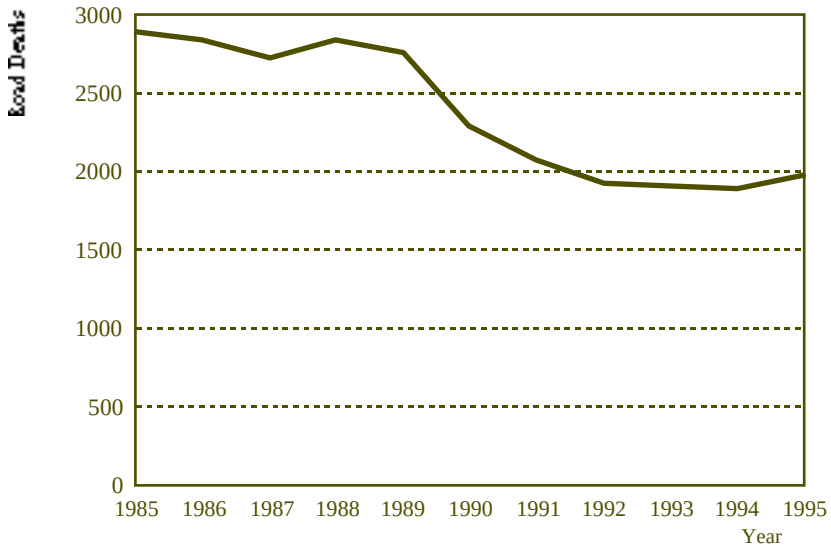
ROAD FATALITY TRENDS IN AUSTRALIA: 1995 SUMMARY

This report analyses trends in road fatalities during 1995 in Australia and in the States and Territories. The road toll rose in 1995 to 2,017 deaths following six years of successive falls in the number of Australians killed on the road. It was also the first time since 1991 that the road toll had exceeded 2,000 deaths. The trend in road deaths is illustrated in Chart 1.

Measuring the number of deaths for every 100,000 people in the population is a widely accepted way of looking at the number of deaths while taking into account the size of the resident population. In 1995, there were 209 road fatalities in Western Australia and 57 fatalities in Tasmania. This apparent difference can be attributed to the size of the population in the two States. In fact, the number of deaths per 100,000 residents is the same: 12.1 deaths in each State. The use of number of deaths per 100,000 of population is a standard measure of public health risk used internationally in relation to death due to disease and injury.



Understanding trends in road fatalities

The media and public attention tend to focus on the national road toll. While the national road toll is an important measure of our success in promoting road safety, it is not the only measure nor necessarily the best measure of road safety performance.

For example, all other things being equal the road toll might be expected to rise with an increase in population. Population movements between States and Territories will put upward pressure on the road toll in one State or Territory and downward pressure in another.

The size of the population is one factor that affects the road toll. Another factor is the degree of motorisation or the number of cars on the road. A country with a small population and a large number of cars may have a higher road toll than a country with a large population and very few cars. The number of deaths for every 10,000 registered vehicles is a way of considering road fatalities taking into account the degree of motorisation.

Another measure is to consider the actual risk associated with travelling on the road. The number of deaths for every 100 million vehicle kilometres travelled is a measure of this probability. Most researchers prefer to use this measure when assessing the success of road safety programs. It is the aim of road safety programs to reduce the risk involved with travel. This measure is also important because it absorbs the effects of changes in economic activity.

It has long been recognised that the road toll is related to the amount of economic activity. The economy influences the road toll by increasing or decreasing the amount of travel undertaken. Thus, the use of number of deaths per distance travelled takes into account the impact of economic growth and reduces the need for complex and often cumbersome attempts to estimate through statistical modelling the effect of the economy on the road toll.

The distinction between physical risk on the road and the threat to public health is important. A program may reduce the actual risk of a fatal crash for every kilometre travelled but the road toll may increase because more people are using the roads. Ideally, both the threat to public health and the risk of death in a fatal crash can be reduced through appropriate road safety programs.

Finally, an understanding of trends in the road toll should take into account both current performance and short and long term trends. Certainly, current performance is important but the road toll in any single year may be influenced by essentially one-off events such as extremes of weather or the sudden influx of a large number of tourists for special occasions. It is perhaps equally important

Table 1: Fatalities

	1995	1994	1985	Short term change	Long term change
Australia	2017	1934	2941	4%	-31%
New South Wales	620	647	1067	-4%	-42%
Victoria	418	378	683	11%	-39%
Queensland	456	422	502	8%	-9%
South Australia	181	159	268	14%	-32%
Western Australia	209	211	243	-1%	-14%
Tasmania	57	59	78	-3%	-27%
Northern Territory	61	41	67	49%	-9%
Australian Capital Territory	15	17	33	-12%	-55%

