

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 Ashburton district.

Half of the casualties from road crashes in the Ashburton district were drivers of cars or vans and over a third were passengers in cars or vans. Motorcyclists were the next largest casualty group and made up just under a tenth of the casualties.

In 2001, five people were killed in road crashes in the Ashburton district: two in urban crashes and three in rural crashes. Two were over 65 year-old drivers of cars and one a 67 year-old motorcyclist. A 63 year-old passenger and a one year-old pedestrian were also killed.

The number of reported injury crashes and casualties was lower in the last two years than previous years. Reported non-injury crashes were slightly lower in 2001 than the previous two years.

Major road safety issues:

Ashburton district

Intersections

Elderly casualties

Poles or trees

Nationally

Speed

Alcohol

Failure to give way

Restraints



2001 road toll for Ashburton district



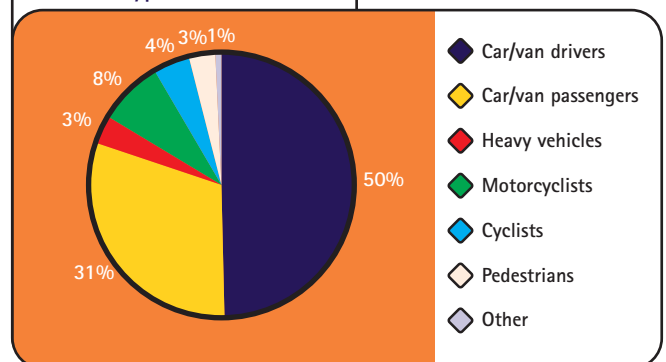
Deaths	5
Serious casualties	11
Minor casualties	51



Fatal crashes	4
Serious injury crashes	10
Minor injury crashes	37
Non-injury crashes	105

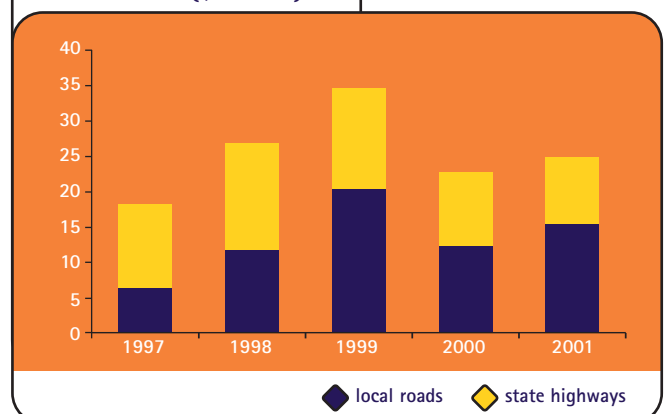
Road user casualties 1997–2001

User type 1997–2001



Estimated social cost of crashes*

Social cost (\$ million)



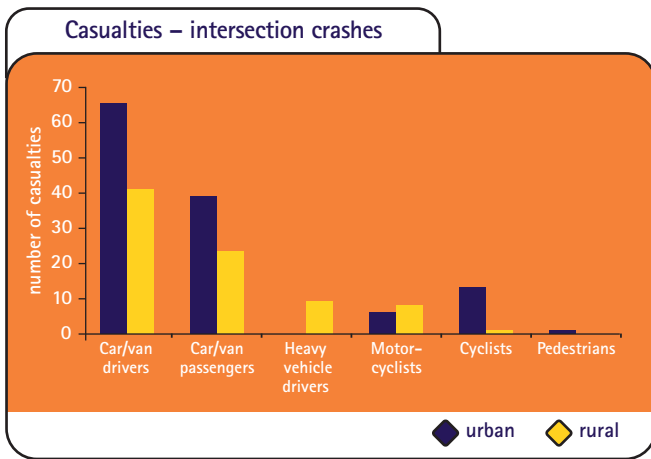
* The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are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

T Intersections

About two thirds of urban injury crashes and one third of rural injury crashes in the Ashburton district happened at intersections. Most of the crashes at intersections were collisions between vehicles crossing or turning at the intersection, but rear-end collisions and single vehicle loss of control turning crashes were also quite common. The social cost of crashes at intersections in 2001 was \$12.4 million. This was half the social cost of crashes in the district.

Crashes at intersections were, and will continue to be, a high proportion of crashes in the district because of the high number of intersections.

The graph below shows the road users injured in crashes at intersections. Most were drivers or passengers in cars or vans, but in urban crashes cyclists and motorcyclists were also injured. Heavy vehicle (truck or bus) drivers were injured in rural crashes at intersections.



