

# road safety issues

#### Land Transport New Zealand has prepared this road safety issues report. It is based on the tables and graphs in the Hurunui District 2000-2004 road safety report and more detailed analysis of the crashes using the crash analysis system (CAS).

Comparing crashes reported in 2004 with other years shows:

- two fatal crashes in 2004 compared with seven in 2003
- a lower social cost of crashes in 2004
- a decline in fatal crashes, but serious and minor crash numbers remained steady
- a decline in the number of alcohol-related injury crashes since 2000
- loss of control on bends is still the most common crash type.

Both fatal crashes occurred on state highways. One crash was the result of a vehicle losing control on a moderate bend in wet weather, possibly due to excessive speed. The other occurred in poor visibility, when a vehicle drove into heavy smoke at a speed too fast to stop for the traffic ahead.

#### Major road safety issues

Hurunui District
Loss of control on bends
Road factors
State highways
Fatigue
Nationally
Speed
Alcohol
Failure to give way
Restraints

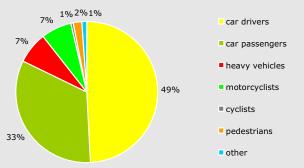
## 2004 road trauma for

•	Hurunui District	
¥	Deaths Serious casualties Minor casualties	2 12 59
<b>—</b>	Fatal crashes Serious injury crashes Minor injury crashes Non-injury crashes	2 10 42 70

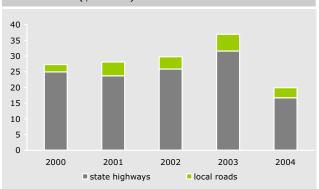
Hurunui District

## Road casualties 2000-2004

User type 2000-2004



### Estimated social cost of crashes\* Social cost (\$ million)

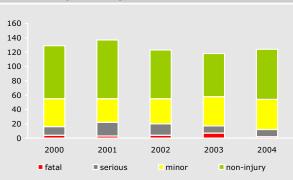


\*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are expressed at June 2004 prices.

## General

Serious crashes in the Hurunui District have been declining since 2001, however, minor crash numbers have increased. The most common crash type in urban areas of the Hurunui District was crossing/turning, ie at intersections, and the most common rural crash type was loss of control on bends, followed by loss of control on straight sections of road. More than 90 percent of crashes occurred on rural roads. Slightly more than 80 percent took place on state highways.

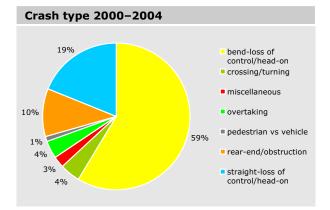
The main cause of crashes was excessive speed, followed by poor handling, poor observation and fatigue.



#### Crashes by severity 2000–2004

December and January recorded the greatest number of crashes in the Hurunui District between 2000 and 2004. Most crashes occurred on Fridays and Saturdays in urban areas, and Fridays and Sundays in rural areas. The highest number of crashes happened between noon and 4 pm.

Over 40 percent of rural crashes occurred in the wet, and just under a third in the dark.



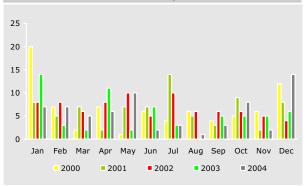
Most drivers involved in crashes during this period were 20 to 24 year olds, followed by 15 to 19 year olds.

## Loss of control on bends

Although the number of injury crashes involving loss of control on bends declined from 36 in 2003 to 30 in 2004, at 60 percent of injury crashes and 56 percent of non-injury crashes it remains the most common crash type in the Hurunui District. Most of these crashes (85 percent) involved only one vehicle, 84 percent occurred on a state highway, and 97 percent occurred on a rural road.

Road factors were the largest contributor to crashes on bends (20 percent), followed by excessive speed (19 percent) and poor handling (15 percent). Alcohol was a factor in just eight percent of all loss of control on bend crashes.

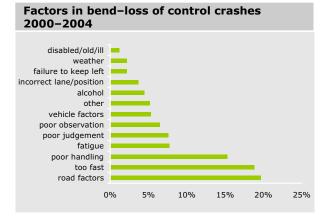
#### Loss of control on bends by month 2000–2004



