

# road safety issues

# Canterbury Region

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data for the 2000–2004 period. The intent of the report is to highlight the key road safety issues in the Canterbury Region.

Comparing the reported injury crashes and casualties in 2004 with 2003:

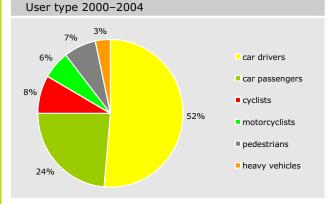
- both urban and rural injury crashes and casualties have reduced
- the proportion of crashes at urban intersections has decreased
- the number of casualties from heavy vehicle crashes has decreased
- pedestrian casualties have remained about the same
- cyclist casualties have decreased
- alcohol and speed involvement in crashes has remained unchanged.

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### 2004 road trauma for Canterbury Region

ð	Deaths Serious casualties Minor casualties	45 261 1,210
<b>a</b>	Fatal crashes Serious injury crashes Minor injury crashes Non-injury crashes	41 217 866 2,189

## Road casualties 2000–2004

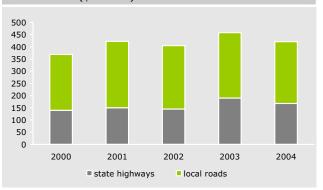


#### Major road safety issues

Canterbury Region
Intersections
Speed
Alcohol
Loss of control
Nationally
Nationally Speed
Speed
Speed Alcohol

# 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.

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# Intersections

In the Canterbury Region, almost 60 percent of urban crashes occurred at intersections. These resulted in 26 fatalities, 402 serious injuries and 2,552 minor injuries. The number of intersection crashes peaked during rush hour traffic times around 8 am and 5 pm.



As shown in the chart above, urban intersection crashes peaked in March and May and continued at a higher level during the winter months.

Rural intersection crashes made up 24 percent of the total intersection crashes and resulted in 30 fatalities, 169 serious injuries and 527 minor injuries. The severity of injuries was greater on rural roads with higher speed limits. The number of rural intersection crashes also peaked at both 8 am and 5 pm.

In the Canterbury Region, the intersections causing the highest cost to the community from fatal and injury crashes between 2000 and 2004 were:

- Lineside Road and the on-ramp southbound to SH 1
- Chaneys off-ramp and Main North Road
- Carmen Road (SH 1) and Buchanans Road
- Johns Road (SH 1) and Main North Road
- Main South Road (SH 1) and Robinsons Road
- Tram Road and the on-ramp southbound to SH 1
- Main South Road (SH 1) and Halswell Junction Road
- Johns Road (SH 1) and McLeans Island Road
- Pound Road and Ryans Road.

Further away from Christchurch, the intersections with the highest cost to the community from fatal and injury crashes were:

- SH 77 and Windwhistle Road (Windwhistle)
- SH 1 and East Street (Ashburton).

# Speed

Excessive speed was a contributing factor in over 30 percent of all fatalities. From 2000 to 2004 there were 486 injury crashes involving excessive speed. However, crashes involving speed decreased from 212 in 2003 to 171 in 2004.

#### **Urban areas**

In urban areas, crashes involving excessive speed resulted in 24 fatalities, 147 serious injuries and 562 minor injuries. Over half of the crashes involving speed occurred during the hours of darkness and twilight, compared with all other crashes where just over 30 percent occurred at night-time.

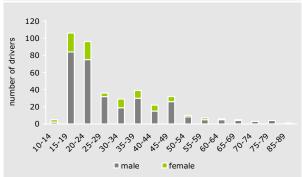
Almost half of the crashes occurred during the weekend and a third of all urban speed-related crashes also involved alcohol as a factor. Most of the crashes resulted in roadside objects being struck; the most common being poles, fences and trees.

#### **Rural areas**

In rural areas, where the speed limit is higher, vehicle crashes are more severe and result in more trauma to drivers and passengers. This is evidenced by fewer injury crashes in rural areas than in urban areas, but more fatalities and serious injuries. In rural areas, crashes involving speed resulted in 49 fatalities, 166 serious injuries and 429 minor injuries.

