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National Road Safety – Eyes on the road ahead

Inquiry into National Road Safety

House of Representatives
Standing Committee on Transport and Regional Services

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Canberra

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Foreword

Road safety is an issue of national significance. Every year, some 1700 Australians are killed in road accidents and many more are seriously injured. In economic terms the cost of road trauma is some $15 billion a year. Furthermore, every year governments and industry invest huge sums of money to create safer roads, vehicles and driver behaviour.

In 2003, 1634 people died on Australia's roads. While this was an improvement on the previous year, it still marks a worrying trend—the improvement in Australia's road safety record over the last two decades has levelled out. With this in mind, the Minister for Transport and Regional Services asked the Committee to investigate matters relating to road safety in Australia.

This report, *National Road Safety—Eyes on the road ahead*, addresses a wide range of road safety issues. It proposes a range of solutions to matters both big and small, all of which have the potential to save lives. Overall, the report highlights the need for a national approach to road safety. As a nation, we must ensure that all stakeholders, including governments, vehicle manufacturing and motoring groups, and road users generally are aware of their responsibilities for improving road safety. Ongoing investment in the safety of our roads and vehicles, in driver education and in effective law enforcement are all vital to reducing the road toll, a goal which interests every member of the community.

The Committee would like to thank all those who contributed to the inquiry, and particularly those who participated in the one day forum held on 28 November 2003. The Committee received submissions and took evidence from a wide variety of stakeholders, including governments, road safety experts, industry and motoring bodies and concerned citizens. Their responses have already stimulated discussion on a variety of road safety issues. This report will provoke further examination of matters pertaining to road safety and lead to advances in an issue of concern to all Australians.

Paul Neville MP
Committee Chair

Membership of the Committee

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Deputy Chair	Mr Steve Gibbons MP	
Members	Mr Peter Andren MP	Mr Stewart McArthur MP
	Mr Barry Haase MP	Mr Frank Mossfield MP
	Mrs Sussan Ley MP	Mr Alby Schultz MP
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Terms of reference

The House of Representatives Standing Committee on Transport and Regional Services is to inquire into national road safety. The terms of reference are to:

1. Review the strategic objectives, priority areas and proposed measures in the National Road Safety Strategy 2001 – 2010, and the National Road Safety Action Plans for 2001 and 2002 and for 2003 and 2004 and consider whether these remain appropriate.

2. Identify any additional measures or approaches that could or should be adopted by the Commonwealth, States and Territories, local government and non-government agencies and bodies (including industry) to reduce road trauma.

3. Identify factors that may be impeding progress in reducing road trauma, and suggest how these could be addressed.

List of abbreviations

AAA	Australian Automobile Association
ADR	Australian Design Rule
ANCAP	Australian New Car Assessment Program
ASB	Advertising Standards Board
ATA	Australian Trucking Association
ATC	Australian Transport Council
ATSB	Australian Transport Safety Bureau
AusRAP	Australian Road Assessment Program
BAC	Blood Alcohol Concentration
BCR	Benefit Cost Ratio
BIC	Bus Industry Confederation
BTE	Bureau of Transport Economics
COAG	Council of Australian Governments
DRL	Daytime Running Lights
DOTARS	Department of Transport and Regional Services
EU	European Union
FCAI	Federal Chamber of Automotive Industries

GPS	Global Positioning System
HID	Xenon High Intensity Discharge (lights)
ISA	Intelligent Speed Adaptation
ISS	Intelligent Safety Systems
ITS	Intelligent Transport Systems
MUARC	Monash University Accident Research Centre
NCAP	New Car Assessment Program
NMAA	National Motorists Association Australia
NRSAP	National Road Safety Action Plan
NRSS	National Road Safety Strategy
NRTC	National Road Transport Commission
NTC	National Transport Commission
PBS	Performance Based Standards
RTA	Roads and Traffic Authority (NSW)
UNECE	United Nations Economic Commission for Europe

List of recommendations

1

Introduction

1.1 The road toll in Australia remains an abiding concern for the community and governments across Australia. In 2002, 1715 Australians were killed in road accidents, and many more seriously injured. The number of fatalities in 2003 was 1634.

1.2 In total, over 163 000 Australians have been killed in road accidents. Aside from the human cost, it is estimated that road trauma costs the community some $15 billion per annum.[1]

1.3 To mitigate this cost, governments and industry have invested large sums of money in an effort to create safer vehicles, roads and driver behaviour.

1.4 The effect has been spectacular. The national road toll has declined from 3321 in 1981 to 1715 in 2002, the number of fatal crashes from 2954 in 1980 to 1525 in 2002.[2] Between 1970 and 1999, the fatality rate dropped from 30.4 to 9.3 deaths per 100 000 population, the lowest rate since record keeping began in 1925. The fatality rate per 10 000 registered vehicles has dropped from 8.0 to 1.5.[3]

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1 Australian Transport Council (ATC), *National Road Safety Strategy, 2001–2010,* p. 1.

2 Australian Transport Safety Bureau (ATSB), *Road Fatalities Australia: 2002 Statistical Summary*, pp. 38, 35.

3 ATC, *National Road Safety Strategy, 2001–2010*, p. 2.

1.5 To build on the success of past measures, in 2000 the Federal, State and Territory Governments adopted the *National Road Safety Strategy, 2001–2010*. The aim is to reduce the number of road fatalities per 100 000 population by more than forty per cent, from 9.3 in 1999 to no more than 5.6 in 2010.[4]

1.6 However, in recent years a worrying trend has developed—the drop in road fatalities has reached a plateau. In its 2002 statistical summary of road fatalities in Australia, the Australian Transport Safety Bureau noted that 'after steadily falling from the mid 1980s to 1997, the road toll from 1997 to 2002 was effectively constant'.[5] This trend was confirmed in much of the evidence presented to the Committee.

1.7 It is with this in view that the Committee has set out to identify current trends and potential developments which will maintain the trend towards greater road safety and lower road trauma.

Inquiry Background

1.8 The current inquiry arose from a request by the Minister for Transport and Regional Services for the Committee to investigate matters relating to the management of road safety in Australia, specifically to

- review the current National Road Safety Strategy, 2001–2010, and related action plans
- identify additional measures or approaches that could be adopted to reduce road trauma
- identify factors impeding progress towards reducing the road toll and the means of addressing these impediments.

1.9 In order to meet these objectives, in September and October 2003 the Committee called for submissions from relevant government departments and other organisations, industry and community groups, and interested parties generally. The Committee received forty-three submissions.

4 ATC, *National Road Safety Strategy, 2001–2010*, p. 3.

5 ATSB, *Road Fatalities Australia: 2002 Statistical Summary*, p. 1.

1.10 On 28 November 2003, the Committee also held a one day forum in Canberra, during which a range of witnesses were called upon to give evidence on current and future directions for road safety in Australia. A number of witnesses from government, industry and community gave evidence, with audience members invited to contribute their views.

1.11 The Committee has also referred to *Beyond the Midnight Oil*, its report on managing fatigue in the transport sector. Among other things, this report made a number of recommendations concerning fatigue management in the road transport industry.[6]

Report Structure

1.12 The purpose of this inquiry is to examine road safety from three different angles—to review progress under current strategies and plans, to identify new measures and address impediments to progress.

1.13 Chapter 2 presents an overview of recent developments in road safety including the National Road Safety Strategy and related action plans. It also presents a statistical summary of road fatalities in Australia. It makes several recommendations regarding the overall road safety planning process.

1.14 The remaining chapters will focus on particular issues with a view to identifying current practices and future directions, existing problems and potential solutions. Chapter 3 deals with speed management, including the success of current enforcement measures and the need to review speed limits with a view to enhancing road safety for all road users.

1.15 Chapter 4 looks at the road environment, including levels of road funding, measures to improve the standard of the road environment, and the needs of various road user groups such as heavy vehicles, motorcycles, bicycles and pedestrians. It identifies the need to create a more forgiving and tolerant road environment.

6 House of Representatives Standing Committee on Communications, Transport and the Arts, *Beyond the Midnight Oil: An inquiry into managing fatigue in transport*, Parliament of the Commonwealth, Canberra, October 2000.

1.16 Chapter 5 examines driver management. It looks at the impact of public awareness campaigns, motor vehicle advertising and driver training upon driver attitudes and behaviour. It also looks at the impact of licensing and enforcement measures and the problems of driver impairment, including the effects of alcohol and drugs, and fatigue.

1.17 Chapter 6 deals with questions of vehicle safety, especially the role of technology in improving the standard of vehicles and assisting safe driving. It also looks at the role of Australian Design Rules (ADRs) and the Australian New Car Assessment Program (ANCAP) in setting standards for vehicle safety.

1.18 Finally, Chapter 7 focuses upon issues surrounding special groups in the road environment, including heavy vehicles (trucks and buses), motorcycles, bicycles, pedestrians and young drivers. It makes a number of recommendations with regard to these groups, including the need to implement a range of specific strategies to meet the special needs of vulnerable road users.

2

Road Safety in Australia

2.1 There are currently about 1700 road deaths each year in Australia, and over ten times as many serious road injuries (currently the annual rate of serious injury is approximately 22 000[1]). Road crashes are a major cause of premature death. The economic cost has been estimated at some $15 billion per annum (1996).[2]

2.2 Cost of crashes by injury category were:

- Fatal crashes: $2.92 billion
- Serious injury crashes: $7.15 billion
- Minor injury crashes: $2.47 billion
- Property damage only crashes: $2.44 billion[3]

2.3 The fatality rate is substantially higher for males than females. As a proportion of population it is also substantially higher for people living in rural and regional areas than for those living in cities.

2.4 Drivers account for approximately 45 per cent of fatalities, passengers 24 per cent, pedestrians fifteen per cent, motorcycles 14 per cent and cyclists 2 per cent. Trucks are involved in 17 per cent of road fatalities. In crashes involving trucks, 15 per cent of those killed are truck drivers. Around one per cent of fatalities involve buses,

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1 ATSB, *Serious Injury Due to Road Crashes Australia, July 1999 to June 2002.*

2 Department of Transport and Regional Services (DOTARS), Submission no. 23, p. 1.

3 Bureau of Transport Economics (BTE), Report 102: Road Crash Costs in Australia, BTE, Canberra, 2000, p. xii.

and most of these were pedestrians or the occupants of other vehicles.[4]

2.5 A range of measures have been adopted in recent decades in an effort to mitigate this tragedy, with some considerable success. The low point of road safety was the late 1960s and 1970s, when road accidents consistently claimed in excess of 3000 lives every year nationally, representing 25–30 fatalities per 100 000 population every year.

2.6 The worst year was 1970, with 3798 killed, or 30.4 fatalities per 100 000 population. Since then, the death rate has more than halved, despite a near doubling of the population, distances travelled having more than doubled, a threefold increase in vehicle registrations, and trebling of the number of people holding drivers licences.[5]

2.7 The latest initiative is the National Road Safety Strategy, and related action plans. The Strategy aims to achieve a reduction in the fatality rate of forty per cent, from 9.3 per 100 000 population in 1999 to no more than 5.6 in 2010.[6] The National Road Safety Strategy provides the framework for the road safety strategies of individual States and Territories.

Road Safety Trends

2.8 In the last twenty years, there has been a significant improvement in the number of fatalities on Australia's roads. Table 2.1 shows a steady decline in the absolute number of road fatalities nationwide over the last two decades, a decline matched in all jurisdictions except the Northern Territory.

2.9 Table 2.2 shows this decline in road fatalities is consistent across road use types—drivers, passengers, pedestrians, motorcyclists (including passengers) and cyclists.

2.10 Tables 2.3, 2.4 and 2.6 examine fatality trends across all jurisdictions using three different measures. Table 2.3 measures fatalities per 100

4 DOTARS, Submission no. 23, p. 2.

5 ATSB, *Road crash data and rates, Australian States and Territories 1925 to 2001*, DOTARS, Canberra, September 2002, pp. 2–3.

6 ATC, *National Road Safety Strategy, 2001–2010*, p. 3.

000 population, the basic standard by which fatality trends are assessed, and demonstrates huge improvements across all jurisdictions since 1975.

2.11 Similar trends are evidenced in table 2.4, which measures fatalities per 100 million kilometres travelled; and table 2.6 which measures fatalities per 10,000 registered motor vehicles.

2.12 Table 2.5 looks at fatality trends per 100 000 population by age group, and demonstrates that improvements in fatality rates is fairly consistent across all age groups.

2.13 What is also clear, however, is the decline in the rate of improvement over recent years, the plateau effect across all types of measurement and all jurisdictions.

Table 2.1 Road Fatalities by State and Territory, 1980–2002

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
1980	1303	657	557	269	293	100	63	30	3272
1981	1291	766	594	222	238	111	70	29	3321
1982	1253	709	602	270	236	96	60	26	3252
1983	966	664	510	266	203	70	48	28	2755
1984	1037	657	505	232	221	83	50	37	2822
1985	1067	683	502	268	243	78	67	33	2941
1986	1029	668	481	288	228	91	71	32	2888
1987	959	705	442	256	213	77	84	36	2772
1988	1037	701	539	223	230	75	51	31	2887
1989	960	776	428	222	242	80	61	32	2801
1990	797	548	399	226	196	71	68	26	2331
1991	663	503	395	184	207	77	67	17	2113
1992	649	396	416	165	200	74	54	20	1974
1993	581	435	396	218	209	58	44	12	1953
1994	646	377	418	159	211	59	41	17	1928
1995	620	418	456	181	209	57	61	15	2017
1996	581	417	385	181	247	64	72	23	1970
1997	576	377	360	148	197	32	60	17	1767
1998	556	390	279	168	223	48	69	22	1755
1999	577	383	314	151	218	53	49	19	1764
2000	603	407	317	166	212	43	51	18	1817
2001	524	444	324	153	165	61	50	16	1737
2002	561	397	322	154	179	37	55	10	1715

Source ATSB, Road Fatalities Australia: 2002 Statistical Summary, p. 38.

Table 2.2 Fatalities by road user, 1980–2002

	Drivers	Passengers	Pedestrians	Motorcycles	Bicycles
1980	1236	842	644	442	93
1981	1279	889	629	424	94
1982	1237	850	591	482	88
1983	1034	689	512	410	103
1984	1036	756	541	390	90
1985	1143	763	538	404	83
1986	1134	730	537	405	78
1987	1095	737	493	359	79
1988	1144	776	548	323	87
1989	1122	781	501	299	98
1990	935	634	420	262	80
1991	910	554	343	248	58
1992	815	570	350	197	41
1993	859	513	331	203	45
1994	809	501	367	190	59
1995	874	491	398	204	48
1996	869	499	351	193	57
1997	776	431	328	177	52
1998	741	468	318	181	44
1999	820	428	299	176	40
2000	852	450	287	191	31
2001	776	407	290	216	46
2002	785	422	249	224	34

Source *ATSB, Road Fatalities Australia: 2002 Statistical Summary, pp. 37–8.*

Table 2.3 Road Fatalities per 100 000 population, by State and Territory, 1975–2002

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
1975	26.12	24.03	30.96	26.79	26.32	29.75	68.91	16.08	26.59
1980	25.20	16.78	24.58	20.56	23.09	23.61	53.28	13.38	22.27
1985	19.53	16.58	19.52	19.54	17.13	17.61	45.11	13.13	18.63
1990	13.66	12.52	13.76	15.78	12.15	15.36	41.53	9.21	13.66
1991	11.24	11.38	13.34	12.72	12.65	16.50	40.49	5.88	12.23
1992	10.88	8.89	13.73	11.33	12.06	15.75	32.13	6.79	11.28
1993	9.68	9.73	12.73	14.92	12.46	12.30	25.77	4.01	11.05
1994	10.66	8.40	13.12	10.84	12.39	12.48	23.65	5.64	10.80
1995	10.12	9.25	13.97	12.32	12.05	12.03	34.36	4.92	11.16
1996	9.36	9.14	11.53	12.28	13.99	13.49	39.59	7.46	10.76
1997	9.18	8.20	10.60	9.99	10.97	6.76	32.10	5.50	9.54
1998	8.77	8.41	8.09	11.28	12.23	10.17	36.34	7.10	9.38
1999	9.00	8.17	8.97	10.08	11.79	11.24	25.42	6.08	9.32
2000	9.30	8.58	8.90	11.03	11.31	9.12	26.08	5.71	9.49
2001	7.97	9.24	8.93	10.12	8.68	12.93	25.28	5.01	8.95
2002	8.45	8.15	8.69	10.13	9.29	7.83	27.78	3.11	8.72

Source ATSB, Road Fatalities Australia: 2002 Statistical Summary, p. 15.

Table 2.4 Road Fatalities per 100 million km travelled, by State and Territory, 1976–2002

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
1976	3.70	3.38	3.86	3.20	3.21	3.91	7.96	2.32	3.55
1979	3.50	2.82	3.55	2.98	2.44	3.11	7.45	1.35	3.15
1982	2.92	2.19	2.78	2.45	1.91	2.66	6.16	1.35	2.56
1985	2.33	1.78	2.21	2.19	1.73	1.99	5.40	1.63	2.09
1988	2.06	1.63	2.16	1.72	1.49	1.87	4.75	1.35	1.88
1991	1.44	1.23	1.49	1.43	1.29	2.00	4.60	0.61	1.41
1995	1.27	0.97	1.32	1.33	1.18	1.32	4.23	0.50	1.21
1998	1.06	0.87	0.94	1.20	1.25	1.15	4.65	0.70	1.05
1999	1.04	0.84	0.95	1.15	1.23	1.40	3.00	0.64	1.02
2000	1.18	0.75	0.86	1.26	1.07	0.98	3.13	0.56	0.98
2001	0.89	0.87	0.84	1.01	0.89	1.53	3.29	0.52	0.91
2002	0.92	0.77	0.88	1.04	0.93	0.83	3.21	0.32	0.89

Source ATSB, Road Fatalities Australia: 2002 Statistical Summary, p. 15.

Table 2.5 Road Fatalities per 100 000 population by age groups, 1980–2002

	0–16 years	17–25 years	26–39 years	40–59 years	60–69 years	70+ years	All
1980	9.8	51.8	20.7	15.7	47.8		22.3
1985	7.6	43.6	18.0	13.8	38.5		18.6
1990	5.6	29.9	13.5	9.8	12.8	21.8	13.7
1991	4.6	25.7	12.6	8.9	12.0	20.5	12.2
1992	4.4	23.9	11.9	8.1	10.9	17.6	11.3
1993	4.1	23.6	12.2	8.3	10.1	16.0	11.1
1994	4.2	21.8	10.9	8.0	11.5	19.1	10.8
1995	4.0	24.0	12.2	8.0	10.9	17.4	11.2
1996	4.3	22.4	11.2	8.4	10.3	16.7	10.8
1997	3.7	21.2	10.2	7.0	8.6	14.2	9.5
1998	3.7	19.3	9.7	7.6	7.8	15.4	9.4
1999	3.3	20.1	10.8	6.6	10.0	13.6	9.3
2000	3.5	20.7	11.1	7.2	8.1	13.9	9.5
2001	3.0	18.9	10.0	7.3	8.7	13.5	8.9
2002	2.9	18.2	10.9	7.2	7.3	11.5	8.7

Source ATSB, Road Fatalities Australia: 2002 Statistical Summary, p. 20.

Table 2.6 Road fatalities per 10 000 registered motor vehicles, by State and Territory, 1980–2002

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
1980	5.17	3.35	4.43	3.80	3.93	4.36	13.40	2.84	4.32
1985	3.57	2.80	3.25	3.28	2.81	2.93	9.33	2.58	3.23
1990	2.47	2.07	2.28	2.56	1.89	2.41	8.55	1.64	2.31
1991	2.17	1.81	2.40	2.15	1.95	2.58	8.91	1.08	2.13
1992	2.02	1.47	2.27	1.85	1.85	2.43	6.68	1.21	1.93
1993	1.80	1.60	2.09	2.41	1.88	1.87	5.26	0.69	1.87
1994	1.98	1.34	2.12	1.73	1 85	1.87	4.46	0.93	1.80
1995	1.86	1.46	2.27	1.88	1.78	1.78	6.75	0.82	1.84
1996	1.68	1.37	1.85	1.84	2.02	1.97	7.49	1.22	1.73
1997	1.63	1.21	1.69	1.49	1.55	0.98	6.05	0.86	1.51
1998	1.51	1.23	1.25	1.63	1.68	1.49	6.75	1.13	1.45
1999	1.57	1.17	1.36	1.46	1.62	1.61	4.75	0.96	1.44
2000	1.62	1.23	1.35	1.59	1.56	1.30	4.95	0.89	1.46
2001	1.40	1.34	1.38	1.46	1.20	1.84	4.86	0.79	1.39
2002	1.46	1.16	1.32	1.45	1.27	1.10	5.30	0.48	1.34

Source ATSB, Road Fatalities Australia: 2002 Statistical Summary, p. 22.

2.14 Evidence presented to the Committee indicated that these national trends were broadly indicative of trends in the various States and Territories. There were, however, a number of issues highlighted by individual States.

2.15 In its submission to the inquiry, the Queensland Government noted that the fatality rate in that State had declined from 12.7 deaths per 100 000 population in 1992 to 8.06 deaths per 100 000 population at 30 September 2003. During that time however, the rate of hospitalisations due to road accidents had broadly increased, with the rate of hospitalisations recorded in 2002 up almost 14 per cent on 1992.[7]

2.16 A similar trend was evident in data presented by Mr Eric Howard, General Manager, Road Safety, VicRoads. While road fatalities in Victoria were trending down, consistent with the national average, and current fatality rates were below the Victorian average for 1999–2001, the number of serious injuries had risen, and was trending above the average rate for 1999–2001.[8] A similar trend is also evident in new South Wales.[9]

2.17 On the other hand, data presented by Mr Phil Allan, Acting Director, Road Safety, Department of Transport and Urban Planning, South Australia, indicated that in South Australia serious injuries had levelled out in rough proportion to fatalities.[10]

2.18 In his evidence before the Committee, Mr Howard also highlighted the disparity in fatality rates between metropolitan and country areas. Road fatalities in Melbourne were trending down while those in rural Victoria were trending up. In 2003 road deaths in rural Victoria exceeded those in Melbourne.[11]

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7 Government of Queensland, Submission no. 31, p. 15.

8 Powerpoint presentation by Mr Eric Howard, General Manager, Road Safety, VicRoads, Exhibit no. 4.

9 Australian Automobile Association, Submission no. 18, p. 11.

10 Powerpoint presentation by Mr Phil Allan, Acting Director, Road Safety, Department of Transport and Urban Planning, South Australia, Exhibit no. 5.

11 *Transcript of Evidence*, p. 6; Powerpoint presentation by Mr Howard, Exhibit no. 4.

2.19 Similar findings were presented by Mr Allan in evidence before the Committee. In South Australia, there has been an increase in rural crashes over the last decade, and a decrease in metropolitan crashes.[12] Between 2000 and 2002, 58 per cent of fatal crashes and 47 per cent of serious crashes occurred on rural roads.[13]

2.20 In its submission to the inquiry, the Western Australian Government also noted that more fatal crashes occur in country areas (58 per cent) than in Perth (42 per cent), while more serious injury crashes occur in Perth (62 per cent) than in country areas (38 per cent). In 2002 rates of serious injury and death were greater outside Perth (21.6 deaths per 100 000 population) than in Perth (5.07 deaths per 100 000 population).

2.21 Road injuries and deaths in Western Australia are not predominantly a highway problem. Four per cent of serious crashes occur on national highways, 31 per cent on state highways and 65 per cent on local government roads. Over half of fatal crashes occur in roads zoned 70 km / h or less.[14]

2.22 The submission noted annual death and injury rates of about 200 and 3000 persons per annum respectively in Western Australia, at a cost of about $1.5 billion annually. It further noted that while Western Australia had the second lowest fatality rate per 100 000 population in 1990, by 1998 it was the second highest. While other jurisdictions had improved their performance Western Australia's had levelled out. Since 1998, however, Western Australia has gradually improved while other jurisdictions have plateaued.[15]

2.23 Analysis of those being killed and injured on Western Australia's roads revealed:

- the road users most commonly involved in fatal crashes are drivers and passengers, particularly male drivers aged 17 to 59;
- about 37 per cent of drivers and riders involved in fatal crashes are aged 17 to 24 and about 90 per cent of these are male;

12 *Transcript of Evidence*, p. 31.

13 Government of South Australia, *South Australian Road Safety Strategy 2003–2010. Road Trauma: Facts and Figures*, p. 3.

