

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 Selwyn District.

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

- the total number of injury crashes decreased
- the total number of casualties decreased
- these decreases occurred mainly in rural areas of the district
- the proportion of crashes at intersections decreased slightly
- the number of collisions with roadside hazards decreased
- alcohol involvement decreased in rural crashes
- speed involvement stayed about the same in both urban and rural crashes.

The number of reported non-injury crashes decreased 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 a wet road
- one in five urban and one in seven rural crashes involved a collision with a pole
- just under a third of all casualties were in the 15 to 24 year age group
- 86 percent of male casualties and 89 percent of female casualties were in a car or van
- about two thirds of motorcyclist casualties were male.

Major road safety issues

Selwyn District

Rural intersections

Roadside hazards

Loss of control on straight roads

Speed

Nationally

Speed

Alcohol

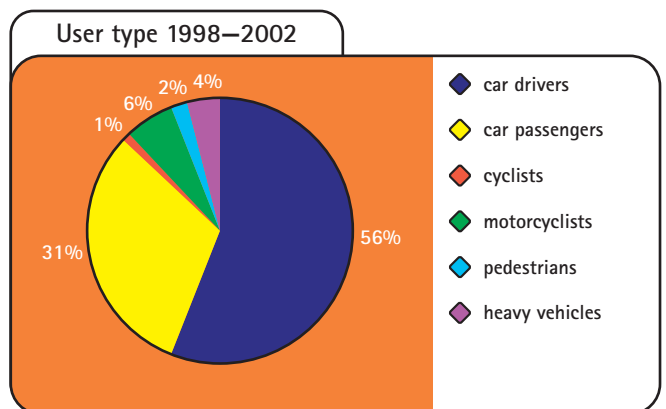
Failure to give way

Restraints

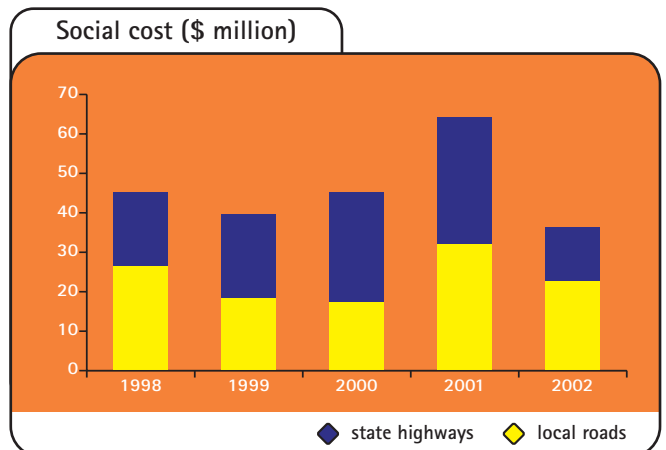
2002 road trauma for Selwyn District

Deaths	4
Serious casualties	18
Minor casualties	81
Fatal crashes	4
Serious injury crashes	17
Minor-injury crashes	54
Non-injury crashes	97

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.

Rural intersections

Crashes at intersections comprised about:

- 30 percent of all rural crashes in the Selwyn District
- 40 percent of all rural crashes away from state highways in the district.

About three quarters of crashes at state highway intersections were collisions where one of the vehicles was turning onto or off the highway. In contrast, at intersections between local authority roads:

- about a quarter of the crashes were single vehicle, loss of control crashes
- nearly half the crashes were right angle collisions.

The nature of the road network in Selwyn with its large number of crossroads contributed to this. Crossroads are known to be more dangerous than T junctions.

