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Safety

**International road safety comparisons
2014**

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Bureau of Infrastructure, Transport and Regional Economics

International road safety comparisons
2014

Department of Infrastructure and Regional Development
Canberra, Australia

At a glance

This report presents tabulations of road deaths and road death rates for Organisation for Economic Co-operation and Development (OECD) nations and Australian states and territories. The rates allow for a comparison of Australia's road safety performance with that of other OECD nations by accounting for the differing levels of population, motorisation and distances travelled.

- In terms of annual deaths per 100,000 population in 2014:

Australia's rate of 4.92 was the 14th lowest rate out of the 32 nations with available data. The nations with the three lowest rates were

–	Iceland	1.23
–	Sweden	2.80
–	Netherlands	2.83

Between 2005 and 2014, the rate of annual road crash fatalities per 100,000 population in Australia declined by a total of 38.9 per cent. Over the same period the OECD median rate fell by 46.0 per cent. All Australian jurisdictions achieved reduction of at least 11.7 per cent.

- In terms of annual deaths per 10,000 registered vehicles in 2014:

Australia's rate of 0.66 was the 11th lowest rate out of the 26 nations with available data. The nations with the three lowest rates were

–	Iceland	0.15
–	Norway	0.37
–	Switzerland	0.41

Annual road deaths in Australia relative to vehicle ownership declined between 2005 and 2014 by a total of 44.0 per cent. During this period the median rate for OECD nations declined by 46.0 per cent. Australian jurisdictions all achieved reductions of at least 19.8 per cent.

- In terms of annual deaths per 100 million vehicle kilometres travelled in 2014:

Australia's rate of 0.48 was the 8th lowest rate out of 13 nations with available data. The nations with the three lowest rates were

–	Iceland	0.12
–	Norway	0.33
–	Sweden	0.34

Between 2005 and 2014, Australia's rate declined by a total of 35.8 per cent whilst the OECD median declined by 49.8 per cent. For Australian jurisdictions, the reductions ranged from 3.1 per cent (Western Australia) to 64.9 per cent (Australian Capital Territory).

Data sources

International data

The International Road Traffic Accident Database (IRTAD 2016) is the main source of fatality and exposure data in this report. IRTAD is maintained by the Joint Transport Research Centre of the OECD and the International Transport Forum. Each year member nations supply IRTAD with their most recent data, which may include revisions to historical data. Further information on IRTAD is available at <http://internationaltransportforum.org/irtadpublic/about.html>.

In addition to the IRTAD database, other sources include OECD Stat Extracts (OECD 7 July, 2016) and in a small number of cases, a country's relevant government website.

Australian data

Australian road fatality data in this report are based on two databases: the Australian Road Deaths Database (ARDD) and the National Crash Database (NCD). There are minor data differences between the two databases due to the timing differences in data receipt and ongoing validation by data providers. ARDD data are available at http://www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx. ARDD data used in this report was current to June 2016 and NCD data to September 2015.

Australian data for population and registered vehicles were obtained from the Australian Bureau of Statistics, (ABS 2016) and (ABS 2016b) respectively. Estimates of vehicle kilometres travelled were obtained from the Bureau of Infrastructure and Regional Economics (BITRE unpublished).

Acknowledgements

The Department of Infrastructure and Regional Development gratefully acknowledges the provision of road crash data from the following agencies:

Transport for New South Wales;
VicRoads;
Queensland Department of Transport and Main Roads;
Department of Planning, Transport and Infrastructure South Australia;
Western Australian Police;
Main Roads Western Australia;
Department of State Growth, Tasmania;
Department of Transport, Northern Territory;
Territory and Municipal Services Directorate, Australian Capital Territory.

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SECTION I

Road deaths per 100,000 population

The number of road deaths per population is a measure of the public health risk associated with road crashes.

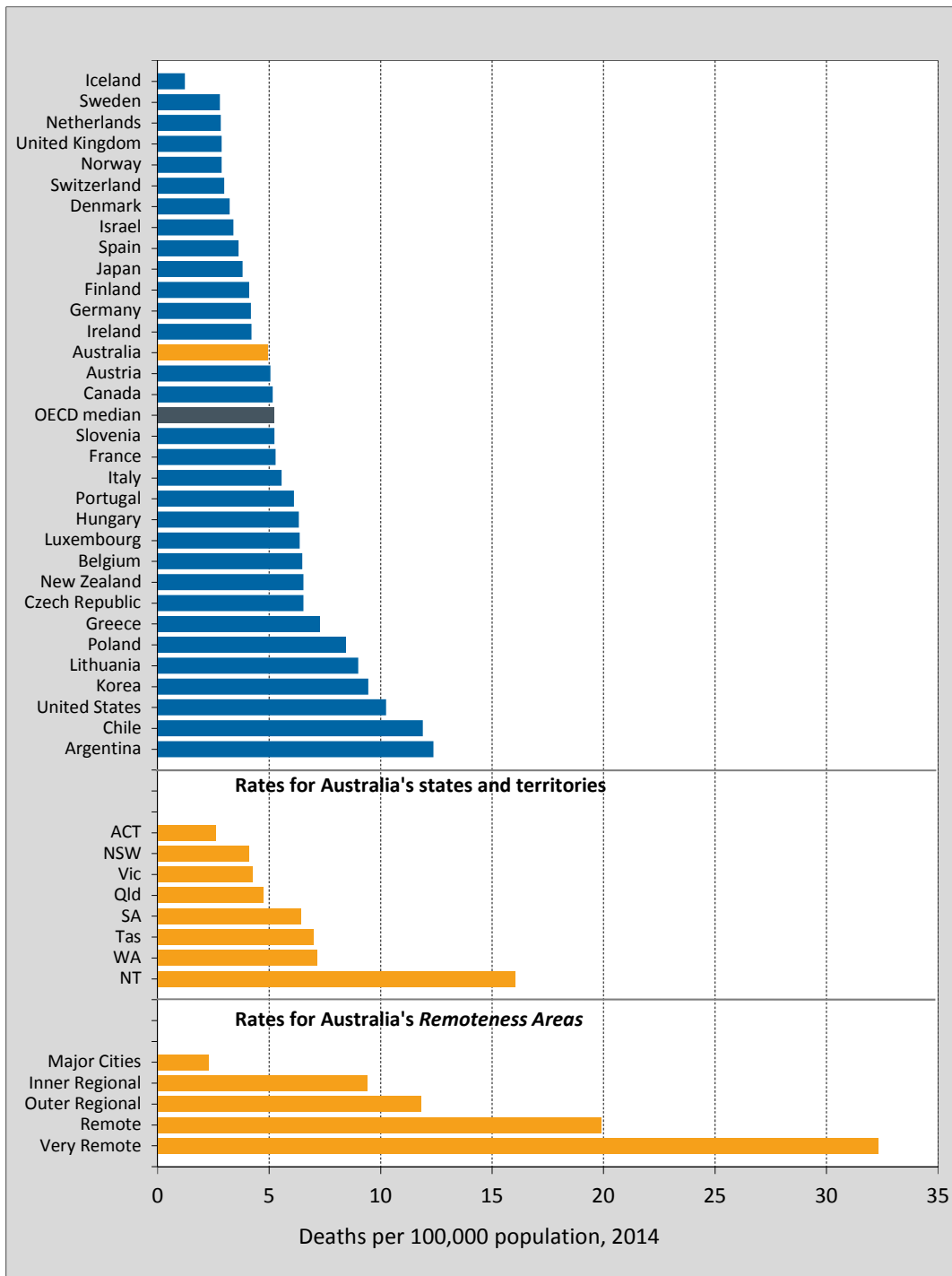
Road deaths per 100,000 population – OECD countries, 2014