Failure to give way and poor observation were the most common factors in both urban and rural intersection crashes. Speed (travelling too fast for the conditions) and alcohol were also common factors in intersection crashes. Speed was more a factor at rural intersections and alcohol more at urban intersections.

Urban intersection crashes:

- happened mostly at Give Way controlled X junctions
- killed two people between 1997 and 2001 (one driver and one passenger)
- involved drivers in all age groups, but with many under 20 or over 70 years old and nearly half of them female drivers
- injured nearly 60 percent as many passengers as drivers, mostly passengers under 25 years old
- injured 13 cyclists, mostly teenagers.

Rural intersection crashes:

- happened mostly at Give Way controlled intersections, both X and T junctions

- killed three drivers, one motorcyclist, one cyclist and one car passenger in the last five years
- injured seven motorcyclists
- involved drivers in all age groups with most under 40 years old, nearly a third of them under 25 years old and two thirds of them male drivers
- injured half as many passengers as drivers, with two thirds of them female and most under 25 years old.

Recommended actions

Education

- Initiate and support campaigns on the need to give way at intersections, particularly when turning right.
- Support education and advertising campaigns on the right of way rules.
- 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 cyclists.

Enforcement

- Support strategic enforcement campaigns aimed at crossroads and known problem intersections.
- Encourage enforcement campaigns targeting drivers who fail to stop or give way.

Engineering

- Continue crash reduction studies to identify, investigate and remedy intersections with high crash rates.
- Improve visibility at intersections.
- Research reasons why drivers are failing to notice and give way to other vehicles.
- Conduct a safety audit/survey of intersection controls and visibility.
- Investigate the level of control at T intersections.
- Consider installing roundabouts, where feasible, to reduce the severity of crash injuries.

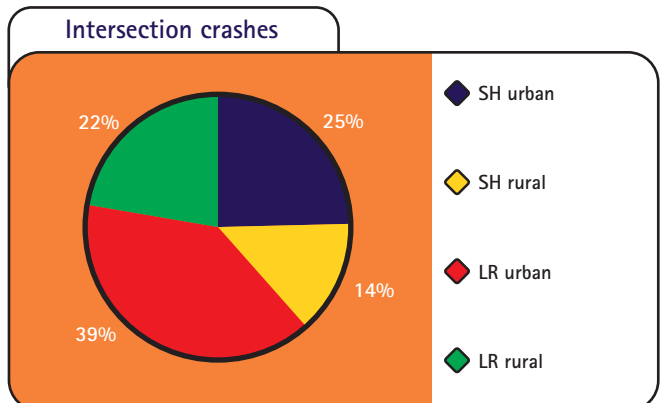
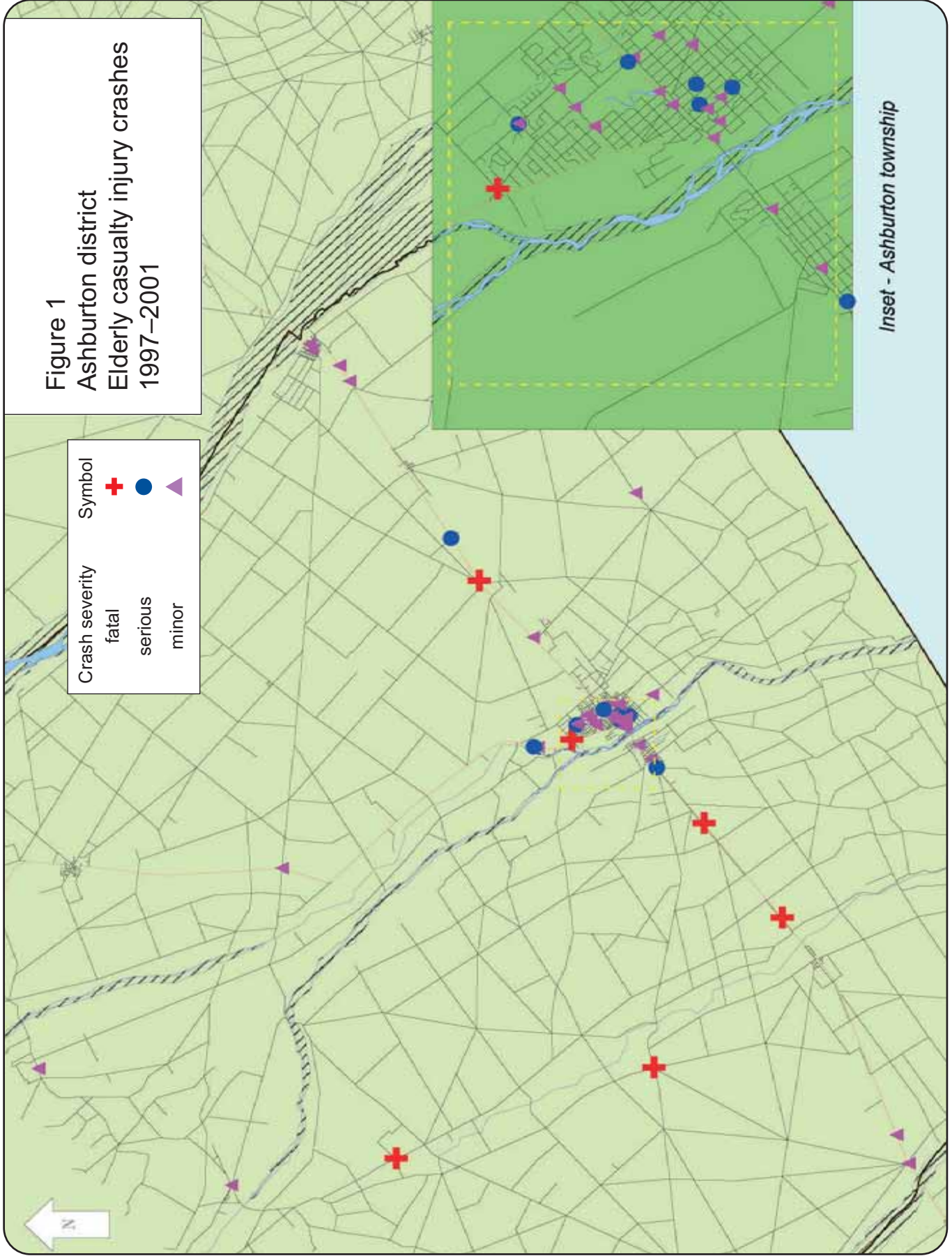


