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road safety issues

Waimakariri District

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

Comparing the crashes reported in 2004 with other years shows:

- eight deaths in 2004 compared with four in 2003
- a higher social cost of crashes in 2004
- a higher number of fatal crashes but fewer serious and non-injury crashes in 2004 than 2003
- an increased number of crossing/turning crashes on rural roads
- an increase in rural fatigue-related injury crashes (seven in 2004, three in 2003)
- the continuation of poor observation as the most common factor contributing to the crashes.

Of the seven fatal crashes in 2004, three were on SH 1. Excessive speed was a factor in three crashes, with alcohol a factor in another three crashes. Both factors were recorded in one of the three crashes. The actual crash types were varied, although five occurred in twilight or darkness.

Major road safety issues

Waimakariri District

Loss of control/head-on

Intersection crashes

Rear-end/obstruction crashes

Nationally

Speed

Alcohol

Failure to give way

Restraints

•	2004 road trauma for Waimakariri District		
ð	Deaths Serious casualties Minor casualties	23 8!	
	Fatal crashes	-	

Serious injury crashes

Minor injury crashes

Non-injury crashes

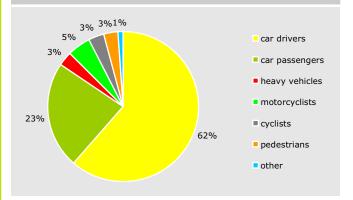
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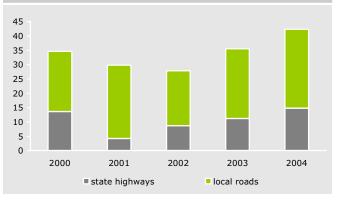
Road casualties 2000-2004

User type 2000-2004



Estimated social cost of crashes*

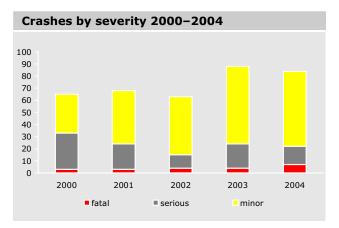
Social cost (\$ million)



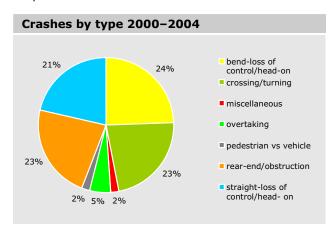
*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are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

General

In the last five years, there have been 21 fatal, 97 serious, 250 minor and 489 non-injury crashes in the Waimakariri District. The most common types of crash were loss of control, both on bends and on straight roads, followed by crossing/turning crashes and rear-end/obstruction crashes. The most common cause of crashes in the Waimakariri District was poor observation, followed by failure to give way/stop, alcohol and excessive speed. However, the level of alcohol and speed involvement has remained unchanged in the last five years.



Thirty-eight percent of all crashes occurred at intersections, nearly 40 percent in darkness and 38 percent on urban roads.



Most crashes occurred on Saturdays, followed by Fridays. Most were between 4 pm and 8 pm.

Easily the biggest group of drivers involved in crashes was 15 to 19 year olds. Males of this age made up the largest group, followed by 20 to 24 year old males, then 15 to 19 year old females.

Trucks were involved in nine percent of all crashes.

Loss of control crashes

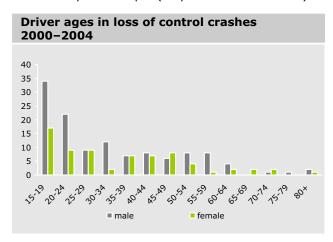
Between 2000 and 2004, 392 crashes (45 percent of all crashes) in the Waimakariri District were caused by loss of control and/or colliding with another vehicle head-on. Of these, 53 percent occurred on a bend and 47 percent on a straight road. One of these crashes was fatal in the urban environment, and eight in rural areas. Seventeen percent involved more than one vehicle.

Thirty-six percent of urban loss of control crashes occurred at intersections, compared with 21 percent of rural loss of control crashes.

