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# road safety issues

## Mackenzie District

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

Comparing the 2004 reported crashes with other years shows:

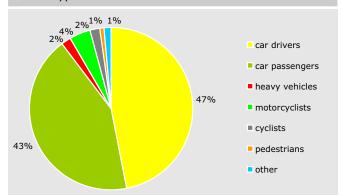
- no fatalities in 2004 compared with three in 2003
- fewer casualties in 2004, reversing the increasing trend in casualty numbers from 1998 to 2003
- a much lower social cost of crashes in 2004
- over 85 percent of the crashes were in rural areas in 2004 and 2003; only two minor injury and five non-injury crashes were in urban areas in 2004
- no injury crashes involving alcohol in 2004.

In the 2000–2004 five-year period, 90 percent of the casualties were car drivers or passengers and nearly three quarters of these were injured in crashes on rural roads. Over three quarters of the rural crashes were on state highways but over two thirds of the urban crashes were on local roads.

#### 2004 road trauma for Mackenzie District Deaths 0 Serious casualties 6 Minor casualties 21 Fatal crashes 0 Serious injury crashes 4 Minor injury crashes 12 Non-injury crashes 36

## Road casualties 2000-2004

User type 2000-2004



## Major road safety issues

#### Mackenzie District

Rural state highways

Local roads

Overseas drivers

#### **Nationally**

Speed

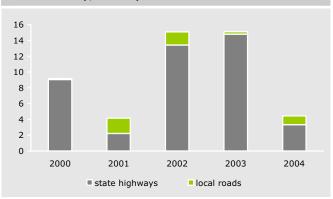
Alcohol

Failure to give way

Restraints

## 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.

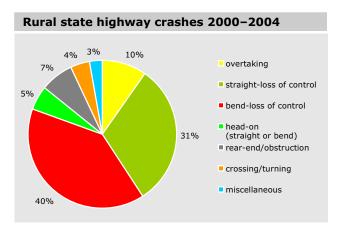
## Rural state highways

The social cost of crashes in 2004 on rural state highways was \$3.21 million. This was over 70 percent of the total social cost of crashes in the district in 2004.

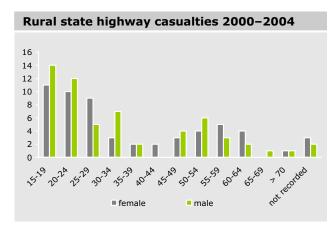
In the five years from 2000 to 2004, the 69 reported injury crashes on rural state highways in the district killed six people and injured 110, 32 of them seriously. In addition, 108 non-injury crashes on rural state highways were reported.

Analysis of the rural state highway crashes shows:

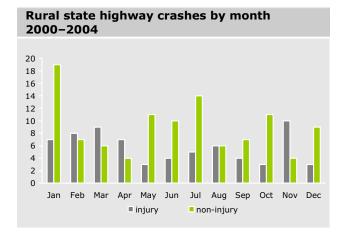
- there were 52 injury and 83 non-injury crashes on SH 8, 13 injury and 17 non-injury crashes on SH 80 and four injury and eight non-injury crashes on SH 79
- most of the crashes were single vehicle loss of control crashes on bends (40 percent) or straight roads (31 percent)
- fatigue and travelling too fast for the conditions were the most common driver causes
- about a quarter of the injury and a third of the noninjury crashes happened in twilight or darkness.



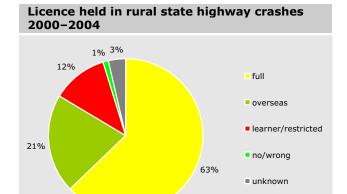
Road factors contributed to just under 20 percent of the crashes. Typically, these were slippery roads due to rain, snow or ice. Drivers often lost control when trying to return to the seal after driving onto the gravel shoulder.



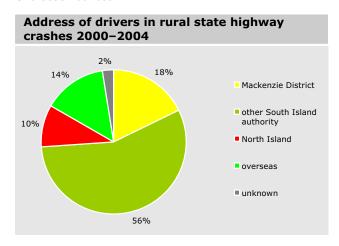
Of the 116 casualties, 59 were male and 57 female. Over half were under 30 years old.