14 Government of Western Australia, Submission no. 37, pp. 4–5.

15 Government of Western Australia, Submission no. 37, pp. 2–3.

- about 30 per cent of those killed are not wearing seatbelts (sometimes in combination with alcohol);
- the major factors contributing to fatal crashes are drink driving (22 per cent), speeding (35 per cent) and fatigue; and
- the major factors contributing to severe injury are speed and failure to wear seatbelts.[16]

2.24 The high incidence of fatalities amongst young males was also an issue in South Australia. Males account for 74 per cent of road deaths in South Australia, a significant proportions of these being men aged between 16 and 30. Overall, the 16–20 year age group accounted for 15 per cent of fatalities.[17]

Road Safety Strategies

2.25 The National Road Safety Strategy provides the basic policy framework for improved road safety in Australia. Its target, no more than 5.6 road fatalities per 100 000 population is to be achieved through pursuit of eight principal strategic objectives:

- improved road user behaviour;
- improved safety of roads;
- improved vehicle compatibility and occupant protection;
- use of new technology to reduce human error;
- greater equity among road users;
- improved trauma, medical and retrieval services;
- improved road safety policy and programs through research of safety outcomes; and
- encouraging alternatives to motor vehicle use.[18]

16 Government of Western Australia, Submission no. 37, p. 4.

17 Government of South Australia, *South Australian Road Safety Strategy 2003–2010. Road Trauma: Facts and Figures*, p. 4.

18 ATC, *National Road Safety Strategy, 2001–2010*, p. 4.

2.26 A combination of education, driver training and enforcement are seen as the keys to improved driver safety, including measures set out under the *National Action Plan for Youth Road Safety*.[19]

2.27 Improving the safety of roads is seen as the most achievable single factor in reducing road trauma. The Strategy notes that:

> General road improvements have been found to reduce fatalities by two lives per annum per $100 million invested and provide benefit/cost ratios averaging 3.3. Black spot programs have been found to reduce fatalities by over 20 lives per annum per $100 million and produce high average benefit/cost ratios of around 4. As these findings were made prior to the estimated annual monetary cost of crashes being revised from $6 billion to $15 billion, they are likely to now be conservative. Investment in roads, and especially in black spot programs, therefore offers excellent returns over the period to 2010.[20]

2.28 Improving vehicle compatibility and occupant protection includes designing vehicles that cause less damage to other vehicles and road users in a crash. Four wheel drive vehicles are highlighted as a risk to other road users because of their high mounting and heavy chassis.[21]

2.29 Potential technological innovations include devices capable of:

- ensuring that restraints are used;
- maintaining safe following distances between vehicles;
- preventing speed limits from being exceeded;
- controlling cornering response;
- enforcing license conditions;
- monitoring driver alertness;
- performing breath tests before staring a car (e.g. alcohol interlocks); and

19 ATC, *National Road Safety Strategy, 2001–2010*, pp. 5–6.

20 ATC, *National Road Safety Strategy, 2001–2010*, p. 6.

21 ATC, *National Road Safety Strategy, 2001–2010*, p. 8.

- automatically notifying emergency services of location and severity of crashes and number of occupants involved.[22]

2.30 Targeted strategies are intended for vulnerable road users, such as youth, indigenous people, older people, and residents of rural and remote areas, pedestrians, cyclists and motorcyclists. There is also a recognised need to improve trauma, medical and retrieval services, especially in rural areas where crash speeds are higher, response times are greater, and medical and retrieval services less well equipped to deal with severe trauma.[23]

2.31 Research is required to support the national strategy, investigating

- the causes of road crashes;
- the consequences of road crashes;
- the effect of existing countermeasures; and
- the likely effect of potential countermeasures.

2.32 Benchmarking will be used to help assess the benefit of road safety measures and promote their adoption across jurisdictions.[24]

2.33 Encouraging alternatives to motor vehicle use has the potential to reduce exposure to road trauma, as well as achieving environmental and health benefits. This requires:

- land use planning that reduces the amount of transport necessary for people and goods;
- transport planning that integrates transport systems and improves the quality and effectiveness of transport;
- expansion of telecommuting and other measures that avoid the need to travel; and
- promoting the benefits of public transport, walking and cycling.[25]

22 ATC, *National Road Safety Strategy, 2001–2010*, p. 9.

23 ATC, *National Road Safety Strategy, 2001–2010*, pp. 9–11.

24 ATC, *National Road Safety Strategy, 2001–2010*, p. 14–15.

25 ATC, *National Road Safety Strategy, 2001–2010*, p. 14.

2.34 It is anticipated that the target of the National Road Safety Strategy, a 40 per cent reduction in road fatalities, will be achieved through the improved safety of roads (19%), improved vehicle occupant protection (10%), improved road use behaviour (9%) and new technology to reduce human error (2%).[26]

2.35 The possible measures to attain the strategic objectives outlined in the National Road Safety Strategy were first outlined in the *National Road Safety Action Plan 2001 and 2002*.[27] A range of 'action areas' are set out under each objective, and a list of 'possible measures' under each action area.

2.36 The action areas relating to improved road user behaviour relate to:

- drink driving;
- use of illicit and prescription drugs;
- compliance with speed limits;
- matching speed limits to road conditions;
- fatigue;
- use of restraints;
- deterrence of unlicensed driving;
- work related road use; and
- community engagement—local government and schools.

2.37 Actions to improve the safety of roads include expansion of the 'black spot' program, increased use of road safety audits, and improved road design.

2.38 Improved vehicle compatibility and occupant protection is seen chiefly as the province of Australian Design Rules (ADRs) and the Australian New Car Assessment Program (ANCAP). Possible measures include using ADRs to increase underrun protection on heavy vehicles and promoting awareness of car safety features.

26 ATC, *National Road Safety Strategy, 2001–2010*, p. 19.

27 ATC, *National Road Safety Action Plan 2001 and 2002.*

2.39 Use of new technology to reduce human error centres on encouraging the adoption of Intelligent Transport Systems (ITS) as they become available.[28] Improving equity among road users involves developing strategies focused upon groups targeted in the National Road Safety Strategy.

2.40 Improved trauma, medical and retrieval services include better training for health professionals, improved first aid training for the general public, improved planning of trauma management systems, and use of technology to enable earlier notification of serious crashes.

2.41 Improving road safety programs will involve targeted research to better understand the causes and consequences of serious road crashes and to help develop and assess countermeasures. Possible measures include establishing multi-disciplinary teams to undertake investigations of road crashes taking into account all issues including enforcement, road design and driver behaviour. This objective will also involve improving the process through which State, Territory and local governments learn from each other and from overseas practices.

2.42 Encouraging alternatives to motor vehicle use includes two action areas:

- Utilising land-use planning to reduce the amount of transport necessary for people and goods
- Reducing motor vehicle use through promotion of public transport, walking and cycling.

2.43 The *National Road Safety Action Plan 2003 and 2004* briefly reviewed the earlier action plan. It found that the overall effort included the continuation and expansion of many proven road safety programs, as well as the introduction of new initiatives expected to bring considerable safety returns in future years. It also found, however, that there had been slower than expected progress towards the overall target of the National Road Safety Strategy. Factors influencing this outcome included:

28 In December 2002, the Committee presented its report investigating the safety and efficiency potential of ITS, with a view to facilitating its implementation. The Government has not, as yet, responded. House of Representatives Standing Committee on Transport and Regional Services, *Moving on intelligent transport systems*, Parliament of the Commonwealth of Australia, Canberra, December 2002.

- Less improvement than expected in overall compliance with drink driving laws and speed limits;
- Increasing diversity of the vehicle fleet;
- A substantial increase in motorcycle rider fatalities, which was not predicted in earlier estimates;
- Changes in vehicle usage (possibly related to economic factors); and
- Statistical variation.[29]

2.44 The second action plan is more focussed than the first on specific issues. Critical to its success are actions taken in two key areas—speed management and the safety of roads. Other important focus areas are driver impairment, vehicle improvements, licensing and driver management, and special groups and issues.

2.45 Speed management will focus upon:

- extending integrated publicity and enforcement campaigns geared to maximising compliance with speed limits;
- developing national guidelines to support best practice in speed enforcement;
- continuous (automatic) speed enforcement on high volume roads and other roads with high crash rates;
- detailed monitoring of travel speeds independent of enforcement actions;
- introducing a national urban default speed limit of 50 km / h;
- selective extension of urban speed limits less than 60 km / h (for example, to local shopping precincts, school zones and other areas of high pedestrian activity);
- zoning to lower speed limits on selected rural and urban arterials (with a focus on roads of above average crash risk); and
- education and information programs to support speed management initiatives.[30]

29 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 10.

30 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 14.

2.46 Road environment actions will:

- provide funding for mass application of proven countermeasures targeting
  - ⇒ high volume roads and road lengths with bad crash records or high-risk characteristics; and
  - ⇒ area-based treatments that meet appropriate selection criteria;
- implement road safety risk assessments in road planning, construction and maintenance;
- eliminate unsafe roadside planting programs; and
- maintain and extend black spot programs.[31]

2.47 Alcohol, other drugs and fatigue are the central focus of approaches to driver impairment. Proposed actions include:

- enhance drink driving deterrence—
  - ⇒ maintain and increase resources for enforcement and public education;
  - ⇒ develop national guidelines on best practice in drink driving enforcement;
  - ⇒ focus on developing more effective programs for reducing drink driving in rural areas;
- implement and monitor alcohol interlock and rehabilitation programs to change the behaviour of repeat offenders;
- develop and evaluate improved drug deterrence measures;
- implement road-based countermeasures to reduce the harm arising from fatigue-related crashes;
- address fatigue through further public education for all drivers on risks, warning signs and preventive strategies; and
- complete and implement the Fatigue Reform coordinated by the National Road Transport Commission (now National Transport Commission) addressing heavy vehicle driver fatigue, and the related Compliance and Enforcement Reform.[32]

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31 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 16.

32 ATC, *National Road Safety Action Plan 2003 and 2004,* pp. 18–19.

2.48 Actions to achieve improved vehicle safety include:

- introduce an ADR for intrusive audible seatbelt warning devices;
- encourage corporate and individual vehicle purchasers to select safer vehicles, through campaigns to promote awareness of ANCAP safety ratings and used-vehicle safety ratings;
- mandate display of occupant protection safety ratings on new and used vehicles at point of sale;
- research vehicle compatibility implications of the increasing diversity of the Australian vehicle fleet, and review potential countermeasures (which could include road-based, vehicle-based and behavioural measures to reduce the frequency or severity of multi-vehicle crashes);
- complete the development and implementation of the National Heavy Vehicle Safety Strategy;
- introduce an ADR for underrun protection for heavy vehicles;
- encourage voluntary uptake of Intelligent Speed Adaptation in both light and heavy vehicle fleets, to increase understanding and awareness of potential benefits.[33]

2.49 Under licensing and driver management the action plan proposes:

- requiring all drivers and riders to carry their licence and produce it when requested by police;
- resourcing the use of in-vehicle technology to access on-line licence databases;
- reviewing sanctions to ensure they maximise deterrence;
- monitoring safety impacts of mobile phones in vehicles.[34]

2.50 Actions relating to special groups and issues include:

- examining and, if effective, introducing extensions to graduated licensing systems to improve the safety of novice drivers (for example, night time driving restrictions and same-age passenger restrictions, which have been effective in other countries);

33 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 21.

34 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 22.

- implementing frontal identification systems for motorcycles so that automated speed enforcement measures may apply to motorcycles on the same basis as other vehicles;
- completing the development of an International Visitors Road Safety Strategy and commencing implementation of key measures;
- working with indigenous communities to identify and implement locally relevant initiatives that improve road safety outcomes for indigenous people;
- developing an internet-based clearing house to share effective indigenous road safety initiatives amongst stakeholders and communities.[35]

Implementing the Strategy

2.51 While much of the evidence received by the Committee was supportive of the National Road Safety Strategy and the related Action Plans, there was some criticism directed at the implementation of both Strategy and Plans.

2.52 In its submission, DOTARS acknowledged the slow progress made during the first years of the National Road Safety Strategy, but argued that the target set was still achievable. Indeed, the submission argued that the strategy was still on course:

> Uniform progress toward the target would have required a cumulative reduction in the fatality rate of 9.7% after two years (to December 2002) and 14.2% by the end of 2003, relative to the base figure.
>
> The actual cumulative reduction by December 2002 was 6.8%.
>
> In the first nine months of 2003 there were 1188 fatalities. This was 6.9% lower than the same period last year and corresponds to an annualised fatality rate of 7.9. If this rate holds for the remainder of the year, the cumulative reduction will be 14.8%, which would slightly exceed the pro-rata reduction target of 14.2% (a fatality rate of 8.0).[36]

35 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 24.

36 DOTARS, Submission no. 23, p. 5.

2.53 This point was taken up by Mr Kym Bills, Executive Director of the Australian Transport Safety Bureau at the one day forum on 28 November 2003. He noted that there had been a substantial fall in the road fatality rate between 2002 and 2003, and that the rate of improvement was very nearly on course. He told the Committee that 'this reinforces the view in the current action plan that the target is still achievable'. He admitted, however, that this was very much due to a sharp reduction in fatalities in Victoria.[37]

2.54 In evidence before the Committee, Professor Ian Johnston, Director of the Monash University Accident Research Centre, took a different view. He argued that Victoria's road toll was down 'not because it is following the National Road Safety Strategy but because it is doing something different':

> I am probably going to be a little bit controversial here, because I think the National Road Safety Strategy is fundamentally flawed. Several people have made the point—Ian Faulks [Committee Manager, Staysafe Committee, Parliament of New South Wales] in particular—that much of the road safety responsibility lies with the states. The National Road Safety Strategy does not focus on the areas of national responsibility; its fundamental focus is on the coordination of state and territory action. I am not saying that that is inappropriate; what I am saying is that it misses an enormous number of opportunities.[38]

2.55 Professor Johnston argued that the National Road Safety Strategy should focus on three objectives:

- National leadership.
- National harmonisation (laws, signs, markings).
- Integrated State/Territory programs.

37 *Transcript of Evidence,* pp. 3, 6.

38 *Transcript of Evidence,* p. 52.

2.56 He continued:

> The first element really is national leadership in the areas where the federal government has the accountability. The vehicle area and the roadside safety standards on national highways are the two that I think are really underperforming. The second element of a national road safety strategy is the national harmonisation. There is a fair bit in there. We have to have the same laws, signs and markings around the country. The third bit is the integrated programs.[39]

2.57 Looking at the implementation of the Strategy and related Action Plans, the Australian Automobile Association (AAA) noted in its submission that despite the anticipated contribution of safer roads to reductions in the fatality rate, 'only relatively minor initiatives in this area have been made'. The exception was South Australia. The submission continues:

> It is worth noting that the NRSAP 2001–02 assumes that future Government funding for *safer roads* would be maintained in real terms. AAA is concerned that Commonwealth and State Governments have not been increasing investments so as to match the 2002–02 investments in real terms, and therefore, are now effectively spending less on roads.[40]

2.58 The AAA argues that Commonwealth outlays on roads, for example, were lower in real terms in 2002–03 than in 1996–97, despite the introduction of new programs.[41]

2.59 The AAA noted little evidence of commitment by way of new initiatives on the part of governments to improve vehicle occupant protection or introduce new technology to reduce human error, despite the role of these objectives in anticipated reductions in the road toll. Only in the area of improved road user behaviour had a number of new programs been introduced.[42]

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39 *Transcript of Evidence*, p. 55.

40 AAA, Submission no. 18, p. 14.

41 AAA, Submission no. 18, p. 14.

42 AAA, Submission no. 18, pp. 14–15.

2.60 A similar point was made by Professor Johnston, who noted that Australia was 'considered a leader internationally, but we are considered a leader only in behavioural control measures'.[43] He felt that we were deficient in a number of other respects, especially roadside safety standards. 'There is an opportunity for the federal government to lead in that respect.'[44]

2.61 With regard to the National Road Safety Strategy, the AAA submission concluded:

> It is interesting to note the uniformity with which some programs have been introduced across the States. Programs such as 50km / h speed limits on urban roads, more speed and red light cameras, more audible tactile pavement markers, tougher penalties and increased enforcement, graduated licensing schemes and alcohol interlocks have all been introduced by a number of states.
>
> This comparison is by no means comprehensive in terms of road safety programs being undertaken in Australia. There are many programs, at the Commonwealth, State and Local Government levels that were underway, such as Black Spot Programs, and these have continued since the launching of the NRSS. Nevertheless, it does appear that the implementation of new programs aimed at reducing road trauma has been inconsistent and therefore less effective than predicted.
>
> Unless substantial efforts are made to fulfil the objectives of the new NRSAP 2003–04, and in particular improve the safety of roads, then the prospect of reducing Australia's fatality rate by 40% by 2010 is going to become increasingly difficult to achieve.[45]

2.62 The Committee supports the view that it is the responsibility of the Commonwealth Government to provide national leadership, not least by setting an example to other jurisdictions in its areas of responsibility. Clearly, this leadership must include setting benchmarks in areas such as vehicle design and the construction and maintenance of national highways.

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43 *Transcript of Evidence,* p. 52.

44 *Transcript of Evidence,* p. 55.

45 AAA, Submission no. 18, pp. 14–15.

2.63 The Committee believes that national leadership must also involve setting benchmarks more generally and ensuring that all jurisdictions are moving in similar directions at a satisfactory pace. This will necessarily involve Commonwealth agencies being conversant with the latest developments in every jurisdiction and ensuring that innovations in one jurisdiction translate into best practice nationwide.

Recommendation 1

2.64 **The Committee recommends that the Australian Government, in its road safety planning:**

- **set best practice benchmarks for all road safety activities;**
- **sees that these benchmarks are incorporated into future National Road Safety Action Plans; and**
- **directs funding to those jurisdictions which comply with the best practice benchmarks so defined.**

2.65 In its submission, the AAA was also less than sanguine about the Strategy's progress:

> In 2002 there were 1,725 fatalities as a result of crashes on Australia's roads. This represented a fatality rate of 8.75 per 100,000 population. While it is pleasing to note that this is the lowest rate recorded in the past decade and continues the downward trend, it is still above that which might be expected if the target is to be achieved. If we assume that the 40% reduction target is to be met by a simple linear rate of reduction over the eleven years to 2010, then we would expect that by 2002 the national fatality rate would be 8.29, not 8.75. Admittedly, there will always be variations around the trend, but the fact that the national fatality rate is now 'behind target' suggest that even greater gains (and efforts) will have to be made in the ensuing years.[46]

46 Australian Automobile Association (AAA), Submission no. 18, pp. 9–10.

2.66 The AAA was also concerned about the focus on fatalities rather than serious injuries in the National Road Safety Strategy, a concern already noted in this report. Citing figures from New South Wales, the AAA found that while there had been a substantial improvement in the injury rate from the mid 1970s to the early 1990s, the recent plateau in the fatality rate seems to have coincided with an increase in the injury rate. 'This highlights the point that focussing solely on fatality rates might prove to be misleading, and ultimately detrimental for road safety.'[47]

2.67 This was an issue also highlighted by the Queensland Government in its submission. It noted the need to focus on injuries as well as fatalities, but noted several impediments to compiling injury statistics:

- Jurisdictions are reliant on police reports. As such, some hospitalisations such as those resulting from bicycle–vehicle crashes may not be included in police reports due to the uncertain nature of these types of crashes.
- There is no nationally consistent coding of injuries, and as such, injury levels are not coded in the same way across jurisdictions. Furthermore, road crash data are often not linked between jurisdictions.
- The hospitalisation category while including catastrophic injuries also includes less serious injuries, such as those referred for observation. This makes the definition of serious injuries more difficult, and also makes it difficult to monitor and evaluate the effectiveness of countermeasures on serious injuries.[48]

2.68 The dangers in using fatalities as the principal indicator of road safety was highlighted in the 2004 year book of the Australasian College of Road Safety, *Road Safety Towards 2010*. In an article entitled 'Plotting Progress for Road Safety Development', Ann Williamson of the NSW Injury Risk Management Research Centre, University of New South Wales, highlighted the fact that improvements in fatality trends could disguise the real level of road trauma as indicated by injury statistics. With regard to heavy vehicles she noted:

47 AAA, Submission no. 18, p. 10.

48 Government of Queensland, Submission no. 31, p. 16.

> An analysis of the contribution of heavy vehicles to road safety in NSW … showed that based on fatal crashes there has been no change in rates for heavy trucks. Based on injury-related crashes however, there has been a significant increase in crashes per registered heavy truck … The analysis also showed increases in this period for injury-related crashes per kilometre travelled especially for crashes where the truck was the vehicle judged at fault. We could conclude, if only looking at fatality data, that crashes involving heavy trucks are not a major road safety problem and that these crashes are more to do with other vehicles than the trucks themselves, but analysis of non-fatal casualty crashes gives a different picture. There are a lot of them and they cost a lot.

2.69 Similar problems were identified in regard to pedestrians, cyclists and motorcyclists:

> Analysis of pedestrian, bicycle and motorcycle crashes across Australia also showed different patterns between fatalities and injury crashes … Bicyclists accounted for only two percent of road fatalities compared with pedestrians who accounted for around 15 percent of road fatalities. On the other hand, bicyclists and pedestrians accounted for similar proportions of road-related serious injuries, especially in 2001 (hospitalised for at least one night). Using only fatality information, therefore, we could conclude that pedestrian injury is considerably more important than motorcycle and bicycle injury, but the serious injury statistics would lead to a different conclusion, with motorcycle injury being placed first.[49]

2.70 The Committee is in full accord with the argument of the Queensland Government that comprehensive and nationally consistent injury statistics are vital to understanding the impact of road safety measures. The Committee believes the collection of such data should be made a priority in the next National Road Safety Action Plan.

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49 Ann Williamson, 'Plotting Progress for Road Safety Development', in Australasian College of Road Safety, 2004 Year Book, *Road Safety Towards 2010,* p. 6.

Recommendation 2

2.71 **The Committee recommends that the Australian Government ask the Australian Transport Council to:**

- **incorporate the collection of comprehensive and nationally consistent road accident injury data in the next National Road Safety Action Plan; and**
- **incorporate targets for reducing serious road injury in the *National Road Safety Strategy, 2001–2010*.**

2.72 One of the fundamental problems with the Strategy identified by the AAA was that the Action Plans 'do not list any accountabilities, timelines or anticipated outcomes. They represent a list of suggestions that may or may not be implemented':

> The latest action plan, NSRAP 2003–04, released in December 2002, has clearly acknowledged that greater efforts need to be made by all parties yet does not include any details of the accountabilities of State or Commonwealth Governments to implement these activities. Subsequently, the action plans do not represent a nation-wide commitment to reducing road trauma in Australia and will be unlikely to do this unless the process changes.

2.73 The Queensland Government felt that the priority areas adopted in the Action Plan for 2003–04 offered a better targeted and more appropriate approach to road safety management than the more general platform laid out in the first Action Plan, and supported the retention of the six targeted action areas in future action plans.[50]

2.74 The AAA argued that the Commonwealth should 'lead by example and clearly show their commitment to road safety by stating which actions they will implement and by when'. The AAA also believes the Commonwealth should work to encourage each State and Territory to do likewise.[51]

50 Government of Queensland, Submission no. 31, pp. 8–10.

51 AAA, Submission no. 18, p. 15.

2.75 The Committee is in full accord with the need for accountability for all actions in all jurisdictions. Only in this way can the commitment of governments and the success of National Road Safety Action Plans be effectively measured. The Strategy and Action Plans should be subjected to regular review and audit.

Recommendation 3

2.76 **The Committee recommends that the Australian Government ask the Australian Transport Council to implement a comprehensive system of targets, timelines and accountabilities in future National Road Safety Action Plans and that each new Plan incorporate a more comprehensive review of its predecessor than presented in Plans to date.**

3

Speed Management

3.1 It is the Committee's view that the importance of speed management in reducing the road toll should not be understated. Excessive speed is regarded as one of the principal factors in road crashes leading to serious injury or death. Speed management has thus been targeted in the National Road Safety Strategy and National Road Safety Action Plans.

3.2 A number of measures have been introduced to better manage speed. In most jurisdictions, default speed limits have been reduced to 50 km/h in urban areas, while greater reliance has been placed on the use of speed cameras to enforce speed limits.

3.3 Despite the evident success of such measures, however, speed limits and the enforcement of speed limits remain controversial. Submissions received by the Committee have called for higher and lower speed limits. Some have also accused governments of using enforcement measures for raising revenue.

3.4 The Committee believes that the three key factors in speed management are:

- Creating the road environment (which will be dealt with in Chapter 4);
- Setting speed limits to match the road environment, taking into account the needs of all road users; and
- Gaining compliance with speed limits through a mixture of enforcement and attitudinal change.