Table I.1 Road deaths per 100,000 population – 32 OECD countries and Australian states/territories, 2014

<i>Nation</i>	<i>Road deaths</i>	<i>Population (000s)</i>	<i>Deaths per 100,000 population</i>
Iceland	4	326	1.23
Sweden	270	9,645	2.80
Netherlands	476	16,829	2.83
United Kingdom	1,854	64,597	2.87
Norway	147	5,108	2.88
Switzerland	243	8,140	2.99
Denmark	182	5,627	3.23
Israel	279	8,216	3.40
Spain	1,688	46,512	3.63
Japan	4,838	127,083	3.81
Finland	224	5,451	4.11
Germany	3,377	80,767	4.18
Ireland	194	4,606	4.21
Australia	1,155	23,461	4.92
Austria	430	8,507	5.05
Canada	1,834	35,540	5.16
OECD median			5.20
Slovenia	108	2,061	5.24
France	3,384	63,920	5.29
Italy	3,381	60,783	5.56
Portugal	638	10,427	6.12
Hungary	626	9,877	6.34
Luxembourg	35	550	6.37
Belgium	727	11,204	6.49
New Zealand	295	4,510	6.54
Czech Republic	688	10,512	6.54
Greece	795	10,927	7.28
Poland	3,202	38,018	8.42
Lithuania	265	2,943	9.00
Korea	4,762	50,423	9.44
United States	32,675	318,857	10.25
Chile	2,119	17,819	11.89
Argentina	5,279	42,670	12.37
ACT	10	385	2.60
NSW	307	7,513	4.09
Vic	249	5,838	4.27
Qld	223	4,720	4.72
SA	108	1,686	6.41
Tas	36	515	6.99
WA	183	2,557	7.16
NT	39	243	16.03

Sources ABS 2016; Australian Road Deaths Database; IRTAD 2016; OECD 2016

Figure I.1 Road deaths per 100,000 population – 32 OECD countries, Australian states/territories, and Australia's Remoteness areas, 2014



Note See page 6 for more information on Remoteness Areas.
 Sources ABS 2016; Australian Road Deaths Database; IRTAD 2016; OECD 2016

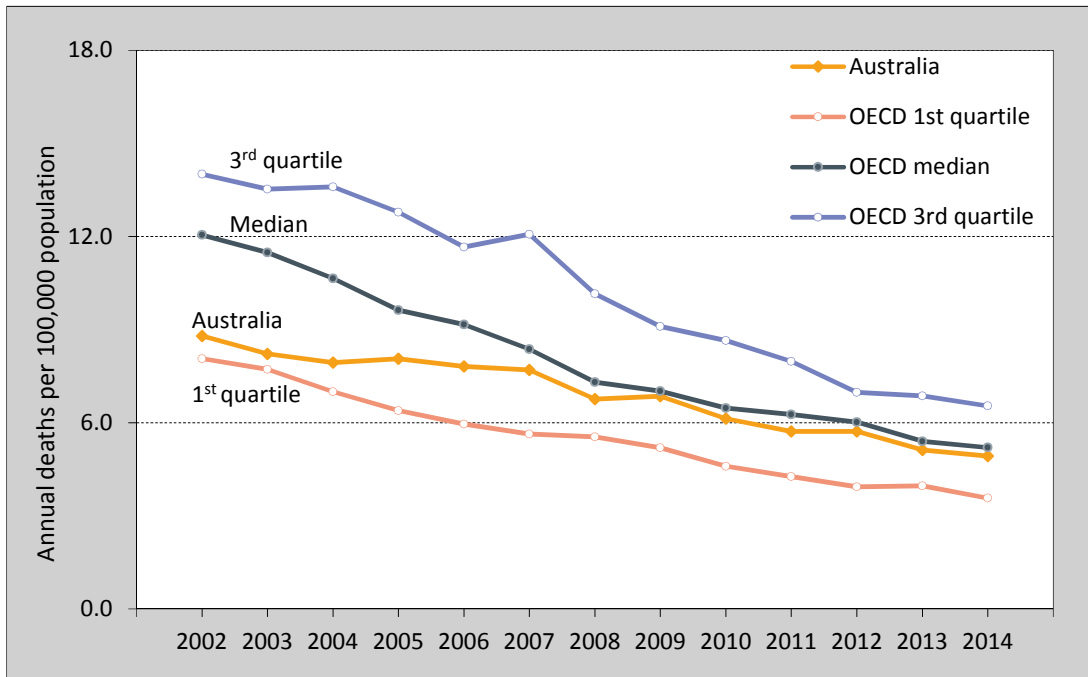
OECD countries, 1990, 2000 and 2002 to 2014

Table 1.2 Annual road deaths per 100,000 population – OECD countries and Australian states/territories, 1990, 2000 and 2002 to 2014

