ISSN 1176-841X July 2006



# road safety issues

# Selwyn District

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data for the 2001–2005 period. The intent of this report is to highlight the key road safety issues within the Selwyn District.

Comparing the crashes reported in 2005 with the previous year shows:

- nine deaths compared with five in the previous year
- an increased social cost of crashes, both for state highways and local roads.

Other features of injury crashes in the last five years were:

- urban crash severity trended slightly upwards, but overall the level of severity has decreasing
- nearly three fifths of all crashes involved loss of control
- poor observation continued to be the major contributing factor to crashes in the district
- local roads accounted for 42 percent of travel and 54 percent of crashes.

Reasons for fatal crashes in 2005 included, among others, speed, inexperience, and fatigue. Most fatal crashes occurred in daylight when the weather was fine.

# Major road safety issues

#### Selwyn District

Loss of control

Intersections

Local roads

#### Nationally

Speed

Alcohol

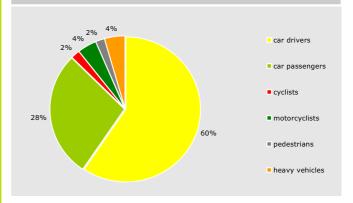
Failure to give way

Restraints

<b>�</b>	2005 road trauma for Selwyn District	
¥	Deaths Serious casualties Minor casualties	9 27 85
<b>—</b>	Fatal crashes Serious injury crashes Minor injury crashes Non-iniury crashes	9 18 53 109

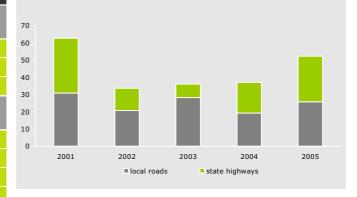
#### Road casualties 2001-2005

User type 2001-2005



### 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 2005 prices.

Unless otherwise stated, the information in this report is based on both injury and non-injury crashes from 2001 to 2005. Attention will be drawn to apparent trends; lack of comment will generally indicate random patterns rather than a discernible trend.

#### **General**

Between 2001 and 2005, 33 people were killed and 575 injured – 124 seriously, in 384 crashes (see map). Another 573 non-injury crashes were reported to the Police. Injury crashes in Selwyn reached their second highest level in five years in 2005.

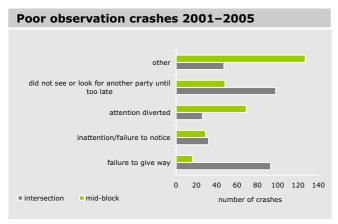
Just under 90 percent of all crashes occurred on rural roads, and 44 percent on the state highway network. Ten times as many fatal crashes occurred on rural roads as urban in the last five years

The most common types of crashes were loss of control, both on bends and straight roads. Around a third of all crashes occurred at intersections.

Environmental factors which can be addressed with road improvements were not a noticeable problem in Selwyn District, with only one third occurring in darkness and just over a quarter in wet or icy weather.

Alcohol was a factor in 13 percent of injury crashes, and excessive speed for the conditions in 18 percent. The recorded speed involvement during the last two years has been below both similar local authority and all New Zealand averages.

Poor observation was the most common cause of crashes in the Selwyn District for this period, and has particularly been a factor in an increasing number of rural crashes. In intersection crashes, this generally includes failing to notice a sign, the intersection itself or another driver. However, in loss of control crashes this mostly includes attention being diverted by passengers, scenery and other traffic.



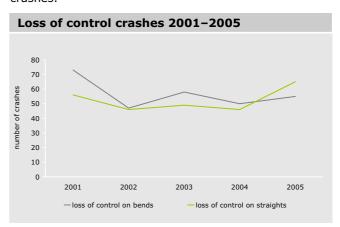
Between 3 pm and 6 pm was easily the worst time for crashes, with a quarter of all crashes happening at this time. Over a third of all crashes were caused partly or wholly by 15 to 25 year old drivers.

Of those where details were known, 69 percent of all drivers held a full New Zealand licence, while eight percent held an overseas licence.

#### Loss of control

In the last five years, 57 percent of all crashes in the Selwyn District involved loss of control or head-on crashes, either on bends or straight roads, killing four people and injuring 72. Around half of these crashes occurred on bends, and half on straight stretches of road. The locations of these crashes are shown on the accompanying plot.

