further \$77,300 has been allocated to the Canterbury Region for advertising which supports community road safety initiatives. This funding is held by the LTSA and carries application criteria that must be met. Road safety co-ordinators have the criteria.

Also in addition to the above funding, each of the 10 local authorities receives funding for community projects. The combined value of this funding for 2003/2004 is \$499,980.

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 road safety co-ordinators.

In 2003/2004, the Canterbury Police are funded to deliver 179,980 hours of road policing in the Canterbury Region as follows:

Project	Police hours
Strategic – alcohol/drugs, speed, restraints and visible road safety enforcement	128,370
Traffic management including crash attendance, incidents, emergencies and events	33,930
School road safety education	6,710
Police community services	10,970

These Police hours do not include the Kaikoura District where the Tasman Police District deliver the road policing.

Where to get more information

For more specific information relating to road crashes in the Canterbury Region, please refer to the 1998 to 2002 Road Safety Data Report or the Land Transport Safety Authority CAS System, or to one of the contacts listed below:

Contacts

Land Transport Safety Authority	New Zealand Police
Regional Manager Dennis Robertson Phone 03 363 5661	Inspector Derek Erasmus PO Box 2109, Christchurch Phone 03 363 7417
Regional Education Advisor Bob Clements Phone 03 363 5677	Environment Canterbury Michael Blyleven PO Box 345, Christchurch Phone 03 365 3828
Area Road Safety Engineer Wayne Osmers Phone 03 363 5640	Transit New Zealand Tony Spowart PO Box 1479, Christchurch Phone 03 366 4455
Road Safety Co-ordinator Maureen Bishop PO Box 419, Ashburton Phone 03 308 8377	

Christchurch Regional Office
Level 5, BNZ House, 129 Hereford Street
PO Box 13364, Christchurch
Phone 03 363 5666, Fax 03 363 5655
www.ltsa.govt.nz