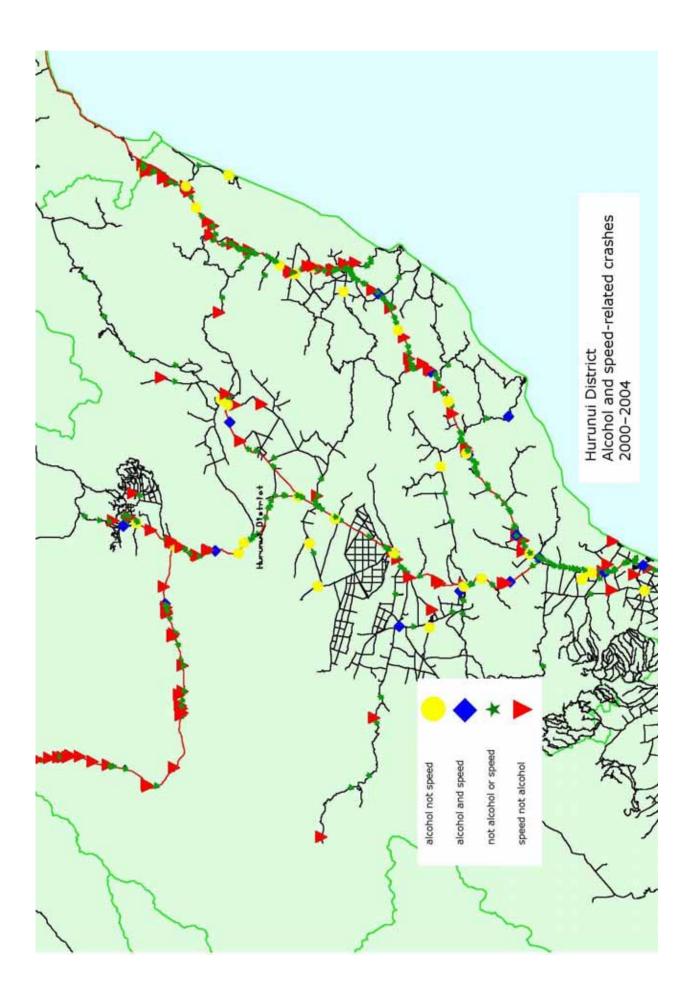
Over the five-year period, crashes on bends occurred most often in January followed by December; however, in 2004 the second worst month for crashes was May.

Nearly half of all loss of control on bend crashes in 2004 happened on a wet road compared with just 30 percent in 2003. Only 28 percent occurred in darkness, close to the five-year average of 32 percent.

Male drivers were responsible for three quarters of all injury crashes, with the biggest group being 20 to 24 year olds, followed by 15 to 19 year olds.

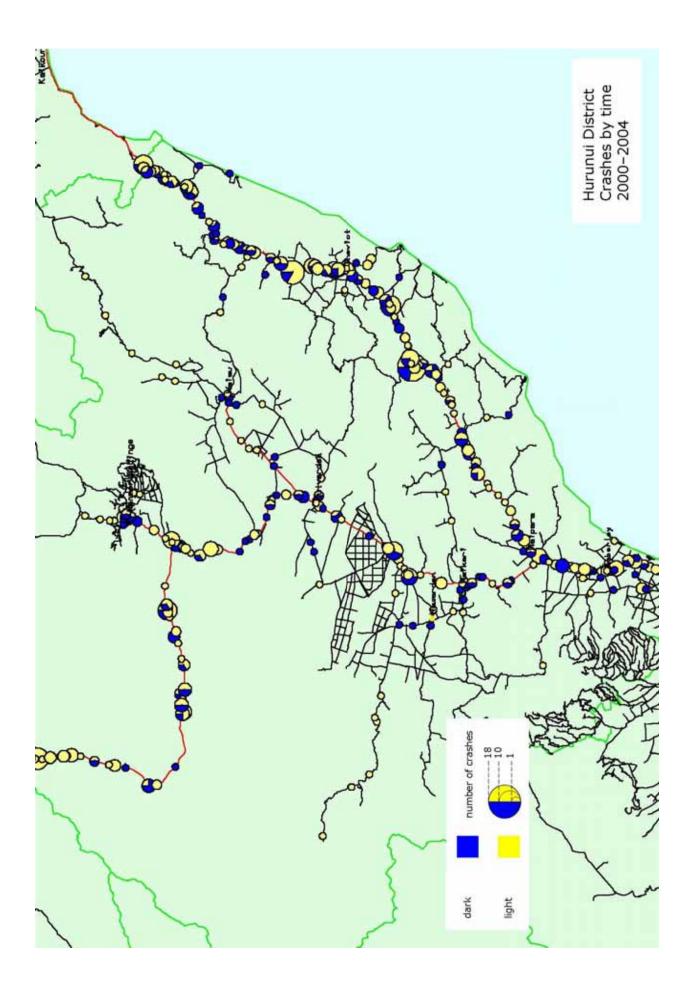


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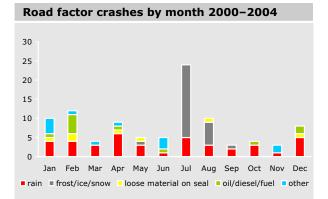
## **Road factors**

Rain was recorded as a factor in 40 crashes in the last five years. Twenty-five crashes had ice or frost as a contributing factor, with oil or diesel recorded 11 times, and road under construction or maintenance and loose material on the seal both implicated seven times. Of those factors, the greatest number of crashes in 2004 occurred on roads slippery due to rain, followed by diesel spills.