Figure 1
Ashburton district
Elderly casualty injury crashes
1997-2001

Crash severity	Symbol
fatal	+
serious	●
minor	▲



Elderly casualties

Compared with other similar districts or all of New Zealand, a higher proportion of the casualties from road crashes in the Ashburton district was over 65 years of age.

From 1997 to 2001, seven people over 65 years old were killed, nine were seriously injured and 38 received minor injuries in road crashes in the district. These casualties were from 44 crashes – 26 urban and 18 rural. Most of the casualties were car drivers but 12 were passengers, three were motorcyclists and two were pedestrians.

Six of the seven deaths were from crashes on rural roads, four on State Highway 1 and two on local roads. Just over half the elderly casualties from urban crashes and over two thirds from rural crashes were female.

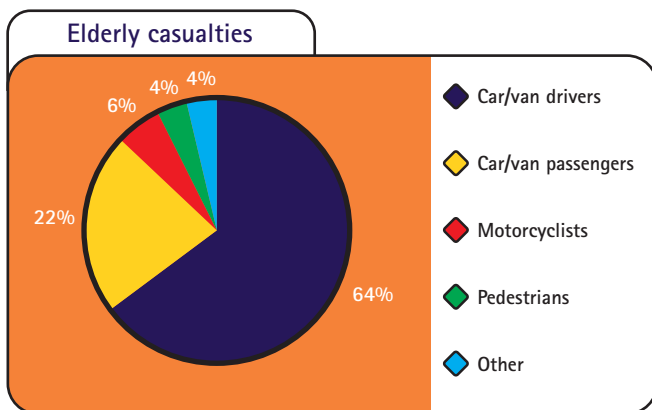
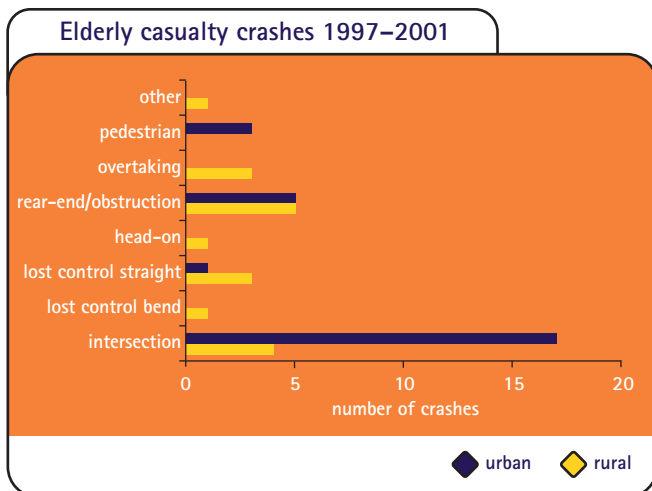


Figure 1 shows the locations of the injury crashes with elderly casualties. Nearly half of these crashes were intersection crashes and a quarter rear-end or obstruction collisions. Most of the intersection crashes were right-angle crossing collisions. The rear-end or obstruction crashes included a mix of rear-end collisions and collisions with parked cars or vehicles doing a U-turn.



