

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 to identify possible ways to reduce the number of road deaths and injuries in the Waimate district.

Most of the casualties from road crashes in Waimate were either drivers or passengers of cars or vans. Sixty percent were males and nearly a third were under 20 years old.

One person was killed in road crashes in Waimate in 2001. This was an 89 year-old man on a mobility scooter, hit by a car on the pedestrian crossing on Queen Street (State Highway 82) near Glasgow Street.

Most (95 percent) of the vehicle kilometres travelled in Waimate occurred on rural roads. Three quarters of the reported injury crashes and two thirds of the non-injury crashes were on rural roads. Half of the injury crashes were on State Highway 1, 30 percent on local rural roads and 20 percent on State Highway 82.

Over the five-year period the licence status of the 112 drivers involved in the injury crashes was:

- 81 full licences
- 14 learner or restricted licences
- four overseas licences
- six drivers forbidden or disqualified
- one driver with no licence or the wrong class of licence
- six drivers with an unknown licence status.

Major road safety issues:

Waimate district

Rural loss of control/head-on crashes

Fatigue

Urban poor observation

Nationally

Speed

Alcohol

Failure to give way

Restraints



2001 road toll for Waimate district

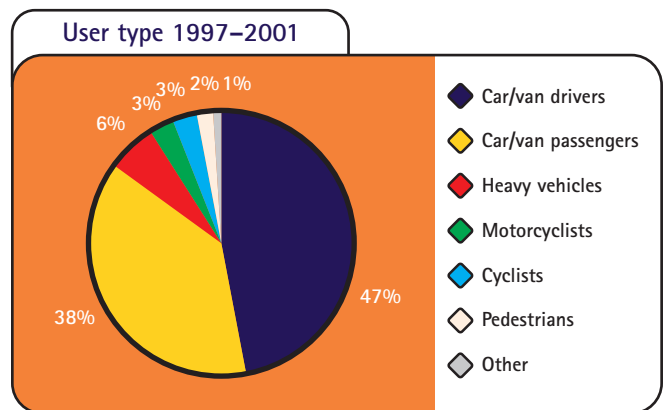


Deaths	1
Serious casualties	12
Minor casualties	39

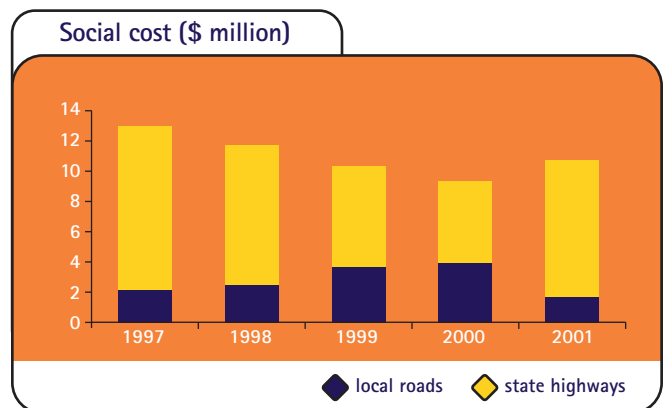


Fatal crashes	1
Serious injury crashes	8
Minor injury crashes	12
Non-injury crashes	26

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.



Rural loss of control/head-on crashes

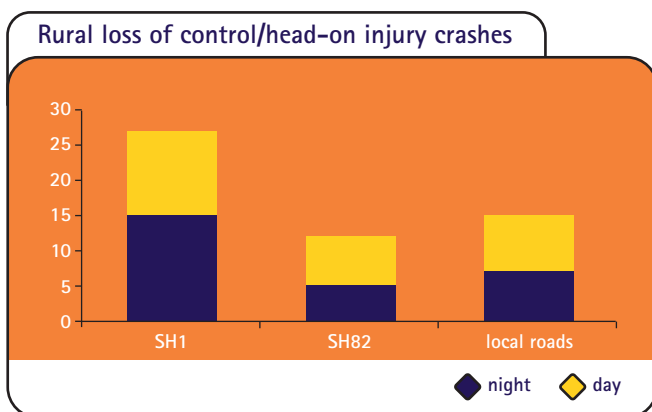
The social cost of the loss of control/head-on crashes in 2001 was \$5.66 million. This is over half the total social cost of the crashes in 2001 in the Waimate district. Three quarters of the injury crashes in Waimate happened on rural roads. Most were loss of control or head-on crashes.

