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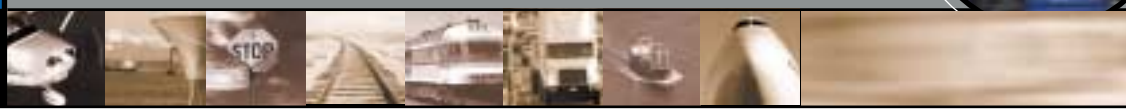
Monograph 3

Pedestrian Safety



Australia's international pedestrian safety performance 1990 to 1997

This monograph compares Australia's pedestrian fatalities with other OECD nations between 1990 and 1997. The comparisons are drawn taking into account the population and level of motorisation of the countries reported.

Pedestrian fatalities per 100 000 population

The number of road deaths for every 100 000 population is a measure of the public health risk associated with road use.

Table 1 shows that pedestrian road safety in Australia compares unfavourably on this basis, with a number of OECD nations.

Australia had 1.78 pedestrian road fatalities per 100 000 population in 1997, slightly above the median for the OECD as a whole (1.68).

Within Australia, in 1997, Tasmania had the lowest rate with no pedestrian fatalities per 100 000, whilst the Northern Territory had the highest rate at 9.09 per 100 000. Only in Tasmania, ACT and South Australia was the pedestrian fatality rate below the OECD median.

Table 1 also shows a reduction since 1990 in the rate of pedestrian road deaths in Australia. The rate of pedestrian deaths in Australia was 2.45 per 100 000 population in 1990 and 1.78

Table 1
Pedestrian fatalities per 100 000 population 1990 – 1997

Country	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*
Australia	2.45	1.98	2.02	1.87	2.08	2.21	1.91	1.78
Austria	3.38	3.35	3.05	2.54	2.81	2.49	1.95	1.93
Belgium	3.03	2.80	2.32	1.98	1.95	1.47	1.53	1.40
Canada	2.20	1.97	1.55	1.66	1.48	1.41	1.56	1.34
Czech Rep	-	-	-	-	-	4.11	4.31	4.11
Denmark	2.30	2.74	2.15	2.57	1.81	2.26	1.30	1.65
Finland	2.11	2.60	2.31	1.70	1.71	1.41	1.36	1.34
France	2.72	2.56	2.22	2.08	2.06	1.87	1.79	1.68
Germany	2.67	2.40	2.20	1.95	1.81	1.64	1.44	1.40
Greece	5.16	4.62	4.50	4.80	4.59	4.60	-	-
Hungary	7.74	6.03	5.94	5.00	4.61	4.75	4.23	4.40
Iceland	2.36	1.95	3.08	1.51	0.75	0.00	0.74	1.84
Ireland	4.28	3.24	3.24	3.82	3.41	3.13	3.15	3.52
Italy	1.86	2.15	2.02	1.75	1.79	-	1.72	1.56
Japan	3.20	3.33	3.27	2.95	2.83	2.86	2.62	2.49
Korea	-	-	-	-	-	-	12.21	10.76
Netherlands	0.97	0.96	1.00	0.96	0.80	0.92	0.70	0.76
Norway	1.30	1.58	1.31	1.12	0.95	1.06	1.12	0.82
New Zealand	3.07	2.57	2.21	2.12	1.53	1.98	1.73	1.44
Poland	7.80	7.84	7.21	6.47	6.97	6.83	6.30	-
Portugal	8.18	8.52	7.41	7.44	5.99	6.35	6.62	-
Spain	3.96	3.53	3.10	2.83	2.58	2.55	2.45	2.46
Sweden	1.57	1.46	1.60	1.08	0.98	0.81	0.84	0.81
Switzerland	2.50	2.38	2.17	1.80	1.81	1.80	1.53	1.64
Turkey	5.09	4.53	4.32	4.26	-	-	-	-
UK	3.05	2.67	2.40	2.20	2.00	1.85	1.77	1.71
USA	2.59	2.30	2.17	2.19	2.10	2.13	2.05	1.98
OECD median	**2.72**	**2.60**	**2.32**	**2.12**	**1.98**	**2.10**	**1.77**	**1.68**