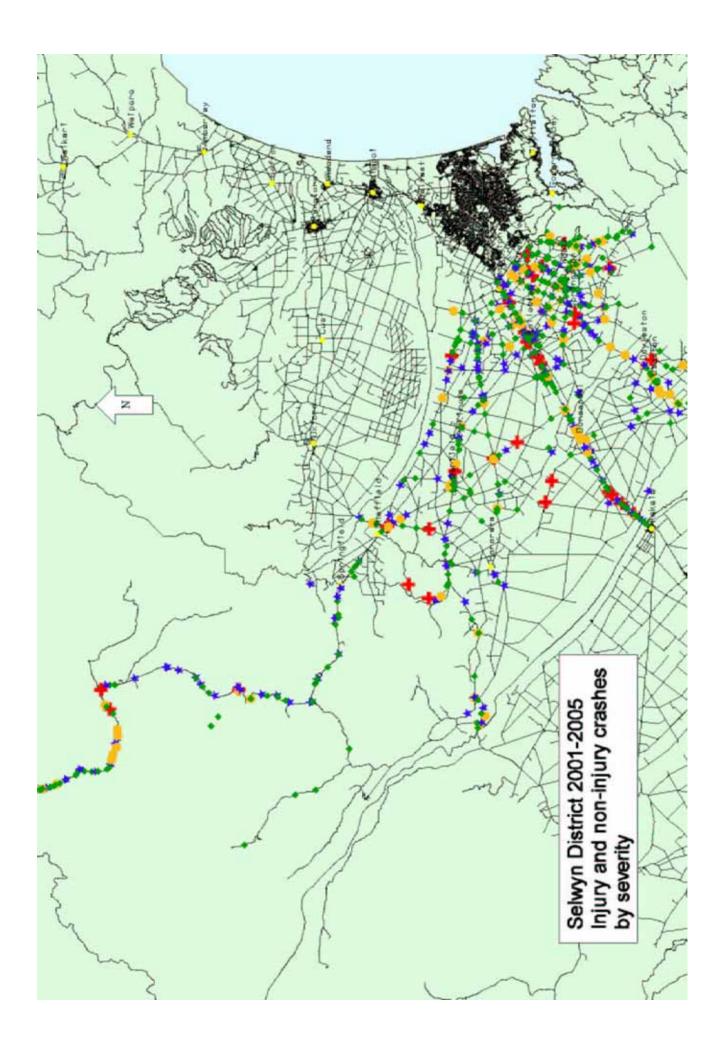
2005 was the first time in five years that more loss of control crashes occurred on straight stretches of road than bends (see graph). Just under one fifth of all loss of control or head-on crashes occurred at an intersection. Just under half occurred in darkness and just over a third in wet or icy conditions (crashes on wet roads have been creeping upwards since 2002). Road or weather conditions featured in a quarter of all crashes.

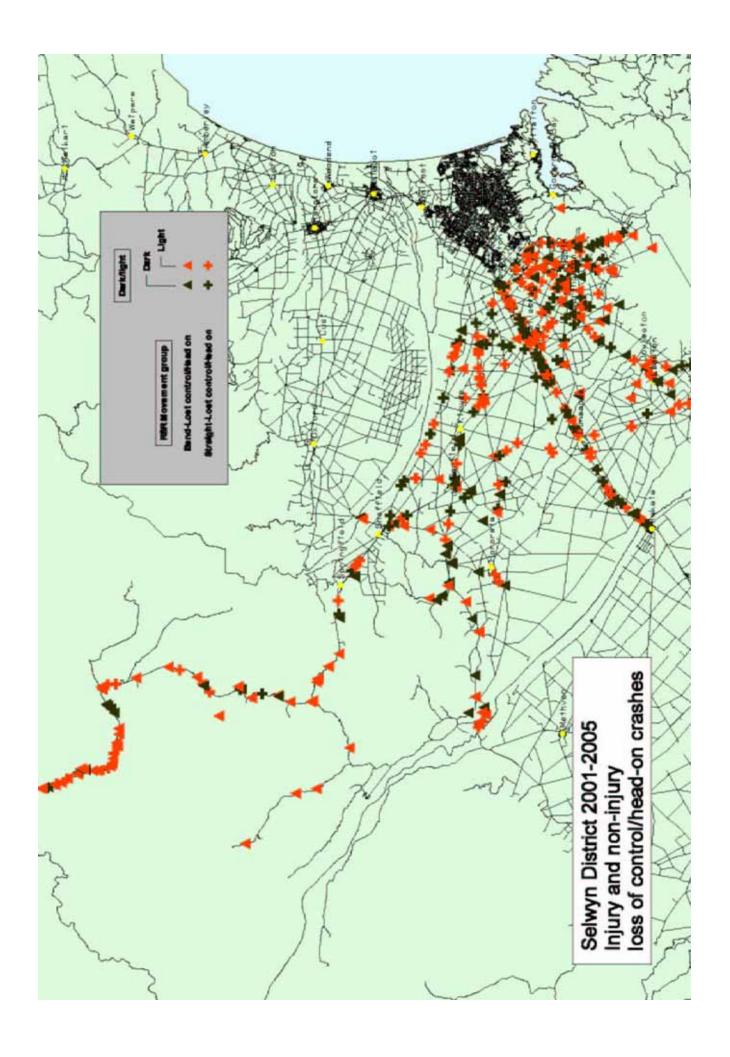


Poor handling was the most common cause of crashes in the last five years and has been climbing during that period. It has featured in nearly a third of loss of control injury crashes, while speed, the next most common cause, was involved in just over a quarter and fatigue in around a fifth of crashes.