3.5 Within this context the critical issue is the need for attitudinal change. One of the key factors in reducing the incidence of speeding is generating understanding within the community as to why speed limits are set. Evidence presented to the Committee indicates that there is still a widespread belief that speed limits are an arbitrary measure of driving ability, that 'good' drivers should be able to set their own limits. As Mr Howard of VicRoads told the Committee in evidence, however, speed limits are intended primarily to reduce road trauma:

> We as a community do not understand what an enormous difference across the system a few kilometres an hour in average travel speeds means in terms of risk…Speed limits are there because they limit the amount of energy that you have to lose in a collision. That is essentially why we have speed limits. They should reflect the nature of the crash risk on a given road section. I would suggest that we do not fully understand that and certainly do not as a community generally apply it.[1]

3.6 This chapter will briefly examine the nature of the speeding problem, current approaches to speed management, and potential measures that may enhance current management strategies.

The speed problem

3.7 The evidence presented to the Committee clearly indicates that speed is a major factor in road trauma. Speed affects both the risk of crashing and the severity of a crash—including in crashes caused by factors other than speed. In its submission, DOTARS noted that:

- changes in travel speeds produce disproportionately large changes in emergency braking distances and in speed at the point of impact;
- a small change in impact speed produces a larger change in impact energy;
- the probability of death or severe injury increases very rapidly as impact energy increases.[2]

1 *Transcript of Evidence,* pp. 7–8.

2 DOTARS, Submission no. 23, Attachment 6, p. 3.

3.8 The potential significance of this can be seen in the following examples:

- A twenty per cent increase in travel speed (for example, from 50 km / h to 60 km / h) increases emergency braking distance by almost half (44%).
- At the point where a driver braking from 60 km / h would stop completely, a driver braking from 70 km / h would still be travelling at about 46 km / h—a speed that could be fatal if the vehicle hit a pedestrian or the side of another vehicle.
- Most pedestrians struck by a car at 40 km / h survive; most pedestrians struck by a car at 60km / h die.[3]

3.9 In its submission, the Queensland Government identified speed as a major contributing factor to road trauma and its related costs:

> Speeding continues to be a road safety issue in Queensland, with fatal crashes attributed to speed up by 32 percent over the last five years and fatal crashes in high speed zones still accounting for 49 percent of all fatal crashes. Excessive speed is a major contributing factor in approximately 15 percent of fatal crashes each year in Queensland. Speed related crashes continue to be a major contributor to major fatalities on our roads. Speed related crashes cost the community approximately $180 million per year in hospital and health care costs, lost productivity in the workplace and the use of emergency services.[4]

3.10 Likewise, the Western Australian Government noted that speeding continues to be a significant factor in about 35 per cent of fatal crashes and 21 per cent of serious injury crashes.

Dealing with speed

3.11 The *National Road Safety Action Plan 2003 and 2004* noted that speed enforcement programs backed by extensive publicity were a significant factor in the reduction in road fatalities that occurred between 1989 and 1997. Greater compliance would reduce road deaths significantly. It is the Committee's view that there are clear benefits to be obtained through greater compliance. The issue is how to achieve it.

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3 DOTARS, Submission no. 23, Attachment 6, p. 3.

4 Government of Queensland, Submission no. 31, p. 8.

3.12 Within the broad paradigm set out in national and state strategies, various different approaches to speed management have been tried. Detailed evidence was given in relation to Western Australia, New South Wales and Victoria.

Western Australia

3.13 The principal response to speed management in Western Australia has been a mixture of community education and enforcement, including use of speed cameras in high volume traffic areas and hand held and mobile radars in country areas.[5]

3.14 The success of speed cameras may be gauged by the fact that despite the number of vehicles passing through cameras increasing from four million (1994–95) to nineteen million (2000–01), there has been a 70 per cent reduction in the percentage of drivers exceeding the posted speed limit.

3.15 Surveys tracking the results of community education campaigns also indicate changes in attitude:

> On a social proof scale, about 40 percent of young males aged 17–39 years agreed in September 2003 that they believe speeding is completely or largely unacceptable, an improvement on the February 1998 baseline of about 30 percent. In the same period young males agreeing that it was morally unacceptable or wrong to drive 10 km / h over the limit in a 60 km / h zone improved from a baseline of 48 percent in 1998 to 76 percent in 2003.
>
> While 60 per cent of young males surveyed between July 2000 and August 2002 admitted they exceeded the speed limit on an occasional basis, an encouraging finding in self reported behaviour has been noted with more drivers limiting their speeding to lower infractions of 1–5 km / h over the posted limit, rather than higher 6–10 km / h levels.[6]

3.16 Despite these successes, problems continue. The proportion of 17–39 year old males who report exceeding the posted speed limit by 11 or more km / h has not been significantly reduced. In fact it increased between February and August 2002, which led to the 'Ghost' campaign targeting high end speeders—the approximately eleven per cent of young males

5 Government of Western Australia, Submission no. 37, p. 8.

6 Government of Western Australia, Submission no. 37, p. 8.

who say they regularly drive 11 or more km/h above the posted speed limit. The Submission notes:

> Despite increased enforcement and education about a third of drivers still do not believe that speeding by more than 10 km/h increases crash risk and about half do not believe they will be booked if they drive up to 10 km/h over the limit. Educating drivers about the potential results of speeding, particularly on vulnerable road users such as pedestrians, cyclists, motorcyclists, children and older people is an important component of the WA Strategy.
>
> Data from specific sites on country highways in the last five years shows that between 20 and 30 per cent of cars, four wheel drives and utilities passed at more than the 110 km/h limit with no signs of reduction over this period. This, and current attitudes towards speeding, shows that enforcement and education needs to be enhanced and more strategic.[7]

3.17 The Committee is encouraged by results in Western Australia, and by the apparent willingness of the authorities to seek new and better targeted education and enforcement strategies. Cleary, the emphasis must increasingly be focussed upon recidivist offenders. This matter will be dealt with in more detail in Chapter 5.

Fixed speed cameras NSW

3.18 Encouraged by reported results in Europe and the United Kingdom, in late 1999 the Roads and Traffic Authority (RTA) in New South Wales began a program of installing and evaluating fixed digital speed cameras. The decision was made to install the cameras on black lengths of road with demonstrated speed and crash problems, and to clearly signpost the cameras to maximise compliance.[8]

3.19 After two years operation, the following trends were noted:

- There was a very pronounced reduction in the proportion of vehicles exceeding the speed limit in all speed zones.
- There was a pronounced reduction in the proportion of vehicles exceeding the speed limit by more than 10 km/h.

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7 Government of Western Australia, Submission no. 37, p. 8.

8 Roads and Traffic Authority NSW, Submission no. 35.

- Similar trends were observed for reductions in the proportion of vehicles exceeding the speed limit by more than 20 km/h and by more than 30 km/h.
- There was a substantial reduction in the variability of vehicle speeds, which is also conducive to increased safety.
- These improvements were achieved early in the evaluation process and sustained throughout.[9]

3.20 The results in terms of reducing road trauma are impressive. In the three years prior to the installation of cameras, the selected road lengths incurred twenty-one fatalities. In the two years subsequent to the cameras being installed only one fatality occurred. This fatality happened two kilometres from the camera and was not speed related.

3.21 Overall, tow-away crashes were reduced by 17 per cent, injury crashes by 20 per cent, 'casualty crashes' (injury and fatality combined) by 23 per cent, and fatality crashes by 90 per cent. The reduction in crashes over all crash types was 20 per cent.[10]

3.22 According to the RTA, such were results were very much as predicted, and a vindication of their strategy:

> The pattern of crash results, with all crash severities reduced but with much greater reductions at the higher levels of severity, are very much as could be predicted from reducing speeds. That is, both in theory and in various other studies it has been shown that reduced speeds tend to reduce crashes of all types. But because the amount of impact energy is reduced in such crashes as still occur, injuries and death are substantially reduced.
>
> These reductions in crashes, particularly the reductions in casualty crashes, indicate that the fixed speed cameras were very successful in achieving their purpose as employed in NSW—to reduce crashes in defined blacklengths.[11]

9 RTA, Submission no. 35.

10 RTA, Submission no. 35.

11 RTA, Submission no. 35.

3.23 Despite the success of the fixed camera strategy adopted in New South Wales, much of the evidence received by the Committee supports the covert use of mobile cameras, the strategy adopted in Western Australia and Victoria.

Victoria

3.24 Victoria has followed a different course to New South Wales in the use of speed cameras. Mr Howard of VicRoads told the Committee:

> Victoria, as I am sure you would be aware, has followed a very tough strategy with speed in the last 18 months. There has been increased use of mobile cameras, and their covert operation, the philosophy being that, if you speed anywhere any time, you may be detected. We are saying, 'We don't want you to speed anywhere any time.' That has been accompanied by tougher tolerances—lower enforcement levels, some fixed cameras, speed and red light cameras, tougher penalties and lower thresholds for demerit points. Next year [2004] we plan to introduce point-to-point cameras on the Hume Highway as an attempt to do something about that country road toll.[12]

3.25 The success of the Victorian strategy was dramatic. A doubling of infringements (from about 50 000 to 100 000 a month) coincided with a decline in fatalities from May 2002. Since then, infringements have returned to average levels, but fatalities have continued to fall.[13]

3.26 The Committee has been impressed by the evidence presented to it of the success of covert, random, mobile speed enforcement measures, and believes that they should become a central part of speed management in all jurisdictions.

3.27 That being stated, the Committee is also cognisant of the success of fixed cameras in reducing fatalities in black lengths of roads, and believes they have a role in addition to mobile enforcement measures.

12 *Transcript of Evidence,* pp. 6–7.

13 *Transcript of Evidence,* p. 7.

3.28 The Committee is also aware of concerns that remote enforcement depersonalises speed management. The deterrent effect of a visible police presence on the roads should not be underestimated. Nonetheless, the Committee believes that remote detection makes deterrence and enforcement more efficient and more effective than a mere 'cops on the beat' approach will allow.

Recommendation 4

3.29 **The Committee recommends that the Australian Government ask the Australian Transport Council to undertake a study of different speed enforcement measures in all State and Territory jurisdictions with a view to developing national best practice speed enforcement guidelines.**

Lower speed limits

3.30 The problem with speed is not just about drivers exceeding the speed limit, but authorities setting appropriate speeds for various road environments.

Urban Roads

3.31 Mr Howard also informed the Committee of the results of lower urban speed limits in Victoria. Fatalities on metropolitan 50 km / h and 60 km / h roads had fallen from 110 per annum to around 55 per annum—'an enormous reduction in risk on those roads'. In contrast, there had been almost no discernable reduction in fatalities on rural 100 km / h and 110 km / h roads.[14] Positive results from lower urban speed limits had also been found in South Australia.[15]

3.32 In its submission, the Western Australian Government also highlighted the benefits of lower speed limits. 50 km / h speed limits were introduced on local roads in urban areas in December 2001. Fatal crashes on 50 km / h roads were reduced by 36.8 per cent and injury crashes by 20.6 per cent.

14 *Transcript of Evidence,* p. 7.

15 *Transcript of Evidence,* p. 33.

During the same period there had been smaller corresponding reductions in fatalities and injuries on 60 km / h and 70 km / h roads.[16]

3.33 Mr Harold Scruby, Chairman and Chief Executive Officer of the Pedestrian Council of Australia, urged the Committee to 'go national with 50 kilometres per hour':

> It is coming, and it is great. You only have to look at Victoria who went with it first. They now have the lowest pedestrian death rate ever.[17]

3.34 The Committee agrees that there is a need to introduce uniform limits of 50 km / h on local urban roads and 60 km / h on urban arterial roads. While broadly endorsing this proposal, the Committee believes that outside metropolitan areas and major towns urban speed limits should be applied with some discretion. A mechanism should be in place to allow rural communities to apply for exemption from uniform speed limits. Moreover, where such limits do apply, there should be a graduated transition from urban road speed limits to rural road speed limits, for example from 100 km / h to 80 km / h to 60 km / h. Such transitions must be clearly signposted.

Recommendation 5

3.35 **The Committee recommends that the Australian Government initiate the adoption under the next National Road Safety Action Plan of:**

- **uniform national 50 km/h speed limits on local urban roads;**
- **uniform national 60 km/h speed limits on urban arterial roads; and**
- **exemption provisions for rural communities from uniform national urban speed limits.**

16 Government of Western Australia, Submission no. 37, p. 9.

17 *Transcript of Evidence*, p. 77.

Rural Roads

3.36 In a study of potential benefits and costs of speed changes on rural roads, Professor Max Cameron of the Monash University Accident Research Centre (MUARC), looked at the economic costs and benefits of increasing the speed limit to 130 km / h on rural roads. Impacts were examined for rural freeways, rural divided roads and rural two-way undivided roads. The costs tested were vehicle operating costs, time costs, crash costs and air pollution costs, the aggregate of these impacts representing the total social cost. Two different methodologies were used, 'human capital' and 'willingness to pay'.[18]

3.37 Broadly speaking, vehicle operating costs, crash costs and air pollution costs decline as speeds are reduced, while time costs increase. The optimum speed for total social cost is somewhere in between. The optimum speed for total social cost is lower for trucks than for cars. Crash costs are higher under the willingness to pay approach than under the human capital approach, with consequent reductions in optimum speeds. Any increase in speed increases the cost of road trauma.

3.38 With regard to rural freeways the report found:

> Increasing the speed limit to 130 km / h for all vehicles on rural freeways would have substantial social costs. The total social cost could be constrained, and even reduced, if trucks were limited to 100 km / h on such roads. A variable speed limit system allowing speeds of 120 km / h for cars and light commercial vehicles during good conditions, but reduced to 100 km / h under adverse conditions, while limiting trucks to 100 km / h at all times, would keep total social costs below current levels. However, all scenarios whereby speed limits are increased for some vehicle types and circumstances are necessarily accompanied by increased road trauma to provide travel time saving benefits.[19]

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18 The human capital approach characterises people, and therefore life, as a labour source and input into the production process. The value to society of preventing injury or death is the saving in potential output or productive capacity. The willingness to pay approach attempts to capture trade-offs between wealth and risk. It estimates the value of life in terms of the amounts that individuals are prepared to pay to reduce risks to their lives. The willingness to pay approach will generally put higher values on life than the human capital approach. However, the human capital approach provides a fairly reliable lower bound estimate of the social cost of crashes. Bureau of Transport Economics, Report 102, *Road Crash Costs in Australia*, Commonwealth of Australia, Canberra, 2000, pp. 19–21.

19 M. Cameron, *Potential Benefits and Costs of Speed Changes on Rural Roads*, ATSB, Canberra, 2003, p. 56.

3.39 Prospects for increased speed limits were even less promising on rural divided roads:

> Increasing the speed limit to 130 km / h on rural divided roads would have even greater social costs than the increased limit on freeways. If trucks were limited to 100 km / h, the impact on total social costs would be smaller but they would still increase. Even a variable speed limit like that for freeways described above would be associated with an increase in road trauma costs. The higher crash rate on the divided roads compared with rural freeways will result in any speed limit increase producing even greater road trauma increases than on freeways, despite lower traffic volumes on non-freeway roads.[20]

3.40 The report found that using 'willingness to pay' valuations, there was little case for increasing car speeds and a case for reducing truck speeds from current levels. Optimum speeds for cars on rural freeways was found to be 120 km / h taking into account total social cost, but there would still be an increase in road trauma.[21]

3.41 With regard to rural undivided roads the report found:

> There is no economic justification for increasing the speed limit on two-lane undivided rural roads, even on those safer roads with sealed shoulders. On undivided roads through terrain requiring slowing for sharp bends and occasional stops in towns, the increased fuel consumption and air pollution emissions associated with deceleration from and acceleration to high cruise speeds would add very substantially to the total social costs. Using 'human capital' costs to value road trauma, the optimum speed for cars is about the current speed limit (100 km / h) on straight sections of these roads, but 10–15 km / h less on the curvy roads with intersections and towns. The optimum speed for trucks is substantially below the current speed limit, and even lower on the curvy roads. The optimum speeds would be even lower if 'willingness to pay' valuations of crash costs were used.[22]

20 Cameron, *Potential Benefits and Costs,* p. 56.

21 Cameron, *Potential Benefits and Costs,* p. 56.

22 Cameron, *Potential Benefits and Costs,* p. 56.

3.42 The Committee is of the opinion that speed limits on rural roads should be re-examined. The disproportionate representation of rural roads in trauma statistics, and the evident problems with creating a safe road environment in rural road networks (see Chapter 4), indicate that speed limits on rural roads need to be set at levels appropriate to the engineering standards and local conditions of roads.

Recommendation 6

3.43 **The Committee recommends that the Australian Government ask the Australian Transport Council to undertake research into safe speed limits on rural roads with a view to implementing a system of speed limits and signage appropriate to the engineering standards and local conditions of roads.**

4

The Road Environment

4.1 Improving the safety of the road environment is vital to reducing the road toll. Road improvements are expected to be responsible for half the reductions in the fatality rate over the life of the National Road Safety Strategy, and are a focal point of the National Road Safety Action Plans.

Improving Road Safety—the National Road Safety Strategy

4.2 The National Road Safety Strategy identifies improving the safety of roads as 'the single most significant achievable factor in reducing road trauma'. Investment in roads 'improves road safety through general road improvements—typically, 'new' roads are safer than 'old' roads—as well as through treatment of black spots'.[1]

4.3 Under the Strategy, investment in roads is to be primarily targeted at:

- improving the estimation of the costs of crashes used in the economic evaluation of road improvement options;
- widespread use of road safety audits in assuring safety outcomes from road improvement projects and in designing and planning proposed major developments;

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1 ATC, *National Road Safety Strategy, 2001–2010*, p. 6.

- conducting safety investigations on the existing road network, taking into account the needs of all road user groups, giving priority to sites with a crash history and identifying significant remedial opportunities; and
- improving road design and traffic engineering measures to create a safer environment for pedestrians, cyclists and motorcyclists.

4.4 Management of roadside hazards has also been identified as a significant issue. They are a major factor in some 40 per cent of car occupant fatalities.[2]

4.5 The first National Road Safety Action Plan identified a range of measures to improve the safety of existing roads, including:

- continuing and expanding black spot programs;
- conducting road safety audits of the road network, taking into account the needs of all road user groups, giving priority to sites with a crash history and identifying significant remedial opportunities;
- ensuring road design standards and road management practices are consistent and reflect world's best practice in the provision of safe road infrastructure;
- providing rural local governments with guidelines for the construction and maintenance of road types which reduce the incidence and consequences of crashes; and
- identifying, assessing and evaluating potential treatments for roadside hazards.[3]

4.6 Measures to improve the safety of new roads include:

- fostering investment in new roads and road improvements;
- improving the estimation of the cost of serious injury and fatal crashes used in the economic evaluation of road improvement options to provide optimum return on investment in terms of both finance and safety;

2 ATC, *National Road Safety Strategy, 2001–2010,* p. 7.

3 ATC, *National Road Safety Action Plan 2001 and 2002.*

- making road safety audits a requirement for major road projects, land use planning and development approval processes for large projects, with the threshold for requiring audits being progressively lowered over time; and
- reviewing road design guidelines relevant to older drivers' reduced performance levels, especially with regard to placement, legibility and night-time reflectivity, adopting best practice where different standards exist.[4]

4.7 The *National Road Safety Action Plan 2003 and 2004* identified a number of measures for improving the safety of roads, with potential for cost effective mass application and high safety benefits, including:

- clearance of roadside hazards, or use of barriers to reduce the hazard;
- shoulder sealing, audible edge lining, nigh-time delineation;
- replacement of intersections by roundabouts;
- programs to minimise the risks posed by utility poles; and
- separating road users, using centre barriers, pedestrian precincts, bike tracks etc.[5]

4.8 Proposed actions under the plan include:

- providing funding for mass application of proven countermeasures;
- implementing road safety risk assessments in road planning, construction and maintenance;
- eliminating unsafe roadside planting programs; and
- maintaining and extending black spot programs.[6]

4 ATC, *National Road Safety Action Plan 2001 and 2002.*

5 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 15.

6 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 16.

Commonwealth Funding

4.9 The Committee is cognisant of the important role the Australian Government plays in road funding and the significant contribution this makes to road safety.

4.10 The Australian Government budgeted some $1.784 billion in road funding for 2003–04, under six different programs, comprising:

National Highway	$704.6 million
Roads of National Importance	$227.1 million
Grants to local government	$462.7 million
Roads to Recovery	$302.2 million
National Black Spot Program	$45.0 million
Federation Fund	$43.0 million[7]

4.11 The Australian Government funds all maintenance, rehabilitation and construction activity on the National Highway, with the aim of providing a safe, efficient means for the transport of passengers and freight. The Government has spent more than $15 billion upgrading the National Highway in the last 25 years. This includes road improvements such as sealing shoulders and increasing the number of lanes and divided highways.[8]

4.12 The Roads of National Importance Program is also directed at upgrading key road links with clear safety benefits, such as the Pacific Highway. Grants to local government are funded under the Roads to Recovery Program and Financial Assistance Grants. Measured as road length, local councils are responsible for the bulk of the Australia's road network. Commonwealth grants contribute significantly towards maintaining local roads.[9]

7 DOTARS, Submission no. 23, Attachment 7, p. 1.
8 DOTARS, Submission no. 23, Attachment 7, p. 1.
9 DOTARS, Submission no. 23, Attachment 7, p. 2.

The Black Spot Program

4.13 One of the most significant contributing factors to the reduced road toll has been the National Black Spot Program, which has been replicated in one form or another in most of the States.

4.14 The Australian Government commenced a Road Safety Black Spot Program in 1990, as a direct response to the high level of road trauma. The current Black Spot Program was initiated in 1996. The program is now in its eighth year having been extended twice. Since 1996, more than 2900 projects have been approved representing an investment of over $320 million. Funding for Black Spot locations will be $44.5 million per annum through to 2005–06. Each State and Territory receives an annual allocation according to population and proportion of casualty crashes.[10]

4.15 The Black Spot Program is directed at improving the physical condition or traffic management at locations with a high incidence of crashes involving death and serious injury. The purpose of the program is to maximise lives saved per dollar spent. Funding is mainly available for the treatment of sites with a proven history of crashes. Project proposals must demonstrate a safety benefit to cost ratio of at least 2:1. Up to 20 per cent of proposals may also be considered on the basis of a safety audit. Approximately 50 per cent of program funds are reserved for rural roads.[11]

4.16 The success of the National Black Spot Program and its state counterparts was lauded by most witnesses at the inquiry's one day forum. Mr Kym Bills, Executive Director of the Australian Transport Safety Bureau, told the Committee that 'there is unequivocal evidence that the black spots program is very effective in saving lives and there are extremely high benefit to cost ratios'.[12]

4.17 In his evidence, Mr Howard presented the Victorian view:

> We are very strong believers in those black spot programs. We appreciate the federal program. Victoria ran a very large black spot program over the last four years—spending $240 million. That is certainly giving us some benefits and will continue to provide benefits into the future. From memory, the benefit–cost ratio of the federal black spot program as assessed independently in Victoria

10 DOTARS, Submission no. 23, Attachment 7, pp. 2–4.

11 DOTARS, Submission no. 23, Attachment 7, p. 4.

12 *Transcript of Evidence*, p. 6,

> was about 13 to one. They are enormous cost–benefit ratios for the community.[13]

4.18 Dr Soames Job, General Manager, Road Safety Strategy, for the Roads and Traffic Authority of New South Wales, agreed:

> This has been an excellent program. We have already heard from the other states that there is excellent evidence for extremely good cost–benefit ratios. The Bureau of Transport Economics estimated that we get $14 worth of economic return for each dollar spent. So we agree with what has been said and we think that an extension and full funding of that program has value.[14]

4.19 The Committee has been impressed by the evidence presented as to the success of black spot programs in reducing the road toll. Such programs have clearly had a significant, and cost effective, impact on the road toll, and should be maintained as a specific component of overall road funding.

4.20 The Committee had concerns that Black Spot funding could be allocated in cases where fatalities are the result of driver behaviour rather than the state of the road in question.

4.21 In evidence to the Committee Mr Barry O'Neil from DOTARS made the point that the way Black Spot funding is allocated (based on fatality data) would suggest that poor road user behaviour would not have enough of a statistical impact to influence funding decisions. He stated:

> We expect that the one-offs that are going to be related to that would not necessarily distort the picture. If there was a consistent pattern of a certain type of accident happening, that would come through as the crash history rather than be distorted by one-offs that might be unrelated to the road. So that is why we look at the crash history of a site.[15]

The need for greater funding

4.22 While the Committee acknowledges the Commonwealth's important contribution to road funding, it has received a considerable amount of evidence to the effect that more needs to be done.

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13 *Transcript of Evidence,* p. 9.

14 *Transcript of Evidence,* p. 23.

15 *Transcript of Evidence (11/02/2004) p. 30.*

4.23 In evidence before the Committee, Mr Ray Taylor, General Manager, Business and Marketing, ARRB Transport Research Limited, applauded the success of the black spot programs. However, he also called for new approaches and significant increase in the level of investment in road safety.