The number of rural loss of control/head-on injury crashes has reduced in the last two years but the number of non-injury crashes has increased.

There were 53 injury loss of control/head-on crashes from 1997 to 2001. Of these:

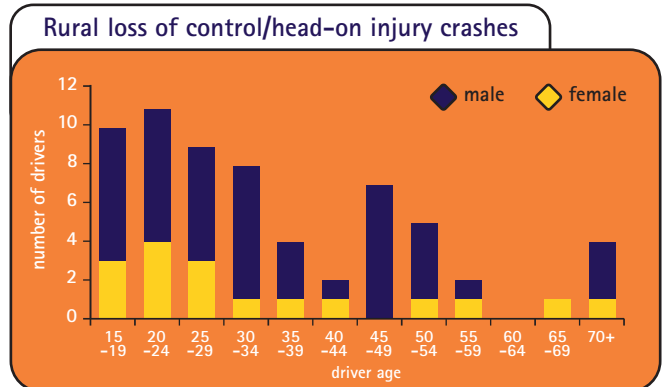
- two thirds were on State Highway 1, 21 percent on State Highway 82 and 28 percent on local roads
- about half were at night
- over half involved a loss of control on bends, and most of these involved a loss of control while turning right
- most of the crashes on bends were on easy or moderate bends
- less than one fifth were head-on crashes
- on straight roads most of the crashes involved the vehicle losing control and going off the road to the left
- most occurred on dry roads.

Crash patterns for the 50 non-injury rural loss of control/head-on crashes were very similar.



Fatigue, speed and poor handling were the most common factors. Drivers travelled too fast for the conditions and when approaching bends. On straight roads many involved a loss of control when the driver was trying to return to the seal after drifting off the road to the left due to fatigue.

Most of the drivers were males. The following graph shows drivers in most age groups, with relatively high numbers of male drivers under 35 years old or between 45 and 54 years old. Most of the female drivers were under 30 years old.



Recommended actions

Education

- Support campaigns on adjusting drivers' speed for different environment and road conditions.
- Encourage campaigns on the need to be fully alert when driving.
- Raise awareness of fatigue issues by community projects and continuing use of fatigue stops.