<i>Nation</i>	1990	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Iceland	9.5	11.5	10.1	8.0	7.9	6.5	10.3	4.9	3.8	5.3	2.5	3.8	2.8	4.7	1.2
Sweden	9.1	6.7	6.0	5.9	5.3	4.9	4.9	5.2	4.3	3.9	2.8	3.4	3.0	2.7	2.8
Netherlands	9.2	6.8	6.1	6.3	4.9	4.6	4.5	4.3	4.1	3.9	3.2	3.3	3.4	2.8	2.8
United Kingdom	9.4	6.1	6.0	6.1	5.6	5.5	5.4	5.0	4.3	3.8	3.0	3.1	2.8	2.8	2.9
Norway	7.8	7.6	6.9	6.2	5.6	4.8	5.2	5.0	5.4	4.4	4.3	3.4	2.9	3.7	2.9
Switzerland	13.9	8.3	7.1	7.5	6.9	5.5	5.0	5.1	4.7	4.5	4.2	4.1	4.3	3.3	3.0
Denmark	12.3	9.3	8.6	8.0	6.8	6.1	5.6	7.5	7.4	5.5	4.6	4.0	3.0	3.4	3.2
Israel	8.7	7.1	7.8	6.6	6.8	6.3	5.7	5.3	5.6	4.2	4.6	4.4	3.3	3.4	3.4
Spain	23.3	14.4	13.0	12.9	11.1	10.3	9.3	8.5	6.8	5.9	5.3	4.4	4.1	3.6	3.6
Japan	11.8	8.2	7.6	7.0	6.7	6.3	5.7	5.2	4.8	4.6	4.6	4.3	4.1	4.1	3.8
Finland	13.0	7.7	8.0	7.3	7.2	7.2	6.4	7.2	6.5	5.2	5.1	5.4	4.7	4.8	4.1
Germany	-	9.1	8.3	8.0	7.1	6.5	6.2	6.0	5.4	5.1	4.5	4.9	4.5	4.1	4.2
Ireland	13.6	11.0	9.6	8.5	9.3	9.6	8.7	7.8	6.3	5.3	4.7	4.1	3.5	4.1	4.2
Australia	13.7	9.5	8.8	8.2	7.9	8.1	7.8	7.7	6.8	6.9	6.1	5.7	5.7	5.1	4.9
Austria	20.4	12.2	11.9	11.5	10.8	9.4	8.8	8.3	8.2	7.6	6.6	6.2	6.3	5.4	5.1
Canada	14.3	9.5	9.3	8.8	8.6	9.0	8.8	8.4	7.3	6.6	6.6	5.9	5.9	5.4	5.2
Slovenia	25.9	15.8	13.5	12.1	13.7	12.9	13.1	14.6	10.6	8.4	6.7	6.9	6.3	6.1	5.2
France	19.8	13.7	12.8	10.1	9.2	8.7	7.7	7.5	6.9	6.8	6.4	6.3	5.8	5.1	5.3
Italy	12.6	12.4	12.2	11.5	10.6	10.1	9.8	8.8	8.1	7.2	7.0	6.5	6.3	5.7	5.6
Portugal	29.3	20.0	17.8	16.4	13.7	13.1	10.2	10.2	9.3	8.8	8.9	8.4	6.8	6.1	6.1
Hungary	23.4	11.7	14.0	13.1	12.8	12.7	12.9	12.2	9.9	8.2	7.4	6.4	6.1	6.0	6.3
Luxembourg	18.7	17.5	14.0	11.8	11.0	10.2	9.2	9.5	7.2	9.7	6.4	6.4	6.5	8.4	6.4
Belgium	19.9	14.4	13.1	11.7	11.2	10.4	10.2	10.1	8.8	8.8	7.7	7.8	6.9	6.5	6.5
New Zealand	21.4	12.0	10.3	11.5	10.7	9.8	9.5	10.0	8.6	8.9	8.6	6.4	6.9	5.7	6.5
Czech Republic	12.5	14.5	14.0	14.2	13.6	12.6	10.4	11.9	10.4	8.6	7.7	7.4	7.1	6.2	6.5
Greece	20.3	18.7	14.9	14.6	15.1	15.0	14.9	14.5	13.9	13.0	11.2	10.3	8.9	8.0	7.3
Poland	19.3	16.4	15.2	14.8	15.0	14.3	13.7	14.6	14.3	12.0	10.2	10.9	9.3	8.7	8.4
Lithuania	29.3	18.3	20.2	20.7	22.1	23.0	23.1	22.8	15.5	11.6	9.5	9.7	10.0	8.7	9.0
Korea	33.1	21.8	15.2	15.1	13.6	13.2	13.0	12.7	12.1	12.0	11.3	10.5	10.8	10.1	9.4
United States	17.9	14.9	15.0	14.8	14.6	14.7	14.3	13.7	12.3	11.0	10.7	10.4	10.8	10.4	10.2
Chile	-	-	12.9	14.0	14.3	13.1	13.2	13.0	13.9	11.6	12.1	11.9	11.4	12.0	11.9
Argentina	-	-	-	-	-	-	-	-	-	13.0	12.6	12.3	12.3	12.3	12.4
ACT	9.2	5.7	3.1	3.4	2.7	7.8	3.9	4.1	4.0	3.4	5.3	1.6	3.2	1.8	2.6
NSW	13.7	9.4	8.5	8.1	7.7	7.6	7.4	6.4	5.4	6.4	5.7	5.0	5.0	4.5	4.1
Vic	12.5	8.7	8.2	6.8	7.0	6.9	6.7	6.4	5.8	5.4	5.3	5.2	5.0	4.2	4.3
Qld	13.8	9.0	8.8	8.3	8.1	8.4	8.4	8.8	7.8	7.6	5.7	6.0	6.1	5.8	4.7
SA	15.8	11.1	10.2	10.3	9.1	9.6	7.5	7.9	6.2	7.4	7.3	6.3	5.7	5.8	6.4
Tas	15.4	9.1	7.8	8.6	12.0	10.5	11.2	9.1	7.8	12.1	6.1	4.9	6.2	6.8	7.0
WA	12.2	11.3	9.3	9.2	9.0	8.1	9.8	11.2	9.4	8.5	8.4	7.6	7.5	6.4	7.2
NT	41.5	25.6	27.2	26.3	17.3	26.7	21.5	27.1	34.1	13.7	21.8	19.5	20.8	15.3	16.0

Sources ABS 2016; Australian Road Deaths Database; IRTAD 2016; OECD 2016

Figure I.2 Annual road deaths per 100,000 population – OECD quartiles and Australia, 2002 to 2014



Sources ABS 2016; Australian Road Deaths Database; IRTAD 2016; OECD 2016

Road deaths per 100,000 population by Remoteness Area – Australia, 2010 to 2014

In this section, Australia's annual fatality rates (per population) are classified by *Remoteness Area*. This classification is part of the Australian Bureau of Statistics – Australian Statistical Geography Standard (ASGS)^a. A map of Australia in Figure 1.3 shows the boundaries of the five remoteness areas.

