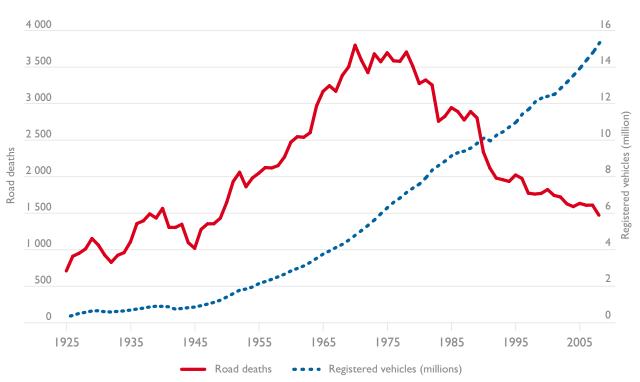


### Australian Government

**Department of Infrastructure, Transport, Regional Development and Local Government** Bureau of Infrastructure, Transport and Regional Economics

Road deaths in Australia 1925–2008

Records of road crash deaths in Australia commenced in 1925, a time when motor vehicle ownership was just starting its steady rise to the more than 15 million motor vehicles on the road in Australia today. As the number of vehicles on the road increased, so too did the number of road crash deaths, until the 1970s when concerted government action stopped and reversed the rise in numbers of people killed each year. Improvements to roads and vehicles, enactment of road safety legislation, intensive public education and enhanced police enforcement aided by improved enforcement technology were the major contributors to the turnaround. Even though the number of vehicles on the road has continued to increase, annual road deaths have dropped from a peak of 3798 in 1970 to an average of 3613 in the 1970s, 2971 in the 1980s, 1957 in the 1990s and 1641 in the 2000s for the period 2000–08 (Figure 1).

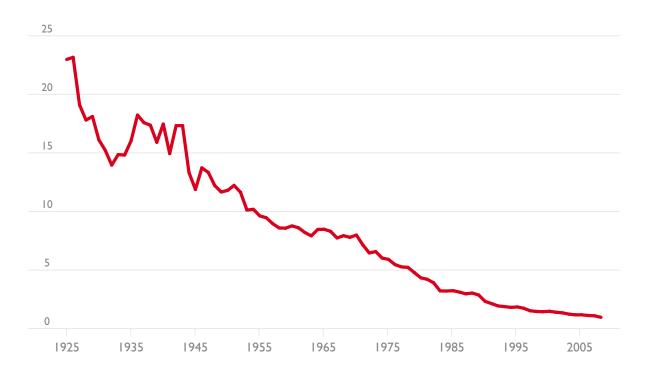


### FI Number of road deaths and registered vehicles, Australia, 1925–2008

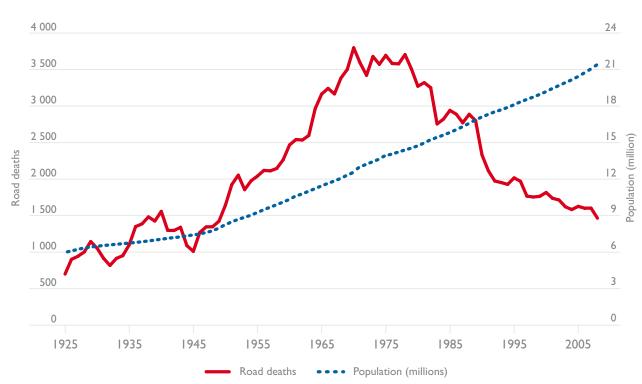
38

Comparing the number of road crash deaths per 10 000 registered vehicles in 1970 with the rate thereafter shows that 8 deaths per 10 000 registered vehicles in 1970 decreased gradually to 1 death per 10 000 registered vehicles in 2008 (Figure 2). Other OECD countries recorded a similar trend: the OECD median of 7 deaths per 10 000 registered vehicles in 1975 had fallen to 1 in 2007. The Australian rate has been below the OECD median rate since 1975.