4.24 Mr Taylor argued that much of what governments were now doing was reactive, dealing with problems after casualties had occurred. What was needed was a proactive approach—applying the knowledge gained from years of research and program implementation to preventing problems. He told the Committee:

> When you are moving to address problems in the future, you have got to be looking at proactive approaches, which are more risk based. A road safety audit is one approach … but the approach which is emerging as one to be used in Australia is what I would call risk management. A risk management approach draws on what was undertaken in the formal road safety audit program but places the identification of risks in the roadside in relationship to one another and enables a road authority or a local council to prioritise those risks.[16]

4.25 The other requirement was increasing investment:

> The key question is: if we know what to do, if we know a lot of the treatments work and if we have programs on which to place those treatments, why aren't we achieving the goals? My answer to that is … we need a genuine scale of implementation. We are just below a significant enough scale of implementation across the country in order to achieve the benefits from known treatments on the road environment.
>
> …I have done some arithmetic; essentially I have estimated that across Australia we spend about $225 million a year on road environment treatments in safety programs. These are estimates; they are not precise but, by rule of thumb, they are pretty well right. Assuming a four to one BCR [benefit–cost ratio] across the whole lot, we get something like a three per cent net improvement in our road toll … With a decent scale of activity and investing $600 million Australia-wide, there would be a benefit in the region

16 *Transcript of Evidence*, p. 79.

> of 13 per cent and we would get Australia's fatality rate strategy very well back on track.[17]

4.26 Mr Taylor believed that significant results could be achieved through the widespread application of proven low-cost measures, such as:

- Roadside hazard removal
- Hazard protection
- Shoulder sealing
- Edgelining and audible edgelining
- Road delineation
- Roundabouts
- Roadside pole replacement
- Road user separation.[18]

4.27 In its submission, the Queensland Government noted both the expense of maintaining road networks and the need for greater investment:

> Providing safe roads is a particular challenge for Queensland, as the State has the largest road system in Australia and 44 percent of the state controlled road network is older than 20 years. The estimated cost of maintenance and rehabilitation of the state's roads is $4 billion. Queensland is also experiencing unprecedented population growth, and increased related economic activity is expected to double the freight task over the next 15 years.[19]

4.28 The Queensland Government argued strongly for the application of black spot funding to national highways (currently national highways are specifically excluded from the National Black Spot Program[20]). 'Extending the national black spot program to include a specific focus on locations where crashes are occurring on national highways would help to reduce crashes resulting in fatalities and hospitalisations.'[21]

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17 *Transcript of Evidence*, p. 80.

18 Powerpoint presentation by Mr Ray Taylor, General Manager, Business and Marketing, ARRB Transport Research, Exhibit no. 3.

19 Government of Queensland, Submission no. 31, p. 4.

20 DOTARS, Submission no. 23, Attachment 7, p. 2.

21 Government of Queensland, Submission no. 31, p. 14.

4.29 The critical issue, however, is the overall need for more funding:

> Queensland also endeavours to plan and work proactively, undertaking road safety audits and mass application of remedial measures. Although these activities are effective in reducing crashes they are potentially costly to implement. Often, road authorities can only afford to implement some of the higher priority road safety audit findings, due to lack of funds. Similarly, road authorities can only afford to apply, to a limited extent, mass applications such a shoulder sealing, audible edge lines, and utility pole treatment. Solutions to these matters need to be found.[22]

4.30 The AAA also called for a greater funding commitment to road safety. It believed that current levels of funding for black spots were relatively low 'at around $40 million per annum, which is not enough to treat the long list of identified locations'. It also called for a 'system wide comprehensive upgrade of the National Highway System to incorporate safety features that are proven to be effective in preventing crashes and reducing the severity of crashes which do occur'. According to the AAA, the economic and social benefits involved made a compelling case for increased investment in a safer road environment.[23] It argued that the unwillingness of governments at all levels to commit funding and other resources to road safety was one of the factors impeding the progress of the National Road Safety Strategy.[24]

4.31 The Committee is concerned that lower cost work is not able to be assessed for Black Spot funding due to the cost of preparing safety audits and reports in applying for that funding. It believes that 10% of Black Spot funding should be available for lower cost projects, to approximately $35,000. These funds should be allocated by some simple system, such as on the basis of two engineer's certificates.

22 Government of Queensland, Submission no. 31, p. 14.

23 AAA, Submission no. 18, pp. 17–18.

24 AAA, Submission no. 18, p. 27.

4.32 The Committee is of the view that the total of Black Spot funding should be increased by 25%. The Committee was not persuaded by the view of the AAA that the Black Spot Program should be extended to national highways; but should continue to be addressed through the Safety and Urgent Minor Works program—referred to later in this chapter.

Recommendation 7

4.33 **The Committee recommends to the Australian Government that:**

- **the pool available for Black Spot funding throughout Australia be increased by 25%; and**
- **thereafter, Black Spot funding should be divided on the basis of:**
  - ⇒ **major projects 70%**
  - ⇒ **projects requiring a safety audit 20%**
  - ⇒ **lower cost projects 10%.**

4.34 The Committee is in accord with the view that it will be necessary to increase Commonwealth funding to road safety and maintenance programs in order to accelerate improvements in the road toll. Significant progress has been achieved, but there is a substantial gap between what is being done and what could, and should, be done.

4.35 The Committee believes that the national highway system should be the exemplar of road safety measures. The Safety and Urgent Minor Works component of National Highway funding should be increased by a substantial amount.

4.36 There needs to be a greater commitment to mass application of road safety measures. National design and maintenance standards need to be established to ensure that all roads are built or rebuilt to meet minimum safety standards.

4.37 Such actions will require greater levels of commitment and resources from all levels of government. The Committee believes, however, that the Australian Government should take the lead in terms of prescribing safety standards and committing resources to achieve those standards. This requires developing a national investment strategy in the safety of the road environment as part of the broader National Road Safety Strategy.

4.38 It also requires a substantial increase in funding. The Committee took evidence that a figure of around $600 million per annum in direct investment on measures specifically designed to improve the safety of the road environment would be appropriate.[25]

A Safer Road Environment

4.39 The importance of creating a safe road environment, an environment more 'tolerant' and 'forgiving' of error, was emphasised by a number of witnesses at the one day forum.

4.40 Mr Howard of VicRoads told the Committee that:

> The road transport system should be designed on the premise that accidents are going to happen and in a way where people could withstand the forces that they would endure if they were in a collision. We expect individuals to abide by the rules—we cannot do a lot for people who break the law—but system designers have to build in safety.[26]

4.41 Similar sentiments were expressed by the AAA in its submission to the inquiry:

> AAA believes that the highest priority road safety area in Australia should be investing in safer and more forgiving roads. The safety features and standard or road infrastructure are closely linked to crash rates … and it is clear that well founded improvements to infrastructure have a direct correlation to crash reduction.
>
> Motorists should be able to travel on Australia's road system in safety, knowing that the features of the road itself, such as sharp bends, will not cause them to lose control. Roads must be of a

25 *Transcript of Evidence,* p. 80.

26 *Transcript of Evidence,* p. 10.

> standard such that the likelihood of a crash is minimised, and for those crashes that do occur, the road and the associated road environment, is more forgiving, that new vehicles are as crashworthy as possible, making crashes survivable.[27]

4.42 In integral part of achieving better road safety is improving standards of design and construction. Because road infrastructure is long lasting and not easily or cheaply modified, it is vital that roads and roadsides are designed to the highest appropriate standards. The AAA regards safety auditing is a vital part of the design stage.[28]

4.43 One of the problems cited by Mr Howard was the prevalence of run-off-road accidents on rural roads. A high proportion of all casualty crashes on rural roads are run-off-road. The problem is that many rural roads have dangerous roadside environments. The result is 'that about 70 or 80 per cent of those run-off-road crashes end up hitting a fixed object, mainly a tree … clearly, where there is vegetation next to a 100 kilometres per hour road, it is high risk'.[29]

4.44 Professor Johnston also emphasised the need for greater roadside safety not so much as a way of preventing crashes, but of minimising their effects:

> The most common rural road death comes from running off the road … The reasons for all those road run-offs are alcohol, speed, fatigue, driver distraction and all the rest of it. It is very difficult to control in rural areas, as other people have said, but we can manage that outcome. We have sealed the shoulders and put in rumble edge lines—and I think we should put in rumble centre lines at the same time—and we have put in small amounts of guard rail.[30]

27 AAA, Submission no. 18, p. 16.

28 AAA, Submission no. 18, p. 17.

29 *Transcript of Evidence,* p. 9.

30 *Transcript of Evidence,* p. 54.

4.45 He argued for a much greater effort to be made in improving the standards of our national highways, which, despite their low death rates per kilometre travelled, were still responsible for a considerable number of casualties in absolute terms. Australia's national highways had high geometric standards, but 'not very high roadside safety standards in terms of guarding the roadside. There is an opportunity for the federal government to lead in that respect'.[31]

4.46 In his submission, Mr Douglas Gardiner of Portsea, Victoria, brought attention to the basic need to simply maintain roads:

> While it is agreed new roads are often far safer than old roads, the percentage of roads ripped up and re-laid is very close to nil, even in a 20-year cycle (the typical life of a road). Repairs are often very rough and therefore disturbing patchwork horrors, and the materials used can be quite different to the surrounding surface. The Hume Highway displays this problem, and even with Roads to Recovery Funding inherent problems are not addressed so the subsequent failure occurs even within 12 months.[32]

4.47 The Committee agrees that the first principal of road design is the need to create a more tolerant and forgiving road environment. Road design and maintenance must be in accord with best practice principals. Critical to this is creating a roadside environment that is forgiving of error. Equally important are maintenance regimes which maintain the quality and safety of roads.

4.48 The Committee also supports a national scheme for rating the safety of roads. In its submission, the Western Australian Government urged the development of a system for rating the relative safety of roads for the information of motorists in the same manner as vehicle rating for consumer information.[33]

4.49 The AAA noted that it had 'commenced discussion with AustRoads and individual State Road Authorities on an Australian Road Assessment Program (AusRAP)':

> This program would ideally be undertaken in collaboration with government, following the EuroRAP model in Europe which is a collaborative effort between a number of motoring clubs, road

31 *Transcript of Evidence*, p. 55.

32 Mr Douglas Gardiner, Submission no. 33, p. 9.

33 Government of Western Australia, Submission no. 37, p. 14.

> authorities and others. AusRAP aims to do for roads what the Australian New Car Assessment Program (ANCAP) does for cars, that is, assess the inherent safety of roads.[34]

Road Markings and Signs

4.50 One of the measures emphasised in several submissions and in evidence before the Committee was the need to improve road marking and signs.

4.51 In evidence before the Committee, Mr Rod Hannifey, a working truck driver and road transport and road safety advocate, proposed changes to road signs to improve road safety. He suggested that the length of overtaking lanes should be indicated on signs so that people knew how long they had to overtake. He questioned the value of advisory speed signs on corners—most people ignored them because they were often not relevant to modern cars. He also proposed signposting off-camber turns (where the road surface slopes away from the angle of the turn).[35]

4.52 The Committee endorses the idea of indicating the length of overtaking lanes and signposting off-camber turns. Both are sensible road safety measures. It also supports the idea of reviewing the use of advisory speed signs, and the idea of colour coding road markings to indicate changes in speed limits. This idea may have some merit and the Committee believes that federal and state road authorities should investigate the feasibility of introducing colour coded speed markings.

4.53 In his submission, Mr Gardiner highlighted the problem of road signs being incorrectly installed:

> One of the glaring facts in road safety is the matter of dealing with glare. Reflective material has the propensity to cause glare, and one component of this is reduced dramatically by the installation of signs at the correct angle to avoid specular glare. This is a management item that appears in all roads' manuals yet in Victoria it is estimated that no better than 10% of signs are installed at the correct angle to avoid this "white out" problem. Signs have to be angled away from the approach of the on-coming vehicle—yet there is a plethora of signs (possibly as many as 80%) that are installed square to the road. Even worse are those signs whose angle to the adjoining road is inside square.[36]

34 AAA, Submission no. 18, p. 18.

35 *Transcript of Evidence*, pp. 93–5; Mr Rod Hannifey, Submission no. 40.

36 Mr Douglas Gardiner, Submission no. 33, p. 4.

4.54 Mr Gardiner also regarded the placement of signs as 'a science that requires further study … how often are signs placed either at the point of turn / departure or even after that crucial point?' He cited the off ramp signs on freeways as the most outstanding example in this category:

> Placement of such signs can only be user friendly if located approximately 150m before the departure point, and for clear observation in close proximity to the lanes is vital. Peering 300m to a sign in fog is totally counterproductive, and not much better in rain.[37]

4.55 Mr Gardiner also noted the impact of aging and lack of maintenance on line marking—'the gradual downgrading of the reflective markings as road hardware suffers from poor maintenance, age, and the complications … where headlights are improving but the reflective surface of the road markers remains unchanged'. This results in a loss of delineation, with the inevitable consequences in terms of driver concentration and fatigue.[38]

4.56 The Committee agrees that the placement and installation of road signs is an important issue, that national standards should be created and enforced to ensure that road signs are appropriately sited and installed. Road marking is also an important issue. Faded or damaged road markings are a hazard, particularly in wet conditions, demanding high levels of concentration from drivers. In recent years there have been a number of measures introduced, both inside vehicles and in the environment, aimed at reducing driver distractions. The Committee is of the opinion that, while mandatory and advisory speed signs and road condition signs are of the utmost importance, there is an obligation on State and local authorities to see that travel distance advisory signs, directional signs and street markings, are kept up to date and clearly displayed, to allow motorists to concentrate on the safety aspects of their driving. The Committee believes that this should be extended even to clear house or block numbering, so that motorists' attention is not unduly distracted. Again, minimum design and maintenance standards should be created and enforced.

37 Mr Douglas Gardiner, Submission no. 33, p. 8.

38 Mr Douglas Gardiner, Submission no. 33, p. 7.

Recommendation 8

4.57 **The Committee recommends that the Australian Government adopt the following measures to improve the safety of the road environment:**

- **With the State and Territory Governments, establish a national investment strategy for improving the safety of the road environment.**
- **With the State and Territory Governments, carry out further work on national road design, maintenance and safety standards.**
- **Increase black spot funding by 25%.**
- **Increase the Safety and Urgent Minor Works component of National Highway funding by 25%.**
- **Increase funding for low cost measures to improve the safety of the road environment.**
- **Ensure that design and maintenance standards on the national highway system conform with world's best practice.**
- **With the State and Territory Government establish a national system for rating the safety of roads.**

Heavy vehicles and other road users

4.58 The evidence presented to the Committee revealed that aside from the general issue of safety and design standards of the road environment, there were a number of issues pertaining particularly to specific road user groups.

4.59 Mr Chris Althaus, Chief Executive Officer of the Australian Trucking Association, emphasised the importance of road infrastructure improvements from the point of view of the road transport industry:

> We look at the investment in roads, we look at the contribution via taxation mechanisms and the like from the industry and it is very

> important that we see a growing investment in our road infrastructure. Right now we have a situation where there is a very important and essential component in AusLink being considered. We constantly request that this be fast-tracked and appropriately funded, not just for the development of new infrastructure but most importantly for the maintenance of existing infrastructure. We know only too well the balance that this holds between the Commonwealth and state jurisdictions. However, in the context of this inquiry and this committee's work, the safety burden and additional safety risk that comes out of decaying infrastructure is substantial and deserves a much faster response from both levels of government than we are currently seeing.[39]

4.60 In his submission to the inquiry, Mr Hannifey also highlighted the importance of maintaining and upgrading road infrastructure:

> Whilst many roads have improved, many are still below standard for the volume of traffic and the size of trucks, with many roads still with no shoulder, leaving soft edges and or deep ruts. Also little consideration is given to how road surface irregularities affect trucks. There are many savage dips and bumps that have no justification for being there, other than that no one but truckies feel and are affected by them. This not only increases wear and tear on the road, the truck and the driver's fatigue, for every action there is a reaction and this reaction is what is doing more damage to roads and bridges.[40]

4.61 As he told the Committee in evidence:

> …if a truck is driven along the road, rather than pounding into it or onto it, the truck and the driver suffer less fatigue and wear and tear and the road will also suffer less wear and tear. If those dips and bumps could be filled in, that is one less hazard and one less road maintenance issue.[41]

39 *Transcript of Evidence,* p. 99.

40 Mr Rod Hannifey, Submission no.14.

41 *Transcript of Evidence,* p. 91.

4.62 Mr Hannifey also attached a proposal to his submission for a national 1800 number for reporting potholes and other damage, which he believed 'could save road repair costs and lives through early notification of damage to roads'.[42] Problems could be reported quickly and easily from any part of Australia. He told the Committee:

> If there was one number—obviously, it could be just a recorded service at night—not only could we save lives but also we could improve road quality and save the road authorities money by having those things fixed when they are small, simple and cheap.[43]

4.63 The Committee was particularly taken by this suggestion and felt that a call centre could disseminate prompt information to state and local authorities. The Committee believes that this call centre number should be advertised on the reverse side of registration stickers and other relevant road advice brochures.

Recommendation 9

4.64 **The Committee recommends that the Australian Government ask the Australian Transport Council to establish a well advertised national call centre for reporting road damage.**

4.65 In his evidence before the Committee, Mr Rick Bedford, National President of the Ulysses Club, a motorcycle club for those over 40 years of age, stressed the need to make roads more motorcycle friendly:

> As a club we think one of the biggest issues which needs addressing is the road environment because a motorcycle only has so much tyre on the road and a bad road environment makes it so much more unsafe for a motorcyclist than for a car driver.[44]

42 Mr Rod Hannifey, Submission no.14.

43 *Transcript of Evidence,* pp. 95–6.

44 *Transcript of Evidence,* p. 69.

4.66 In its submission, the Club highlighted the benefits of the black spot program, the construction of passing lanes, the sealing of shoulders(especially on the inside of corners), and the sealing of side roads and driveways that connect to major road. It recommended that side roads should be sealed back to a distance of ten metres and driveways to a distance of five metres.

4.67 The submission also criticised the practise of crack sealing to extend the life of roads on the grounds that it created differentials in skid resistance on the same piece of road. It recommended that all roads be subject to regular road safety audits—once every two years or when changes have been implemented to the road environment.[45]

4.68 Mr Scruby alerted the Committee the perils of poor roadside design from the pedestrians point of view—'footpath obstructions, illegal and dangerous parking, construction sites, footpaths which lead nowhere, footpaths which are not maintained'.[46] Illustrating his points with examples of poor design and dangerous practices, he asked:

> When we create pedestrian crossings, where do we park? Always in from of them so no-one can see people as they step out. You can see the traffic lights there on the far side; that is where a young boy from our children's school was killed He came out from the pub. And where does Chubb stop every day? It stops right in the middle of the pedestrian zone. Where do the taxis drop off their fares? It is always in the pedestrian zone. What does the City of Sydney do with its street furniture and the millions of [advertising] dollars that come from J. C. Decaux? They place them at every set of traffic lights so that you cannot see the pedestrians emerging from behind the street furniture…
>
> Have a look at this. This is a picture of Pitt Street Sydney at Martin Place. A nib is constructed to give pedestrians and motorists better visibility of each other, so where do we put the kiosk? It is right in the middle where you cannot even park, so no-one can see each other on the busiest intersection in the city. And now we make them [the advertisements] scroll. J. C. Decaux has said that, if they scroll, 95 per cent of motorists actually watch them, so what are they watching when they are driving through the intersection? The RTA's very own policy states that street furniture should never be

45 Ulysses Club Incorporated, Submission no. 17, pp. 2–3.

46 *Transcript of Evidence*, p. 71.

> placed in a position that obstructs vision between pedestrians and motorists, but it does and everyone turns a blind eye…Pedestrians do cross against the lights, and motor vehicles do run red lights. It is a recipe for disaster.[47]

4.69 Mr Scruby also criticised governments for failing to make adequate provision for the elderly and disabled. Scooters gave the elderly greater mobility, but the pedestrian infrastructure was often not fit to use them.[48] Roll-top kerbs not only allowed cars to park on footpaths, but the vision impaired now had no way to tell when they had left or entered the roadway.[49] Pedestrian access was all too often an afterthought, with little regard for safety in view:

> We are creating an environment which is unsafe and dangerous. When council built this road only a year ago with a brand new footpath, where did they leave all the power poles? They left them right in the middle of the footpath—where else?[50]

Recommendation 10

4.70 **The Committee recommends that the Australian Government ensure that any national standards for the design, maintenance and safety of roads reflect the needs of all road users including heavy vehicles, motorcycles, bicycles and pedestrians.**

47 *Transcript of Evidence,* p. 72.
48 *Transcript of Evidence,* p. 71.
49 *Transcript of Evidence,* p. 73.
50 *Transcript of Evidence,* p. 71.

5

Driver Management

5.1 In the Committee's view, getting driver's to change their perceptions of risk and appropriate behaviour on the road is vital to creating a safer road environment.

5.2 The difficulties associated with changing attitudes, however, are illustrated by evidence received by the Committee. Drink driving remains a problem, especially in rural areas. People continue to be killed and seriously injured when not wearing seatbelts—despite years of public education and law enforcement. Speeding continues to be considered dangerous only when other people do it.

5.3 The principal measures impacting on driver behaviour are, education, training and enforcement. All have their strengths and limitations, and all have to be applied in varying degrees to different groups and situations. The National Road Safety Strategy noted that:

> Strong synergies exist between education, enforcement and information in developing safe behaviour in road users, and each is of limited effect alone. Education is needed to develop an understanding of why certain behaviour is safe and other behaviour unsafe. Education will be more effective in combination with enforcement which provides incentives for appropriate behaviour. Public information campaigns can refresh the education message and reinforce the benefit of enforcement. Information and education also maintain support for enforcement action.[1]

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1 ATC, *National Road Safety Strategy, 2001–2010*, p. 5.

Improving Road User Behaviour—the National Road Safety Strategy

5.4 Under the National Road Safety Strategy, education, driver training and licensing, and enforcement, have been identified as the key areas for improving road user behaviour. Public information initiatives are seen as the key to improving the behaviour of experienced drivers, while education and training are targeted at novice drivers. Training and testing of novice drivers will be improved by:

- increasing supervised driving practice;
- trialling and, if proven, expanding school-based learning initiatives and competency-based continuous assessment programs; and
- developing programs focusing on cognitive skills such as hazard perception and conflict prediction.

5.5 Enforcement measures identified under the Strategy 'will increase the general deterrence provided by police operations and will promote the public perception that compliance "everywhere, all the time" is the best way of avoiding penalties and improving safety'.[2]

5.6 Under the heading of Licensing and Driver Management, the *National Road Safety Action Plan 2003 and 2004* targets unlicensed driving and mobile phone use. The Plan notes:

> Licence suspension is an important deterrent penalty but many recidivist offenders continue to drive without licences.
>
> Among drivers and motorcycle riders involved in fatal crashes at least 5% of drivers and 19% of motorcycle riders do not have a valid licence.
>
> A requirement to display a licence on demand is important to deterrence of unlicensed driving; it is also important to the enforcement of special licence conditions, such as alcohol interlocks and the zero alcohol limit on novice drivers, and to achieving certainty in the application of other penalties.[3]

5.7 The *National Road Safety Action Plan 2003 and 2004* also focuses on driver impairment, including the effects of alcohol, drugs and fatigue. Regarding drink driving the Plan notes:

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2 ATC, *National Road Safety Strategy, 2001–2010,* p. 5–6.

3 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 22.

> All jurisdictions have had considerable success in reducing the contribution of alcohol to road trauma, but about 26% of driver and rider fatalities still have a blood alcohol concentration above the legal limit.

5.8 Part of the solution is continuing intensive and effective enforcement, maintaining the perception that if you drink and drive you will be caught. Drink driving is identified as a particular problem in rural areas:

> This reflects both the difficulties in applying Random Breath Testing effectively in rural areas, and the lack of alternative transport options (such as trains, buses or taxis) in many rural areas. Specially adapted programs are needed to reduce drink driving in rural areas.

5.9 Another aspect of the equation is the problem of recidivism:

> There is evidence that a substantial proportion of drink drivers—particularly recidivist offenders—have serious alcohol abuse problems, often paralleled by broader psychological problems. Alcohol interlock programs and rehabilitation programs have had some success in changing the behaviour of recidivist offenders who are resistant to mainstream deterrence and publicity programs.[4]

5.10 Drug impairment is also seen as an important issue, but the means of identifying and combating the problem are still under development.[5]

5.11 Fatigue is regarded as another major contributor to the road toll, but in the absence of effective enforcement measures, public education and road based measures (alerting drivers before they drift off the road or reducing the likelihood of severe impact) are seen as the principal means for reducing the impact of driver fatigue.[6] The Committee again draws attention to its comments on this matter in its report *Beyond the Midnight Oil: An inquiry into managing fatigue in transport*.[7]

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4 ATC, *National Road Safety Action Plan 2003 and 2004*, pp. 17–18.