Common reasons for the crashes that are occurring at intersections include:

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

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

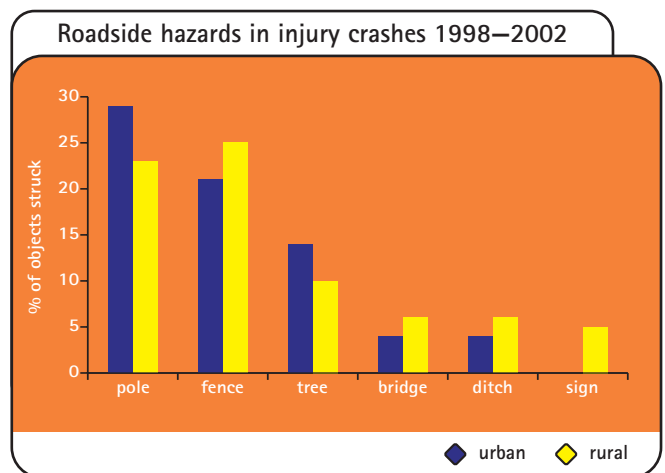
- Conduct crash reduction studies to look at mass action opportunities for all crossroad types: rural, urban local and urban traffic signals.
- Continue education campaigns, backed by enforcement and based on proper analysis, to promote appropriate speed and behaviour at intersections.

Roadside hazards

About 50 percent of injury crashes on both urban and rural roads in the Selwyn District 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:

- 12 people were killed
- 64 people were seriously injured
- 206 people received minor injuries in collisions with roadside hazards.



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

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 installing new lines of poles 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.