### F2 Road deaths per 10 000 registered vehicles, Australia, 1925–2008



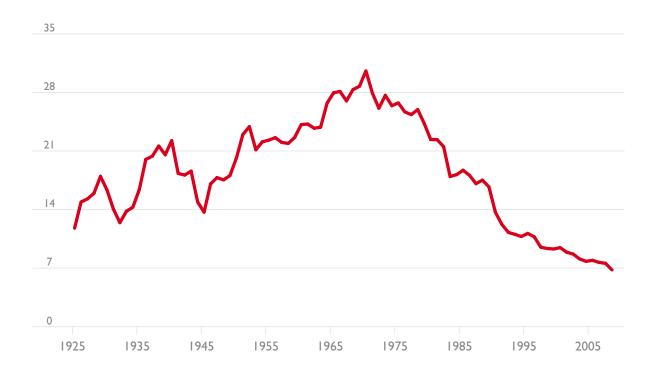
Australia's population slowly increased from 1925, increasing more rapidly from the end of the Second World War in 1945 (Figure 3).



F3 Number of road deaths and resident population, Australia, 1925–2008

38

The number of road crash deaths per 100 000 population reached a peak of 30 in 1970 decreasing, with a few reversals along the way, to 7 deaths per 100 000 population in 2008 (Figure 4). In 1975, the OECD median rate was 19 deaths per 100 000 population but by 2007 it had decreased to 8 deaths per 100 000 population. On this measure, the Australian rate has moved from above the OECD median in 1975 to below it by 1990 and thereafter.



### F4 Road deaths per 100 000 population, Australia, 1925–2008

While these trends are encouraging, road trauma continues to impose a huge burden on the community. Nearly 200 000 people were killed in road crashes in Australia in the twentieth century. This is more than double the number of Australians killed (nearly 90 000) in the four major wars in which Australia was involved in the twentieth century: First World War, Second World War, Korea and Vietnam.

In addition to the persons killed each year, there are many who are seriously injured. Overall, in 2006, the latest year for which data are available, for every person killed on the roads there were also 20 persons seriously injured, many with debilitating lifelong injuries. Road crashes impose economic costs conservatively estimated to be \$18 billion per annum<sup>1</sup> and social costs that are not readily quantifiable but are nonetheless devastating for the individuals, families and communities involved.

The National Road Safety Strategy 2001–10 aims to reduce the annual number of road deaths to no more than 5.6 per 100 000 population by December 2010. With one year remaining to achieve this target, the National Road Safety Action Plan 2009 and 2010 focuses on measures to reduce driving speeds, make vehicles, roads and roadsides safer and facilitate safer behaviour among road users.

The data behind the charts above are available on <u>page 4</u>. Figures for the OECD (Organisation for Economic Cooperation and Development) countries as a whole are from an annual series titled International Road Safety Comparisons, available at <u>www.infrastructure.gov.au</u>

# Road crash casualties and rates, Australia, 1925–2008

This table is updated as new data become available (usually annually). While it is presented as a time series it is more a compilation of the data available from different data collections in use over the period and users should read the notes carefully.