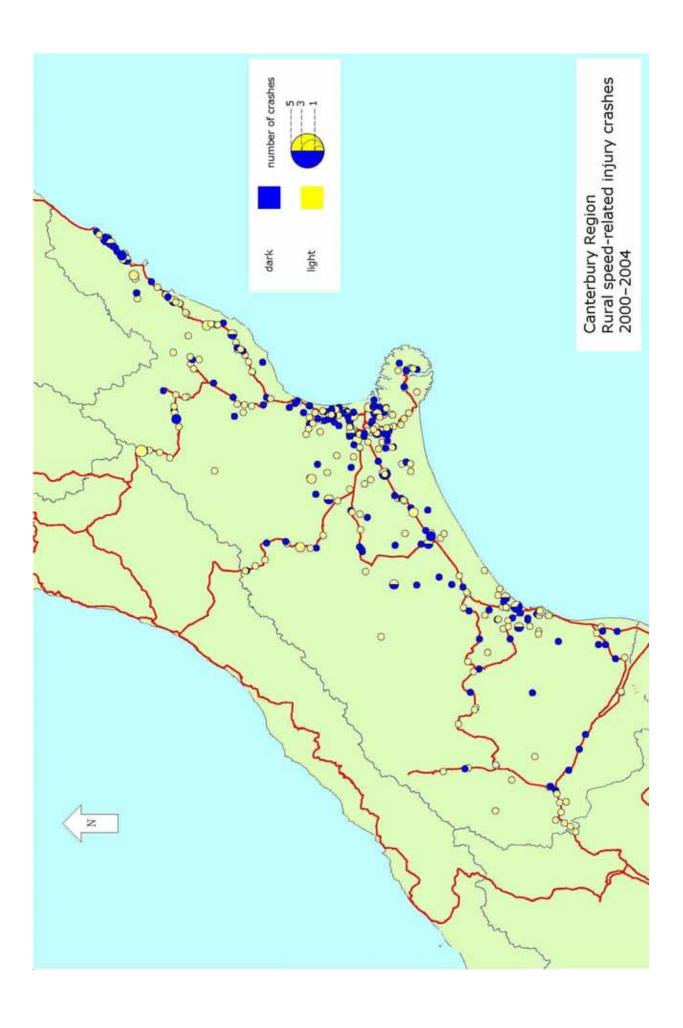
Almost half the rural crashes involving speed occurred during the weekend and a fifth of them involved alcohol. The most common type of crash involved a vehicle losing control on a curve.