5 ATC, *National Road Safety Action Plan 2003 and 2004*, p. 18.

6 ATC, *National Road Safety Action Plan 2003 and 2004*, pp. 18–19.

7 House of Representatives Standing Committee on Communications, Transport and the Arts (HORSCCTA), *Beyond the Midnight Oil: An inquiry into managing fatigue in transport*, Parliament of the Commonwealth of Australia, Canberra, October 2000.

Public Education and Awareness

5.12 The success of public awareness and publicity campaigns in educating the general public about road safety was alluded to in much of the evidence presented to the Committee. To some extent the statistics speak for themselves, with a dramatic reduction in the road toll during the past twenty years. Evidence presented in Chapter 3 indicated changes in attitude and compliance to speed limits. Perhaps the most dramatic evidence of the success of combined publicity and enforcement is the high level of compliance with car restraint laws. Around 95–97 per cent of drivers wear seatbelts.[8]

5.13 Nonetheless, the recent plateau in road fatality reductions and continuing non-compliance with road rules indicate that new approaches are needed.

5.14 In his evidence before the Committee, Mr Gary Mahon, Director of Strategic Policy for Queensland Transport, outlined the changing nature of awareness and enforcement programs. Increasingly the emphasis is shifting away from specific issues towards broader cultural change:

> We believe that promoting a culture of road safety on a national basis much more aggressively than we have been has the potential to reinforce appropriate driving practices throughout Australia. The point has been touched on today that, through human judgment and human nature, it is somewhat inevitable that crashes will occur, but many crashes occur that are not just the result of the inevitability of human nature; they are behavioural issues that do need significant treatment.[9]

5.15 There is also much more focus on targeting education and enforcement measures at at-risk groups. The focus of sanctions is increasingly towards recidivist offenders and 'changing the nature of the way we deal with second and subsequent offences—particularly within a period of 12 months—which is the area in which we believe we may be able to return better results in terms of behavioural change'.[10]

8 *Transcript of Evidence,* pp. 31, 53.

9 *Transcript of Evidence,* pp. 18–19.

10 *Transcript of Evidence,* pp. 19–20.

5.16 The Committee endorses this shift towards creating a culture of road safety, but remains concerned that one of the problems affecting the success of public awareness campaigns is that they are not nationally coordinated or sufficiently sustained. The Committee believes that the Australian Transport Council should take a leading role in providing national coordination of road safety campaigns, and in coordinating the funding of such campaigns. In this way, the best campaigns will have national prominence and be promoted on a long term basis. The Committee is also aware of the evidence of Dr Zoe Sofoulis, a senior lecturer with the Centre for Cultural Research at the University of Western Sydney on the need to engage youth through campaigns which are culturally relevant in form and content (see Chapter 7).

Recommendation 11

5.17 **The Committee recommends that the Australian Government work through the Australian Transport Council to establish a system for coordinating and funding road safety campaigns on a national basis.**

Vehicle Advertising

5.18 Another factor affecting driver attitudes to road safety is motor vehicle advertising. Evidence presented to the Committee indicated that vehicle advertising was regarded as a significant influence on driver attitudes and behaviour, that it often sent messages appearing to condone unsafe road use behaviour—particularly speeding, and that advertising guidelines were inadequate to prevent this.

5.19 Currently, motor vehicle advertising standards are determined by a voluntary code of practice developed by the Federal Chamber of Automotive Industries (FCAI). The code was agreed to by the Australian Transport Council and came into effect from November 2002. Compliance with the code is administered by the Advertising Standards Board (ASB). The ASB operates under the auspices of the Advertising Standards Bureau, a private organisation established by the advertising industry to administer advertising standards.

5.20 In its submission, the Roads and Traffic Authority of New South Wales argued the code had not been effective in controlling advertising content, a view supported by the AAA and a number of witnesses appearing before the Committee. This was due primarily to the weak nature of the code and weak enforcement by the ASB.[11]

5.21 Creative devices—motor sport, fantasy, humour and self-evident exaggeration—have been used by advertisers and the ASB to excuse virtually any content in advertisements regardless of the code.

5.22 It is the view of the New South Wales Government that the voluntary code should be replaced by a mandatory code that would incorporate tougher controls. It might also be appropriate to have advertisements assessed prior to release.[12] The AAA also proposed investigating more effective arrangements.[13]

5.23 Mr Scruby argued that 'the ASB should be disbanded unless, very soon, someone is put in there who will actually enforce their code'. He suggested replacing the chairman of the ASB with a retired judge, and urged that vehicle advertisements be vetted before being released.[14]

5.24 On the other hand, Mr Peter Sturrock, Chief Executive of the FCAI, argued that the code was effective, and that while there might be some need to further refine the process, it was fundamentally working well.[15]

5.25 The Committee notes that not all advertising agencies and vehicle manufacturers are complying with the voluntary code of practice. It believes that the ASB should work with the FCAI to implement periodic reviews of the code to ensure improved standards of compliance. The Committee believes that the images portrayed in vehicle advertisements should reflect real life driving conditions and experiences, within the framework of national regulations. Fantasy and escapist images do not justify non-compliance.

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11 RTA, Submission no. 35; AAA, Submission no. 18, pp. 22; *Transcript of Evidence,* pp. 5, 23, 29, 69; Mr Paul Rebula, Submission no. 8, p. 2.

12 RTA, Submission no. 35.

13 AAA, Submission no. 18, p. 22.

14 *Transcript of Evidence,* pp. 74–5.

15 *Transcript of Evidence,* p. 85.

Recommendation 12

5.26 **The Committee recommends that the Australian Government ask the Advertising Standards Board and the Federal Chamber of Automotive Industries to review the voluntary code of practice with a view to a more rigorous compliance.**

Driver Training

5.27 Another critical facet of road safety affecting driver attitude and performance is driver training.

5.28 In its submission, the National Motorists Association of Australia noted that young and inexperienced drivers are overrepresented in road fatalities and recommended that 'all drivers be required to satisfactorily complete a defensive driving course with an accredited training organisation before progressing beyond (red) P-plates … The level of training required should be at least equivalent to the successful training provided for motorbike riders'.[16]

5.29 A similar point was made by the Ulysses Club in its submission to the inquiry. Comparing the standards of training for motorcycle riders and car drivers, it stated:

> …motorcyclists have to undergo a rigorous training and testing program in order to get their motorcycle license. Car drivers, on the other hand, can be fully trained by their parents, friends or other members of the family. This method of testing is far below the competence level required to obtain a motorcycle license.
>
> Since the implementation of compulsory motorcycle training the fatality rate of motorcyclists, especially those in the 17 to 29 year age range has plummeted. Motorcyclists in their first year of riding are only permitted to ride machines that are under 250cc in capacity or are under a certain power to rate ratio, depending on which State one is a resident of.
>
> This system obviously works with the rider graduating to a more powerful bike if they want to, after a year at a lower power level. Car drivers, on the other hand, can go straight to a V8 or 'grey

16 National Motorists Association of Australia (NMAA), Submission no. 5.

> import' turbo and be permitted to carry as many passengers as they like, often with dire, well publicized consequences.

5.30 The submission recommended that 'a system similar to the current motorcycle system be investigated so that new drivers would be restricted to lower powered vehicles'.[17]

5.31 The Hon. Rick Colless MLC, a member of the New South Wales STAYSAFE Committee supported the idea of structured driver training under expert instructors but emphasised the need for psychological as well as technical training:

> I think that something that has to be built into that training program is giving kids the right psychological training to become good drivers, rather than just giving them the expert skills so that they go out thinking that they are good drivers when they still do not necessarily have on-road experience.[18]

5.32 This point was elaborated upon in the submission from the AAA. Research into driver training had shown that 'beyond imparting basic car control and road law knowledge skills', driver training programs for learners and pre-learners contributed little to 'post-licence reductions in casualty crashes or traffic violations'. Moreover, there was also little evidence that post licence training reduced risk:

> Such training often leads to an increase in confidence and optimism bias (i.e. where novices can believe that they are more skilful than they actually are) and sometimes an increase in crash risk for novices, particularly young males.[19]

5.33 The AAA argued instead that there was 'a need to move driver training and education beyond vehicle manoeuvring knowledge and skill, and towards a greater understanding of risks, risk reduction and self-awareness'. It cited the example of driver training programs in Europe:

> A driver development program that focuses on higher order skills has been undertaken for new drivers in Finland. This program consists of three parts: a one-to-one in car feedback component; an off-road experiential component to allow insight into personal skills and weaknesses; and a facilitated group discussion. An evaluation of this compulsory program has shown significant

17 Ulysses Club Incorporated, Submission no. 17, p. 5.

18 *Transcript of Evidence,* p. 42.

19 AAA, Submission no. 18, p. 40.

> crash reductions, particularly for young male drivers. Although there has been some criticism of the Finnish program's evaluation methodology, this program stands out as one worth monitoring and perhaps replicating in Australia as a potential risk reduction initiative for novice drivers.
>
> Another program that targets optimism bias, over-confidence and attitudinal or motivational factors that influence driving behaviour is "insight" training. The Swedish Insight Program has been subject to ongoing experimentation and any evaluation of this program is worth monitoring as it is soundly based from a theoretical perspective.

5.34 The AAA noted that in reviewing these programs it was important to see whether such approaches would work in Australia. 'This underscores the need for the trial or piloting of potentially useful programs in Australia.'[20]

5.35 The Committee concurs with the view that a more comprehensive and structured system of driver training is required, both to give drivers the skills and knowledge required to operate a vehicle safely, but also to inculcate road safe attitudes and responses. It is clear to the Committee that road safety is as much about state of mind as about technical skill. In this vein, the Committee notes the work of Dr Sarah Redshaw from the Centre for Cultural Research at the University of Western Sydney (see Chapter 7). The Committee also notes that the matter of driver training has been referred to the ATC and is currently under investigation.

5.36 The Committee believes that training models from Europe which address driver training holistically should be investigated and adopted here. The Committee also supports the idea of graduated licensing, where novice drivers are limited to lower powered vehicles until they have gained a degree of driving experience, but notes the difficulty in implementing such a requirement.

5.37 Retesting of drivers is also regarded as an important innovation. Several submissions urged the introduction of periodic retesting for all drivers, about every ten years, to ensure ongoing competency and familiarity with road laws. The NMAA also argued for more frequent testing of older drivers, including tests of medical fitness.[21]

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20 AAA, Submission no. 18, p. 41.

21 Mr Mark Cove, Submission no. 19; NMAA, Submission no. 5.

5.38 In his submission, Mr Paul Rebula suggested written tests upon license renewal. The tests would not be supervised and would be completed in the driver's own time. The purpose would be to enhance familiarity with road rules.[22]

5.39 The Committee supports the periodic retesting of drivers as a necessary means to ensure ongoing familiarity with changing road rules and competence in handling vehicles. It believes a system of periodic retesting should be standard throughout Australia. Similarly, the Committee believes that standards of driver testing must keep pace with standards of driver training, and that driver testing must accurately reflect real road conditions. There is little point testing drivers under idealised conditions at low speeds when they are required to drive proficiently at much higher speeds in real traffic conditions.[23]

Licensing

5.40 The evidence presented to the Committee raised a number of issues with regard to licensing.

5.41 In its submission, the South Australian Government urged the development of uniform training and licensing system across all States and Territories.[24] In his evidence before the Committee, Mr Allan from the South Australian Department of Transport and Urban Planning, said:

> At the moment, with the best will in the world, there are a heap of different systems in different states. While that may not be the end of the world, perhaps there are some advantages in having some consistency between jurisdictions.[25]

5.42 In its submission, the AAA urged uniform laws requiring the carriage of licences at all times. Such a requirement was an essential tool for law enforcement, especially in dealing with unlicensed drivers and recidivist offenders who had special conditions imposed upon their licenses.[26]

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22 Mr Paul Rebula, Submission no. 8, p. 2.

23 Jeff McDougall, 'Certificate IV: The Road Ahead for Driver Trainers and Licensing Authorities', in Australasian College of Road Safety, 2004 Year Book, *Road Safety Towards 2010*, pp. 17–19.

24 South Australian Government, Submission no. 32.

25 *Transcript of Evidence,* p. 33.

26 AAA, Submission no. 18, p. 21.

5.43 With regard to younger drivers, the consensus of opinion favours a system of graduated licensing. In his evidence before the Committee, Mr Allan spoke of the South Australian experience with licensing:

> We have introduced some changes to the licensing scheme for young drivers. We have made the learner's test a bit harder and put in a few hurdles for P-platers. It would be fair to say that there will be some other changes to the licensing scheme.[27]

5.44 Several submissions advocated special licenses for four wheel drives and caravans. In his submission, Mr Rebula advocated special license endorsements for four wheel drives as one means to curb their proliferation:

> This could be introduced to discourage unnecessary use, and ensure drivers understood and could competently handle 4WD vehicles in all conditions. The standard car (2WD) test would be extended to include 'off-road' driving. People who successfully completed the test would have their license endorsed accordingly and be allowed to drive a 4WD in addition to a standard car. Existing licence holders would also need this endorsement, but could wait until their licence was due for renewal.[28]

5.45 An experienced truck driver, Mr Hannifey alerted the Committee to the anomaly that any car driver could, without any special training, convert their car into an articulated vehicle simply by attaching a caravan. He suggested that at the very least caravan owners should be given a video 'with half an hour on how to load your van, how weight affects it and a tag bit on the end about sharing the road with trucks, because some people are driving vehicles the same size as a semitrailer and there are no licensing requirements for that'.[29]

5.46 The same point was made by Mr Gardiner in his submission to the inquiry,[30] and the point is taken by the Committee that it is anomalous to require truck drivers to possess special licenses if other large articulated vehicles—cars with caravans—do not require them.

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27 *Transcript of Evidence*, p. 32.

28 Mr Paul Rebula, Submission no. 8, p. 2.

29 *Transcript of Evidence*, p. 93; Mr Rod Hannifey, Submission no. 14.

30 Mr Douglas Gardiner, Submission no. 33, p. 2.

5.47 The Committee supports a national uniform licensing system. It also endorses graduated licensing as a way of ensuring that drivers gain experience of vehicle use and road conditions before attaining the privileges of a full licence. It also advocates special licences for different vehicles, such as four wheel drives and caravans. Driving conditions in these vehicles are sufficiently different from those in standard cars to warrant such an approach.

Enforcement

5.48 The Committee believes law enforcement is the reverse side of the coin to education and driver training, and an essential element of the road safety matrix. Education and enforcement go hand in hand in creating a safer road environment.

5.49 In its submission, the Government of Western Australia stated:

> Effective enforcement is an essential factor along with coordinated education in encouraging and maintaining safer road use behaviour. An investigation of Crash Outcomes in Western Australia in 2001 … showed that the increasing level and effectiveness of enforcement in the following areas was likely to be associated with improvements in safety:
>
> - RBT activity focusing on testing as many drivers as possible;
> - Speed camera activity focusing on detecting as many speeders as possible;
> - General speed enforcement focusing on detecting speeders; and
> - Red light camera operations.[31]

5.50 The Committee received evidence, however, that road law enforcement was both inconsistent in response to unlawful behaviour and, as yet, unable to address the problem of recidivism.

5.51 In its submission, the Australian Trucking Association argued that there 'is a chronic shortage of enforcement resources, especially in regional areas of Australia'.[32] This is something the Committee believes should be addressed.

31 Government of Western Australia, Submission no. 37, p. 12.

32 Australian Trucking Association, Submission no. 26, p. 4.

5.52 In his evidence before the Committee, Mr Scruby spoke forcefully of the anomalies in the current system of penalties:

> If you stop in the middle of George Street in a bus lane it is $220, three demerit points and $130 tow away, so put it up on the footpath and it is $68 and you can stay there all day. Incidentally, for a bit of fun, the parking in most inner-city car parks in the CBD is $68 a day, so where will you park? And why not just deliver the Coca-Cola at the bus stop? People say, 'Where else is he going to park?' Where else are the pedestrians going to get on and off the bus? The penalty is still $90 and there are no demerit points.[33]

5.53 He believed the most effective and equitable penalty for road traffic infringements was the demerit points system:

> Demerit points are the most important tool in road safety. They are a socially equitable tool. They show whether or not a person is a bad driver. It is not about dollars. The rich can afford dollars.[34]

5.54 In his evidence before the Committee, Mr Cameron spoke of the success of the use of double demerit points in Western Australia:

> The double demerits initiative was introduced in Western Australia in 2002. It has certainly worked to enhance our enforcement and has enjoyed very strong community support. We have extended a trial to June 2004 to determine if there will be any wear-out effect. The pleasing thing when we analysed a wide range of data was that the different data sources showed that drivers reported driving more safely at those times. They told us they were going to drive safely, and they did drive more safely. Police increased the amount of enforcement activity, yet their infringement rate per enforcement hour was down. Our total reported crashes, including serious and fatal, were also down in comparison to reported crashes in the similar periods the year before. So it is being continued on a trial basis. It only focuses on speeding offences, restraints and alcohol offences where you incur demerit points.[35]

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33 *Transcript of Evidence,* p. 71.

34 *Transcript of Evidence,* p. 73.

35 *Transcript of Evidence,* pp. 15–16.

5.55 Mr Scruby, however, argued for even stricter enforcement measures for dangerous behaviour and recidivism. Drink drivers should suffer an automatic loss of licence, while unlicensed drivers should have their vehicles confiscated. He told the Committee:

> Unlicensed drivers are estimated to be as high as 12 per cent. We must consider the New Zealand system of confiscation of vehicles. There has been a 40 per cent reduction in New Zealand in unlicensed driving. There is no other way to get the recalcitrant driver off the road than to take his or her vehicle.[36]

5.56 The Committee supports the system of demerit points for unlawful behaviour, and believes such penalties should be adopted uniformly across Australia. The logical conclusion of such a system, however, is that serious or repeated infringement will result in loss of licence.

5.57 The Committee believes that the holding of a licence should be conditional on demonstrating a capacity and willingness to abide by road laws, and that loss of licence should follow automatically upon repeated or serious failure to abide by those laws. It logically follows, therefore, that those persons who continue to drive unlicensed should receive punishment appropriate to what constitutes an absolute contempt for lawful authority, their own safety and the safety of others.

Recommendation 13

5.58 **The Committee recommends that the Australian Government, through the Australian Transport Council, urge the development of a uniform licensing system across Australia, to incorporate:**

- **graduated licences for novice drivers;**
- **special licenses for four wheel drive vehicles and caravans;**
- **the use of demerit points to address all major traffic infringements; and**
- **the suspension or loss of licences to address serious or repeated infringements.**

36 *Transcript of Evidence*, p. 74.

Driver impairment and distraction

Managing Fatigue

5.59 The Committee's interest in the question of fatigue is one of long standing. In October 2000, the House of Representatives Standing Committee on Communications, Transport and the Arts tabled its report, *Beyond the Midnight Oil: An inquiry into managing fatigue in transport*. While examining the problem of operator fatigue across the spectrum of transport industries, this landmark report found that 'in terms of cost and human impact the road transport sector constituted the major area for fatigue'.[37]

5.60 This report made a number of recommendations that have been addressed at a policy level by the Third Heavy Vehicle Reform Package, including the NRTC Fatigue Reform and Compliance and Enforcement Reform. Despite this, the evidence presented to the Committee reveals that fatigue in the road transport industry remains a live issue, and that much more work needs to be done.

5.61 The problem of fatigue in the road transport sector is very much a matter of management and regulation, the details of which are looked at more closely in Chapter 7. The broader issue of driver fatigue is a much more intractable problem.

5.62 Driver fatigue is a major cause of road accidents, but effective remedies are hard to find.[38] Most of the evidence received by the Committee pointed to the need to alert the public to the dangers of fatigue, and to provide more rest stops, especially for trucks.

5.63 The Committee is of the view that at this stage the best course for fatigue management is to raise public awareness while promoting road environment measures proven to prevent or reduce the impact of run-off-road accidents (see Chapter 4).

37 House of Representatives Standing Committee on Communications, Transport and the Arts (HORSCCTA), *Beyond the Midnight Oil: An inquiry into managing fatigue in transport*, Parliament of the Commonwealth of Australia, Canberra, October 2000, p. viii.

38 *Transcript of Evidence*, p. 4.

Drugs and Alcohol

5.64 Drugs and alcohol remain a significant factor in the road toll. In its submission, the Queensland Government reported that in 2002 alcohol contributed to 30 per cent of fatality crashes and 19 per cent of serious injury crashes in Queensland. It is estimated that in 2001 approximately 40 per cent of people killed in fatal crashes had drugs present in their system.[39]

5.65 In its submission, the Western Australian Government noted that about 25 per cent of drivers killed had a blood alcohol concentration (BAC) above .05 per cent.[40]

5.66 Queensland research has shown that:

- one in ten motorists admit driving under the influence of alcohol;
- most did so because they were under the .05 BAC;
- one in seven motorists admitted to driving when drunk when they did not have far to travel;
- 15 per cent of motorists admitted driving under the influence of recreational drugs; and
- 13 per cent of motorists said they would continue driving even if their doctor advised them that their medication would affect driving.[41]

5.67 Drugs and alcohol remain a problem in Victoria. During 2002, there was a substantial increase in the number of fatalities linked to drink driving, particularly in rural areas. There has also been a substantial increase in drug impaired driving. Mr Howard of VicRoads stated that in 2002 'some 27 per cent of driver fatalities had a trace, to some degree, of an illegal psychotropic drug in their bloodstream. That is a fairly sobering statistic'.

5.68 The increased fatality rate was met by an increased enforcement effort and tougher penalties, including the introduction of alcohol interlocks for repeat drink-drivers and high-level first offenders. There are now some forty of these in place. Legislation has also been passed providing for the random testing of drivers for use of cannabis and methamphetamine. It is

39 Government of Queensland, Submission no. 31, p. 9.

40 Government of Western Australia, Submission no. 37, p. 10.

41 Government of Queensland, Submission no. 31, p. 9.

expected that all these measures will have some impact upon the road toll.[42]

5.69 In its submission, the AAA argued that alcohol abuse be treated as a public health issue, not simply as a road safety problem, and that the most effective remedies were prevention, treatment and rehabilitation of the underlying problem.[43]

5.70 With this view, the Committee is in full accord. However, there is also a need to focus on more immediate remedies. The Committee supports tougher penalties for motorists found driving under the influence of drugs or alcohol, including immediate loss of licence for serious or repeat offenders, and the use of alcohol ignition interlocks for all repeat alcohol offenders.

5.71 The Committee also supports the Victorian approach to drugs outlined in 5.69. This is a critical area of reform. Committee believes that such programs should be coordinated on a national level to maximise their impact.

Recommendation 14

5.72 **The Committee recommends that the Australian Government request the Australian Transport Council establish a task force to coordinate the implementation of drug and alcohol road safety strategies, with a view to introducing:**

- **uniform penalties for drug and alcohol infringements;**
- **tougher penalties for alcohol related infringements; and**
- **a national approach to detecting and dealing with motorists driving under the influence of drugs.**

42 *Transcript of Evidence,* p. 8; Powerpoint presentation by Mr Howard, VicRoads, Exhibit no. 4.

43 AAA, Submission no. 18, p. 21.

Audio-visual entertainment devices

5.73 The committee is concerned at the growing use of distracting entertainment devices by drivers. It considers that video/DVD players should not be visible to drivers while they are driving. The committee has some similar concerns about drivers who become distracted when changing CDs or cassettes but recognises that the use of these devices is more difficult to control without unduly infringing drivers' personal freedom.

Recommendation 15

5.74 **The committee recommends that the Australian Transport Safety Bureau review the potential for video devices to cause driver distraction and propose measures to minimise the impact of such devices on driver concentration.**

6

Vehicle Safety

6.1 The Committee believes that vehicle safety measures have great potential to make a significant reduction in the road toll, a contribution that as yet has only been partly realised. The Committee's central concern is that although many of these measures have been identified, and are often already available, progress in bringing them on-line has been too slow. More needs to be done to accelerate the uptake of new vehicle safety technology.

Vehicle Safety—the National Road Safety Strategy

6.2 Vehicle safety measures—improvements in vehicle compatibility and occupant protection, and new technology to reduce human error—are expected to generate 12 per cent of the 40 per cent reduction in fatalities over the life of the National Road Safety Strategy.[1]

6.3 Most of this 12 per cent reduction in fatalities (ten per cent overall) represents the flow on effect of vehicle occupant safety improvements already implemented or scheduled to be implemented, while only a fraction (some two per cent overall) represents the impact of intelligent transport systems (ITS). ITS will, however, have a much more substantial impact in the longer term.[2]

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1 ATC, *National Road Safety Strategy, 2001–2010,* p. 19.

2 *Transcript of Evidence,* p. 3.