State/Territory	*1997*
NSW	1.82
Vic.	1.69
Qld	1.74
SA	1.35
WA	2.11
Tas.	0.00
NT	9.09
ACT	0.65

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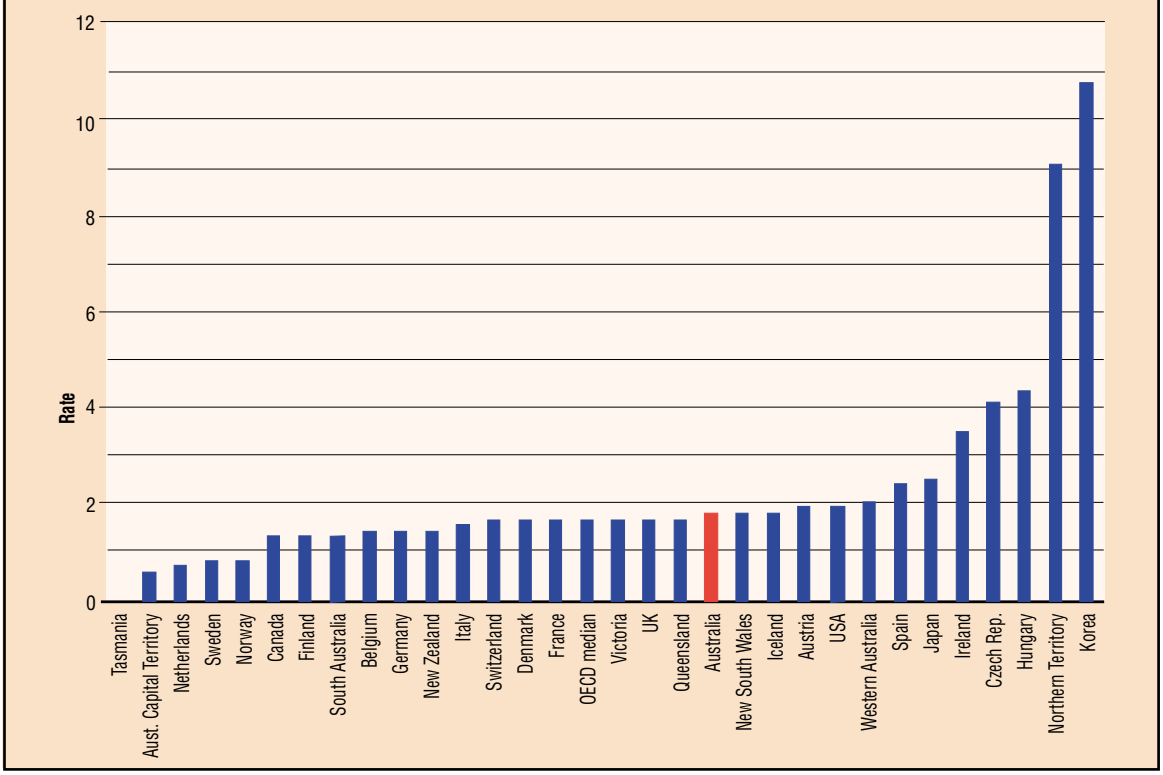
Figure 1
Pedestrian fatalities per 100 000 population, 1997



deaths per 100 000 in 1997. This improvement did not, however, match that seen for the OECD as a whole where the median fatality rate decreased from 2.72 deaths per 100 000 in 1990 to 1.68 deaths per 100 000 population in 1997. From ranking 9th best among OECD nations in 1990, Australia's performance fell to 14th in 1997 (see fig. 1).

Pedestrian fatalities per 10 000 registered motor vehicles

The number of fatalities for every 10 000 registered motor vehicles is a method of comparing road fatalities between nations taking into account their differing level of motorisation.

Table 2 shows that Australia compares much more favourably with other OECD nations on this basis. Australia had 0.28 pedestrian road fatalities per 10 000 registered motor vehicles in 1997, compared to the median value for the OECD as a whole (0.33). Australia's rate ranked 11th amongst the OECD nations in 1997 (see figure. 2).