# Drivers at fault in rural speed crashes 2000–2004

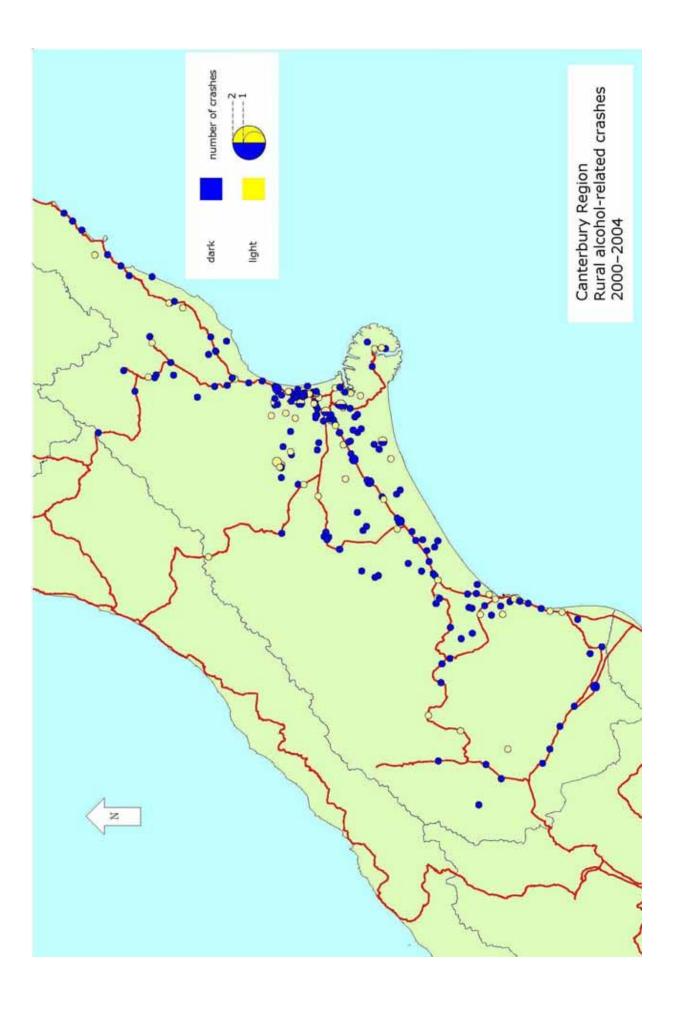


The chart above shows that speeding drivers are typically between 15 and 24 years old and predominantly male. Males are almost four times more likely than females to be the driver in these crashes. Male drivers up to 50 years of age continue to be over-represented in speed-related crashes.

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# Alcohol

Alcohol was involved in 14 percent of all crashes in the Canterbury Region in the period from 2000 to 2004.

#### **Urban areas**

In urban areas crashes involving alcohol resulted in 19 fatalities, 139 serious injuries and 555 minor injuries in the 2000–2004 period. Crash numbers remained constant over this period.

Almost 80 percent of these crashes occurred during the hours of darkness with almost half of the nighttime crashes occurring during the weekend.

Apart from alcohol, other factors that contributed to these crashes were excessive speed, failing to give way and loss of control.

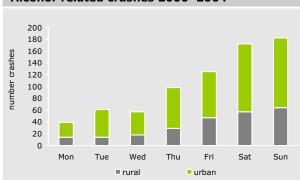
#### **Rural areas**

In rural areas, crashes involving alcohol resulted in 33 fatalities, 118 serious injuries and 226 minor injuries from 2000 to 2004. Crash numbers have fallen significantly from 58 in 2003 to 36 in 2004.

Three quarters of these crashes occurred during darkness and 60 percent of the crashes occurred during the weekend. Most crashes occurred during January, while the quietest months were during winter from May to July.

Apart from alcohol, the other factors that contributed to rural area crashes were excessive speed, loss of control and fatigue.

About 80 percent of drivers involved in these crashes were male and one third were males aged from 15 to 24 years.



#### Alcohol-related crashes 2000-2004

# **Loss of control**

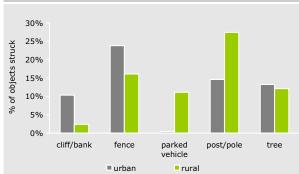
Loss of control crashes accounted for 35 percent of all crashes in the Canterbury Region in the period from 2000 to 2004. In urban areas, these crashes caused 31 fatalities, 237 serious injuries and 930 minor injuries. Over the same period in rural areas, loss of control crashes caused 103 fatalities, 452 serious injuries and 1,231 minor injuries

Alcohol, excessive speed and fatigue were the major contributing factors to loss of control crashes. In 20 percent of the crashes, environmental conditions such as rain, frost, ice, strong winds or fog were contributing factors.

The pattern of crashes over the past years shows that most crashes happened in December and January, with many involving alcohol as a contributing factor. There was a second peak in the number of crashes in July – these crashes were caused by winter conditions such as frost and rain.

Loss of control crashes followed a similar pattern to alcohol-involved crashes, with a distinct peak in crash numbers from Friday to Sunday.

Objects struck in loss of control crashes 2000–2004



In many loss of control crashes, a vehicle leaves the road and comes into contact with a roadside hazard. As shown in the graph above, for both urban and rural loss of control crashes the most common objects struck are fences and poles.

Another possibility is that a vehicle that has lost control will cross the centre-line and come into conflict with opposing traffic. However, about 80 percent of crashes are single vehicle crashes.

# **Performance measures**

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

	Range for all regions' performances	Canterbury Region 2004 injury crashes
Open road speed crashes % of rural crashes where excessive speed was a factor	18% to 31%	22%
Open road alcohol crashes % of rural crashes where alcohol was a factor	9% to 23%	9%
Urban alcohol crashes % of urban crashes where alcohol was a factor	7% to 20%	13%
Reporting Estimated % of all serious injury crashes that are reported	53% to 85%	66%
Safety belts % of safety belts not worn	4% to 9%	6%
<b>Cycle</b> % of cycle helmets not worn	2% to 16%	6%

# Contacts

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