6.4 The vehicle safety action areas identified in the *National Road Safety Action Plan 2001 and 2002* include:

- Developing design standards for vehicle compatibility, including
  - ⇒ introducing ADRs for rear and side underrun protection on heavy vehicles
  - ⇒ developing ADRs for passenger vehicle compatibility;
- Improving occupant protection through regulation and consumer demand, including
  - ⇒ continuing existing ADR programs
  - ⇒ promoting crashworthiness rating of vehicles under the Australian New Car Assessment Program (ANCAP), the Buyer's Guide to Used Car Safety Ratings and other sources
  - ⇒ developing public information programs to encourage increased consumer awareness of vehicle safety features;
- Monitoring and encouraging adoption of emerging Intelligent Transport Systems (ITS), including
  - ⇒ in-vehicle systems that automatically notify emergency services of the location of a serious crash and, if practicable, details of the crash and number of occupants
  - ⇒ systems that monitor drivers for symptoms preliminary to sleep and respond with warning alarms
  - ⇒ systems that maintain safe following distances between vehicles
  - ⇒ systems that prevent drivers exceeding the speed limit
  - ⇒ systems that intervene to enhance vehicle stability during cornering, braking and acceleration.[3]

6.5 Action areas identified under the *National Road Safety Action Plan 2003 and 2004* include:

- Introducing an ADR for intrusive audible seat belt warning devices;
- Encouraging purchase of safer vehicles by promoting ANCAP and used vehicle safety ratings;
- Mandating display of safety ratings at point of sale;

3 ATC, *National Road Safety Action Plan 2001 and 2002.*

- Researching the implications of increasing levels of vehicle incompatibility and potential countermeasures;
- Measures under the National Heavy Vehicle Safety Strategy (see Chapter 7);
- Introducing an ADR for underrun protection for heavy vehicles; and
- Encouraging the uptake of Intelligent Speed Adaptation.[4]

Vehicle Safety Technology

6.6 The range of vehicle safety technology now becoming available is impressive. In his submission to the inquiry, Mr Ian Faulks, Committee Manager for the New South Wales STAYSAFE Committee, identified a number of systems that could potentially be used to control vehicle speed. These include:

- Intelligent Speed Adaptation (ISA)—where the system acquires information about local speed limits and encourages driver compliance;
- Top speed limiting, where the vehicle is unable to exceed realistic top speeds for extended periods;
- Cruise control and top-speed limited cruise control;
- Speed alarms that are set by the driver;
- On-board monitoring of vehicle speeds during entire journeys;
- On-board monitoring of vehicle speed just prior to an incident such as a severe accident; and
- Speedometer scales and ergonomics.[5]

6.7 In its submission, the South Australian Government also identified a range of systems that 'have the potential to significantly reduce and in some cases virtually eliminate a number of behavioural issues that significantly contribute to the size and severity of the road toll'. These include:

- Alcohol interlock;
- Seat belt warning or interlock;

4 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 21.

5 Mr Ian Faulks, Submission no. 38.

- Speed warning devices;
- Intelligent speed adaptation systems;
- Fatigue warning and vehicle shut-down devices;
- Crash avoidance systems;
- Tailgating warning or control systems;
- Vehicle tracking devices;
- Route navigation units; and
- Smart cards combining licences, vehicle access and vehicle operation.

6.8 The Ford Motor Company is currently involved in a collaborative research project known as the 'Intelligent SafeCar' project with the Victorian Transport Accident Research Commission and the Monash University Accident Research Centre which has incorporated a number of the features listed above. The object of the project is to identify ITS technologies that promote road safety either by reducing the risk of accidents or reducing road trauma. The technologies being tested include:

- Intelligent Speed Adaptation
- Forward Collision Warning System
- Breath Alcohol Detection and Advisory System
- Seat belt reminder System
- Reverse Collision Warning System[6]

6.9 Intelligent Speed Adaptation is designed to warns drivers when they are travelling over the speed limit:

> The system comprises a global positioning system (GPS) and a digital map of the road system that also contains a digital record of the speed limits applicable to various parts of the road system. A computer program analyses from the GPS data where the vehicle is being driven and compares the speed limit for that location with digitized speedometer input. It uses visual and auditory aids (flashing lights and a buzzer) to help the driver travel within the legal speed limit.

6 Ford Motor Company of Australia Limited, Submission no. 11, pp. 1–3.

> One variant of this system is to provide resistance through the accelerator pedal once the driver travels above the speed limit for a set period of time. A 'kick down' override facility is available if necessary.[7]

6.10 The Forward Collision Warning System warns drivers if they are approaching too close to the vehicle in front or about to collide with stationary or moving objects to their front:

> The system uses transmitted and received radar signals to determine the distance and relative speed between the host vehicle and objects in front. It provides alerts in the form of visual and audible warnings indicating the relative distance to the object or vehicle in front and a crash warning if the driver is in immediate danger of collision.[8]

6.11 The Breath Alcohol Detection and Advisory System automatically detects the presence of alcohol in the air inside the vehicle cabin and issues a message to the driver to blow into a mouthpiece to test their breath alcohol concentration. If above the specified limit, the driver is advised to stop the vehicle. In fleet vehicles an electronic message can be sent to the fleet manager if the driver fails to stop.[9]

6.12 The Seat Belt Reminder System reminds drivers to fasten their seatbelts:

> If any person (driver or passenger) sits in the vehicle and does not fasten his / her seat belt, a visual "unbuckled" icon illuminates until the vehicle speed reaches 15 km / hour. Between 15 and 24 km / hr, the "unbuckled" icon flashes and a single audio chime is heard. Between 25 and 49 km / hr, the chime sounds repeatedly at the same rate that the visual icon flashes. When the vehicle travels at 50 km / hr or higher, the audio chime and the "unbuckled" icon sound / flash even faster.[10]

6.13 The Reverse Collision Warning System warns the driver if they are likely to collide with an object behind the vehicle by activating audible alerts. These warnings increase in intensity at and below a rear object distance of one metre.[11]

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7 Ford Motor Company of Australia Limited, Submission no. 11, p. 2.
8 Ford Motor Company of Australia Limited, Submission no. 11, p. 2.
9 Ford Motor Company of Australia Limited, Submission no. 11, pp. 2–3.
10 Ford Motor Company of Australia Limited, Submission no. 11, p. 3.
11 Ford Motor Company of Australia Limited, Submission no. 11, p. 3.

6.14 In addition to the measures being tested, Ford also identified a range of features on the new BA Falcon designed to improve occupant safety. Known as Intelligent Safety Systems (ISS), they include:

- Two-stage passenger and driver airbags to control inflation pressure according to the circumstances of a crash;
- An additional 'crash sensitivity' sensor to enable earlier detection of a wider array of crash events;
- Driver's seat position sensor to enable airbag inflation to be adjusted according to the proximity of the driver to the airbag; and
- Seat buckle latch detection to determine if the seat belt is worn at he time of the crash.[12].

Implementing New Technology

6.15 While the list of the new technology available makes impressive reading, implementing it is another matter. The Committee is aware of the range of pressures impacting on the introduction of new technologies as standard equipment, the commercial imperatives on the one hand and the cost in lives lost on the other hand.

6.16 In its submission to the inquiry the South Australian Government outlined what it saw as the problem:

> None of these systems are awaiting discovery or the development of enabling technology. The Systems exist and they are beyond prototype stage. Some of the systems exist as marketable products. Some are becoming installed by some vehicle manufacturers in luxury-end models of their vehicle ranges.
>
> Understandably, there are commercial interests and certain confidentialities involved with some of the devices. The progressive introduction of the devices into new vehicles is associated with a degree with the cost of implementation and competition between manufacturers in a healthy industry.[13]

12 Ford Motor Company of Australia Limited, Submission no. 11, pp. 3–4.

13 Government of South Australia, Submission no. 32.

6.17 As a result, 'Australia is missing an opportunity to speed up the introduction of many of these devices to all new vehicles manufactured and sold in Australia', and the nation missing an opportunity to use the latest technology to reduce the road toll. The South Australian Government has proposed two solutions. Firstly, speed up the introduction of new technology through Australian Design Rules. Secondly, through direct government collaboration with vehicle manufacturers in Australia and overseas:

> Australian manufacturers are part of the Australian community and there appears to be an opportunity to foster the voluntary increase in the speed with which ITS equipment is installed in all new vehicles sold in Australia. The provision of some incentives may be possible based on the likely benefit resulting from the uptake of the ITS devices.[14]

6.18 Another problem, identified by Mr Peter Sturrock, Chief Executive of the Federal Chamber of Automotive Industries, in his evidence before the Committee, was the need for the international harmonisation of standards:

> The Australian design rules for motor vehicle safety and emission are currently about 70 per cent harmonised with the United Nations regulations. It is not unreasonable to aim for 100 per cent harmonisation in the near future. It is a situation well recognised by legislators and there is agreement to work towards a solution to reduce road trauma. But with the announcement of the post 2005 car industry plan, there is now a sense of greater need to ensure that our design regulations comply with global standards within a time span which facilitates new model development. Decisions taken now will have a significant effect on cars to be built post 2010.[15]

6.19 When questioned as to whether international standardisation would occur at the expense of the Australian public, however, Mr Sturrock assured the Committee that it would not:

> No, not at all. We have very clear and well defined standards. We have seen the benefit of that in new models and new technology over recent years. That will continue, without any question. The investment by brands throughout the world in their new technologies is quite outstanding. We bring those to the open

14 Government of South Australia, Submission no. 32.

15 *Transcript of Evidence*, p. 3.

> market of Australia quite swiftly. We will continue to benefit from international developments within the industry.[16]

Australian Design Rules

6.20 Despite the assurances of Mr Sturrock, the Committee received a considerable amount of evidence to the effect that Australia was not making as much progress as it could in terms of taking up new safety technology, and that one of the major hurdles was the Australian Design Rules.

6.21 In his evidence before the Committee at the one day forum, Professor Johnston said:

> Several people have alluded to the design rule system. The design rule system is global lowest common denominator. It just takes forever to get any kind of design change. I would contend that the design rules are almost irrelevant. The manufacturers try to build to what comes through the ANCAP programs, so it really is about safety at a consumer level.
>
> The innovation stuff … is lagging well behind, so the design rule is certainly not innovating, and the whole process takes way too long. For example, on ADR69, which relates to full frontal impact, vehicles such as the Hyundai Excel, which is very small and does not have front airbags, passes ADR69 but in a real life crash performs appallingly. ADR73, which relates to offset frontal impact, only covers conventional passenger vehicles; it does not address four-wheel drives or forward control passenger vans at all, and four-wheel drives are the fastest growing category. I am not being critical of the federal government; what I am saying is that the globalisation of the car industry has meant that the actual design rule process has gone to the lowest common denominator.[17]

16 *Transcript of Evidence,* p. 85.

17 *Transcript of Evidence,* p. 53.

6.22 In its submission, the AAA highlighted 'de-specification'—the removal from Australian vehicles of safety features standard elsewhere—as an important consequence of the shortcomings of ADRs. It cited the example of airbags—sold as standard safety features on particular models in the United Kingdom, but not available on the same models here. The Submission continued:

> The extent of vehicle 'de-specification' in Australia is not limited to the cars or safety features shown in this cursory examination. The problem is widespread, and given the proven benefits of features such as airbags, this situation is far from satisfactory. Furthermore, if this case exists for the easily observed safety features, it raises the question of the extent of the problem with less easily observed features such as structural design, which also have a significant effect on vehicle crash worthiness.[18]

6.23 In his submission, Dr Peter Hart, a consulting engineer, listed a range of specific problems with the ADR system:

- Design rule development has stalled, 'because firstly the Vehicle Safety Services section of DOTARS is stretched thin and secondly because of the inertia involved in having new proposals agreed to by all the various governments and interests'.
- Vehicles may be modified before they are registered, but *after* they are covered by a compliance plate. 'There is confusion by some manufacturers about what modifications are acceptable and about when the jurisdictions take over administration of vehicle standards.'
- There is no recognition of vehicle engineers' status across jurisdictions. 'Work that is approved in one state may be unacceptable in another state.'
- There is no national accreditation for secondary manufacturers who modify commercial vehicles, and the status of these vehicles is somewhat uncertain. Secondary manufacturers have no workable arrangements to have their work approved in other jurisdictions.
- The ADRs do not set standards for replacement parts.
- Specialist vehicles are treated differently in different places. 'Heavy haulage trailers for example may be registered in a state where the guidelines are easier and used in another state.'

18 AAA, Submission no. 18, p. 19.

- European Union compliance certificates are unacceptable to DOTARS, even though 'virtually all of the EU rules are based verbatim on the appropriate UNECE [United Nations Economic Commission for Europe] rules', which are accepted by DOTARS. 'Some manufacturers spend a lot of time and energy getting around this road block.'[19]

6.24 In evidence before the Committee Mr McIntosh of the AAA noted that "the ADR's were very effective when they were first introduced" however "regulations, like all regulations, tend to become more laborious because more people are involved. Every one has to be consulted, everybody wants to have their say and nothing much happens."[20]

6.25 In addressing criticism of the ADR process Mr Peter Robertson of DOTARS stated that:

> The Australian design rules are actually the standard set under the act. I need to point out that they are in a state of progressive review. We have been doing this for the past five years and we still have some way to go. We have a policy intention to harmonise with regulations developed by the United Nations Economic Commission for Europe. I just need to make a point here early. These are international regulations; they are not European regulations. When we talk about harmonisation, we are not harmonising with Europe; we are harmonising internationally. They are quite complex. The ADRs cover issues such as lighting, emissions, braking, anti-theft, occupant protection, structures and a whole range of miscellaneous items. As Mr McIntosh alluded to, yes, they are becoming very complex indeed. The lighting regulations alone are about 640 pages of small print and not the world's best sellers.
>
> An important point on jurisdictional responsibilities is that the Australian design rules and the Motor Vehicles Standards Act cover vehicles up to the point of first supply to the market. After that, it is a state regulation issue, or what we refer to as in-service regulation. With regard to the terms of reference you are addressing, one comment is that it takes eight or nine years to get an ADR up. That is incorrect, as I will explain, in terms of process. But certainly given the age of the vehicle fleet, when an ADR is introduced, for the effect to filter through the system, certainly if

19 Dr Peter Hart, Submission no. 29, pp. 2–3.

20 *Transcript of Evidence* (11/02/2004), p. 11

> you have a 10-year average age vehicle fleet, you are looking at timeframes to get saturation of the market in that order."[21]

6.26 Mr Robertson also made the point that ADR's are not prescriptive. They are performance based and a manufacturer may put in place any design or technical change to meet current regulations.

> Very quickly I will go back to performance based standards, which is a requirement of both the COAG principles and the agreement on technical barriers to trade. I raise it because I have had a lot of comments about it, such as, for example, why don't we just mandate side airbags on all cars. The simple answer is that that, like many of the other regulations, such as braking lighting, are performance based regulations. The object of the regulation, which is an international regulation, is to provide protection to the occupant as tested using instrumented dummies. The manufacturer can put whatever they want in the car to achieve that objective so that it is not design restrictive. It can include airbags and other technology that you might have."[22]

6.27 The Committee takes the point that there is some misunderstanding as to the complexity of the regulatory environment in which the Australian Design Rules are implemented. The Committee also notes that DOTARS is only able to work within the national and international regulatory environment in which it finds itself. However the Committee feels more could be done to increase the influence of ADRs on vehicle safety in Australia.

6.28 The Committee notes comments from Mr Robertson that ADRs "are in a state of progressive review"[23] but it would appear to the Committee that there is a need for a more detailed and focussed review of the ADR system. This should be done with a view to making it more responsive and more comprehensive. It is imperative that Australian consumers have access to the safest vehicles possible and reliable information on vehicle safety. ADRs should provide the benchmark in terms of what is technically feasible and vehicles should be assessed by their level of compliance with those standards. Manufacturers and importers should be given time to

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21 *Transcript of Evidence* (11/02/2004), p. 18

22 *Transcript of Evidence* (11/02/2004), p. 20

23 *Transcript of Evidence* (11/02/2004), p.18

comply with those standards, after which non-complying vehicles should be banned from sale.

Recommendation 16

6.29 **The Committee recommends that the Australian Government undertake a comprehensive review of the Australian Design Rules to:**

- **ensure that ADRs are more responsive to the rapid uptake of new vehicle safety technology; and**
- **ensure that ADRs cover components and replacement parts.**

Recommendation 17

6.30 **The Committee recommends that the Australian Government ask the Australian Transport Council to devise national standards for:**

- **vehicle modification;**
- **registration of specialised vehicles; and**
- **accreditation of secondary manufacturers.**

ANCAP

6.31 In contrast to problems with the ADRs, the importance of the Australian New Car Assessment Program in accelerating the uptake of new safety technology was highlighted in evidence taken at the one day forum and several submissions received by the Committee.

6.32 ANCAP is a consortium of government and private interests involved in the testing of new car safety standards against a range of criteria. It operates alongside similar NCAP programs elsewhere in the world. Currently, ANCAP stakeholders include:

- all state governments;
- the New Zealand Government;

- all Australian automobile clubs and the New Zealand automobile club; and
- the FIA Foundation (a road safety foundation established by the international association of automobile clubs).

6.33 Its role in promoting vehicle safety has been acknowledged under both National Road Safety Action Plans and by a range of state road authorities. Mr Howard of VicRoads described ANCAP as 'a very important program' which had changed car makers' approaches to safety. He urged the Australian Government to get involved.[24] In its submission the RTA argued that 'ANCAP is a far more effective tool to drive improved road safety outcomes by influencing consumers than the complex and lengthy ADR process'.[25] Likewise, in its submission, the Queensland Government noted:

> The national strategy acknowledges that there is little potential for new Australian Design Rules (ADRs) to impact upon the outcomes up until 2010. This places more emphasis on consumer advocacy, such as provided by ANCAP, to promote vehicle design that can improve occupant and vulnerable road user safety in the interim. ANCAP has had good success in improving the occupant protection levels afforded by new vehicles above regulatory standards. ANCAP has also accelerated the uptake of advanced safety features such as frontal and side airbags and more recently seat belt reminder alarms.[26]

6.34 The Queensland Government urged that ANCAP be sufficiently funded to continue its work of improving vehicle safety ahead of regulatory change.[27] In its submission, the AAA urged the Australian Government to commit 'to becoming a financial partner of ANCAP, contributing at least $500,000 annually';[28] while the RTA thought it anomalous that 'the European governments recognise the benefits of NCAP and the Australian Federal Government does not'.[29] In its submission, ANCAP itself requested Australian Government contributions to the tune of $500 000, citing the cost benefit:

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24 *Transcript of Evidence,* p. 10.

25 RTA, Submission no. 35.

26 Government of Queensland, Submission no. 31, p. 9.

27 Government of Queensland, Submission no. 31, p. 12.

28 AAA, Submission no. 18, p. 20.

29 RTA, Submission no. 35.

> The lack of the federal government's participation must be considered in terms of the overall cost of ANCAP and the benefits delivered so far … the yearly ANCAP budget is approximately $1.5 million, which equates to less than $2 per passenger vehicle sold in Australia. The government currently receives $7.50 per car sold in Australia through sale of compliance plates, for expected total revenue in excess o $6.5 million this calendar year [2003].[30]

6.35 The ANCAP submission continued:

> To continue to deliver improvements in vehicle safety standards and design, the ANCAP testing program needs to not only continue but also to expand into new areas such as evaluating and reporting on the benefits of active safety systems and different crash configurations. ANCAP requires additional stakeholders with a commitment to safety such as the Australian government to continue to achieve its aims of promoting improvements in vehicle safety.[31]

6.36 The Committee believes the contribution of ANCAP to vehicle safety is vital. ANCAP has been and will continue to be at the forefront of improvements to safety standards. It is beholden upon the Australian Government to be a part of this process, and to make a commensurate financial contribution. The Committee believes that given what is at stake, $500 000 per annum is a reasonable figure.

Recommendation 18

6.37 **The Committee recommends that the Australian Government join the Australian New Car Assessment Program, and contributes $500 000 per annum to its work.**

30 ANCAP, Submission no. 20, p. 3.

31 ANCAP, Submission no. 20, pp. 3–4.

6.38 The Committee was also impressed with another suggestion presented in evidence. In their submissions, both the Queensland Government and the AAA proposed using the buying power of government vehicle fleets.[32] The AAA noted:

> Governments can play a significant role in improving occupant protection, without necessarily needing to regulate. Each year, Government fleet purchases count for around 11% of new vehicle sales…
>
> The Government should reduce the extent of 'de-specification' and improve the safety of cars generally, by exercising its significant buying power to require higher safety standards in fleet purchases.[33]

6.39 The point of both submissions was that government fleets should include only vehicles with state of the art safety features. This proposal was also advocated by Professor Johnston in his evidence before the Committee.[34]

Recommendation 19

6.40 **The Committee recommends that the Australian Government only purchase vehicles with state of the art safety features for government car fleets, and recommend similar action to the States and Territories.**

Specific Issues

6.41 During the course of the inquiry, the Committee was made aware of a number of specific vehicle safety issues which require urgent attention. These include the introduction of ADRs for alcohol interlocks, seat belt warning systems/interlocks, daytime running lights and issues surrounding vehicle incompatibility. Professor Johnston also raised the question of modifying speedometers.

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32 Government of Queensland, Submission no. 31, p. 12; AAA, Submission no. 18, pp. 20, 42.

33 AAA, Submission no. 18, p. 20.

34 *Transcript of Evidence*, p. 53.

Alcohol Interlocks

6.42 Alcohol interlocks are widely seen as part of the solution to the problem of drink driving. In his evidence before the Committee, Mr Howard of VicRoads explained that 'interlocks are now required for repeat drink-drivers and high-level first offenders', and stated the Victorian Government's belief that this technology 'offers tremendous protection'.[35]

6.43 Dr Job, from the NSW RTA, told the Committee that 'we see interlocks as a valuable measure for circumventing a great many problems and a piece of technology which allows better ways to address the problem than current enforcement'.[36] The Minister for Transport in New South Wales has referred the question of mandatory alcohol interlocks to the ATC for investigation.[37]

6.44 The AAA has also been a strong supporter of alcohol interlocks for many years, 'because we believe that if used correctly, alcohol interlocks will be an effective tool in preventing recidivist drink drivers from injuring or endangering the lives of themselves and others'.[38]

6.45 The Committee is of the view that alcohol interlocks are going to prove a useful tool for law enforcement. But beyond that, they also have great scope for addressing the broader problem of drink driving by preventing any person driving while drunk. It is the Committee's belief that interlocks should be a standard fitting on all new vehicles and that an ADR should be introduced to provide for that.

Recommendation 20

6.46 **The Committee recommends that the Australian Government introduce an ADR for the mandatory fitting of alcohol interlocks on all new vehicles.**

35 *Transcript of Evidence*, p. 8.

36 *Transcript of Evidence*, p. 24.

37 RTA, Submission no. 35.

38 AAA, Submission no. 18, p. 21.

Seat Belts

6.47 During the course of the public forum the Committee heard evidence on the efficacy of seat belt reminder systems. The general consensus was that systems designed to make people wear seatbelts needed to be sufficiently aggressive to deal with dedicated non-wearers. In his evidence before the Committee, Professor Johnston warned that 'we are not going to make that last three per cent wear their seatbelts by any other means than, for example, an interlock system in a vehicle'.[39] Similarly, in its submission the Western Australian Government called for the 'support of other jurisdictions and the Federal Government in mandating seat belt interlocks or at least more aggressive seat belt reminder systems'.[40]

6.48 On the question of whether seatbelt reminders should come under the Australian Design Rules, however, there was some conflict. Mr Peter Robertson, Assistant Secretary, Vehicle Safety Standards, in DOTARS, questioned the need for regulation given the high level of market penetration of reminder systems.[41]

6.49 On the other hand, despite the high level of seat belt compliance—some 95–97%[42]—failure to wear a seatbelt is a contributing factor in a disproportionate number of fatalities. In his evidence before the Committee, Mr Allan, of the South Australian Department of Transport and Urban Planning, noted:

> What staggers me—and I am sure it staggers just about every road safety person—is that … 36 per cent of vehicle occupants killed on rural roads in South Australia were not wearing a seatbelt. That absolutely staggers me. The same rule applies and the same trend applies in South Australia that about 95 per cent of people are wearing seatbelts, but it clearly shows the risk you face if you do not have one on.[43]

39 *Transcript of Evidence,* p. 55.

40 Government of Western Australia, Submission no. 37, p. 11.

41 *Transcript of Evidence,* pp. 47–8.

42 *Transcript of Evidence,* pp. 31, 53.

43 *Transcript of Evidence,* p. 31.

