Federal Office of Road Safety

TRENDS IN FATAL CRASHES ON RURAL ROADS

Rural crashes have been the focus of concern for road safety professionals for some time, although there is some variation in what is meant by the term "rural".

This paper defines "rural" as the open road outside of town boundaries. Definitions of rural areas, however, can vary widely to include, for example, large towns in country areas. The current definition used by the Federal Office of Road Safety in coding its fatality file is similar to that used by the Australian Bureau of Statistics.

The fatality file is an exhaustive analysis of fatal crash details coded from coroner and police reports. Fatality files exist for the years 1988, 1990 and 1992.

Fatal crashes in rural and urban areas

Fatal crashes on open rural roads are declining at a slower rate than in urban areas and the difference in the rate of decline is statistically significant.

	Rural	Urban
1988	1186	1372
1990	880	1153
1992	828	884
% decrease from 1988 to 1992	30.2%	35.6%

The type of crash occurring on open roads has remained stable over the period 1988-1992 although the typical rural crash differs from the typical urban crash. The majority of crashes in rural areas involve a single vehicle (55%) while urban crashes are more likely to involve multiple vehicles (40%). Pedestrian fatalities are far more frequent in urban areas (35% of crashes) than in rural areas (5% of crashes).

More recent trends

Clearly, there have been some reductions in the number of fatal crashes since 1992. Up-to-date information concerning the speed limit at the location of a fatal crash is available from monthly monitoring statistics maintained by the Federal Office of Road Safety.

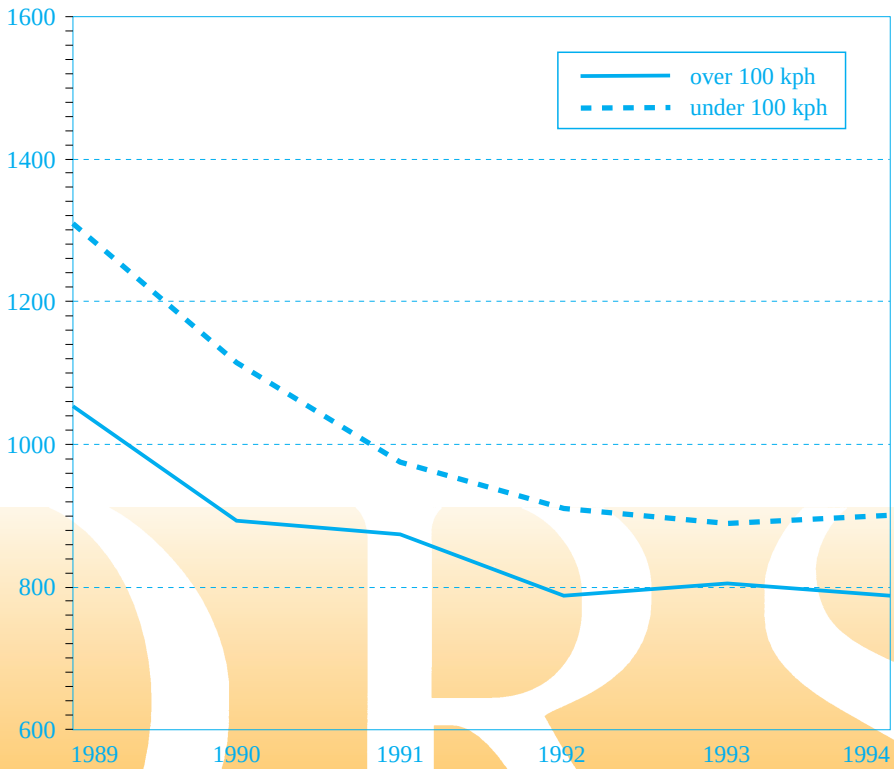
Fatal crashes by speed limit

	100 kph & over	under 100 kph
1989	1056	1308
1990	896	1117
1991	877	975
1992	788	911
1993	805	887
1994	786	901
% decrease from 1989 to 1994	25.6%	31.1%

An approximation of the distinction between rural and urban areas is provided by the speed limit at the crash site with limits of 100 km/h or greater deemed to be probably rural, and less than 100 km/h probably urban. The use of 100 km/h correctly identifies 89 per cent of urban crashes and 83 per cent of rural crashes.

The trend from 1989 to 1992 based on speed limit is very similar to that based on the detailed fatality file. Until 1992, fatal crashes in rural areas (ie 100 km/h and over) did not decline as steeply as crashes in urban areas. The extent of the difference is roughly the same whether data from the fatality file or information based on speed limits is used.

Since 1992, both urban and rural crashes have bottomed and follow a fairly flat trend. However, the overall figures disguise variations among the states and territories.



Percentage reduction in fatal crashes by speed limit and state, 1989 - 1994

	100 kph & over	under 100 kph
AUSTRALIA	25.6%	31.1%
Australian Capital Territory	N/A	N/A
New South Wales	26.6%	31.0%
Northern Territory	26.5%	65.2%
Queensland	7.3%	(2.5%)*
South Australia	20.4%	33.6%
Tasmania	27.9%	20.0%
Victoria	44.9%	53.2%
Western Australia	1.1%	11.2%

** An increase in fatal crashes*

Victoria has performed very strongly reducing crashes in urban and rural areas. The improvement in rural crash rates is almost double the improvement of any other state or territory. Most of the other jurisdictions tend to cluster around the national average in terms of reductions in the number of fatal rural crashes.

However, Western Australia and Queensland are very much below the average in terms of both rural open road crashes and urban crashes. Fatal urban crashes have increased by three per cent in Queensland over the period.

Major factors in rural crashes

In April 1995, a seminar held at Wodonga, Victoria, by the National Road Trauma Advisory Council to consider the issue of rural road safety identified a number of features of fatal crashes on country roads:

- the majority of fatal rural crashes involve a single vehicle and overturning is a significant feature;
- the prevalence of roads with unsealed shoulders in rural areas is probably related to the high incidence of loss of control of the vehicle;
- fatigue, alcohol and speeding are important factors in fatal rural crashes; and
- the incidence of seat belt wearing appears to be low in remote rural areas.

What it all means

The data illustrates that success can be achieved in rural areas. During 1994, 786 fatal crashes occurred on open rural roads.

If Australia could match its success in reducing urban fatal crashes in rural areas, the number of rural crashes would fall by

60 per year.

If states which performed below the national average could raise their performance to meet the national average, Australia would reduce its number of fatal rural crashes by

60 per year.

If all other states could match the performance of Victoria over the past five years in rural areas, the number of rural crashes overall would fall by

200 per year.

If all other states could match the performance of Victoria over the past five years in urban areas, the number of rural crashes would fall by

300 per year.