Seriously injured per 100 million vehicle kilometres		I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	Ι	I	I	I	I	I	I	Ι	I
injureo millio k																														
Deaths per 100 million vehicle kilometres	I	I	I	I	I	I	I	I	I	I	Ι	I	Ι	I	Ι	Ι	Ι	I	Ι	Ι	Ι	I	Ι	Ι	I	Ι	Ι	I	I	T
Vehicle kilometres travelled (millions)	I	I	I	I	I	I	I	I	I	I	I	Ι	Ι	Ι	I	I	I	Ι	I	I	I	Ι	I	I	Ι	I	I	Ι	I	T
Seriously injured per 100 000 population	I	I	I	I	I	I	I	I	I	I	Ι	Ι	I	I	Ι	Ι	Ι	I	Ι	Ι	Ι	I	Ι	Ι	I	Ι	Ι	I	Ι	T
Deaths per 100 000 population	11.8	14.9	15.3	15.9	17.9	16.3	14.0	12.4	13.8	14.3	16.4	19.9	20.3	21.5	20.5	22.1	18.3	1.8.1	18.5	14.9	13.7	17.0	17.8	17.5	18.0	20.1	22.9	23.8	21.1	22.0
Population (thousands)	5 939.2	6 056.4	6 182.5	6 302.2	6 393.9	6 462.6	6 526.5	6 576.8	6 629.8	6 677.4	6 726.3	6 778.4	6 835.5	6 898.5	6 967.8	7 039.5	7 109.9	7 180.7	7 234.9	7 309.7	7 391.7	7 465.2	7 579.4	7 708.8	7 908.1	8 178.7	8 421.8	8 636.5	8 815.4	8 986.5
Seriously injured per 10 000 vehicles	1	I	I	I	I	I	I	I	I	I	I	I	Ι	I	I	I	I	I	I	I	I	I	I	I	Ι	I	Ι	Ι	Ι	I
Deaths per 10 000 vehicles	22.9	23.1	0.91	17.7	18.1	16.1	15.2	13.9	14.8	14.8	16.0	18.2	17.5	17.3	15.9	17.4	14.9	17.3	17.3	13.3	11.8	13.7	13.3	12.2	11.6	11.8	12.2	11.6	10.1	10.1
Registered vehicles (thousands)	305.6	390.3	495.5	565.2	634.3	656.3	604.1	587.9	617.2	644.6	688.4	742.9	791.5	856.8	899.5	895.0	871.5	750.8	776.0	820.2	854.0	928.4	1 012.8	1 107.3	1 224.8	397.	1 580.4	1 770.2	I 839.9	I 947.3
Persons seriously injured	I	I	I	I	I	I	I	I	I	I	Ι	I	Ι	I	Ι	Ι	Ι	I	Ι	Ι	Ι	I	I	I	I	I	I	I	I	T
Road deaths	700	106	943	1 003	1 145	1 054	916	818	914	952	001	1 350	1 387	1 483	I 426	I 558	1 298	1 297	1 340	1 089	1 10 1	1 270	1 346	1 348	1 424	I 643	I 926	2 054	I 856	1 976
Year	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954

(continued)

Deaths per in 10 000 vehicles 10 000 9.6	Deaths per 10 000 vehicles 9.6		Seriously injured per 10 000 vehicles	uusly I per icles	Population (thousands) 9 199.7	Deaths per 100 000 population 22.2	injured per 100 000 population	kilometres travelled (millions)	Deaths per 100 million vehicle kilometres	injured per 100 million vehicle kilometres
		2 246.3 2 366 I	9.4	1 1	9 425.6 9 640 I	22.5 21.9				
	I	2 506.2	8.6	Ι	9 842.3	21.8	I	I	Ι	I
	I	2 649.1	8.5	I	10 056.5	22.5	I	Ι	I	I
	I	2 824.2	8.7	I	10 275.0	24.0	I	Ι	Ι	I
	I	2 962.7	8.6	I	10 548.3	24.1	I	Ι	Ι	I
	Ι	3 100.7	8.2	I	10 742.3	23.6	I	I	Ι	I
	I	3 291.9	7.9	I	10 950.4	23.7	I	I	Ι	I
	Ι	3 516.2	8.4	I	11 166.7	26.6	Ι	I	Ι	I
	I	3 744.3	8.5	I	11 387.7	27.8	Ι	Ι	I	Ι
	I	3 919.5	8.3	I	11 599.5	27.9	Ι	Ι	I	Ι
	Ι	4 106.6	7.7	I	11 799.1	26.8	I	Ι	Ι	I
	I	4 279.3	7.9	I	12 008.6	28.2	Ι	Ι	Ι	Ι
	I	4 508.4	7.8	I	12 263.0	28.6	I	I	I	Ι
	I	4 771.6	8.0	I	12 507.3	30.4	I	I	I	Ι
	Ι	5 039.2	7.1	I	12 937.2	27.7	Ι	81 051	4,4	Ι
	I	5 317.1	6.4	I	13 177.0	26.0	I	I	I	I
	Ι	5 613.1	6.6	I	13 386.4	27.5	I	Ι	I	Ι
	I	5 952.7	6.0	I	13 599.1	26.3	I	Ι	I	Ι
	Ι	6 276.4	5.9	I	13 893.0	26.6	Ι	Ι	Ι	Ι
	Ι	6 580.9	5.4	I	14 033.1	25.5	Ι	616 001	3.6	Ι
	Ι	6 818.0	5.2	I	14 192.2	25.2	I	Ι	Ι	I
	Ι	7 114.5	5.2	I	14 359.3	25.8	Ι	Ι	I	Ι
	Ι	7 358.3	4.8	I	14515.7	24.2	Ι	111 469	3.1	Ι
	32 054	7 573.6	4.3	42.3	14 695.4	22.3	218.1	Ι	I	Ι
	32 108	7 917.6	4.2	40.6	14 923.3	22.3	215.2	Ι	I	Ι
	30 654	8 346.0	3.9	36.7	15 184.2	21.4	201.9	126 866	2.6	24.2
	28 080	8 589.8	3.2	32.7	15 393.5	17.9	182.4	Ι	I	Ι
	28 795	8 832.8	3.2	32.6	15 579.4	18.1	184.8	Ι	Ι	Ι
	29 248	9 118.3	3.2	32.1	15 788.3	18.6	185.3	140 427	2.1	20.8
	29 169	9 290.5	3.1	31.4	16 018.4	18.0	182.1	I	I	I