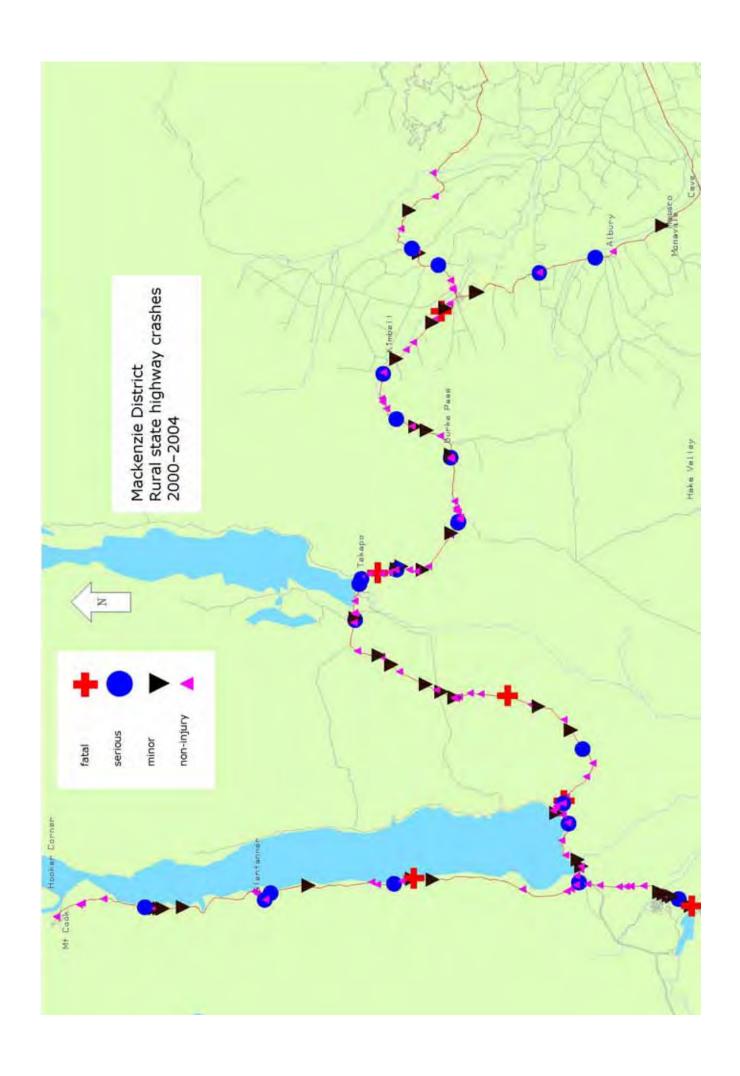
More injury crashes happened over the summer months of November to April (44 crashes) than the winter months of May to October (25 crashes). However, the reverse was the case for the non-injury crashes (49 in summer, 59 in winter).