Table 2: Fatalities per 100,000 population

	1995	1994	1985	Short term change	Long term change
Australia	11.2	10.8	18.6	4%	-40%
New South Wales	10.1	10.7	19.5	-6%	-48%
Victoria	9.3	8.5	16.6	9%	-44%
Queensland	13.9	13.2	19.5	5%	-29%
South Australia	12.3	10.8	19.5	14%	-37%
Western Australia	12.1	12.4	17.1	-2%	-29%
Tasmania	12.1	12.5	17.6	-3%	-31%
Northern Territory	35.1	24.0	45.1	46%	-22%
Australian Capital Territory	4.9	5.7	13.1	-14%	-63%

Table 3: Fatalities per 100 million vehicle kilometres travelled

	1995	1994	1985	Short term change	Long term change
Australia	1.2	-	2.1	-	-43%
New South Wales	1.3	-	2.3	-	-43%
Victoria	1.0	-	1.8	-	-44%
Queensland	1.3	-	2.2	-	-41%
South Australia	1.3	-	2.2	-	-41%
Western Australia	1.2	-	1.7	-	-29%
Tasmania	1.3	-	2.0	-	-35%
Northern Territory	4.2	-	5.4	-	-22%
Australian Capital Territory	0.5	-	1.6	-	-69%

to consider where our road safety performance is heading in the longer term and what we have managed to achieve.

The following report considers the road safety performance of Australia, and its States and Territories in the context of current performance (in this case, 1995) and long term trends. The two key measures that will be analysed are the number of road deaths per 100,000 of population and per 100 million kilometres travelled.

The number of kilometres travelled is based on the Australian Bureau of Statistics' Survey of Motor Vehicle Use. This survey was undertaken in 1991 and again in 1995.

Table 1 has details of the number of fatalities in 1995, 1994 and 1985. Table 2 has details of the number of fatalities per 100,000 population (the measure of threat to public health) for the same years. Table 3 has details of the number of fatalities per 10 million kilometres travelled (the measure of the physical risk of being killed in a road crash) for 1995 and 1985.

Trends in road fatalities: 1995

Australia

As mentioned previously, 1995 was a bad year for road safety in Australia in terms of the total number killed. The number of deaths per 100,000 of population also increased from 10.8 in 1994 to 11.2 in 1995. No survey of motor vehicle use was undertaken in 1994 so it is not possible to compare the trend in physical risk from that year to 1995.

The long term trend has been excellent. From 1985 to 1995, road fatalities fell by 31 per cent. The reduction in public health risk as indicated by the number of deaths per 100,000 of population was even greater at 40 per cent and the probability of death in a fatal crash by distance travelled fell by 43 per cent.

The trend at the State or Territory level varied considerably from the national trend and these are reported below.

New South Wales

After the Australian Capital Territory, New South Wales has had the most success in reducing the number of people killed per 100,000 of population since 1985. Fatalities per population have dropped by 48 per cent from 19.5 in 1985 to 10.1 in 1995. New South Wales has also had success in the short term reducing its road toll and its rate per 100,000 population from 1994 to 1995. In terms of its present performance and its long term trends, New South Wales has outperformed most other States and Territories on this measure.

The physical risk of driving in New South Wales is slightly higher than the national average. This was true in 1985 and also in 1995. New South Wales reduced the level of physical risk on its roads by 43 per cent from 1985 to 1995. This was nearly equivalent to the reduction achieved in Victoria over the same period.

Victoria

In 1995, 418 people were killed on Victorian roads, an increase of 11 per cent over the previous year. Despite a bad outcome in 1995 compared to the previous year, Victoria was second only to the Australian Capital Territory in terms of its risk levels. In 1995, there were 9.3 fatalities per 100,000 population and 1.0 death for every 100 million kilometres travelled.

Victoria has also had a strong long term trend in reducing both these levels of risk. Both the threat to public health and the level of physical risk have diminished by 44 per cent, results comparable to those of New South Wales and better than that of other States and Territories except the Australian Capital Territory.

Queensland

Queensland has greatly reduced the physical risk of a fatal crash on its roads from 1985 to 1995. The rate of involvement fell by 41 per cent from 2.2 fatalities per 100 million kilometres travelled to 1.3. The overall level of physical risk in 1995 was only slightly higher than the national average of 1.2 deaths.

In terms of public health threat, Queensland has not performed as well as other States and Territories. In 1995, there were 13.9 deaths per 100,000 of population. Only the Northern Territory had a higher rate of death. Similarly, the long term trend of this rate is well below the national average. The road crash as a threat to public health in Queensland declined by 29 per cent from 1985 to 1995 compared to a national reduction of 40 per cent.