Less than a quarter of the crashes listed above occurred at night. The majority (93 percent) occurred on a state highway. Just over 80 percent involved only one vehicle.

Of the 118 crashes involving road factors, 56 occurred on SH 7, 47 on SH 1, 13 on local roads and the remainder on SH 7A.

As might be expected, the highest number of crashes involving some form of road factor occurred in winter.



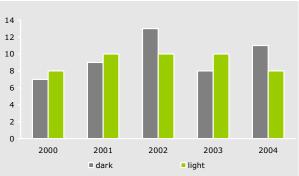
The 40 to 44 year old group was most frequently reported in crashes involving some form of road factor.

## Fatigue

Although fatigue does not feature as highly in statistics as other factors such as speed and road condition, it is believed to be under-reported due to the difficulty in confirming it as a factor and as such should still be addressed. There was one more fatigue-related crash reported in 2004 than in 2003; however, severity was significantly reduced last year, with no fatal crashes reporting fatigue as a factor, and 63 percent of fatigue-related crashes being noninjury compared with the five-year average of 46 percent.

Very few fatigue-related crashes over the five-year period involved more than one vehicle, with all being single vehicle crashes in 2004. They were slightly more likely to occur in darkness – 58 percent in 2004 compared with a 51 percent five-year average. Sixtyfive percent happened on SH 1. Nine percent occurred at intersections, and 60 percent on bends. Fifteen to 19 year olds were most likely to be involved in fatigue-related crashes, followed by 20 to 24 year olds and 30 to 34 year olds.

## Fatigue-related crashes by dark/light 2000-2004

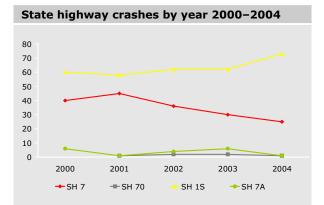


## **State highways**

Seventy-eight percent of injury crashes in the Hurunui District from 2000 to 2004 occurred on the state highway network with 50 percent on SH 1, and 28 percent on SH 7. Slightly more than a quarter involved more than one vehicle.

The most common crash type on state highways was loss of control/head-on on bends, followed by loss of control on a straight section of road. In 2004, there was one more rear-end/collision with obstruction crash than those caused by loss of control on a straight road.

Although the total number of state highway crashes has not changed significantly in the last five years (106 in 2000 to 100 in 2004), the distribution has changed, with increased numbers on SH 1 and a downward trend on SH 7, as shown below.



The most common days for crashes on state highways were Friday and Saturday, compared with Sunday followed by Friday on local roads.

## **Performance measures**

The table below lists some of the local authority performance measures noted in the *Road Safety Progress* publication prepared by Research and Statistics, Ministry of Transport. It compares the measures for the Hurunui District 2004 injury crashes with the range for the five poorest performances recorded in the March 2005 issue of *Road Safety Progress*.

	Range for five poorest performances	Hurunui District 2004 injury crashes
<b>Speed</b> % crashes with excessive speed	28% to 35%	22%
Alcohol % driver alcohol crashes	21% to 40%	6%
Intersections % crashes with failed to stop or give way factors	35% to 43%	7%
<b>Pedestrian</b> % crashes with pedestrians	14% to 22%	0%
<b>Cyclists</b> % crashes with cyclists	12% to 17%	2%
Safety belts % unrestrained – front seat	11% to 19%	13%

## **Contacts**

Land Transport New Zealand Jackie Curtis Partnership Manager Southern See contact details at bottom of the page.

Road Safety Co-ordinator

Tony Francis Francis & Cambridge PO Box 30064 Christchurch Phone 03 332 2722 Mobile 021 332 885

Hurunui District Council

Frank Ledingham PO Box 13 Amberley Phone 03 314 8816

#### New Zealand Police

Derek Erasmus District Traffic Manager PO Box 2109 Christchurch Phone 03 328 8065



Christchurch Regional Office Level 5 BNZ House 129 Hereford Street PO Box 13364 Christchurch

Telephone 03 964 2866 Fax 03 964 2855

www.landtransport.govt.nz