Within Australian, in 1997, Tasmania had no pedestrian fatalities per 10 000 registered motor vehicles, whilst the Northern Territory had the highest rate at 1.72 per 10 000 registered motor vehicles. Only Northern Territory's rate of pedestrian fatalities was above the OECD median.

As is the case with pedestrian road deaths per 100 000 population, table 2 shows a reduction between 1990 and 1997 in the rates of pedestrian road deaths with respect to the level of motorisation in both Australia and the OECD. Australia's improvement fell well short, however, of that seen for the OECD. The rate of pedestrian deaths in Australia was 0.42 per 10 000 registered motor vehicles in 1990 and 0.28 per 10 000 in 1997. The median rate for the OECD nations reported declined from

0.57 per 10 000 in 1990 to 0.33 per 10 000 registered motor vehicles in 1997.

Pedestrian fatalities for individual age groups

Table 3 indicates the considerable variation in the fatality rates of individual age groups of Australian pedestrians in 1997, taking into account the population size of each age group. The high risk groups were the elderly (aged 65+ years) and to a lesser extent young adults (aged 18-24 years).

A similarly elevated fatality rate amongst elderly pedestrians was apparent for the OECD as a whole, but Australia compared very unfavourably for pedestrian deaths amongst young adults (18-24 years old), and to a lesser extent for non-school aged children (0-5 years old) and adults (25-64 years old). Australia ranked 22nd, 17th and 16th, respectively, for these age groups amongst the OECD nations.

Table 3
Pedestrian fatalities per 100 000 population for individual groups, 1997

Age (years)	*Australian fatalities*	*OECD median*
0-5	1.03	0.89
6-17	0.92	1.06
18-24	2.49	0.96
25-64	1.44	1.05
65+	4.32	4.42
All ages	1.78	1.68

In contrast, Australia ranked 12th and 13th, respectively, for pedestrian deaths amongst school-aged children (6-17 years old) and the elderly (65+ years old).

(Technical note: In ranking Australia's pedestrian fatality rates against those of the OECD as a whole, the OECD rates have been adjusted to remove distortions created by differing age distributions).