6.50 Similar results were reported in Western Australia. In its submission, the Western Australian Government stated:

> In 2002 (preliminary data) about 21 per cent of drivers and passengers killed in road crashes were not wearing seatbelts and in a further 12 per cent it was not known whether seta belts were worn.
>
> In rural areas the percentage of drivers and passengers killed not wearing seatbelts is higher. In 2002 (preliminary) 23 per cent of those people in country crashes were not wearing seatbelts compared to 13 per cent in the Perth metropolitan area.[44]

6.51 Given the magnitude of this problem, the Committee believes it is incumbent upon the Australian Government to take a more stringent approach to the problem of non-compliance with seatbelts laws. The Committee supports the immediate introduction of an ADR providing for the fitting in all new cars of intrusive seat belt warning devices and the eventual introduction of an ADR proving for the fitting of seatbelt interlocks.

Recommendation 21

6.52 **The Committee recommends that the Australian Government:**

- **immediately introduces an ADR providing for the fitting in all new cars of intrusive seat belt warning devices;**
- **directs the ATSB to conduct research into seatbelt interlocks with a view to introducing an ADR by 2010.**

Daytime Running Lights and Fog Lights

6.53 Evidence received by the Committee was strongly in favour of the mandatory introduction of daytime running lights. Both Mr Ian Faulks, Committee Manager of the New South Wales Staysafe Committee, and Mr Hannifey spoke strongly in favour of their introduction during the Committee's one day forum.[45]

44 Government of Western Australia, Submission no. 37, pp. 10–11.

45 *Transcript of Evidence*, p. 40.

6.54 In its submission, the NMAA wrote:

> Daytime Running Lights (DRL) are compulsory on new vehicles in Europe, the United Kingdom and North America. Most Australian drivers consider that headlights are solely for the purpose of illuminating the road ahead. Very few realise that headlamps increase the visibility of the vehicle to other road users. The Inquiry should support this low cost option which dramatically increases vehicle visibility, particularly for dark coloured vehicles. Pedestrians are better protected when vehicles are more visible—some elderly pedestrians have very poor eyesight and hearing.[46]

6.55 In its submission, the RTA proposed the adoption of daytime running lights as an ADR. Recognising this would take some time, however, it proposed as an interim measure that 'agreement could be sought from manufacturers for the voluntary adoption of DRL (as they do in Europe and the USA).

6.56 The Committee supports the adoption of daytime running lights as a mandatory standard under an Australian Design Rule. It also urges the Australian Government to pursue the voluntary adoption of daytime running lights as an interim measure.

Recommendation 22

6.57 **The Committee recommends that the Australian Government introduce an ADR for the mandatory fitting of daytime running lights on all new vehicles.**

6.58 On the other hand, the evidence received by the Committee with regard to fog lights indicated that they were regarded as a real road safety problem. in his evidence, Mr Hannifey said:

> Fog lights are an absolute menace to people who spend their life on the road, particularly when driving at night. Currently, there is no need for a warning light on the dash for forward facing fog lights; it is only required for rear facing fog lights … I think there is a $67 fine in New South Wales for driving with your fog lights on. At the moment it is done for pose value—every young bloke has a

46 NMAA, Submission no. 5.

> car and, if it does not already have two more lights, he will hang them on the front. With our roads being less than smooth, as you drive at night it is hard enough to get people to dip their lights let alone having them dip and finding even brighter lights under the bumper bar.[47]

6.59 Similar sentiments were expressed by Mr Gardiner in his submission to the inquiry. However, he also raised the issue of standards with regard to headlights generally:

> The next complication is the fitment of after market globes that provide 30% to 50% more light, while other work in a different spectrum—cool blue, ice, and other variants are freely available.
>
> Add to this mix the HID (Xenon High Intensity Discharge) lights that are so powerful they require fitment to vehicles with self-levelling suspensions, but due to our non-autobarn style of roads result in glare on occasions that require extreme concentration by the approaching driver.[48]

Recommendation 23

6.60 **The Committee recommends that the Australian Government ask the Australian Transport Council to investigate the issue of fog lights and vehicle light fittings generally with a view to adopting ADRs which:**

- **prevent the fitting of unnecessarily powerful lights to any vehicle;**
- **ensure that all light fittings comply with appropriate safety standards.**

47 *Transcript of Evidence,* p. 93.

48 Mr Douglas Gardiner, Submission no. 33, pp. 6–7.

Rollover Protection

6.61 In an article entitled 'Rollover: One of the Road Safety Problems that is not being addressed', which appears in the 2004 year book of the Australasian College of Road Safety, Shane Richardson of DVExperts Pty Ltd, highlights the lack of government regulation or consumer testing of passenger vehicles and four-wheel drives with regard to occupant protection in rollover crashes. He notes that rollovers are a major cause of serious injuries and fatalities, and that four wheel drive vehicles have up to five times the rollover rate of typical passenger cars. He recommends consumer testing for both rollover propensity and crashworthiness, and the introduction of regulations to provide effective rollover protection in passenger cars and four wheel drives. He is concerned, however, that crash testing of vehicles be conducted under realistic conditions as limited simulations give a poor indication of either propensity to roll or occupant protection. [49]

6.62 The Committee is concerned at the apparent lack of effective occupant protection in passenger vehicles and four wheel drives involved in rollover accidents, and the lack of consumer information available with regard to rollover propensity and crashworthiness. The Committee is of the view that rollover protection should be addressed in ANCAP testing and ADRs, and that the assessment of vehicles should be based on real world performance not limited simulations.

Recommendation 24

6.63 **The Committee recommends that the Australian Government:**

- **ask the Australian Transport Council to introduce ADRs for rollover protection in passenger vehicles and four wheel drives; and**
- **fund ANCAP testing of rollover propensity and crashworthiness of passenger vehicles and four wheel drives.**

49 Shane Richardson, 'Rollover: One of the Road Safety Problems that is not being addressed', in Australasian College of Road Safety, 2004 Year Book, *Road Safety Towards 2010,* pp. 48–50.

Reversing Alarms and Cameras

6.64 During its one day forum, the Committee heard evidence on the need for and efficacy of reversing alarms and cameras. Mr Scruby highlighted the fact that there 'were 18 people killed last year by reversing vehicles, 12 of which were four-wheel drives'. While supporting the use of vehicle alarms, Mr Scruby noted that young children do not always react to alarms. He endorsed the use of reversing cameras, which provide a clear rear view through the rear vision mirror when a vehicle reverses.[50]

6.65 The Committee is concerned about the vulnerability of children to reversing vehicles and the disproportionate representation of four wheel drive vehicles in reversing accidents. The Committee believes that reversing alarms and cameras should be mandatory fittings on four wheel drive vehicles, and should become mandatory fittings on all vehicles.

Recommendation 25

6.66 **The Committee recommends that the Australian Government:**

- **ask the Australian Transport Council to introduce ADRs for reversing alarms and cameras; and**
- **fund ANCAP testing of reversing alarms and cameras.**

Vehicle Compatibility

6.67 The vexed question of vehicle compatibility was raised by a number of witnesses and submissions before the inquiry.[51] Small cars have become increasingly popular with women and younger drivers due to their low cost, while larger vehicles, such as four wheel drives, have also grown in popularity. This has presented particular challenges in terms of vehicle safety. In his evidence before the Committee, Professor Johnston noted:

> There is absolutely nothing in the design rules on vehicle compatibility. If we look into the future of road safety, that is probably the single biggest problem. The mid-sized cars are disappearing, the big four-wheel drives are growing very rapidly

50 *Transcript of Evidence,* p. 77.

51 *Transcript of Evidence,* pp. 12, 20, 53, 83.

> and the very small cars are growing very rapidly, and the unequal mass of the vehicles works counter to road safety. We have to address compatibility, but the National Road Safety Strategy does not even talk about it.[52]

6.68 The Committee notes that the *National Road Safety Action Plan 2003 and 2004* recommends that research be conducted into the 'vehicle compatibility implications of the increasing diversity of the Australian vehicle fleet' including potential countermeasures.[53] The Committee believes such research should be carried out as a matter of priority.

Recommendation 26

6.69 **The Committee recommends that the Australian Government urge the Australian Transport Council to commission research into the problem of vehicle compatibility as a matter of priority with a view to identifying specific countermeasures to be applied in the next National Road Safety Action Plan and beyond.**

6.70 Of particular concern was the increasing number of four wheel drive vehicles upon our roads. In its submission the Queensland Government stated:

> Vehicle incompatibility … provides a challenge for road safety. Population growth, changing vehicle purchasing patterns and the increased freight task are impacting on the types of vehicles entering the transport system resulting in increasing numbers of small passenger vehicles, 4WDs and light commercial vehicles. This may lead to a potential for greater injuries for small vehicle occupants in the event of a crash with a larger vehicle. Of increasing concern is the mass and geometry incompatibility of 4WDs with other passenger cars that may result in higher injury levels to occupants in passenger cars in the event of a collision with a 4WD.[54]

52 *Transcript of Evidence,* p. 53.

53 ATC, *National Road Safety Action Plan 2003 and 2004.*

54 Government of Queensland, Submission no. 31, p. 5.

6.71 Evidence presented to the Committee indicated that four wheel drives were overrepresented in road trauma statistics. Several witnesses called for the favourable tariff treatment accorded four wheel drives to be rescinded in an effort to discourage their use.[55]

6.72 The Committee shares this concern and supports bringing tariffs on four wheel drives back into line with other imported passenger vehicles. The only proviso would be that genuine primary producers should be able to purchase four wheel drive vehicles tariff free.

Recommendation 27

6.73 **The Committee recommends that the Australian Government bring the tariff on four wheel drive vehicles into line with the tariff on other imported cars, with genuine primary producers and others who have a legitimate need for four wheel drive capability receiving tariff exemption.**

6.74 The Committee also shares Mr Scruby's concern that bull-bars and other illegal protuberances continue to proliferate despite design rules which specifically prohibit them.[56] As bull-bars are inherently dangerous and rarely serve the purpose for which they are intended, the Committee believes that the onus should be upon the vehicle owner to prove that they require such protection for their vehicle on-farm or for other commercial purposes; that the vehicle be specifically registered to show this; that vehicles not so registered have bull-bars and other protuberances removed; and that where vehicle owners fail to comply their vehicles are impounded.

Recommendation 28

6.75 **The Committee recommends that the Australian Government work with its State and Territory counterparts to prohibit the use of non-compliant bull-bars, except under specific exemption, and to remove all vehicles from the road that fail to comply with such prohibition.**

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55 *Transcript of Evidence,* pp. 24, 77; RTA, Submission no. 35.

56 *Transcript of Evidence,* p. 72.

Speedometers

6.76 In his evidence before the Committee, Professor Johnston raised the issue of speedometers in relation to speeding, asking, quite reasonably in the Committee's view, why speedometers needed to show speeds well in excess of any legal speed limit:

> We market cars on speed and power, and we have talked about that kind of advertising and its impact already. The vehicle industry likes to suggest that it does not have much impact, but we know that is not true. If we stopped installing speedos that went around to 240 kilometres per hour with 100 kilometres per hour being at the vertical point, we could really start to discriminate. It would be impossible for a vehicle manufacturer to sell on speed and power when the speedo looked like that. It is not something that would impact on global marketing, because you can put into our cars any other kind of meter, since all you have is a calibrated speedo.[57]

6.77 The Committee can see no good reason why the change suggested could not be implemented, and agrees that it would have an impact on the way motor vehicles are marketed and driven.

Recommendation 29

6.78 **The Committee recommends that the Australian Government ask the Australian Transport Council to investigate the design of speedometers with a view to bringing them into line with actual speed limits.**

57 *Transcript of Evidence,* pp. 53–4.

7

Special Issues

7.1 During the course of the inquiry the Committee was made aware of a number of issues concerning particular road user groups—heavy vehicles, motorcycles, bicycles, pedestrians and young people. While some of these matters have been dealt with in earlier chapters, others will be dealt with here.

Heavy Vehicles

7.2 In an effort to meet the specific needs of the road transport industry, the Australian Transport Council has adopted a separate National Heavy Vehicle Safety Strategy and Action Plan. These are designed to complement the Nation Road Safety Strategy, and dovetail into that framework. The overall goal of the strategy is to reduce the proportion of fatal crashes involving heavy vehicles despite the expected increase in the road freight task.

7.3 The *National Heavy Vehicle Safety Strategy, 2003–2010* identifies eight strategic objectives:

- increased seatbelt usage by heavy vehicle drivers:
- safer roads;
- more efficient speed management;
- reduced driver impairment;

- safer heavy vehicles;
- enhanced driver and industry management;
- effective enforcement; and
- targeted research and education.[1]

7.4 Seatbelt usage is seen as a particular issue in heavy vehicle accidents. There are low seat belt compliance rates among truck drivers, with consequent high injury and fatality rates amongst drivers involved in accidents. The Strategy estimates 'that 40% to 50% of heavy vehicle driver fatalities could be prevented by seat belt use at rates similar to those achieved in light vehicles'.[2]

7.5 Driver impairment is another critical issue for the road transport industry. Driver fatigue, drink driving, use of stimulant drugs, and medical conditions have all been identified as significant problems which must be addressed.[3]

7.6 A number of issues have been identified with regard to vehicle safety, including seat belts, improved cabin strength and underrun protection. The Strategy notes:

> There are currently UN-ECE standards in place internationally for heavy vehicle cabin strength, front, rear and side underrun protection. These standards have not yet been adopted in Australia, but are under consideration with the view to adopting them as Australian Design Rules.[4]

7.7 The development of Performance Based Standards (PBS) will address safety issues on specialist heavy vehicles:

> Under a performance-based approach to regulation, standards would specify the performance required from vehicle operations rather than mandating how this level of performance is to be achieved. Regulatory requirements will be more closely aligned with the realities of how vehicles perform, how they are driven and operated, and the characteristics of the road network.

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1 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, p. 12
2 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, p. 13.
3 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, p. 18–19.
4 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, p. 20.

> Productivity improvements, increased safety and better protection of infrastructure are the main aims of PBS.[5]

7.8 Industry accreditation programs and 'chain of responsibility' legislation are seen as two key strategies in enhancing driver and industry management. Chain of responsibility legislation and 'smart' technologies are seen as the keys to effective enforcement. Education is regarded as important to improving the safety culture of the road transport industry. It is also vital to the safety of other road users.[6] The Strategy notes:

> The behaviour of other road users plays an important role in the cause of crashes involving heavy vehicles. Research shows that truck drivers are responsible (or partly responsible) for only 38% of fatal crashes involving trucks. It is therefore important that the driving community is made aware of this fact and is provided with a range of strategies to help them better understand how to avoid coming into conflict with heavy vehicles in the traffic stream.[7]

7.9 The *National Heavy Vehicle Safety Action Plan 2003–2005* identifies a range of specific measures to be carried out within the framework of the Strategy. A number of these measures are due to be dealt with as part of the Third Heavy Vehicle Reform Package, which includes the NRTC Fatigue Reform and the Compliance and Enforcement Reform. The Compliance and Enforcement Reform is designed to give legal effect to the 'chain of responsibility', making all sections of the road transport industry, not just drivers, responsible for compliance with road transport and safety laws. Its provisions are due to be implemented in model legislation—the Road Transport Reform (Compliance and Enforcement) Bill—due to be passed in each State and Territory.[8]

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5 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, p. 21; National Road Transport Commission, Submission no. 36, pp. 28–30.

6 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, pp. 22–4.

7 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, p. 24.

8 National Road Transport Commission, Submission no. 36, pp. 19–26.

7.10 In its submission, the Australian Trucking Association endorsed the National Heavy Vehicle Safety Strategy and related reforms, but nonetheless identified a number of areas requiring further attention. The industry itself is looking at measures to deal with fatigue, speed and drug use. In evidence before the Committee, Mr Althaus of the ATA highlighted the growing culture of safety and the role of industry accreditation:

> First of all, the industry as a whole has embraced a culture of safety. It has been pushed, it has been promoted and it has been part of what we have pushed as a peak industry group. But the culture of safety has become more pervasive within our membership. That is evident in the statistics. It is also evident in that we have started a program called Trucksafe. It is an industry accredited, third-party audited accreditation system. That system is growing in its impact on the industry and on road safety. I can say that because we now have just under 20,000 accredited vehicles in that scheme.[9]

7.11 He believed that industry accreditation combined with the 'chain of responsibility' under the compliance and enforcement legislation 'would push more and more people to seek to buy freight services from accredited operators':[10]

> When you go down an accreditation path and the chain of responsibility is in existence, which it is about to be—the compliance and enforcement bill is going to be picked up—if you are a purchaser of fright services and you are going to buy those services, you are going to want to know for your own protection that the person you are buying them from is achieving a certain standard. Increasingly, people are going to want to buy freight services from people who are accredited in a scheme of one sort or another. Currently, TruckSafe is the dominant one. That is going to drive the bar higher and higher within all elements of the industry … it is clear to the industry and to the industry associations that discipline within the industry is improving. Accreditation will drive that discipline further. Compliance and enforcement and the chain of responsibility will drive it further still. All of those things are approaching.[11]

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9 *Transcript of Evidence,* p. 96.

10 *Transcript of Evidence,* p. 97.

11 *Transcript of Evidence,* p. 98.

7.12 Nonetheless, the ATA submission identifies a number of areas where government action is required. These included:

- Accelerating progress on the National Road Safety Strategy and the National Heavy Vehicle Safety Strategy, particularly in regard to better speed enforcement, the usage of seatbelts and better vehicle design;
- Clarifying responsibility for monitoring and implementation of the Action Plans;
- Increasing enforcement resources;
- Providing additional financial assistance to industry to
  - ⇒ pursue technological developments such as ITS
  - ⇒ engage in better safety training
  - ⇒ promote general safety awareness
  - ⇒ broaden coverage of accreditation schemes; and
- Accelerate road infrastructure improvements.[12]

7.13 These are all proposals that the Committee supports. It recommends urgent attention be given to new design rules for seat belts, improved cabin strength and underrun protection in heavy vehicles.

Recommendation 30

7.14 **The Committee recommends that the Australian Government introduce new ADRs covering seat belts, improved cabin strength and underrun protection in heavy vehicles**

Managing Fatigue

7.15 The ATA submission also called for more action to address the problem of driver fatigue. This Committee has a long standing interest in the question of fatigue management in the road transport industry. The House of Representatives Standing Committee on Communications, Transport and the Arts report, *Beyond the Midnight Oil*, made a number of important

12 ATA, Submission no. 26, pp. 4–5.

recommendations regarding fatigue management in the road transport industry. These included:

- amending road transport regulations to
  - ⇒ incorporate time of day considerations into allowable driving and rest periods, and
  - ⇒ increasing minimum allowable rest periods;[13]
- extending the *National Route 39 Driver Fatigue Strategy* to other major transport routes;[14]
- auditing the number, quality and distances between rest areas with a view to developing national guidelines for the provision of heavy vehicle rest areas;[15]
- seeking approval for the Australia-wide introduction of the Safe-T-Cam system currently operating in New South Wales;[16]
- seeking the development of a national operator accreditation scheme;[17]
- developing State and Territory laws making driving while fatigued an offence;[18]
- developing and implementing a drug free policy for the road transport industry, including mandatory workplace testing;[19] and
- implementing a range of research and education measures to combat fatigue.[20]

7.16 Most of these issues are due to be dealt with in the current round of heavy transport reforms. Nonetheless, evidence presented to the Committee indicates that fatigue management in the road transport industry remains an urgent issue.

13 HORSCCTA, *Beyond the Midnight Oil*, rec. 2.
14 HORSCCTA, *Beyond the Midnight Oil*, rec. 19.
15 HORSCCTA, *Beyond the Midnight Oil*, rec. 20.
16 HORSCCTA, *Beyond the Midnight Oil*, rec. 21.
17 HORSCCTA, *Beyond the Midnight Oil*, rec. 33.
18 HORSCCTA, *Beyond the Midnight Oil*, rec. 34.
19 HORSCCTA, *Beyond the Midnight Oil*, rec. 35.
20 HORSCCTA, *Beyond the Midnight Oil*, recs 36–9.

7.17 The ATA identified lack of rest areas and poor rest area design as a major concern. It urged:

> a national review of truck rest areas with a view to introducing a funding approach similar to the current Black Spot program. Improved fatigue management policies (e.g. the introduction of chain of responsibility legislation and reformed driving hours) will not be fully effective if the infrastructure supporting it is not suitable.[21]

7.18 Mr Hannifey also identified the urgent need for progress to be made on this issue. In his submission, he stated:

> There needs to be urgent attention given to this. An immediate start can be made by just clearing suitable areas on the roadside, which can then be upgraded as funds are available. We do not expect millions to be spent tomorrow, but a start must be made. The Pacific Highway is urgently in need of more rest areas.

7.19 Mr Hannifey advocated the adoption of 'blue reflector' rest areas as an interim measure:

> There is currently a trial on the Newell Highway, between Parkes and Gilgandra, of marking informal truck rest areas (just a piece of dirt, often with shade, but not a recognised rest area) with Blue Reflectors on roadside guide posts. This has proved very simple and effective and if expanded has the capacity to save lives in showing with some notice, a spot for a tired truckie to pull into, if a recognised rest area is full or too far away.[22]

7.20 The Committee endorses the principle of standardised coloured reflectors to mark rest areas, but felt that there may be some confusion with blue reflectors used for other purposes. The Committee believes the use of another colour would be more appropriate.

7.21 Just as important was the location and amenities of rest areas. Mr Althaus, CEO of the ATA, told the Committee:

> Rest areas are a disgrace in this country—and you have alluded to that already. We have a changing freight task, we have a changing road network, and yet our rest area capacity seems to be stuck in the mud. We also do not address the detailed needs of a heavy

21 ATA, Submission no. 26, p. 4.

22 Mr Rod Hannifey, Submission no. 14.

> vehicle operator in terms of rest area facilities. Shade is one of the needs, facilities is another. They need to be located at a point where it sits with the driving schedule. There is no point in having a rest area a short distance out of a main city; they are all going to drive straight past. We need to look at the driving time frames and look at the hours required.[23]

7.22 The Committee shares the concern of witnesses at the lack of progress with regard to fatigue management generally and the provision of rest areas specifically. It urges all governments to address the issue of rest areas as a matter of priority. Interim measures, such as standardised coloured reflectors should be adopted immediately while a more comprehensive program of works is carried out.

Recommendation 31

7.23 **The Committee recommends that the Australian Government request the Australian Transport Council to:**

- **devise standards for truck rest areas;**
- **establish a program of works based on those standards; and**
- **immediately commence a program for establishing temporary truck rest areas based on interim measures such as standardised coloured reflector stops.**

7.24 Mr David Leech, in his submission to the Committee, identified leakage of coolant, oil and exhaust fumes into truck cabins which could be a cause of fatigue. [24]

7.25 The Committee is of the opinion that more research is needed into the issue of fume ingress to the cabin area of trucks. The Committee therefore recommends that the Australian Transport Council start a program of research into leakage of coolant, oil and exhaust fumes into truck cabins, the affects this may have on drivers and possible solutions to the problem.

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23 *Transcript of Evidence,* p. 97.

24 Mr David Leech, Submission no, p. 3.

Recommendation 32

7.26 **The Committee recommends that the Australian Government request the Australian Transport Council to:**

- **start a program of research into leakage of fumes from coolant, oil and exhaust into truck cabins;**
- **report on the effects this leakage has on drivers;**
- **incorporate this issue and any solutions into the National Heavy Vehicle Safety Plan 2006 – 2008;**
- **develop maintenance schedules that incorporate checks for leakage of fumes into cabins; and**
- **assess the feasibility of installing carbon monoxide detectors into truck cabins.**

Driver Competence

7.27 The expected doubling of the national road transport freight task over the next two decades[25] has the potential to impact on road safety through a shortage of competent drivers. In his submission, Mr Leech noted:

> The government needs to address the professional driver shortage as this has the potential to allow inexperienced or poor drivers to do a job they are not qualified enough for as there are no alternatives.[26]

7.28 In his evidence before the Committee, Mr Althaus expressed similar concerns stating:

> This industry is suffering a shortage of people, both at the mechanic and at the driver level. We are looking for government involvement in increasing the numbers of people entering the transport sector.[27]

25 ATC, *National Heavy Vehicle Safety Strategy, 2003–2010*, p. 7.

26 Mr David Leech, Submission no. 42.

27 *Transcript of Evidence*, p. 99.

7.29 The Committee shares this concern. A large influx of inexperienced drivers in the road transport sector carries considerable potential to undermine road safety. The Committee urges the Australian Government, in consultation with industry, to plan strategies for remedying personnel shortages in the road transport industry, through apprenticeship schemes or via some other mechanism.

Recommendation 33

7.30 **The Committee recommends that the Australian Government liaise with the National Transport Commission and industry bodies to establish and implement training strategies for the road transport industry.**

Buses

7.31 Statistically, buses are the safest form of motorised road transport available. Between 1990 and 1998, bus passengers represented 0.6 per cent of all road fatalities. Of the 300 bus-related fatalities to occur during this period, one third were pedestrians, one third bus occupants and one third occupants of other vehicles.[28]

7.32 With regard to bus safety, the significant issues identified in the submission of the Bus Industry Confederation (BIC), were:

- Bus awareness, especially amongst young and aged pedestrians;
- The age of the bus fleet—new buses being safer than older buses;
- Seatbelts;
- Seat design;
- Driver Health
- Regulation; and
- Accreditation.