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Year	Road deaths	Persons seriously injured	Registered vehicles (thousands)	Deaths per 10 000 vehicles	Seriously injured per 10 000 vehicles	Population (thousands)	Deaths per 100 000 population	Seriously injured per 100 000 population	Vehicle kilometres travelled (millions)	Deaths per 100 million vehicle kilometres	Seriously injured per 100 million vehicle kilometres
1987	2 772	29 698	9 373.7	3.0	31.7	16 263.9	17.0	182.6	T	I	1
1988	2 887	29 705	9 544.4	3.0	31.1	16 532.2	17.5	179.7	153915	9.1	19.3
1989	2 801	28 483	9 806.1	2.9	29.0	16 814.4	16.7	169.4	I	Ι	I
0661	2 331	24 961	10 080.6	2.3	24.8	17 065.1	13.7	146.3	I	Ι	I
1661	2 113	22 528	9 934.1	2.1	22.7	17 284.0	12.2	130.3	150 389	4.	15.0
1992	1 974	21512	10 246.9	9.1	21.0	17 494.7	11.3	123.0	I	Ι	Ι
1993	1 953	21 557	10 431.5	6.1	20.7	17 667.1	1.11	122.0	I	Ι	I
1994	1 928	22 133	10 699.2	8. I	20.7	17 854.7	10.8	124.0	I	Ι	I
1995	2 017	22 368	10 947.5	В. П	20.4	18 07 1.8	11.2	123.8	166 514	1.2	13.4
9661	026 1	21 989	11 401.1	1.7	19.3	18 310.7	10.8	120.1	I	I	I
1997	1 767	Ι	11 664.4	1.5	I	18 517.6	9.5	I	I	Ι	Ι
1998	I 755	I	12 066.9	1.5	I	18 711.3	9.4	I	167 892	0.1	I
6661	1 764	Ι	12 268.6	4.	I	18 925.9	9.3	I	173 053	0.1	I
2000	1 817	26 963	I	Ι	I	19 153.4	9.5	140.8	184 593	0.1	14.6
2001	1 737	27 471	12 476.8	4.	22.0	19 413.2	8.9	141.5	190 152	0.9	14.4
2002	1715	27 934	12 822.0	C.I	21.8	19 651.4	8.7	142.1	192 209	0.9	14.5
2003	62	28 422	13 163.0	1.2	21.6	19 895.4	8.2	142.9	201 497	0.8	14.1
2004	1 583	28 864	13 533.1	1.2	21.3	20 127.4	7.9	143.4	199 055	0.8	14.5
2005	1 627	30 574	13 920.1	1.2	22.0	20 394.8	8.0	149.9	206 383	0.8	14.8
2006	1 602	32 264	14 358.7		22.5	20 697.9	7.7	155.9	209 405	0.8	15.4
2007	1 603	Ι	14 780.2		I	21 015.0	7.6	Ι	215171	0.7	I
2008	I 465	I	15 296.5	0.1	I	21 374.0	6.9	I	I	Ι	I
Note:	A dash in a cell indicates that data are not available for that cell	at data are not ava	ilable for that cell.								