Table 1.3 shows the five different levels of *Remoteness*, and the proportions of Australia's 2014 population in each.

Table 1.3 Categories of Remoteness Area, with 2014 population

<i>Remoteness Area</i>	<i>Proportion of population (2014)</i>
Major Cities of Australia	70.7%
Inner Regional Australia	18.2%
Outer Regional Australia	8.9%
Remote Australia	1.4%
Very Remote Australia	0.9%
Total	100%

Sources ABS 2013; ABS 2016c; National Crash Database

Table 1.4 shows Australia's annual fatality rates per 100,000 population by Remoteness and year.

Table 1.4 Annual road deaths per 100,000 population – Australia, by Remoteness Area, 2010 to 2014

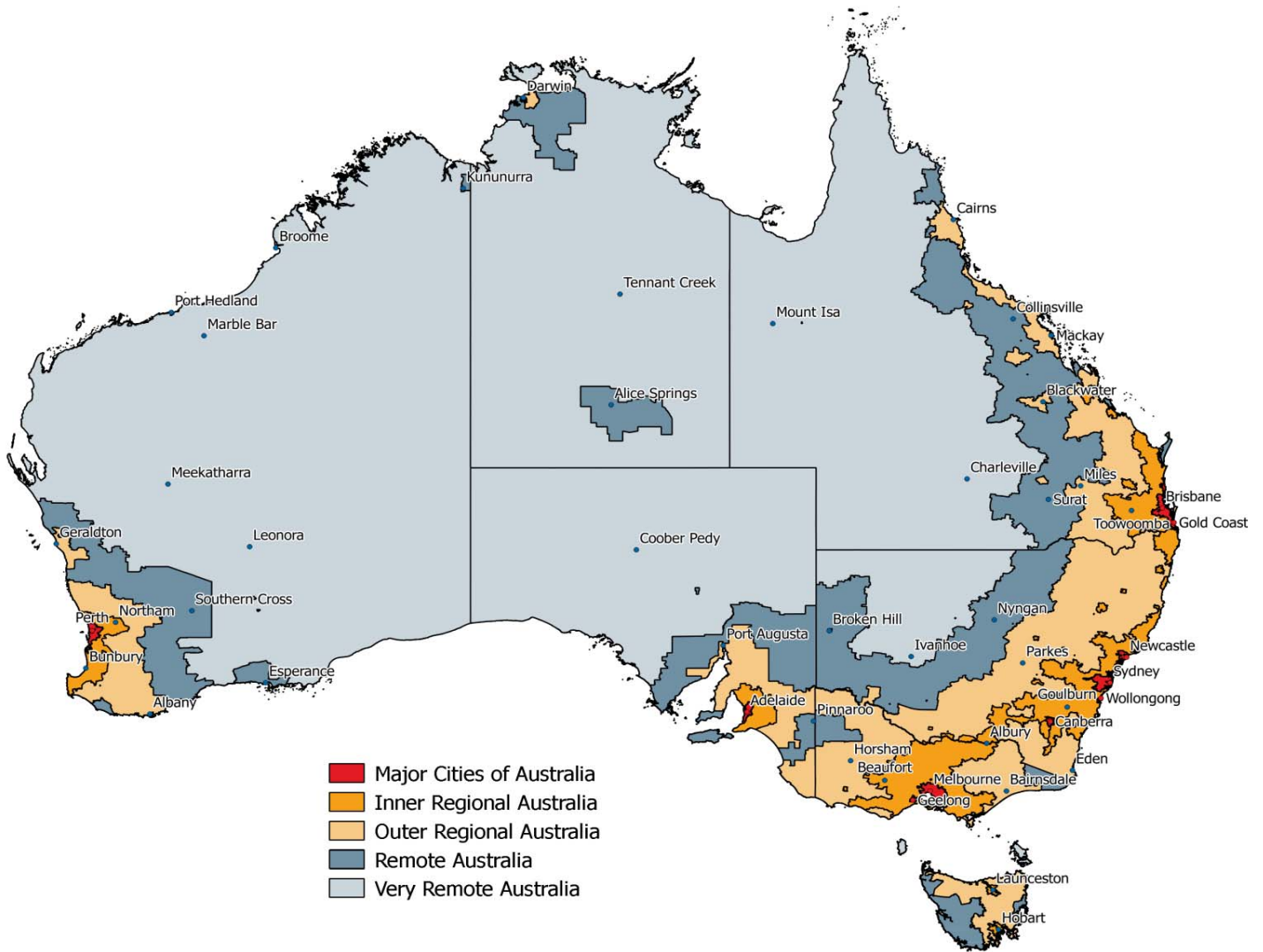
<i>Remoteness Area</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
Major Cities of Australia	2.9	2.7	2.9	2.5	2.3
Inner Regional Australia	11.5	10.4	10.9	9.5	9.4
Outer Regional Australia	14.1	14.1	13.8	11.6	11.8
Remote Australia	22.4	24.5	16.0	23.3	19.9
Very Remote Australia	40.0	30.5	27.6	26.3	32.3
Total Australia	6.1	5.7	5.7	5.1	4.9

Note Total includes unknown locations.

Sources ABS 2013; ABS 2016c; National Crash Database

a Information on this geographical classification is found in ABS 2013.

Figure I.3 ASGS^a Remoteness Areas 2011 and selected cities and towns



a ASGS: Australian Statistical Geography Standard
 Source ABS 2013

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SECTION 2

Road deaths per 10,000 registered vehicles

The number of road deaths per registered vehicle is a means of comparing road deaths among nations by taking into account their different levels of motorisation.