South Australia

In 1995, the road toll in South Australia increased by 14 per cent over the previous year to a total of 181. Despite this, South Australia managed a large reduction in the risk of death in a fatal crash from 2.2 deaths per 100 million kilometres travelled in 1985 to 1.3 deaths in 1995. The 1995 rate was slightly higher than the national average.

In terms of public health threat in 1995, South Australia ranked with the middle order States of Western Australia and Tasmania and behind the Australian Capital Territory, Victoria and New South Wales. Nevertheless, in terms of long term trend, South Australia outperformed the other middle ranking States achieving a reduction of 37 per cent from 1985 to 1995.

Western Australia

In 1995, Western Australia had one of the lowest risks in Australia of death in a fatal crash with 1.2 deaths for every 100 million kilometres travelled. Only the

Australian Capital Territory and Victoria had better records on this measure. Unfortunately, the long term trend is not so impressive.

In 1985, Western Australia was placed second marginally behind the Australian Capital Territory. Since then, it has managed to reduce this rate by 29 per cent, which is well below the nation al average of 43 per cent.

In terms of public health threat, Western Australia was a middle order State in 1995 with a rate of 12.1 deaths per 100,000 of population. Again, the long term trend is less impressive. In 1985, with 17.1 deaths per 100,000 of population, Western Australia was second placed behind the Australian Capital Territory. Its rate of reduction of 29 per cent is well below the national average of 40 per cent.

Tasmania

The road toll in Tasmania fell by 3 per cent from 59 in 1994 to 57 in 1995. In terms of both public health and physical risk in 1995, Tasmania was very much a middle order performer. With 12.1 deaths per 100,000 of population and 1.3 deaths per 100 million kilometres travelled, Tasmania was slightly above the national average on both measures.

Much the same is true of the long term trends. Road trauma as a public health threat dropped by 31 per cent from 1985 to 1995 in Tasmania. The national reduction was 40 per cent. The reduction in risk of death per distance travelled for Tasmania over the same period was 35 per cent compared to 43 per cent nationally.

Northern Territory

The road toll in the Northern Territory in 1995 was 61, which was a 49 per cent increase over the previous year. This was the largest increase recorded of any State or Territory. The Northern Territory had the highest incidence of death per 100,000 of population in 1995 with 35.1 deaths. This is over three times the national average.

The Northern Territory also had the highest level of risk per 100 million kilometres travelled with 4.2 deaths. Again, this is over three times the national average.

The long term trend in the Northern Territory has seen a reduction of 22 per cent in both public health threat and the risk of death by distance travelled. These reductions are nearly half that achieved nationally and the lowest of any State or Territory.

Australian Capital Territory

In terms of public health threat and the risk of death in a fatal crash, the Australian Capital Territory was the safest of the States and Territories in 1995. There were 4.9 deaths per 100,000 of population and 0.5 deaths per 100 million kilometres travelled. The risk in the nation as a whole was more than twice as great.

Similarly, the Australian Capital Territory has had more long term success in addressing the risk associated with road trauma reducing the threat to public health by 63 per cent and the physical risk by 69 per cent. These were by far the largest reductions achieved by any State or Territory.

Conclusion

There is no one recognised way of evaluating road safety performance across States and Territories. This report concentrates on measures of public health and physical risk described above and attempts to reconcile current performance and long term trends.

This analysis suggests that the Australian Capital Territory, New South Wales and Victoria have the best overall record of the States and Territories. South Australia, Western Australia , Tasmania and Queensland have been the middle ranking performers of the group. The Northern Territory has not performed as well as the others.

Nevertheless, road safety in the Northern Territory has improved. In particular, the Territory has employed significant resources in addressing the problem of drink driving. It should also be recognised that the Northern Territory differs significantly in terms of its degree of urbanisation, infrastructure and climate from other States and Territories. The many differences between the States and Territories should be recognised in evaluating road safety statistics.

The extent of urbanisation and other factors may explain some of the variance in road safety performance among States and Territories but it does not explain, however, the differences in trends over time.

For example, in 1985, the Australian Capital Territory had the lowest public health and physical involvement risk of any State or Territory. From 1985 to 1995, the Australian Capital Territory also had the greatest risk reduction, so that the safety gap between the Australian Capital Territory and the rest of Australia is growing.

Unfortunately, the exact converse is true of the Northern Territory. The Northern Territory has had the highest rates of risk and the least rate of improvement of any State and Territory during the period of this study.

In general, States and Territories with lower levels of risk have tended to have had the best rates of improvements. While we can be pleased with the progress that has been achieved in road safety in Australia over the past decade, the level of road trauma nationally and even in the safest of the States and Territories remains morally, socially and economically unacceptable.