Most of the crashes happened between 10am and 5pm on weekdays, with very few crashes on a Saturday or Sunday.

Impaired ability due to age was the most common factor for the elderly drivers in these crashes. Failure to give way at Give Way controls was also a common factor. Failure to check adequately when making a U-turn was the third most common factor for the elderly drivers.

Recommended actions

Education

- Improve driving skills through programmes like Defensive Driving and Safe with Age courses.
- Target programmes to the over 65 year age group.
- Promote the need for drivers to thoroughly check for other vehicles at intersections or when making U-turns.

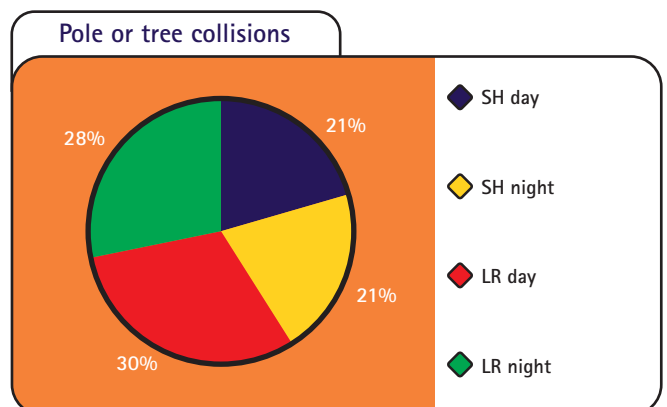
Engineering

- Ensure distracted drivers do not encounter 'surprises' in the road environment.
- Design simple intersection layouts.

Poles or trees

Over a quarter of the rural crashes in the Ashburton district involved collisions with poles or trees. Three people were killed and 48 others were injured in the 39 rural collisions with poles or trees over the 1997–2001 period. Three quarters of these casualties were drivers.

Most of these crashes were single vehicle, loss of control crashes on straight sections of road. Over half the crashes were on local roads, nearly half were at night and two thirds occurred during the weekend.



Three quarters of the drivers in these crashes were males and about half were under 25 years old. Nearly all the passengers injured were less than 20 years old. Fatigue, alcohol and speed were the three most common factors contributing to the crashes.

Recommended actions

Education

- Use community projects to raise awareness of fatigue issues.
- Support education campaigns targeting young drivers and the dangers of driving too fast at night, especially on rural roads.