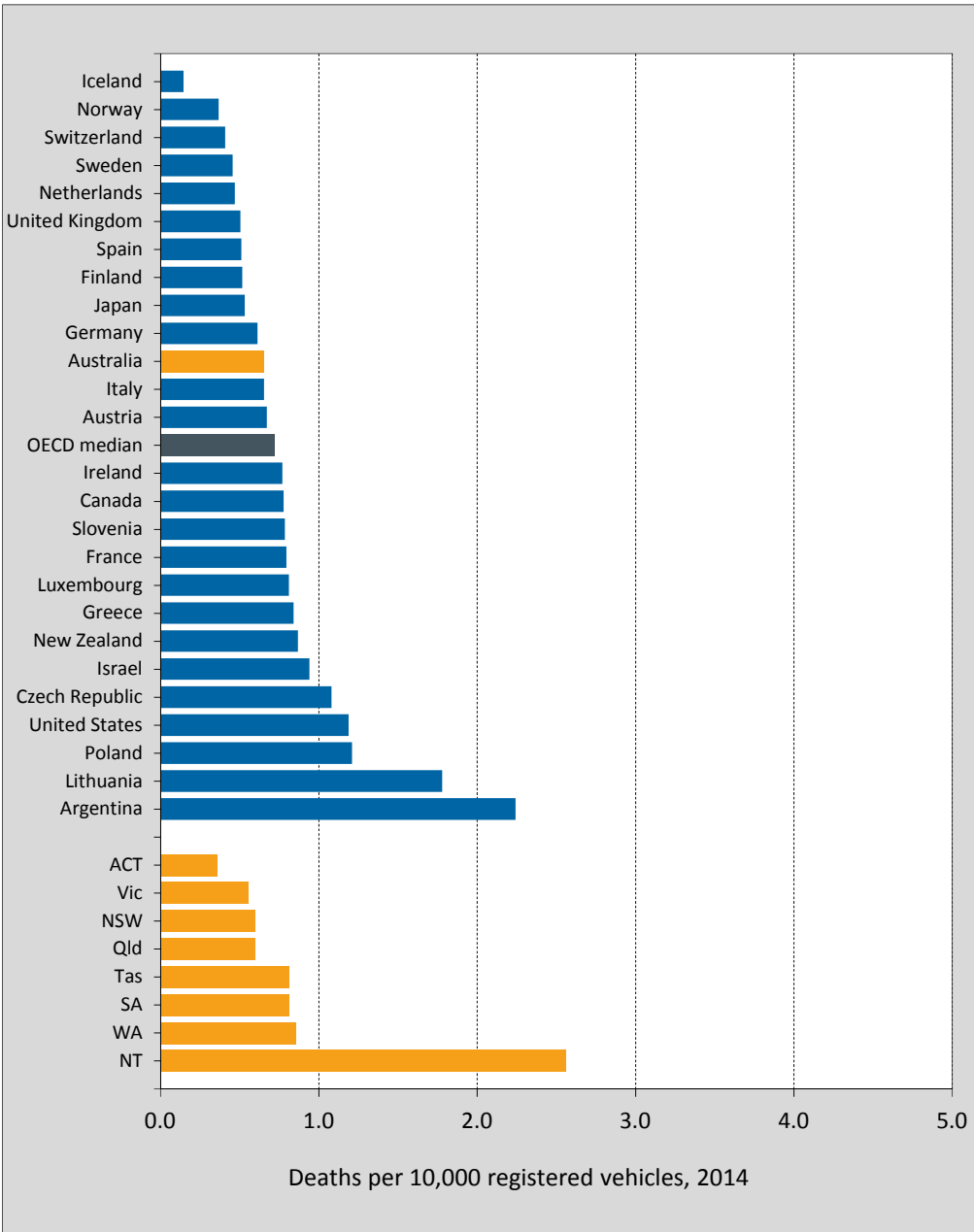
Road deaths per 10,000 registered vehicles – OECD countries, 2014

Table 2.1 Road deaths per 10,000 registered vehicles – 26 OECD countries and Australian states/territories, 2014

<i>Nation</i>	<i>Road deaths</i>	<i>Total registered vehicles (000s)</i>	<i>Deaths per 10,000 registered vehicles</i>
Iceland	4	274	0.15
Norway	147	3,995	0.37
Switzerland	243	5,937	0.41
Sweden	270	5,923	0.46
Netherlands	476	10,109	0.47
United Kingdom	1,854	36,715	0.50
Spain	1,688	33,037	0.51
Finland	224	4,334	0.52
Japan	4,838	90,894	0.53
Germany	3,377	55,011	0.61
Australia	1,155	17,633	0.66
Italy	3,381	51,585	0.66
Austria	430	6,385	0.67
OECD median			0.72
Ireland	194	2,515	0.77
Canada	1,834	23,538	0.78
Slovenia	108	1,373	0.79
France	3,384	42,476	0.80
Luxembourg	35	431	0.81
Greece	795	9,459	0.84
New Zealand	295	3,398	0.87
Israel	279	2,966	0.94
Czech Republic	688	6,360	1.08
United States	32,675	274,805	1.19
Poland	3,202	26,472	1.21
Lithuania	265	1,489	1.78
Argentina	5,279	23,544	2.24
ACT	10	279	0.36
Vic	249	4,483	0.56
NSW	307	5,102	0.60
Qld	223	3,705	0.60
Tas	36	443	0.81
SA	108	1,326	0.81
WA	183	2,142	0.85
NT	39	152	2.56

Sources ABS 2016b; Australian Road Deaths Database; IRTAD 2016; OECD 2016

Figure 2.1 Road deaths per 10,000 registered vehicles – 26 OECD countries and Australian states/territories, 2014



Sources ABS 2016b; Australian Road Deaths Database; IRTAD 2016; OECD 2016

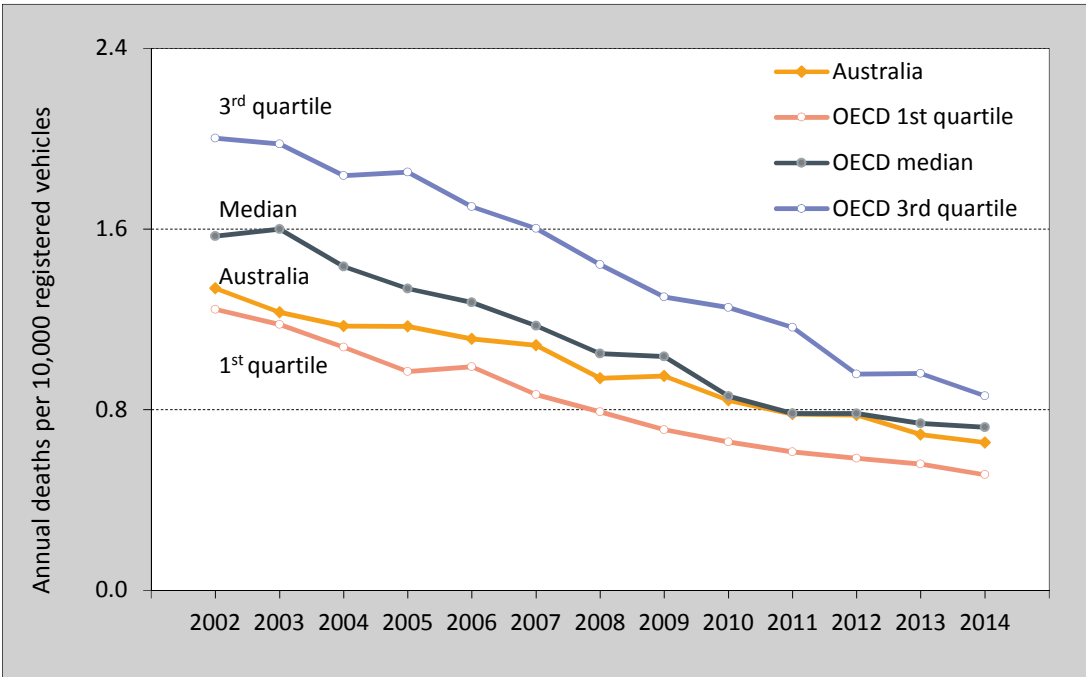
OECD countries, 1990, 2000 and 2002 to 2014