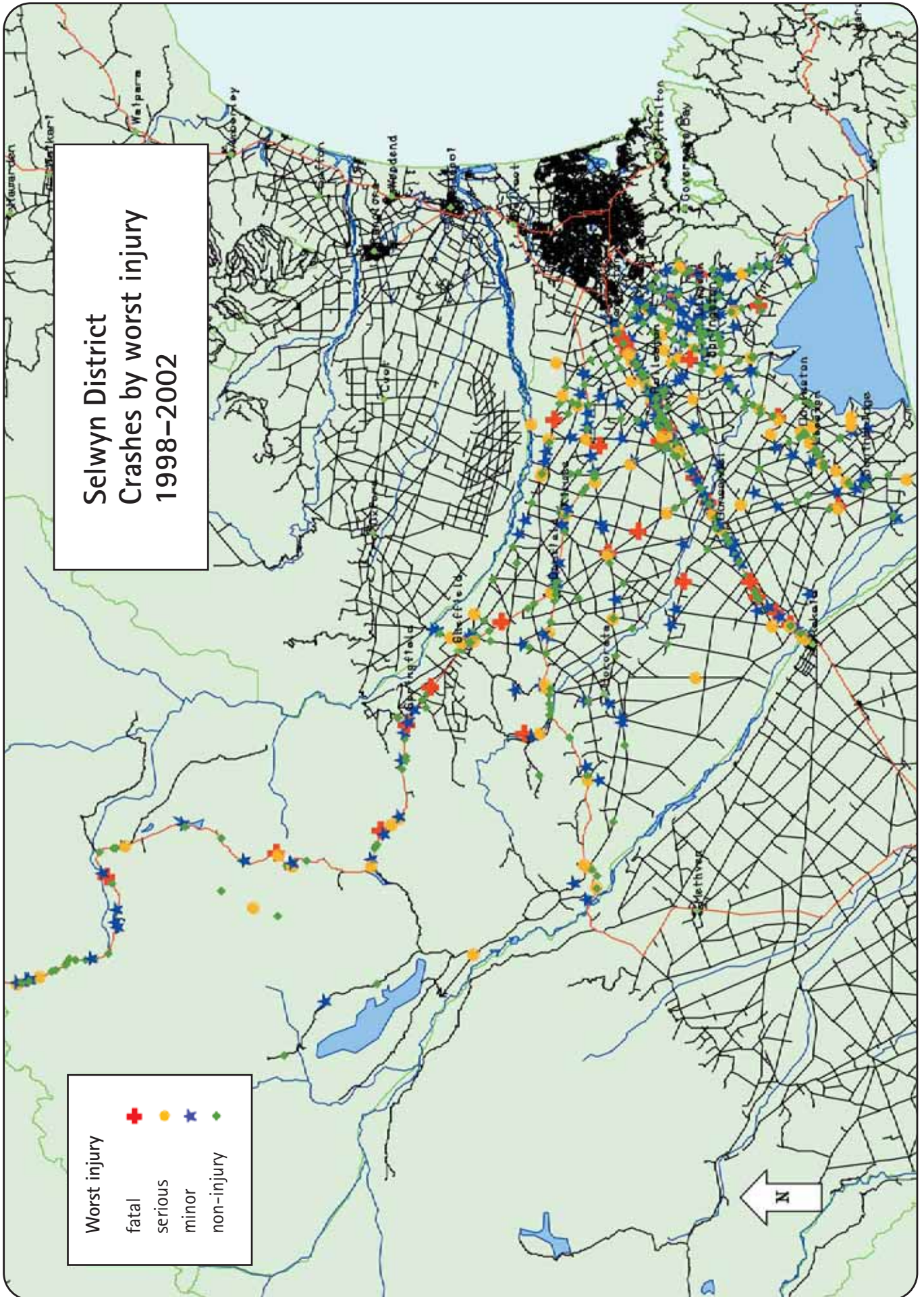
Recommended actions

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

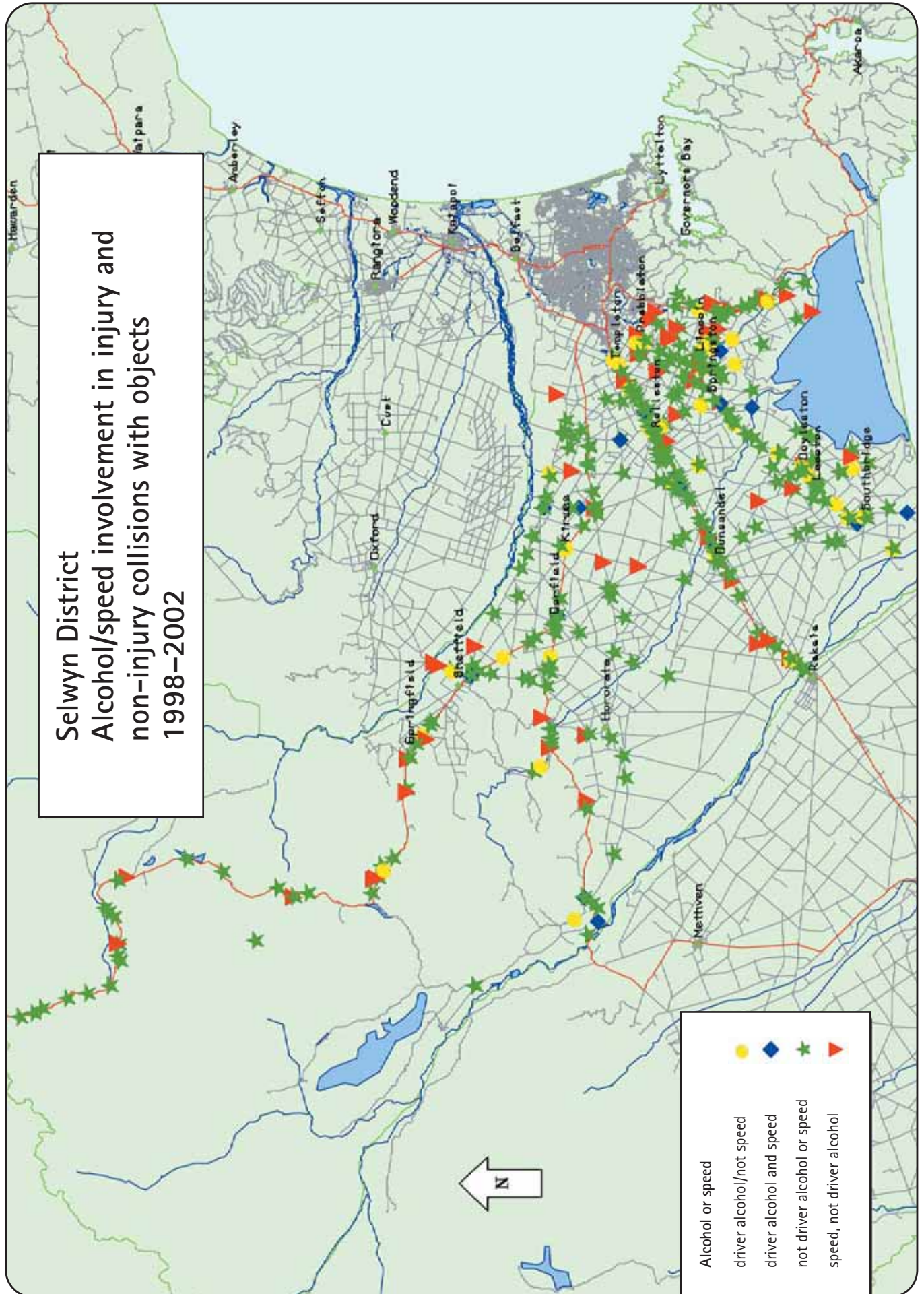
Selwyn District
Crashes by worst injury
1998–2002