# Explanatory notes

# Road deaths

Since 1925, a road crash death has been defined as the 'death of any person within 30 days of the road vehicle accident where death is attributable to injuries sustained during the accident'. Road deaths 1925–79 are from Office of Road Safety *Road traffic accident data and rates: Australia States and Territories 1925 to 1981*. Note, in particular, that Northern Territory fatalities are excluded from the Australian fatalities count and fatality rates for 1925–61. Deaths 1980–89 are from the Australian Bureau of Statistics publication *Road traffic accidents involving casualties, Australia.* The road deaths data from 1990 onwards are from the Department of Infrastructure, Transport, Regional Development and Local Government's Australian Road Deaths Database, which is compiled using police road crash data supplied by the New South Wales Roads and Traffic Authority; VicRoads; Queensland Transport; South Australian Police; Western Australian Police; Main Roads Western Australia; Tasmanian Department of Infrastructure Energy and Resources; Northern Territory police; and the Australian Capital Territory Department of Urban Services.

# Persons seriously injured

Injury data prior to 1980 are not included in the table as they were for all injury not just serious injury and are not comparable with the data since 1980. Persons seriously injured 1980–89 are from the Australian Bureau of Statistics publication *Road traffic accidents involving casualties*, *Australia*. In that publication, 'person injured' was defined as 'injury to any person involved in a road vehicle accident resulting in the injured person being admitted to hospital'. Persons seriously injured 1990–96 are from the Federal Office of Road Safety publication *Road injury Australia: 1996 statistical summary*. In that publication, a 'person hospitalised' was defined as 'a person classified by police as admitted to hospital from injuries received in either a hospitalisation or fatal road crash'. Persons seriously injured 2000 and later are from the Australian Institute of Health and Welfare's National Hospital Morbidity Database. For the purpose here 'serious injury' is defined as 'an injury that results in the person being admitted to hospital and subsequently discharged alive either on the same day or after one or more nights stay in a hospital bed (i.e. deaths are excluded)'.

Injury figures from 1980 to 1996 are based on police reports. Injury figures from 2000 are based on hospital records. Injury figures for 1997–99 are not available as police reports were not nationally collated from 1997 and reporting of figures based on hospital records 1997–99 was not comparable with 2000 and later data due to classification changes. Hospital data on serious injury from 2000 are not comparable with the 1980–96 'admitted to hospital' data based on police reports. They are presented together here simply as the only data available for Australia for the years they cover.

A known deficiency of the police data was the underreporting of serious injury to motorcyclists and pedal cyclists involved in road crashes, which perhaps partly explains the lower numbers compared with the figures derived from the hospital data. Hospital data are published annually in the Australian Institute of Health and Welfare series titled Serious injury due to land transport accidents Australia available at www.nisu.flinders.edu.au.

# **Registered vehicles**

Registration data are sourced from the Australian Bureau of Statistics publication *Motor Vehicle Census Australia* or its predecessors.

# Population

Population data are sourced from the Australian Bureau of Statistics publication Australian Demographic Statistics or its predecessors.

# Vehicle kilometres travelled

Kilometres travelled data are sourced from the Australian Bureau of Statistics publication *Survey of Motor Vehicle Use* or its predecessors.

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