Figure 2
Pedestrian fatalities per 10 000 registered motor vehicles, 1997

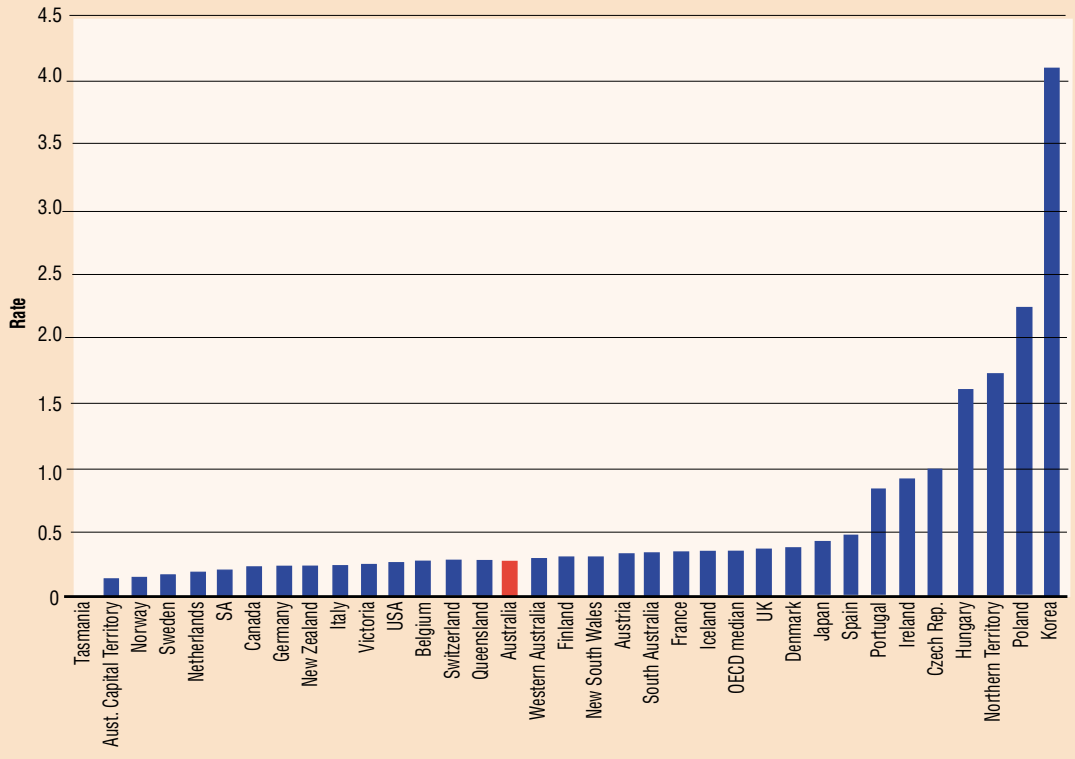


Table 2
Pedestrian fatalities per 10 000 registered motor vehicles

Country	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*
Australia	0.42	0.35	0.35	0.32	0.35	0.36	0.31	0.28
Austria	0.70	0.68	0.61	0.49	0.53	0.45	0.34	0.33
Belgium	0.66	0.59	0.49	0.41	0.39	0.29	0.30	0.27
Canada	0.34	0.32	0.27	0.29	0.25	0.24	0.27	0.23
Czech Rep	1.12	1.04	1.21	1.15	1.37	1.09	1.10	0.98
Denmark	0.57	0.68	0.53	0.63	0.44	0.56	0.31	0.38
Finland	0.47	0.57	0.51	0.37	0.39	0.32	0.31	0.30
France	0.58	0.53	0.46	0.43	0.42	0.38	0.36	0.33
Germany	0.51	0.44	0.40	0.35	0.32	0.28	0.24	0.23
Greece	1.88	1.64	-	1.56	1.42	1.34	-	-
Hungary	3.71	2.60	2.48	2.05	1.86	1.84	1.57	1.62
Iceland	0.36	0.37	0.58	0.30	0.15	0.00	0.14	0.33
Ireland	1.42	1.03	1.02	1.18	1.01	0.90	0.86	0.91
Italy	0.34	0.38	0.34	0.28	0.29	0.26	0.27	0.24
Japan	0.64	0.64	0.61	0.54	0.50	0.50	0.45	0.42
Korea	18.35	16.06	10.94	7.97	6.10	5.19	5.13	4.09
Netherlands	0.24	0.24	0.25	0.23	0.19	0.22	0.16	0.17
New Zealand	0.47	0.40	0.34	0.33	0.24	0.30	0.26	0.23
Norway	0.25	0.30	0.25	0.21	0.18	0.20	0.21	0.15
Poland	3.29	3.05	2.71	2.39	2.48	2.36	2.07	2.23
Portugal	1.97	1.89	1.51	1.41	1.05	1.05	1.03	0.82
Spain	0.98	0.83	0.70	0.62	0.55	0.53	0.49	0.48
Sweden	0.31	0.29	0.31	0.22	0.20	0.16	0.17	0.16
Switzerland	0.44	0.41	0.38	0.31	0.31	0.31	0.26	0.27
UK	0.70	0.62	0.56	0.51	0.46	0.42	0.39	0.37
USA	0.35	0.31	0.30	0.30	0.29	0.28	0.27	0.26
OECD median	**0.57**	**0.58**	**0.51**	**0.42**	**0.41**	**0.37**	**0.31**	**0.33**

State/Territory	*1997*
NSW	0.32
Vic.	0.25
Qld.	0.28
SA	0.20
WA	0.30
Tas.	0.00
NT	1.72
ACT	0.10

Summary

Comparison of pedestrian fatality rates in Australia with those of other OECD nations shows that there is a scope to improve the safety of Australian pedestrians.

In 1997, compared to other OECD nations, Australia was ranked:

- 14th in terms of fatalities per 100 000 population; and
- 11th in terms of fatalities per 10 000 registered motor vehicles.

On both measures, Australia's pedestrian road safety improved considerably in the decade or so prior to 1997 but this improvement fell short of the OECD's improvement.

Data Sources

Figures provided for all OECD nations were derived from the International Road Traffic and Accident Database (IRTAD).

Figures for Australian States and Territories were taken from Federal Office of Road Safety publication Road Fatalities Australia 1998 Statistical Summary.