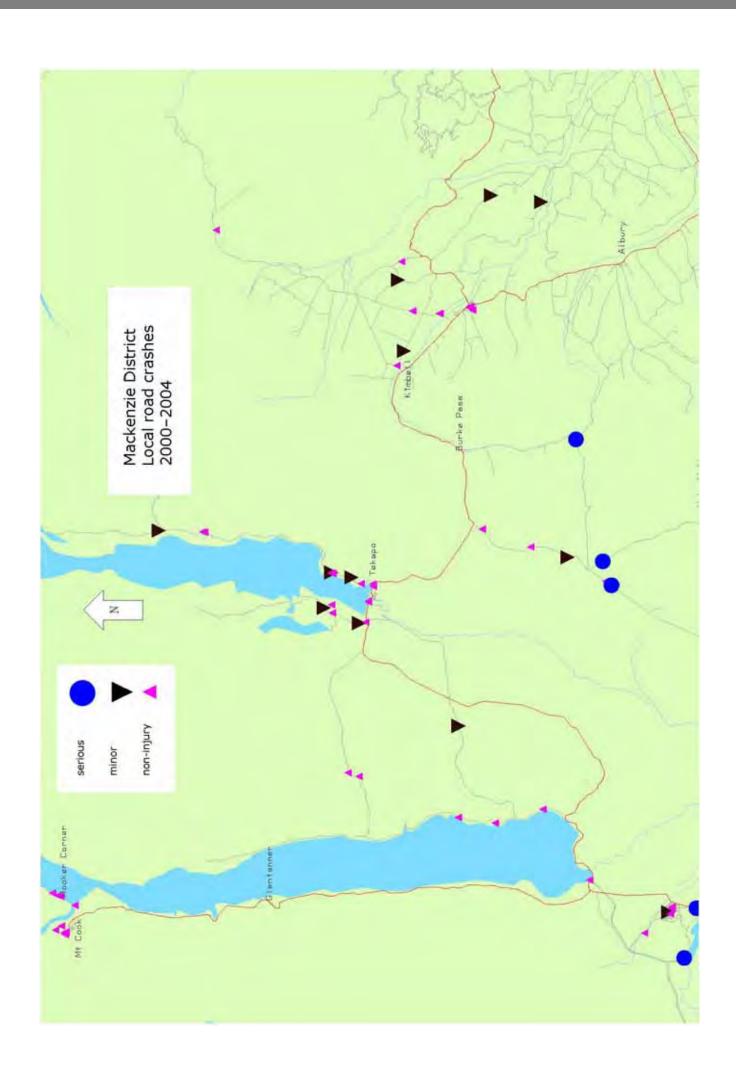


The above graph shows the licence status of drivers involved in the 69 injury crashes on rural state highways. Twenty-one percent of the drivers had overseas licences.



A review of the drivers' addresses for injury crashes showed nearly three quarters of the drivers were resident in the South Island. Eighteen percent had Mackenzie District addresses and 14 percent were from overseas.



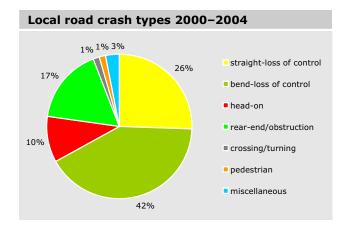


### Local roads

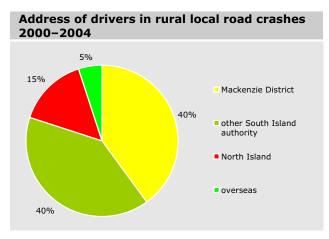
The social cost of crashes in 2004 on local roads was \$1.10 million or about a quarter of the total social cost of crashes in the district. In the five years from 2000 to 2004, crashes on local roads injured 30 people, five seriously, but there were no deaths. In addition 50 non-injury crashes were reported on local roads.

Analysis of the local road crashes shows:

- there were 15 injury and 35 non-injury crashes on rural local roads and two injury and 15 non-injury crashes on urban local roads
- over three quarters of the rural crashes were on unsealed local roads
- nearly a third of the crashes happened on weekends and 40 percent occurred in twilight or darkness
- 68 percent of the crashes were single vehicle loss of control crashes (42 percent on bends, 26 percent on straight roads)
- road factors such as deep loose metal, narrow road and visibility limited by curve contributed to 45 percent of the crashes
- inexperience at driving on unsealed roads was a common driver factor.



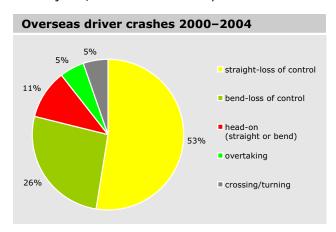
Over half of the rear-end/obstruction type crashes were miscellaneous manoeuvring crashes, often in car parks or service station areas.



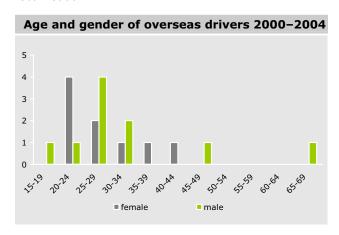
Driver addresses recorded for the 20 drivers involved in injury crashes showed equal numbers of drivers from the Mackenzie District and other South Island authorities. Only one driver had an overseas address, although three were on overseas licences.

#### Overseas drivers

About one in five injury crashes in the Mackenzie District between 2000 and 2004 involved an overseas driver. Driver licence status is not recorded for non-injury crashes. One overseas passenger was killed and 14 overseas drivers were injured, one seriously, in the 19 injury crashes involving overseas drivers. A further 15 passengers in vehicles in these crashes were injured, five of them seriously.



All of the overseas driver crashes happened in rural areas – nine on SH 8, seven on SH 80 and three on local roads.



Twelve of the 19 overseas drivers were under 30 years old. Ten were males and only one was over 60 years old.



Most of the overseas driver crashes happened in the summer months of November to April.

## **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 results for the Mackenzie 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	Mackenzie District 2004 injury crashes
<b>Speed</b> % crashes with excessive speed	28% to 35%	19%
Alcohol % driver alcohol crashes	21% to 40%	0%
Intersections % crashes with failed to stop or give way factors	35% to 43%	13%
Pedestrian % crashes with pedestrians	14% to 22%	0%
Cyclists % crashes with cyclists	12% to 17%	0%
Safety belts % unrestrained - front seat	11% to 19%	9%

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