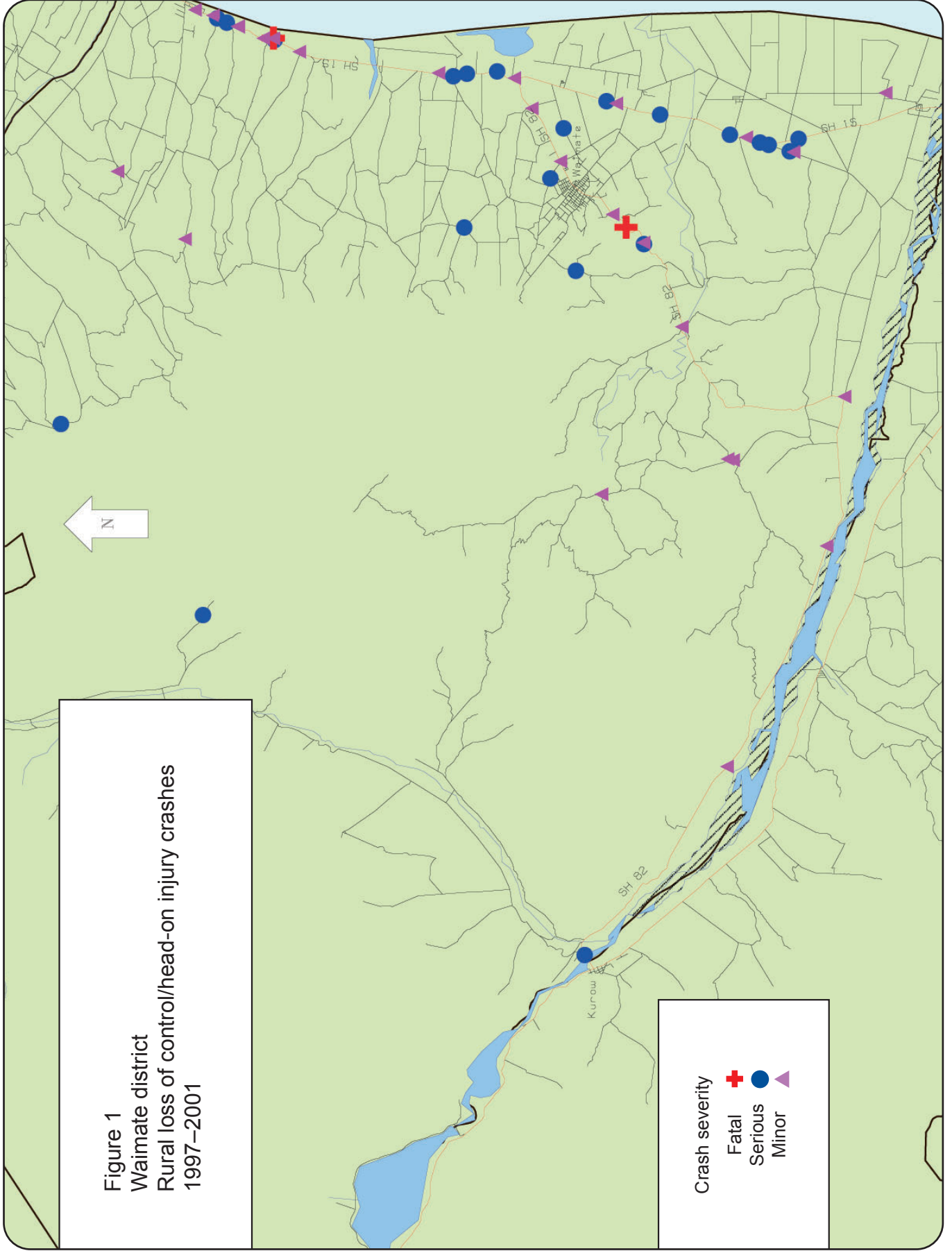
Enforcement

- Support strategic enforcement campaigns targeting speed and alcohol on rural roads, especially over the weekends.

Engineering

- Encourage shoulder widening to ensure roads are the appropriate width with good recovery areas for errant vehicles.
- Ensure advisory signs are appropriate, consistent and in the correct position.
- Maintain good road surfaces and drainage.
- Ensure roadside areas are kept clear of solid objects.
- Continue road realignment projects, where appropriate.

Figure 1
Waimate district
Rural loss of control/head-on injury crashes
1997–2001



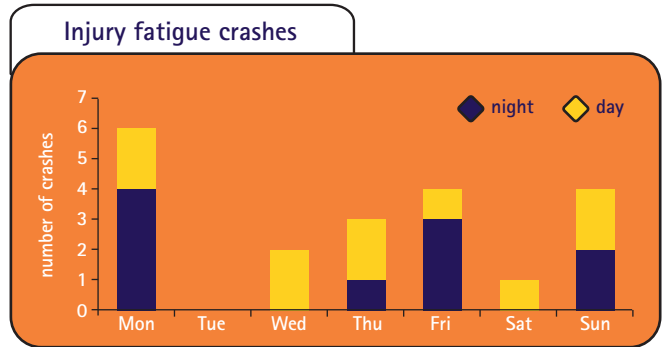
Zzzz Fatigue

Fatigue is the biggest factor contributing to injury crashes in the Waimate district. Over a quarter of the rural crashes from 1997 to 2001 involved drivers who were tired or fell asleep. About a quarter of the fatigued drivers were also affected by alcohol. All except two of the fatigue crashes were single vehicle loss of control crashes.

One driver was killed and 20 drivers and 28 passengers were injured in fatigue crashes. Most of the driver casualties were male but over half the injured passengers were female.