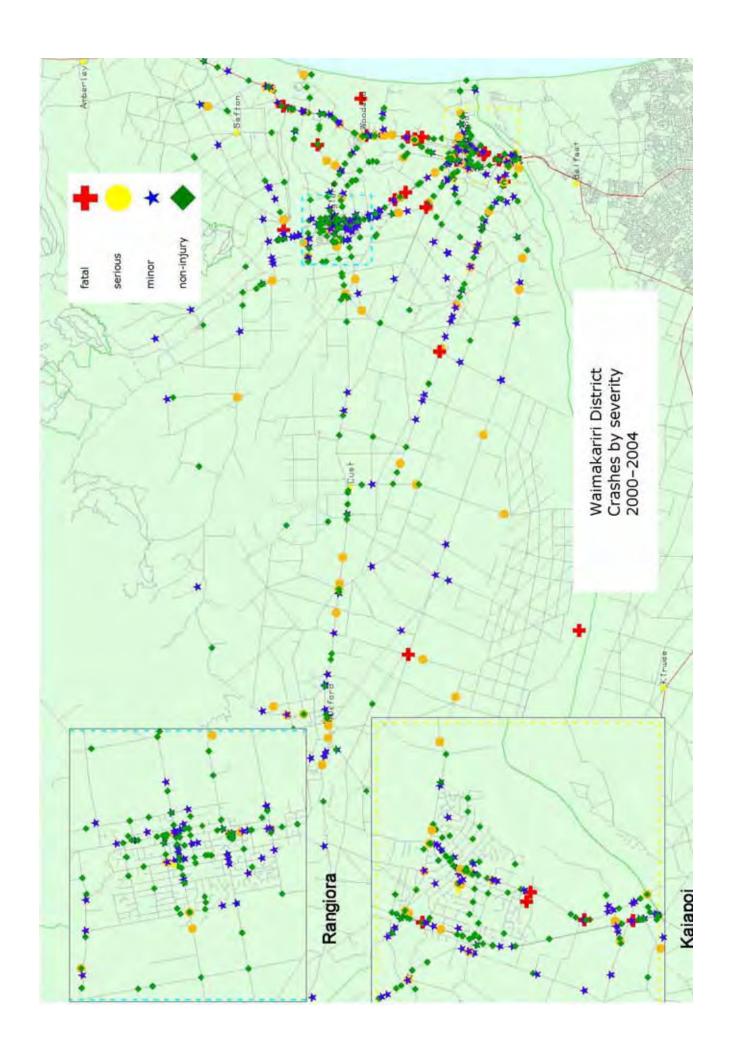


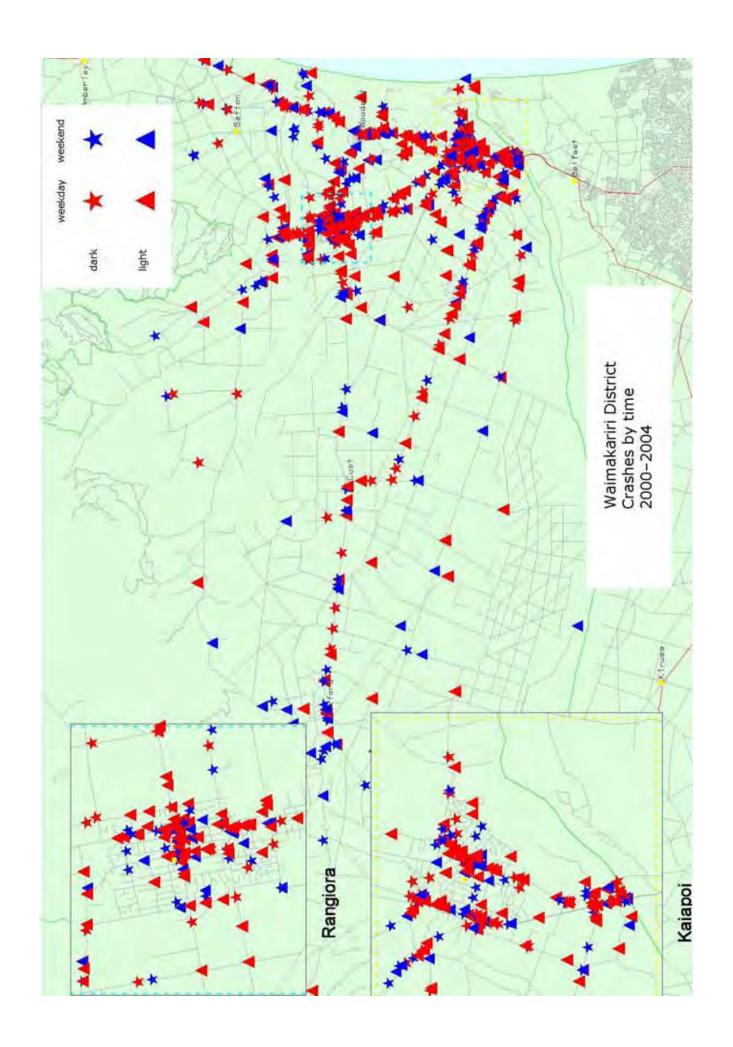
The most common factor contributing to loss of control crashes was travelling too fast for the conditions (123/745), closely followed by road factors (121/745). Slightly more than half of all loss of control crashes occurred in darkness. Of the environmental causes for crashes, eg road surface or poor visibility, 28 out of 84 reported a slippery surface due to frost or ice, with a further 10 slippery due to rain.