Although the state highway network carried 58 percent of the traffic, just over half the loss of control crashes occurred on local roads. Sundays were the worst day of the week for loss of control or head–on crashes, and by far the most common time for crashes was between 3 pm and 6 pm.

Just three fifths of drivers at least partly responsible for a crash held a full New Zealand driver licence. Drivers with overseas licences made up a further  $10^{th}$  of at-fault drivers. Of these, an equal number occurred on bends and straight roads. Females made up about a third of all drivers at fault in loss of control crashes.





#### Intersections

A third of all crashes in the Selwyn District in the last five years occurred at intersections. During that time, seven people were killed and 186 injured in 122 crashes. Of the 186 injured, 39 of those injuries were classed as serious. In addition, there were 180 non-injury crashes over the same period.

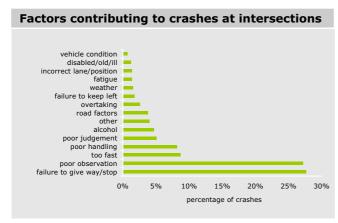
Crashes which occurred at rural intersections in 2005 were at their second highest level in 10 years, second only to 2004. Urban intersection crashes made up about one fifth of all crashes over the last five years.

The most common types of intersection crashes involved vehicles crossing or turning (56 percent) followed by loss of control crashes (31 percent). One quarter of all intersection crashes involved only one party.

Intersection movement or crossing/turning type crashes were a higher proportion of urban and rural crashes in Selwyn than in other similar authorities.

Just under half of the intersection crashes happened at crossroads and about 40 percent at T junctions. About the same number of crashes happened at intersections controlled by Give Way signs as Stop controlled intersections. However, crashes at Stop signs tended to be more severe, as were crashes at crossroads.

The most common factor in injury intersection crashes was failing to give way or stop, followed by poor handling. Eleven percent of injury crashes at intersections over the last five years involved alcohol, and 16 percent involved excessive speed for the conditions. During the last two years the number of crashes involving excessive speed halved.



Four fifths of intersection crashes occurred on rural roads. Intersection crashes were fairly evenly spread through the year, although they were slightly more likely to happen between March and July. Sunday was the quietest day of the week for crashes at intersections, while the most common time of day for crashes was between 3 pm and 6 pm.

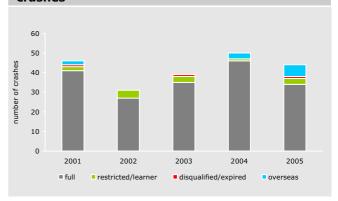
Slightly less than one third of all drivers at fault in injury crashes were aged between 15 and 24 years, while the next highest age group to feature was 30 to 39 year olds, at just over 26 percent. Eighty-five percent of drivers at fault in intersection crashes held full driver licenses compared with just 69 percent of all crashes in the Selwyn District in the last five years.

#### **Local roads**

Fifty-six percent of all crashes in the Selwyn District in the last five years occurred on a road controlled by the local council, as opposed to Transit New Zealand.

Of those local road crashes, 40 percent occurred at intersections.

## Licence status of at-fault drivers in intersection crashes



Just over a quarter of local road crashes involved losing control on a straight stretch of road, slightly more lost control or collided head-on at a bend, and just under a quarter involved crossing or turning at intersections or driveways.

Slightly over a third of all local road crashes occurred in darkness and just over a quarter on wet roads. The percentage of all crashes occurring in darkness, has been declining.

In 2005, more crashes ended with collisions with objects than for the previous four years, with fences and poles being the most commonly struck objects.

The most common cause of crashes on local roads was poor observation, followed by failure to give way or stop. Driving too fast for the conditions was a factor in one in six injury crashes, while alcohol was slightly lower at one in seven.

## Month for crashes on local roads



Friday and Saturday were the worst days for local road crashes, and between 3 pm to 6 pm was the worst time. The worst time of year is shown on the graph above.

#### **Performance measures**

The table below lists some of the local authority performance measures noted in the March 2006 issue of *Road Safety Progress*, a publication prepared by Research and Statistics, Ministry of Transport. It compares the measures for Selwyn District 2005 injury crashes with the national range.

	National range	Selwyn District
Speed	9%-33%	14%
% crashes with excessive speed	(excluding Chatham Islands 75%)	
Alcohol	6%-31%	14%
% driver alcohol crashes		
Intersections	0%-41%	24%
% crashes with failed to stop or give way factors		
Pedestrian	0%-24%	3%
% crashes with pedestrians		
Cyclists	0%-15%	5%
% crashes with cyclists		
Safety belts	1%-13%	5%
% unrestrained – front seat		

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