Two thirds of the crashes were on State Highway 1, one third on State Highway 82 and one third on rural local roads. About half the crashes were on bends, more when turning right than left and generally on easy or moderate bends. On straight sections of road, fatigued drivers lost control and went off the road to the left more than to the right.

Over three quarters of the drivers were male and all but one of the male drivers were under 50 years old. Most of the crashes happened on Sunday, Saturday or Thursday and half of them when it was dark. All the fatigue crashes on local rural roads happened on bends when it was dark.



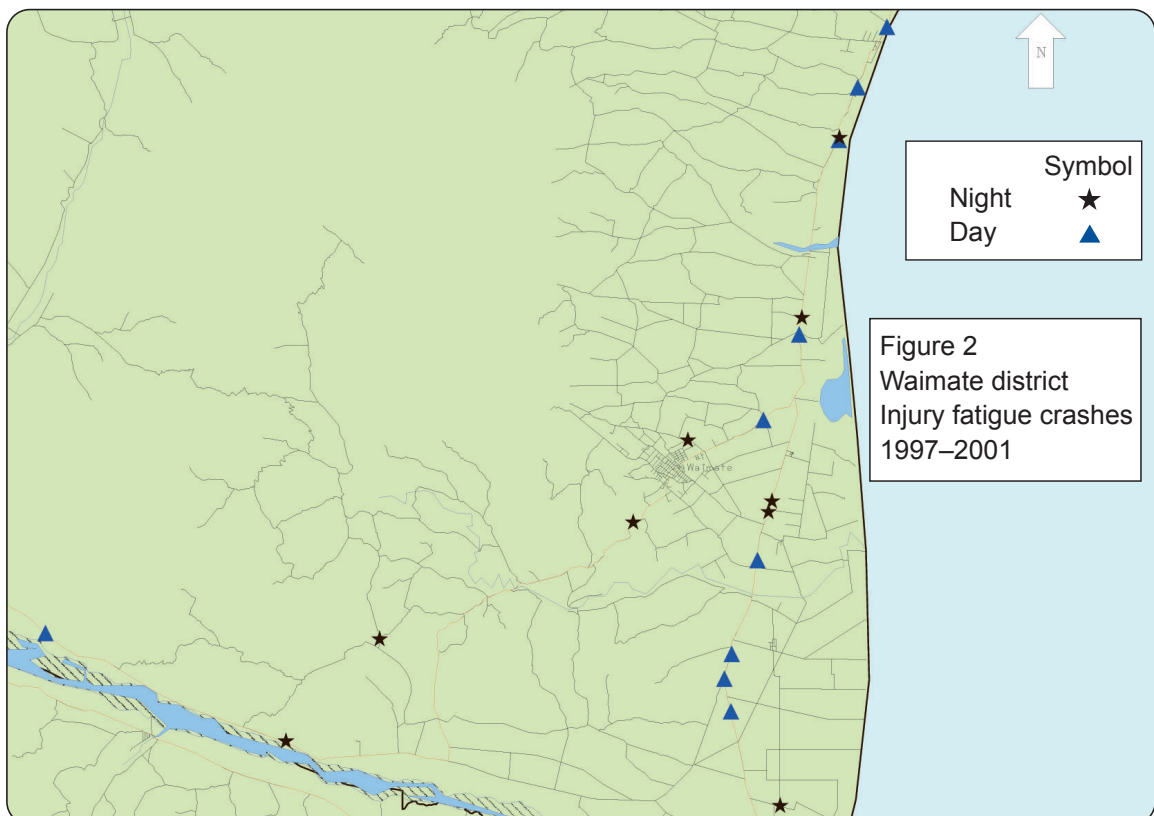
Recommended actions

Education

- Raise awareness of fatigue issues and strategies to avoid fatigue, by community projects and continued use of fatigue stops.
- Encourage drivers travelling on holiday to travel after a night's sleep.
- Use fatigue billboards to raise awareness on the road.