During the five-year period October and April recorded the highest numbers of loss of control crashes. Thursdays and Fridays were the worst days for crashes, (16 percent each) with the peak time between 4 pm and 8 pm (26 percent of all crashes).



Fifteen to 19 year old males were the drivers most commonly involved in loss of control crashes, followed by 20-24 year olds.



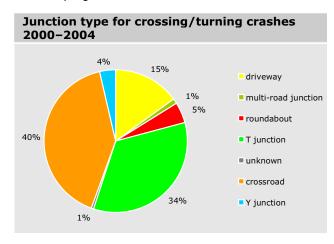


Intersection crashes

Nearly a quarter of all crashes in the Waimakariri District between 2000 and 2004 involved crossing/turning crashes: crashes where two vehicles crossed each other's path at right angles, or where one turned across the path of the other. Five crashes resulted in one or more fatalities, 25 caused serious injury, 60 minor injury and 103 were non-injury crashes. All fatal crashes occurred on rural roads.

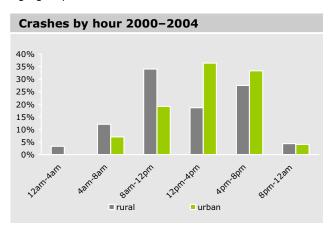
Just over half occurred on an urban road. The most common causes of both urban and rural crossing/turning crashes were failure to give way/stop and poor observation, followed by poor judgement.

Slightly more crashes occurred at Stop signs than Give Way signs.



The greatest number of crashes occurred between 4 pm and 8 pm, and the days most often recorded were Thursdays, followed by Wednesdays.

In urban areas, the highest number of injury crashes caused by failure to give way or stop was caused by 15 to 19 year old males, followed by 55–59 year old males and 55–59 year old females. In rural crashes the driver was more likely to be a male aged between 15 and 44. Fifteen to 19 year old males were also more likely to be involved in a serious crash, however, 35–39 year olds were the most common age group involved in fatal crashes.



Rear-end/obstruction crashes

Between 2000 and 2004, 23 percent of all crashes in the Waimakariri District involved either a rear-end collision between two travelling vehicles, or a collision with some object, such as a parked car or animal. The Waimakariri District figure is higher than for both similar sized local authorities and New Zealand as a whole, for both urban and rural roads.

The most common crash types in this group were collisions with a parked car; rear-end collisions with a turning vehicle, usually entering a driveway; and collisions with a vehicle performing a u-turn. Collisions with parked vehicles were almost exclusively an urban problem, while two thirds of rear-end crashes and half of all U-turn collisions occurred on rural roads.

The rural crashes involved a much greater degree of severity, with five rural crashes in the last five years being fatal and 16 serious, compared with no fatal and nine serious crashes in the urban environment.

Seventy percent of all rear-end crashes occurred in daylight, with slightly more daylight crashes in urban areas. Thursday appeared to be the worst day of the week for these crashes, with the peak time between 4 pm and 8 pm.





Slightly more females than males were involved in collisions with parked cars. Overall, female drivers were involved in just over a third of all urban crashes of this type, compared with less than 10 percent of rural crashes.

The other main objects struck were fences or stray animals.

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 Waimakariri 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	Waimakariri District 2004 injury crashes
Speed % crashes with excessive speed	28% to 35%	15%
Alcohol % driver alcohol crashes	21% to 40%	14%
Intersections % crashes with failed to stop or give way factors	35% to 43%	12%
Pedestrian % crashes with pedestrians	14% to 22%	6%
Cyclists % crashes with cyclists	12% to 17%	5%
Safety belts % unrestrained – front seat	11% to 19%	3%

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