Table 2.2 Annual road deaths per 10,000 registered vehicles – OECD countries and Australian states/territories, 1990, 2000 and 2002 to 2014

<i>Nation</i>	1990	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Iceland	1.7	1.8	1.5	1.1	1.1	0.9	1.3	0.6	0.5	0.7	0.3	0.5	0.3	0.6	0.1
Norway	1.4	1.2	1.1	1.0	0.9	0.7	0.8	0.7	0.8	0.6	0.6	0.5	0.4	0.5	0.4
Switzerland	2.2	1.2	1.0	1.1	1.0	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.4
Sweden	1.7	1.2	1.1	1.0	0.9	0.8	0.8	0.9	0.7	0.6	0.5	0.6	0.5	0.4	0.5
Netherlands	2.2	1.3	1.1	1.2	0.9	0.8	0.8	0.8	0.7	0.7	0.5	0.5	0.6	0.5	0.5
United Kingdom	2.1	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.8	0.7	0.5	0.6	0.5	0.5	0.5
Spain	5.1	2.2	2.0	2.0	1.7	1.5	1.3	1.2	0.9	0.8	0.7	0.6	0.6	0.5	0.5
Finland	2.8	1.5	1.5	1.4	1.3	1.3	1.1	1.2	1.0	0.8	0.7	0.7	0.6	0.6	0.5
Japan	1.9	1.2	1.1	1.0	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5
Germany	-	1.4	1.2	1.2	1.0	1.0	0.9	0.9	0.9	0.8	0.7	0.8	0.7	0.6	0.6
Australia	2.3	1.5	1.3	1.2	1.2	1.2	1.1	1.1	0.9	0.9	0.8	0.8	0.8	0.7	0.7
Italy	2.1	1.6	1.5	1.4	1.3	1.3	1.2	1.1	0.9	0.8	0.8	0.8	0.7	0.7	0.7
Austria	3.7	1.8	1.7	1.7	1.6	1.4	1.3	1.2	1.2	1.1	0.9	0.9	0.9	0.7	0.7
Ireland	4.5	2.5	2.0	1.7	1.8	1.9	1.6	1.4	1.1	1.0	0.9	0.8	0.7	0.8	0.8
Canada	2.3	1.6	1.6	1.5	1.4	1.5	1.5	1.3	1.2	1.0	1.0	0.9	0.9	0.8	0.8
Slovenia	-	-	-	2.2	2.5	2.3	2.2	2.4	1.7	1.3	1.0	1.1	1.0	0.9	0.8
France	3.6	2.3	2.0	1.6	1.5	1.4	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.8	0.8
Luxembourg	3.3	2.4	1.8	1.5	1.4	1.3	1.1	1.2	0.9	1.2	0.8	0.8	0.8	1.0	0.8
Greece	7.4	3.1	2.2	2.1	2.1	2.0	1.9	1.8	1.7	1.5	1.3	1.2	1.0	0.9	0.8
New Zealand	3.3	1.8	1.5	1.6	1.5	1.3	1.3	1.3	1.1	1.2	1.2	0.9	0.9	0.8	0.9
Israel	4.1	2.5	2.6	2.2	2.3	2.1	1.9	1.7	1.7	1.3	1.4	1.3	0.9	1.0	0.9
Czech Republic	3.3	3.2	3.0	3.0	2.8	2.5	2.0	2.2	1.9	1.5	1.3	1.3	1.2	1.0	1.1
United States	2.4	1.9	1.9	1.9	1.8	1.8	1.7	1.6	1.4	1.3	1.3	1.2	1.3	1.2	1.2
Poland	-	-	-	3.5	3.4	3.2	2.8	2.8	2.5	2.1	1.7	1.7	1.4	1.3	1.2
Lithuania	12.7	5.0	4.7	4.5	4.6	4.3	3.9	3.7	2.4	1.7	1.4	1.4	1.3	1.1	1.8
Argentina	-	-	-	-	-	-	-	-	-	3.2	2.9	2.6	2.5	2.3	2.2
Portugal	-	3.9	3.3	3.0	2.5	2.3	1.8	1.8	1.6	1.5	-	-	-	-	-
Denmark	2.9	2.0	1.8	1.7	1.4	1.3	-	-	-	-	-	-	-	-	-
ACT	1.6	0.9	0.5	0.5	0.4	1.2	0.6	0.6	0.6	0.5	0.7	0.2	0.4	0.3	0.4
Vic	2.1	1.2	1.2	0.9	1.0	0.9	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.6	0.6
NSW	2.5	1.6	1.5	1.4	1.3	1.2	1.2	1.0	0.8	1.0	0.9	0.8	0.8	0.7	0.6
Qld	2.3	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.0	1.0	0.7	0.8	0.8	0.8	0.6
Tas	2.4	1.3	1.1	1.2	1.7	1.4	1.5	1.2	1.0	1.5	0.8	0.6	0.7	0.8	0.8
SA	2.6	1.6	1.4	1.5	1.3	1.3	1.0	1.1	0.8	1.0	1.0	0.8	0.7	0.7	0.8
WA	1.9	1.6	1.3	1.3	1.2	1.1	1.2	1.4	1.2	1.0	1.0	0.9	0.9	0.8	0.9
NT	8.6	5.0	5.3	5.1	3.3	5.0	3.9	4.9	6.1	2.4	3.7	3.3	3.5	2.5	2.6

Sources ABS 2016b; Australian Road Deaths Database; IRTAD 2016; OECD 2016

Figure 2.2 Annual road deaths per 10,000 registered vehicles – OECD quartiles and Australia, 2002 to 2014



Sources ABS 2016b; Australian Road Deaths Database; IRTAD 2016; OECD 2016

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SECTION 3

Road deaths per 100 million vehicle kilometres travelled

The number of road deaths per vehicle kilometres travelled is a risk measure which takes account of the estimated amount of vehicle travel.