Engineering

- Investigate use of textured edge lines (rumble strips) on long straight sections of state highways.
- Provide consistent no surprises rural road environments.
- Ensure an appropriate standard of delineation and curve warning on local rural roads.





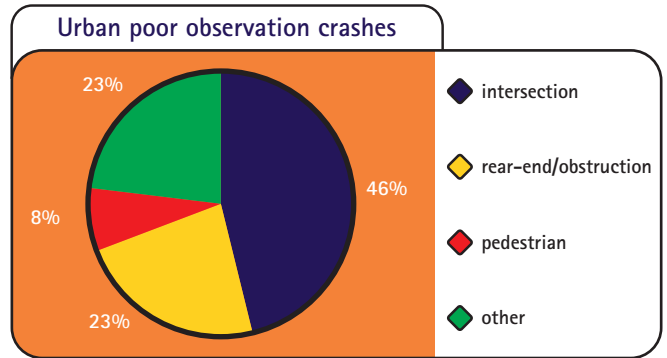
Urban poor observation crashes

There was a sudden rise in the number of casualties from urban crashes in Waimate in 2001. This was mainly due to one urban crash that seriously injured four people and caused minor injuries to a further seven people. A young driver drove straight through a Give Way controlled intersection, collided with another car coming from the right, then hit a power pole. This crash highlighted the possible consequences of poor observation when driving in urban areas. The driver did not see or look for the vehicle that had right of way until too late to avoid the collision.

Half of the 24 urban injury crashes in Waimate between 1997 and 2001 involved drivers being inattentive, distracted or not seeing or looking for other road users until too late. One elderly pedestrian was killed and two young cyclists, 11 drivers and 11 passengers were injured in these crashes.

None of the urban injury crashes in 1997 or 1998 had poor observation factors recorded but there have been three, two and eight with poor observation factors in the years 1999, 2000 and 2001 respectively.

Most of these crashes happened at or near intersections and nearly half involved intersection movement conflicts. Over half the crashes happened between 1pm and 6pm and more on Friday than other days of the week. However the crashes have also happened late at night or early in the morning. Drivers need to be alert and look for other road users at all times. Half of the 18 drivers in these crashes were female and a third under 25 years old.



Recommended actions

Education

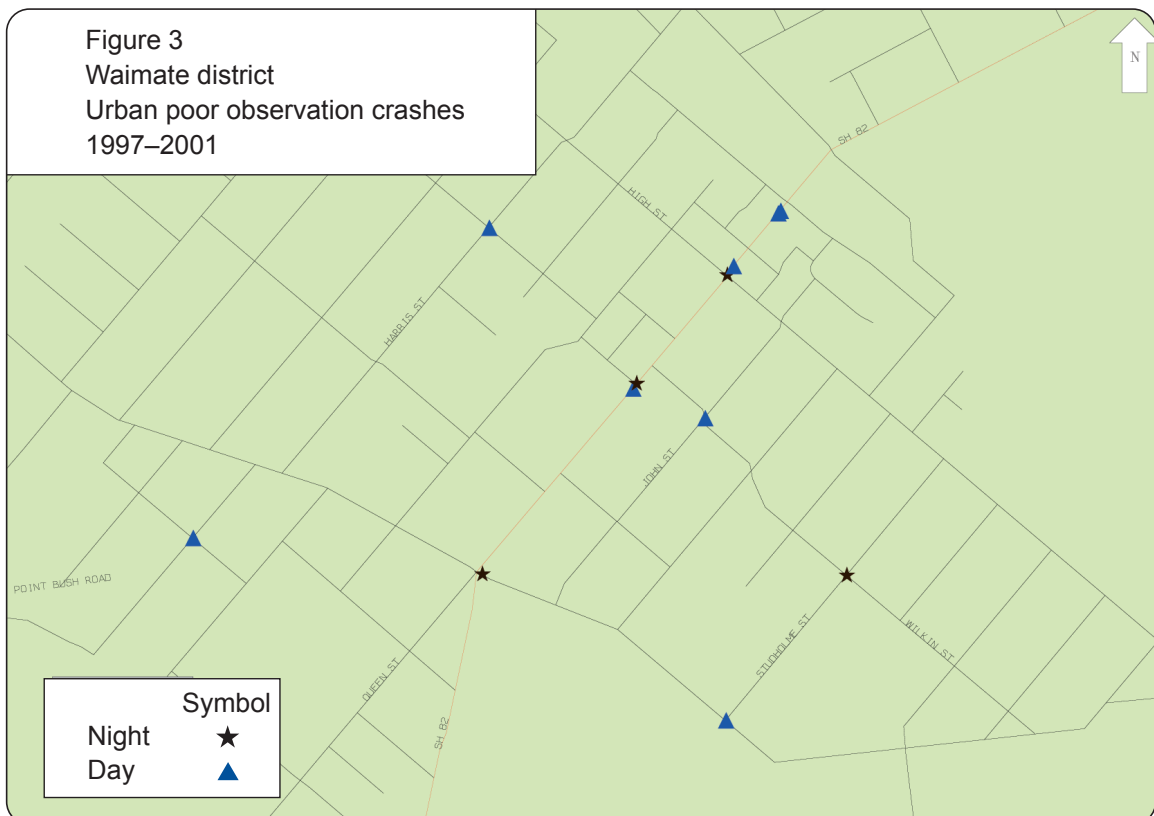
- Initiate and support campaigns on the need to be aware of other road users and to give way at intersections.
- Encourage education programmes and campaigns that address driving at an appropriate speed, keeping a safe distance, signalling intentions, choosing a safe gap and checking for pedestrians and cyclists.