Worst injury

- fatal
- serious
- minor
- non-injury



Selwyn District
Alcohol/speed involvement in injury and
non-injury collisions with objects
1998–2002





Loss of control on straight roads

Just over a quarter of all the Selwyn District's injury crashes from 1998 to 2002 occurred as a result of a vehicle failing to stay in its own lane on a straight road. Most of these crashes (nearly 90 percent) involved only one vehicle running off the road, while the remaining tenth occurred when a vehicle losing control on the road hit an oncoming vehicle. Around half occurred on local roads and half on state highways. Ninety percent took place on the open road.

These crashes were most frequent from Friday to Sunday, and were generally more common between noon and 4 pm, except for Saturday when the incidence was highest between 4 pm and 8 pm.

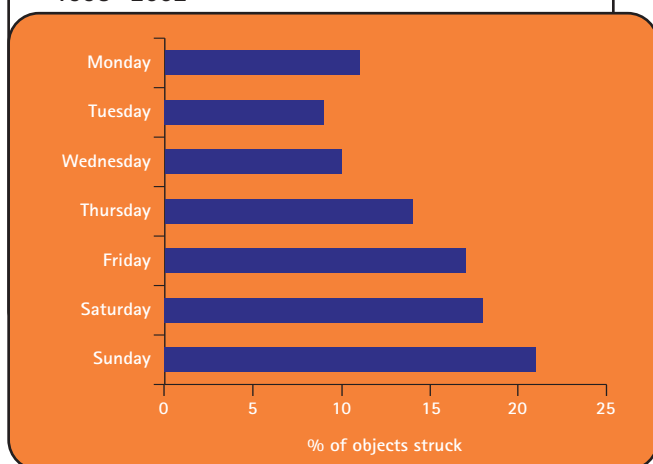
The most common cause of these crashes was fatigue which was a factor in around 28 percent of injury loss of control on straight crashes, followed by alcohol at around 21 percent. However, alcohol has been slowly declining as a factor, while fatigue remains steady.

A quarter of all these crashes ended up in a collision with a post or pole, while a fifth collided with a fence. This issue has been dealt with elsewhere in this report.

Recommended actions

- Continue education on the dangers of fatigue.
- Target enforcement at speed and erratic driving (sign of fatigue).
- Continue utilising engineering initiatives such as Vibraline, and removing, relocating or mitigating the effects of hazards.