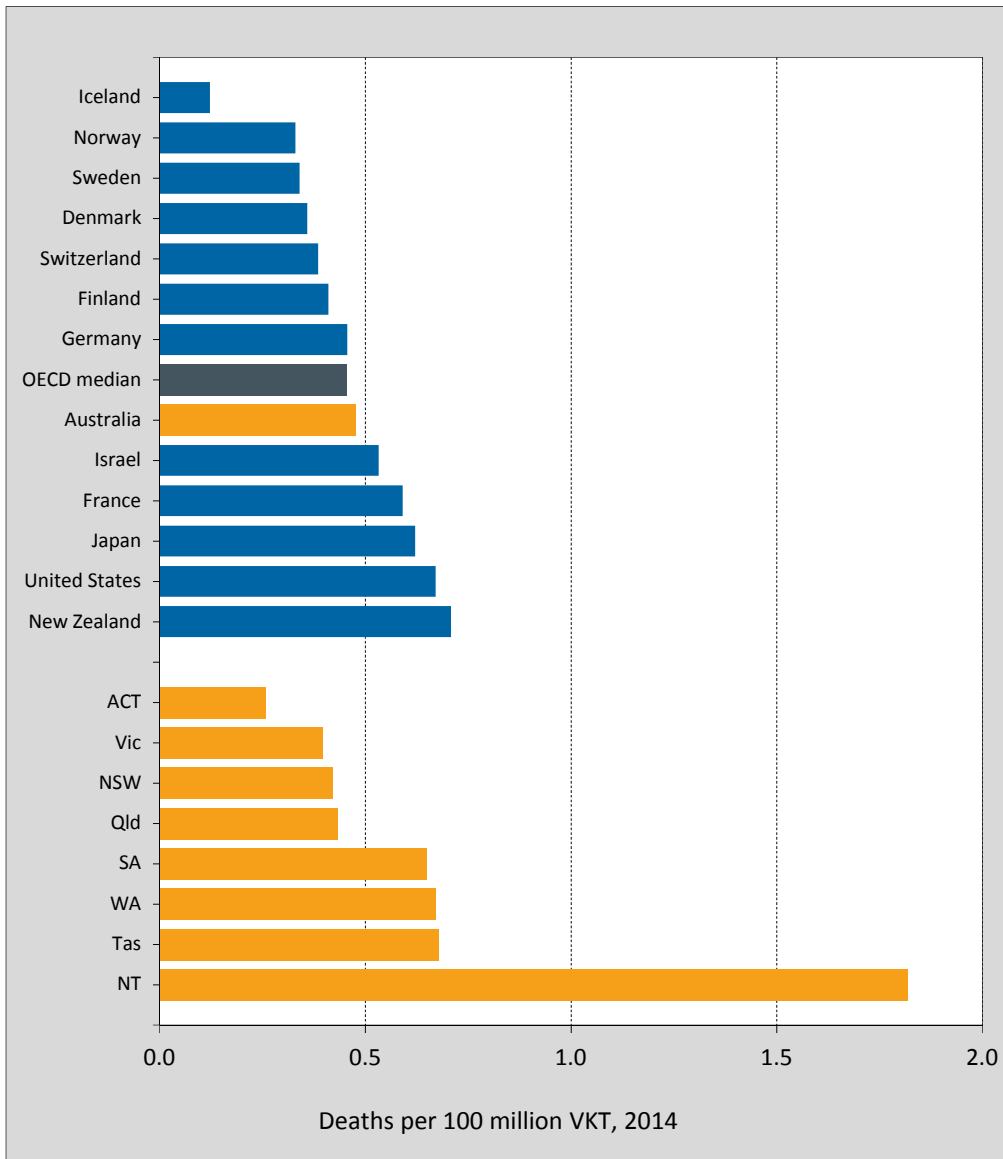
Road deaths per 100 million vehicle kilometres travelled – OECD countries, 2014

**Table 3.1 Road deaths per 100 million vehicle kilometres travelled
– 13 OECD countries and Australian states/territories, 2014**

<i>Nation</i>	<i>Road deaths</i>	<i>Total VKT (millions)</i>	<i>Deaths per 100 million VKTs</i>
Iceland	4	3,269	0.12
Norway	147	44,466	0.33
Sweden	270	79,227	0.34
Denmark	182	50,692	0.36
Switzerland	243	63,028	0.39
Finland	224	54,580	0.41
Germany	3,377	740,500	0.46
OECD median			0.46
Australia	1,155	242,634	0.48
Israel	279	52,400	0.53
France	3,384	572,400	0.59
Japan	4,838	778,335	0.62
United States	32,675	4,869,321	0.67
New Zealand	295	41,632	0.71
ACT	10	3,859	0.26
Vic	249	62,831	0.40
NSW	307	72,942	0.42
Qld	223	51,609	0.43
SA	108	16,663	0.65
WA	183	27,273	0.67
Tas	36	5,311	0.68
NT	39	2,145	1.82

Sources BITRE unpublished; Australian Road Deaths Database; IRTAD 2016; OECD 2016

Figure 3.1 Road deaths per 100 million vehicle kilometres travelled –13 OECD countries and Australian states/territories, 2014



Sources BITRE unpublished; Australian Road Deaths Database; IRTAD 2016; OECD 2016