Engineering

- Ensure intersection signs and markings are up to the appropriate standard.

Enforcement

- Encourage enforcement campaigns targeting drivers who fail to stop or give way.



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 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 Waimate district.

Funding for community projects in the Waimate district from the NZRSP for the 2002/2003 year has been confirmed as follows:

Project	Funding	Police hours
Road safety co-ordinator	\$9,000	–
Speed	\$1,000	15
Community alcohol action programme	\$5,000	100
Restraints	\$500	–
Intersections/poor observation	\$1,000	15
Rural driving/fatigue	\$2,500	30

Waimate district will also be involved in regionally funded projects to target the high risk issues of speed, alcohol, restraints and pedestrian issues. These projects have been funded as follows:

Project	General funding	Advertising funding
Regional road safety co-ordinator	\$38,000	–
Speed	\$60,000	\$20,000
Intersection safety	\$50,000	\$8,000
Fatigue	\$20,000	\$29,510
Pedestrian safety	\$10,000	\$10,000
A & P show displays	\$20,000	–
Development of safe driving policies	\$3,500	–
Regional billboard project	–	\$11,000

Police enforcement

In addition to the 160 police hours to support community projects, a further 4,170 hours will be delivered by police in the Waimate district as follows:

Project	Hours
Strategic – alcohol/drugs, speed, restraint and visible road safety enforcement	3,210
Traffic management including crash attendance, incidents, emergencies and events	790
School road safety education	80
Police community services	90

Road Environment

Transfund New Zealand's National Land Transport Programme 2002–2003 has allocations for minor safety projects on local roads and state highways in the Waimate district.

Where to get more information

For more specific information relating to road safety in the Waimate district please refer to the 1997 to 2001 Road Safety Data Report, or one of the contacts listed below.

Land Transport Safety Authority	New Zealand Police
Regional Manager Dennis Robertson Phone 03 363 5661	Strategic Traffic Manager Derek Erasmus New Zealand Police PO Box 2109, Christchurch Phone 03 363 7417
Regional Education Advisor Bob Clements Phone 03 363 5677	Waimate District Council Rob Moffat PO Box 122, Waimate Phone 03 689 6874
Senior Road Safety Engineer Steve Parry Phone 03 363 5646	Transit New Zealand Area Engineer Colin Hey PO Box 1479, Christchurch Phone 03 366 4455
Road Safety Co-ordinator Wayne Dyche South Canterbury Road Safety Charitable Trust PO Box 522, Timaru Phone 03 684 8199 Mobile 025 386 285	

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