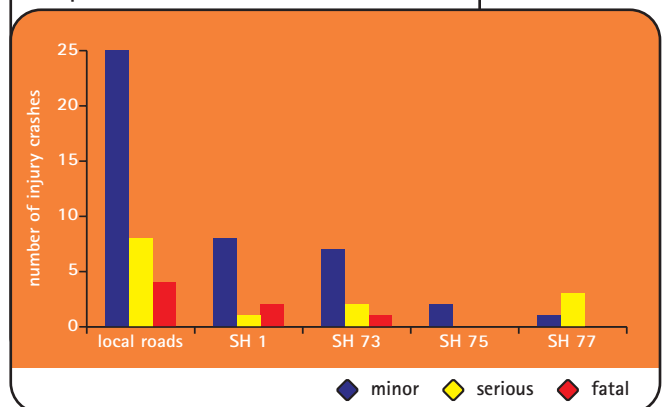
Loss of control on straight road by day of week 1998–2002



80 Speed

One sixth of all crashes in the Selwyn District in the last five years involved a road user, usually a car driver, travelling too fast for the conditions. Speed has been a factor in seven fatal crashes in the last five years, and tends to be a feature of rural driving, with just three percent of speed-related injury crashes occurring on urban roads. Three fifths occurred on non-state highways.

Speed-related crashes 1998–2002



Friday and Saturday together produced nearly half of all speed-related injury crashes, which most commonly occurred between 4 pm and midnight. The worst year for speed-related crashes in the last five was 2001. 2002 saw a 30 percent drop in the incidences of this factor. Half of all speed-related crashes occurred in darkness.

Fifteen to 19 year olds were easily the most featured age group involved in crashes related to driving too fast for conditions, with double the incidences of the next worst group, 20 to 24 year olds. There were twice as many males as females. Fifteen to 29 year olds made up over half of drivers involved in speed-related crashes.

Alcohol was a factor in one fifth of speed-related crashes, while poor judgement and poor handling each featured in one sixth of these crashes.

Recommended actions

- Target enforcement to Friday and Saturday nights, with an emphasis on highways.
- Ensure adequate delineation at night.
- Run education campaigns to target young males.

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.

Joint funding from the NZRSP for community projects in the Selwyn and Banks Peninsula Districts for the 2003/2004 year has been confirmed as follows:

Project	Funding
Intersections	\$25,275
Winter driving – Grip Don't Slip	\$6,000
Speeding ski traffic	\$7,000
Hoons, boy racers	\$7,000
Keeping left	\$11,000
Small project fund	\$5,000
Safe With Age	\$8,800

The project allocations in the table collectively include the salary subsidy for the road safety co-ordinator.

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.

The Selwyn District will also be involved this year in regionally funded projects 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

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 2003/2004 the Police are funded to deliver 12,410 hours of road policing in the Selwyn District as follows:

Project	Police hours
Strategic – alcohol/drugs, speed, restraints and visible road safety enforcement	8,740
Traffic management including crash attendance, incidents, emergencies and events	2,600
School road safety education	400
Police community services	670

Road environment

The Selwyn District has an allocation for minor safety projects on local roads in Transfund New Zealand's National Land Transport Programme 2003–2004.

Where to get more information

For more specific information relating to road crashes in the Selwyn District, please refer to the 1998 to 2002 Road Safety Data Report or the Land Transport Safety Authority CAS System, or contact the people or organisations listed below:

Contacts

Land Transport Safety Authority Regional Manager Dennis Robertson Phone 03 363 5661	New Zealand Police Strategic Traffic Manager Derek Erasmus PO Box 2109, Christchurch Phone 03 363 7417
Regional Education Advisor Bob Clements Phone 03 363 5677	Selwyn District Council Asset Manager Roading Andrew Mazey Private Bag 1, Leeston Phone 03 324 5844
Road Safety Engineer Geoff Holland Phone 03 363 5645	Transit New Zealand Area Engineer Barry Stratton PO Box 1479, Christchurch Phone 03 366 4455
Road Safety Co-ordinator Chris Hewitt Selwyn District Council Private Bag 1, Leeston Phone 03 318 7709	

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