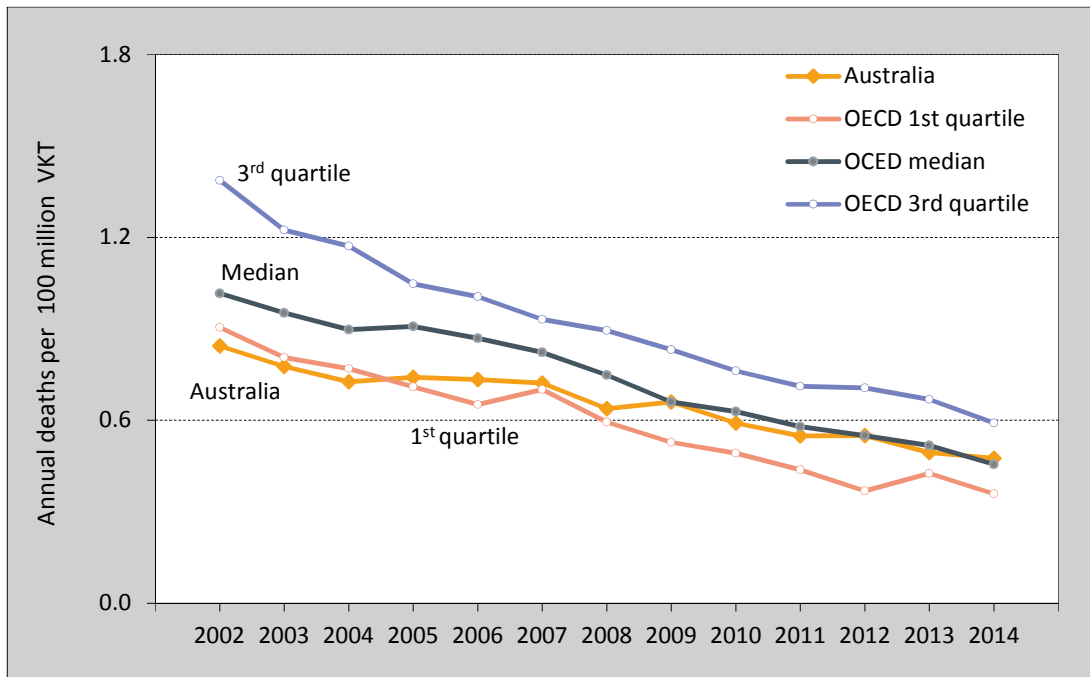
OECD countries, 1990, 2000 and 2002 to 2014

Table 3.2 Annual road deaths per 100 million vehicle kilometres travelled – OECD countries and Australian states/territories, 1990, 2000 and 2002 to 2014

<i>Nation</i>	1990	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Iceland	1.5	1.4	1.2	0.9	0.9	0.7	1.0	0.5	0.4	0.5	0.3	0.4	0.3	0.5	0.1
Norway	1.2	1.0	0.9	0.8	0.7	0.6	0.7	0.6	0.6	0.5	0.5	0.4	0.3	0.4	0.3
Sweden	1.2	0.9	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.3	0.4	0.4	0.3	0.3
Denmark	1.7	1.1	1.0	-	0.8	0.7	0.6	0.8	0.8	0.7	0.6	0.5	0.3	0.4	0.4
Switzerland	1.9	1.1	0.9	1.0	0.9	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.4	0.4
Finland	1.6	0.8	0.9	0.8	0.7	0.7	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.4
Germany	-	1.1	1.0	1.0	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.6	0.5	0.5	0.5
Australia	1.4	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.5	0.6	0.5	0.5
Israel	2.2	1.2	1.4	1.1	1.2	1.0	0.9	0.8	0.9	0.6	0.7	0.7	0.5	0.5	0.5
France	2.6	1.5	1.4	1.1	1.0	1.0	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6
Japan	2.3	1.3	1.2	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.6
United States	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
New Zealand	-	1.4	1.1	1.2	1.1	1.0	1.0	1.0	0.9	1.0	0.9	0.7	0.8	0.6	0.7
United Kingdom	1.3	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	-
Netherlands	1.4	0.9	0.8	0.8	-	-	-	-	0.5	0.5	0.4	0.4	0.4	0.4	-
Ireland	1.9	1.2	1.0	0.9	0.9	0.9	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.4	-
Canada	-	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.5	-
Austria	3.2	1.5	1.4	1.3	1.3	1.1	1.0	0.9	0.9	0.8	0.7	0.7	0.7	0.6	-
Belgium	2.8	1.6	1.5	1.3	1.2	1.1	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.7	-
Slovenia	6.5	2.7	2.2	1.7	1.8	1.7	1.6	1.7	1.2	1.0	0.8	0.8	-	0.7	-
Czech Republic	4.8	3.7	3.3	3.2	2.9	2.6	2.1	2.3	1.9	1.6	1.6	1.6	1.6	-	-
Korea	-	4.9	2.8	2.6	2.3	1.8	1.9	1.9	1.8	2.0	1.9	1.8	1.8	1.7	-
ACT	1.0	0.6	0.3	0.3	0.3	0.7	0.4	0.4	0.4	0.3	0.5	0.2	0.3	0.2	0.3
Vic	1.2	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4
NSW	1.5	1.0	0.9	0.8	0.8	0.8	0.7	0.6	0.6	0.7	0.6	0.5	0.5	0.5	0.4
Qld	1.4	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.5	0.5	0.6	0.5	0.4
SA	1.7	1.1	1.0	1.0	0.9	0.9	0.7	0.8	0.6	0.7	0.7	0.6	0.6	0.6	0.6
WA	1.2	1.0	0.8	0.8	0.8	0.7	0.9	1.0	0.8	0.8	0.8	0.7	0.7	0.6	0.7
Tas	1.7	0.9	0.8	0.8	1.1	1.0	1.1	0.9	0.7	1.2	0.6	0.5	0.6	0.7	0.7
NT	4.7	2.8	3.1	2.9	1.9	2.9	2.4	3.0	3.8	1.5	2.4	2.2	2.4	1.8	1.8

Sources BITRE unpublished; Australian Road Deaths Database; IRTAD 2016; OECD 2016

Figure 3.2 Annual road deaths per 100 million vehicle kilometres travelled – OECD quartiles and Australia, 2002 to 2014



Sources BITRE unpublished; Australian Road Deaths Database; IRTAD 2016; OECD 2016

References

Australian Bureau of Statistics (ABS) 2013, Australian Statistical Geography Standard (ASGS): Volume 5 – Remoteness Structure, Australia 2011, 2013 Cat No 1270.0.55.005

Australian Bureau of Statistics (ABS) 2016, Australian Demographic Statistics, December 2015, June 2016 Cat No 3101.0.

Australian Bureau of Statistics (ABS) 2016b, Motor Vehicle Census, January 2016, July 2016 Cat No 9309.0.

Australian Bureau of Statistics (ABS) 2016c, Population Estimates by Remoteness Area, 2005 to 2015, March 2016 Cat No 3218.0.

Bureau of Infrastructure, Transport and Regional Economics (BITRE) unpublished, State and capital city vehicle kilometres travelled October 2015.

International Road Traffic Accident Database (IRTAD) 2016, (member site) <<http://stats.oecd.org/>>. Accessed 7 July 2016.

Organisation for Economic Co-operation and Development (OECD) 2016, OECD.Stat Extracts (public site) <<http://stats.oecd.org/>>. Accessed 7 July 2016.