28 Bus Industry Confederation, Submission no. 34.

7.33 The age of the fleet was identified by the BIC as important mainly because newer buses incorporated better safety features than older buses. In his evidence before the Committee, Mr Michael Apps, Executive Director of the BIC, stated:

> The age of the Australian bus fleet is a real concern. Really, the age of the fleet is largely determined by the state based contract system for school and route services. For example, the average age of a bus in Tasmania is around 25 to 30 years. In South Australia it is about 25, in Queensland around 30, and in New South Wales and Victoria it is around 12 to 15 years. Those ages are largely reflected in some of the contractual arrangements and the incentives within those contracts to keep the fleet new. From an industry perspective, we also see a clear role for the Commonwealth to play a part in encouraging or incentivising the reduction of the age of the fleet, and that could be done in a variety of ways, whether through an effective tax treatment in the form of depreciation and an effective life rate that is advantageous to promote that kind of thing or through investment allowances. We think the federal government does have a role to play in relation to reducing the age of the fleet, but that would probably be in the form of tax benefits.

7.34 In its submission, the BIC proposed 'a five year effective life depreciation' and a ban on the importation of buses and coaches 15 years of age or over.

7.35 The mandatory fitting of seat belts on new coaches is supported by the BIC, but not the retro-fitting of older buses, nor the fitting of seat belts in urban buses. Better seat design, with higher backs and more padding on seat tops and stanchions is regarded as a more effective measure. There should be no exemption for smaller buses from the requirement to fit seat belts.

7.36 The BIC also suggested annual health checks for all bus drivers. It recommended a uniform system of compliance, regulation and accreditation, including the 'informal' passenger transport industry.[29]

29 Bus Industry Confederation, Submission no. 34; *Transcript of Evidence*, pp. 63–5.

7.37 The Committee is sympathetic to the bus industry's request for a nationally consistent system of regulation and accreditation and believes this is something the National Transport Commission should look into. The Committee also believes that given the safety record of buses, and high safety standards of modern buses and coaches, there is a strong case for encouraging the retirement of older buses and the rapid and continual modernisation of the bus fleet.

Recommendation 34

7.38 **The Committee recommends that the Australian Government ask the National Transport Commission to develop a nationally consistent system of regulation and accreditation for the road passenger transport industry with a view to its implementation by the States and Territories.**

Recommendation 35

7.39 **The Committee recommends that the Australian Government take steps to reduce the age of the bus fleet by:**

- **restricting the age of buses that can be imported for other than collectable or vintage purposes to under 15 years of age, unless substantially rebuilt or modified vehicles comply with agreed accreditation safety standards; and**
- **providing tax incentives to replace older buses in the form of a five year effective life depreciation rate.**

Vulnerable Road Users

7.40 Motorcyclists, cyclists and pedestrians are classed as vulnerable road users because of their inherent lack of protection, and hence vulnerability, compared with occupants of cars and other motor vehicles. This vulnerability demands special consideration in terms of road safety planning.

7.41 Many of the issues of concern to all these groups involve the safety of the road environment—the safety standard of the road and the roadside—speeding and public awareness. A considerable proportion of the evidence relating to these issues was raised in evidence from representatives of these groups, and has been dealt with in earlier chapters.

7.42 Nonetheless, in the Committee's view, the needs of each of these groups must be addressed not only within the context of the broader National Road Safety Strategy, but also within specific strategies designed to cater for these groups.

7.43 The need for a separate motorcycle strategy was noted in the submission of the Ulysses Club, which also called for government funding for motorcycle organisations to conduct their own road safety activities.[30]

7.44 In the introduction to its own road safety plan, the Motorcycle Council of New South Wales identified the need for a separate motorcycle strategy in these terms:

> Each year there are approximately 2200 reported crashes in NSW involving motorcyclists. They represent only a small proportion (4%) of all motor vehicle crashes, but are more likely to result in injury (90%) compared to other crashes (40%). Despite such figures, motorcyclists are rarely singled out by road safety agencies for research or targeted road safety campaigns. It has been assumed that motorcyclists are adequately covered by road safety programs directed at motorists in general, however, there is no evidence to establish whether this is indeed the case.[31]

7.45 The Motorcycle Council's strategic plan identifies a range of strategic objectives and specific measures to improve road safety amongst motorcycle users. The essential point of all of them is that almost every aspect of road safety—road design, road safety auditing, licensing, training, safety design and public awareness—can and must be considered from the specific point of view of the motorcyclist.

30 Ulysses Club Incorporated, Submission no. 17, p. 6.

31 Motorcycle Council of New South Wales, *Positioned for Safety: Road Safety Strategic Plan 2002–2005*, p. 1. Exhibit no. 6.

7.46 While there is not as yet a separate motorcycle strategy, a separate strategy for pushbikes, *Australia Cycling: the National Strategy 1999–2003*, was formulated by Austroads to encourage cycling as a community activity and as a means of transport. Its objectives include:

- Australia Cycling is implemented and reviewed in a coordinated and collaborative manner.
- Policy and planning integrates cycling as a valued element.
- Facilities exist that support increased cycling.
- Safety for cyclists, on and off road, is continuously improved.
- The benefits of cycling are recognised by decision makers and the Australian community.
- Cycling is incorporated into all appropriate areas of education, training and professional development.[32]

7.47 Safety strategies include:

- Developing and implementing a national public communication strategy to improve the awareness of all road users as to how they can better share our roads;
- Developing and implementing a national public communication strategy to improve the awareness of path users as to how they can best share our paths;
- Ensuring that safety initiatives such as safety audits and identification of blackspots include consideration of cycling;
- Researching and trialling measures to improve the safety of cyclists;
- Developing and implementing behavioural programs / initiatives relating to all road users which improve cyclist safety in areas such as motor vehicle speeds and helmets; and
- Establishing and monitoring the casualty rate for cyclists.[33]

32 Austroads, *Australia Cycling: the National Strategy 1999–2003*, pp. 6–7.

33 Austroads, *Australia Cycling: the National Strategy 1999–2003*, p. 11.

7.48 It is the Committee's view that the Austroads cycling strategy would provide a useful template for a national pedestrian strategy. It is also of the view that a national motorcycle safety strategy should be developed along the lines of the National Heavy Vehicle Safety Strategy. Each of these strategies should be designed to tie in with the broader framework of the National Road Safety Strategy, and each should be accompanied by National Action Plans.

Recommendation 36

7.49 **The Committee recommends that the Australian Government ask the Australian Transport Council to develop and implement national strategies for:**

- **Motorcycle safety;**
- **Cyclists; and**
- **Pedestrians.**

Youth

7.50 Probably the group at greatest risk on the road are young male drivers, who are over represented in road fatality statistics. Evidence presented by Mr Iain Cameron, Executive Director of the Office of Road Safety, Department of the Premier and Cabinet Western Australia, indicated that one reason for this was attitudinal.

7.51 With regard to excessive speed, Mr Cameron noted:

> The difficult group … which has not shown much change and has, in fact, gone up at times, is the group of about eight per cent of young males who tell us that they regularly exceed the speed limit by more than 10 kilometres an hour. They say things like, 'The road rules are for everyone else. I know what I am doing. I've got a good car.'[34]

34 *Transcript of Evidence,* p. 14.

7.52 Similar attitudes were encountered with regard to the wearing of seatbelts:

> Compliance—those that tell us they always wear a seatbelt—is about 95 per cent in the Perth metropolitan area versus 80 per cent in the country. The majority of those killed are male, and are young males. They believe a seatbelt will protect them in the event of having a crash, but they do not believe they are going to have a crash. They think, 'I've got a good car, I'm a good driver and I know these roads.'[35]

7.53 The need to address the problems of young drivers have long been recognised. Every jurisdiction has developed strategies for novice drivers. In 2000, Austroads compiled a *Youth Road Strategy* report which outlined a range of strategies and objectives to address youth road safety. These included:

- Youth involvement and ownership.
  - ⇒ To involve and collaborate with youth to communicate better with younger drivers.
- Family, community and industry responsibility.
  - ⇒ To ensure young drivers have support within the community, from family and from the driver training industry.
- Public education.
  - ⇒ To change attitudes to young drivers and driver education by publicising the benefits of developing skills prior to obtaining a provisional / probationary licence.
- Driver education, training and licensing.
  - ⇒ To develop programs that benefit new drivers and reduce their risk of crash involvement.
- Enforcement support.
  - ⇒ To ensure young drivers are aware of the risks and legal consequences of their driving behaviour.
- Legislation.
  - ⇒ To achieve consistency in legislation across jurisdictions.

35 *Transcript of Evidence,* p. 15.

- Research and evaluation.
  - ⇒ To improve the evaluation of young driver programs and develop a better understanding of what can be done to reduce the over-representation of young drivers in crashes.
- Coordination and integration.
  - ⇒ To ensure that all agencies and jurisdictions share information and program evaluations to maximise benefits for all Australian and New Zealand youth.[36]

7.54 While the Committee is satisfied that the *Youth Road Safety* report represents a useful statement of principles, it believes that like other vulnerable road users youth requires its own national strategy and action plan.

Recommendation 37

7.55 **The Committee recommends that the Australian Government ask the Australian Transport Council to develop and implement a national youth road safety strategy and action plan.**

Changing culture

7.56 The Committee also believes that this strategy must incorporate new thinking on the best way to encourage young people to use roads safely. New approaches must be found that engage young people on their own terms.

7.57 In their evidence before the Committee, Dr Zoe Sofoulis and Dr Sarah Redshaw of the Centre for Cultural Research at the University of Western Sydney, questioned the value of current road safety campaigns, especially with regard to young people. The dominant road safety paradigm, Dr Sofoulis argued, cast drivers 'as rational, though occasionally disobedient or drug affected, individuals whose feelings are irrelevant to their conscious command of machines'. It defined driving as the 'domain of technical rationality in which individuals learn knowledge and road rules

36 Austroads, *Youth Road Safety*, 2000, pp. 15–18.

and practice skills and acquire expertise that will allow them to predictably control their vehicles'.[37]

7.58 The result was that road safety campaigns typically made 'authoritarian and sometimes traumatic appeals to audiences who, they address a generic citizens in need of informing, reminding and threatening … The general message is basically: obey the law or suffer'.[38]

7.59 According to Dr Sofoulis, such messages, 'frightening viewers and drivers into avoiding the shocking consequences of a crash by obeying the law or, alternatively, inuring them to this trauma through repetition do nothing to encourage a shared sense of responsibility for safety on the road'. Rather, these messages 'promote a morally weak and murky position in which control of driving rests mainly with the same enforcement agencies who are prepared to traumatise viewers with shock tactics'.[39]

7.60 This ambivalence has profound consequences with regard to young people:

> Such campaigns are readily rejected by young viewer-drivers on a variety of grounds, ranging from their lack of identification with the category of citizen or blanket resistance to any message issuing from the police or a traffic authority, to disputes on technical points and optimistic or overconfident estimates of skill at surviving a similar crash scenario.[40]

7.61 Dr Sofoulis argued for a shift in road safety campaigns 'away from this morally weak emphasis on enforcement and consequences and towards an ethic of care and responsibility'. She continued:

> The thing to point out is that speed or road conditions are not necessarily the most important factors in young driver accidents. Social, emotional and sensory orientations, what is going on inside the car, as well as general attitudes to cars and risk taking and other drivers, are significant variables. These are not factors that are amenable either to engineering or legal solutions and, therefore, cannot be adequately addressed within current official road safety frameworks.[41]

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37 *Transcript of Evidence,* p. 56.
38 *Transcript of Evidence,* p. 56.
39 *Transcript of Evidence,* pp. 56–7.
40 *Transcript of Evidence,* p. 57.
41 *Transcript of Evidence,* p. 57.

7.62 Both Dr Sofoulis and Dr Redshaw emphasised the need to look at 'the broader social environment that the car exists within'.[42] Driving was a 'culturally and personally meaningful practice subject to all of the irrationalities, desires, vagaries and petty illegalities that humans exhibit in the rest of our social lives'.[43]

7.63 With that in view, youth needed to be specifically targeted in road safety campaigns, messages conveyed in mediums and contexts relevant to youth:

> Road safety messages for young people might well be more effective if they are detached from enforcement authorities and aligned with other discourses on things like self-esteem, risk and harm minimisation—things that have been successfully used in the health field, for example, around sex and substance abuse. They might require different modalities for representation. Rather than just gruesome, gory realism, special effects, humour, magical realism, the cartoon format, video game format might be more effective, and these are all unexplored alternatives to the stern warning to citizens. [44]

7.64 Just as importantly, youth need to be involved in the design of campaigns, 'creating road safety or other harm minimisation messages for their peers'.[45]

7.65 Another facet of this approach is getting young people to talk and think about driving. Dr Redshaw outlined the program she had devised in Driving With A Difference, a new workshop based approach to young driver education centred on critical group discussion of the personal and cultural meanings of driving:

> The approach I have taken is to produce a discussion based forum where young people are able to talk in a facilitated fashion. I am one of those people who think that talking is greatly underrated. It is extremely important, particularly because once young people get a provisional license, as most parents will tell you, they cease to talk about their driving. They do not want to talk about it anymore. This is of great concern and is an area where we need to encourage talking and the development of a language about what they are

42 *Transcript of Evidence,* p. 59.
43 *Transcript of Evidence,* p. 59.
44 *Transcript of Evidence,* p. 57.
45 *Transcript of Evidence,* p. 58.

> doing in cars. What I did was to put them into a one-day workshop, where I gave them various activities and exercises designed to make them think and talk with each other about what they are doing in cars. It was successful in producing that result … they really had to look at what they were actually doing in cars, not what they thought they were doing.[46]

7.66 The Committee agrees with the evidence presented by Drs Sofoulis and Redshaw on the need for new and innovative approaches to developing a culture of road safety amongst young people. This evidence accords with other views expressed in Chapter 5 on the need for targeted and sustained national public eduction programs and a more holistic approach to driver training. The Committee endorses the work done under the Driving With A Difference program, and would like to see government investigate it with a view to national implementation.

Recommendation 38

7.67 **The Committee recommends that the Australian Government ask the Australian Transport Council to evaluate the Driving With A Difference Program at the University of Western Sydney, with a view to its implementation nationwide.**

Paul Neville

Committee Chair

2 June 2004

46 *Transcript of Evidence*, p. 60.

Dissent Report—Mr Patrick Secker MP, Member for Barker

It has been my observation that in recent years there has been a move to reduce speed limits and increase policing of those speed limits as a priority to reduce road deaths and injuries.

Of course road trauma can be reduced by reducing speed limits. Reducing speed limits to zero km per hour would reduce road trauma to zero but is that a sensible approach?

No amount of speed limits will stop the habitual speeder, the inattentive driver, the sleepy driver or the stupid driver who overtakes in a dangerous manner, where as better policing at “black spots” (not at the bottom hills for revenue raising), driver education, road construction, safety features such as “rumble strips” to wake the sleep driver and better car designs can assist in reducing road trauma.

Evidence given to the Committee showed that road deaths have been reduced substantially in the last two decades (less than half) but the reductions had ‘levelled off’ in recent times.

The priority of reducing speed limits even though cars are safer and roads are better in many cases leads me to think that other priorities should be addressed such as better designs for vehicles and roads and driver education may continue the reduction in the road toll without this undue priority to reducing speed limits which are cynically seen by many as mere revenue raising by State Governments.

Recent introduction of blanket lower speed limits by the SA State Government, without due regard to local government concerns and beliefs, have not helped this cynical belief especially when road signage to indicate these changes are often inadequate to alert the unsuspecting motorist.

With this in mind I would request a new recommendation to be inserted in to the Committee's report as follows:

"the Committee believes that all reductions in speed limits should be clearly sign posted at the entrance to that altered speed limit."

I advise the Committee that in the following areas I dissent from the Committee's findings:

3.34

I move that the words "60km per hour on urban arterial roads" be deleted and replaces with "speed limits appropriate for urban arterial roads which may be 60, 70 or 80 km per hour depending on traffic conditions, road conditions and safety concerns"

3.35

I move that the second dot point be deleted and replaced with "appropriate speed limits on urban arterial roads that take into account road width, design, traffic congestion and conditions and may be 60, 70 or 80 km per hour as appropriate"

5.39

All words up to and including Similarly in the fourth line should be deleted.

The reason for this is I believe that periodic retesting of drivers is totally unnecessary and that experience is far better than testing which only ensures that drivers behaviour for the duration of the test. New laws can be adequately addressed by driver education and information through media and direct mail upon changes to laws.

5.46

Add a new recommendation – Recommendation 5.46, which reads "The Committee believes that appropriate videos or CDs be provided to purchasers of caravans and trailers on how to load, how weight affects it, sharing the roads, dealing with winds and dealing with possible accident scenarios."

5.47

Delete recommendation 5.47. The reason for this deletion is that this may lead to States like South Australia having to raise their driving age to comply with uniformity and not enough evidence was provided to show that raising age limits has had any effect on total road traumas. Anecdotal evidence may suggest that learning to drive at 16 years old, without the right to drink alcohol, may be more sensible than giving licences to drive and drink at the same age. No consideration has been given by authorities to the Committee on the possibility of raising the legal drinking age, so that we don't have the conjunction of inexperienced drivers with inexperienced drinkers.

New Recommendation:

Insert a new Recommendation: “That the possibility of raising the age for zero alcohol tolerance for drivers be investigated.”

5.58

Delete the first two dot points, because we already have an adequate graduated licence system of P-Plates for novice drivers and uniformity has not discussed the previous points over ‘when is the right time to learn to drive’ with differences in age limits between States.

The exception could be on the age for zero alcohol tolerance.

Having special licences for 4WD vehicles is unnecessarily problematic with the introduction or more All Wheel Drives (still 4WD) on the market and the existence of many smaller 4Wds that have normal handling characteristics comparable to many sedans and wagons. It could be argued that there is a greater difference between driving a front wheel drive and a traditional rear wheel drive than there is with many 4WDs such as the Subaru, Mazda Tribute, Ford Territory, etc.

6.45

I move that 6.45 be deleted and replaced with “The Committee believes that alcohol interlocks may prove to be a useful tool for law enforcement but that more evidence is needed to show that the extra cost of installation and that their reliability is proven before any ADR is introduced.”

It was the Committee’s belief that alcohol interlocks could be too easily overcome and that in emergency situation could prove problematic.

6.46

I move that 6.46 be deleted and replaced with “The Committee believes that further study should be done on the effectiveness and reliability of alcohol interlocks.”

6.51

I move that 6.51 be deleted and replaced with “The Committee believes that more stringent policing of non-compliance with seatbelt laws should occur and that intrusive seatbelt warnings should be fitted.”

6.52

6.52 Should read “The Committee recommends that the Australian Government ensure that there is an ADR for intrusive seat belt warnings for all passenger cars and that a study be instigated on their practicability for commercial vehicles.”

6.72

6.72 Should be deleted. This is because tariffs have been used in the past for protection of the local industry (fruitlessly) and as there is virtually no local 4WD industry then the use of tariffs is not warranted. It also ignores the fact that tariffs are being reduced for all vehicles anyway so it becomes a meaningless proposition. It also ignores the rights and freedoms of Australians, the right to choose without excessive taxes on those choices.

6.73

As a result of the comments pertaining to 6.72 recommendation 6.73 should be deleted.

Patrick Secker MP

June 2004

A

Appendix A – List of submissions

Number	Organisation
43	Archer, Mr Laurence
1	Arnol, Mr John
18	Australian Automobile Association
20	Australian New Car Assessment Program
16	Australian Security Industry Association Limited
26	Australian Trucking Association
9	Barnes, Mr Viv
25	Barros, Ms Janette
3	Bennett, Mr John
34	Bus Industry Confederation
21	Clarke, Mr Geoff
2	Clay, Mr R W
19	Cove, Mr Mark
15	Cyclists' Urban Speedlimit Taskforce
23	Department of Transport and Regional Services
11	Ford Motor Company of Australia Limited
33	Gardiner, Mr Douglas

14	Hannifey, Mr Rod
40	Hannifey, Mr Rod [supplementary submission]
29	Hart, Dr Peter
30	Healy, Mr Tony
39	Laird, Professor Philip
42	Leech, Mr David
7	Lewin, Mr Blake
41	Margetts, Mr Tony
5	National Motorists Association Australia
6	National Motorists Association Australia [supplementary to submission]
36	National Road Transport Commission
13	Peters, Mr Marshall
28	Peters, Mr Marshall [supplementary submission]
27	Peters, Mr Marshall [supplementary submission]
31	Queensland Transport
8	Rebula, Mr Paul
35	Road and Traffic Authority (RTA)
12	Rose, Howard & Sylvia
4	Safe Speed [Scotland]
32	South Australian Government
38	STAYSAFE Committee
17	Ulysses Club Incorporated
10	University of Western Sydney, Centre for Cultural Research
22	University of Western Sydney, Centre for Cultural Research [supplementary submission]
24	University of Western Sydney, Centre for Cultural Research [supplementary submission]
37	Western Australian Government

B

Appendix B – List of exhibits

1 *Potential Benefits and costs of speed changes on rural roads*, paper by Prof Max Cameron, Monash University Accident Research Centre.

2 *Improving Road Safety in the Longer Term* – finding the right buttons to push, paper by Ian Johnston, Director, Monash University Accident Research Centre.

3 Powerpoint presentation by Ray Taylor, ARRB Transport Research. Inquiry into Road Safety, One Day Forum, 28 November 2003.

4 Powerpoint presentation by Mr Eric Howard, General Manager, Road Safety, VicRoads. Inquiry into Road Safety, One Day Forum, 28 November 2003.

5 Powerpoint presentation by Mr Phil Allan, A/Director Road Safety, Department of Transport and Urban Planning, SA. Inquiry into Road Safety, One Day Forum, 28 November 2003.

6 Motorcycle Council of New South Wales, Positioned for Safety: Road Safety Strategic Plan 2002–2005.

C

Appendix C – List of public hearings

Friday, 28 November 2003 - CANBERRA

Individuals

Mr Rod Hannifey

ARRB Transport Research Ltd

Mr Raymond Taylor, General Manager, Business and Marketing

Australian Transport Safety Bureau

Mr Kym Bills, Executive Director

Mr Chris Brooks, Team Leader, Road Safety Research and Strategy

Australian Trucking Association

Mr Chris Althaus, CEO

Bus Industry Confederation

Mr Michael Apps, Executive Director

Cyclists' Urban Speedlimit Taskforce

Mr Michael Yeates, Convenor

Department of the Premier and Cabinet, Western Australia

Mr Iain Cameron, Executive Director / Office of Road Safety

Department of Transport and Regional Services

Mr Robert Hogan, Assistant Secretary, Transport Programmes South East Regulation Group

Mr Barry O'Neill, Director, Investment Policy and Black Spots Transport Programmes

Mr Peter Robertson, Assistant Secretary, Vehicle Safety Standards

Department of Transport and Urban Planning, South Australia

Mr Phillip Allan, A / Director, Road Safety

Federated Chamber of Automotive Industries

Mr Peter Sturrock, Chief Executive

Monash University Accident Research Centre

Professor Maxwell Cameron, Adjunct Professor

Professor Ian Johnston, Director,

National Road Transport Commission

Mr Peter Makeham, Director-Safety & Environment

Pedestrian Council of Australia Inc.

Mr Harold Scruby, Chairman / Chief Executive Officer

Queensland Transport

Mr Gary Mahon, Director Strategic Policy

Roads and Traffic Authority of New South Wales

Dr Don Carseldine, Manager, Speed Management

Dr Soames Job, General Manager, Road Safety Strategy

STAYSAFE Committee

Hon Rick Colless MLC, Member

Mr Ian Faulks, Committee Manager

Ulysses Club Inc.

Mr Rick Bedford, National President

University of Western Sydney

Dr Sarah Redshaw, Centre for Cultural Research

University of Western Sydney, Centre for Cultural Research

Dr Zoe Sofoulis

VicRoads

Mr Eric Howard, General Manager-Road Safety

Wednesday, 11 February 2004 - CANBERRA

Australian Automobile Association

Mr James Hurnall, Director, Technical Services

Mr John Metcalfe, Director, Research and Policy

Automobile Association of Australia

Mr Lauchlan McIntosh, Executive Director

Department of Transport and Regional Services

Mr Robert Hogan, Assistant Secretary, Transport Programmes South East Regulation Group

Mr Barry O'Neill, Director, Investment Policy and Black Spots Transport Programmes

Mr Peter Robertson, Assistant Secretary, Vehicle Safety Standards

Royal Automobile Club of Victoria

Ms Anne Harris, Chief Behavioural Scientist, Public Policy