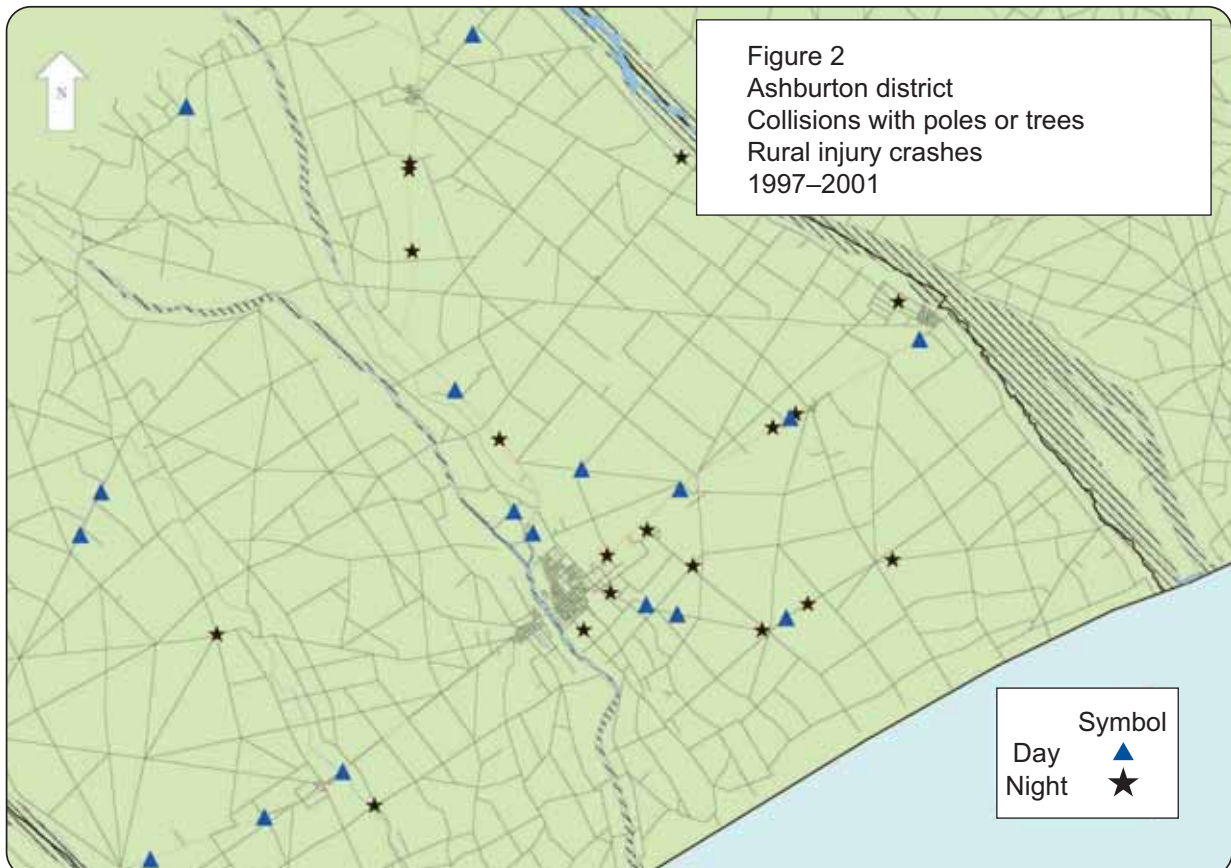
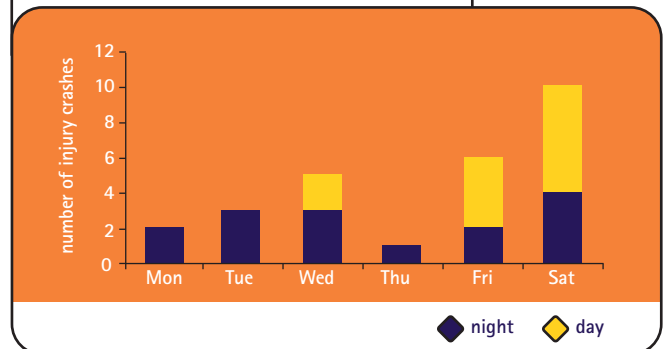
Enforcement

- Support enforcement campaigns aimed at controlling rural speeds, especially during the Friday to Sunday period.
- Continue to support drink-driving strategic enforcement campaigns, especially on rural roads at night and at weekends.

Engineering

- Provide safe clear zones (ie remove roadside hazards) to reduce the seriousness of any 'run off the road' crashes.
- Provide consistent 'no surprises' road environments.
- Provide good rest areas to encourage drivers to take a break.
- Use frangible poles when replacing poles.
- Work with utility companies to eliminate poles and relocate services underground.
- Promote awareness of hazards within the road corridor and the safety gains that can be made by managing them effectively.

Rural collisions with poles or trees



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 level of deaths and injuries in the Ashburton district.

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

Project	Funding	Police hours
Road safety co-ordinator	\$11,000	
Community alcohol action programme	\$6,500	200
Restraints	\$500	
Intersection safety	\$3,500	30
Speed – loss of control and rural	\$4,500	10
Fatigue	\$2,000	
Fatigue stop	\$500	
Community youth road crash consequences	\$2,500	30
Driver education	\$4,000	

The Ashburton 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 270 police hours to support community projects, a further 9,940 hours will be delivered by police in the Ashburton district as follows:

Project	Police hours
Strategic – alcohol/drugs, speed, restraint and visible road safety enforcement	8,110
Traffic management including crash attendance, incidents, emergencies and events	1,110
School road safety education	510
Police community services	210

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 Ashburton district.

Where to get more information

For more specific information relating to road safety in the Ashburton district please refer to the 1997 to 2001 Road Safety Data Report, or contact the people or organisations listed below:

Land Transport Safety Authority

Regional Manager
Dennis Robertson
Phone 03 363 5661

Regional Education Advisor
Bob Clements
Phone 03 363 5677

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
Sharon McDonald
Ashburton District Council
PO Box 419, Ashburton
Phone 03 308 8377

New Zealand Police
Senior Sergeant Arnold Kelly
PO Box 34, Ashburton
Phone 03 307 8400

Ashburton District Council
David Robertson
PO Box 94, Ashburton
Phone 03 308 5139

Christchurch Regional Office

Level 5, BNZ House, 129 Hereford Street

PO Box 13–364, Christchurch

Phone 03 363 5666, Fax 03 363 5655

www.ltsa.govt.nz

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