

Federal Office of Road Safety

**Variation in Relative Safety
of Australian Drivers
with Age**

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Federal Office of Road Safety



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Abstract

This report compares the road safety performance of individual age classes of Australian drivers. Age differences are examined in drivers' propensity for involvement in serious crashes after allowing for differences in driving exposure and differences in vulnerability to death from crash injuries. Age differences are also examined in recent driver fatality trends and inferences drawn about the relative contributions in each age class deriving from improved road safety and from shifts in external factors of population size and driver's licence ownership. Based on these trends, projections are given of the age profile of driver fatalities up to two decades from now. A summary is given of the implications for Australian road safety policy.

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EXECUTIVE SUMMARY

This report compares the road safety performance of individual age classes of Australian drivers.

Age differences are examined in Australian drivers' propensity for involvement in serious crashes after allowing for differences in driving exposure and differences in vulnerability to death from crash injuries.

Age differences are also examined in recent driver fatality trends. Australian and New South Wales data are used to draw inferences about the relative contributions to overall fatality trends in each driver age class deriving from improved road safety and from shifts in external factors of population size and driver's licence ownership. Based on these trends, projections are given of the age profile of Australian driver fatalities up to two decades from now.

Findings and policy implications

(a) Older drivers

Older drivers have contributed relatively little to the decrease in road fatalities over recent years, and there has actually been an increase in fatalities for drivers aged 70 and over. This can be largely attributed to substantial population increase and more widespread ownership of drivers' licences in this age group. There has also been relatively less benefit from road safety measures that have tended to have greater effect on fatalities associated with high risk road use more common amongst younger drivers.

Demographic change will lead to additional increase in the representation of older persons amongst driver fatalities. This is projected to happen fairly slowly, and even two decades from now the contribution to driver fatalities from people aged 60 years and over is likely to be no more than 30% compared with 19% at present.

This increased representation is nevertheless likely to focus attention on older driver fatality rates. Older drivers have very high rates of fatalities per kilometre driven compared with other drivers but the comparison improves substantially when the rates are discounted by the contribution stemming solely from older drivers' relatively greater vulnerability to death once a crash has occurred.

It is therefore recommended that when canvassing new safety measures such as driver's licence re-testing, policy makers make allowance for the strong influence that physical frailty has on the fatality rates of older drivers relative to those of younger drivers.

When this allowance is made, the crash propensities of older drivers up to about 80 years of age are comparable with those of age groups generally considered safe drivers and do not indicate a strong case for licence re-testing. To reduce fatalities of these drivers it may prove more effective to address their greater physical frailty

by additional measures of vehicle occupant protection. There is a stronger case for re-testing of driving skills after about 80 years of age.

(b) Young drivers

Notwithstanding the gradual ageing of Australia's population, young drivers are projected to remain the largest group of driver fatalities for at least two decades.

When young drivers' fatality rates are adjusted to take account of relatively greater ability to survive crash injuries, their road safety performance appears in a very poor light. On this basis, the crash propensity of 17 to 20 years old drivers and, to a lesser extent, those aged 21 to 25, is substantially greater than that of all but the very elderly.

This warrants a continuation of extensive targeting on young drivers, in particular those aged 17 to 20.

There have been substantial reductions in young driver fatalities over recent years, but these are seen to be more modest when allowance is made for the falling population share and reduced ownership of drivers' licences in this age group.

The trend has differed, however, with crash circumstances. Impressive inroads have been made into young driver fatalities associated with high risk road use, and this accounts for much of the reduction in young driver fatalities. There has been less reduction in other young driver fatalities. These fatalities, perhaps more associated with inexperience, now represent a substantial proportion of total young driver fatalities.

This warrants consideration of road safety measures directed at more general aspects of the driving performance of the young in addition to those directed at high risk road use.

(c) Middle-aged drivers

When allowance is made for relative shifts in population share and ownership of drivers' licences, the biggest inroads into driver fatalities over recent years are seen to have been made amongst middle-aged drivers aged 40 to 59, notwithstanding greater scope for inroads amongst younger drivers due to higher prevalence of risky road use. A more modest result has been achieved amongst middle-aged drivers below 40 years of age.

The trend amongst drivers aged 40 to 59 has differed substantially, however, with crash circumstances. Whereas very impressive inroads have been made into driver fatalities not associated with high risk road use, there has been much less reduction in fatalities of those who were intoxicated or speeding. This perhaps reflects greater reluctance at this age to modify high risk road use.

This warrants specific attention being directed at high risk road use by late-middle-aged drivers, notwithstanding the fact that this tends to be less prevalent at that age than amongst younger drivers.

1. INTRODUCTION

This report broadly reviews the road safety performance of individual age groups of Australian drivers, with the aim of identifying groups most warranting specific road safety targeting. Age differences are examined in drivers' propensity for involvement in serious crashes. Age differences are also examined in recent driver fatality trends and projections given of the long-term age profile of driver fatalities.

Chapter 2 examines age differences in Australian drivers' propensity for involvement in serious crashes. This is based on fatality counts in each driver age group adjusted for age differences in amount of driving exposure (kilometres driven) and vulnerability to death from crash injuries. These data are presented for 1991, this being the most recent year for which there are estimates of distance driven in Australia.

Chapter 3 examines age differences in driver fatality trends from 1989 to 1994. From a combination of Australian and New South Wales material, inferences are drawn about the relative success of recent road safety measures in individual driver age groups. An overall quantification is also provided of the relative contributions to fatality trends in each driver age group deriving from improved road safety and from changes in population size and level of driver's licence ownership.

Chapter 4 presents long-term projections of the age profile of Australian driver fatalities based on the projected population size of each age group and forward projection of the fatality trends identified in Chapter 3.

2. AGE DIFFERENCES IN DRIVER CRASH PROPENSITY

(a) Introduction

This chapter examines age differences in Australian drivers' propensity for involvement in serious crashes.

The incidence of driver fatality in any given age group is determined by three factors; the quantity and characteristics of driving exposure, the propensity for involvement in a serious crash and the physical vulnerability to death once a crash has occurred (which increases steadily from about age 20). Propensity for involvement in a serious crash can therefore be compared between driver age groups in terms of number of driver fatalities adjusted for exposure and vulnerability.

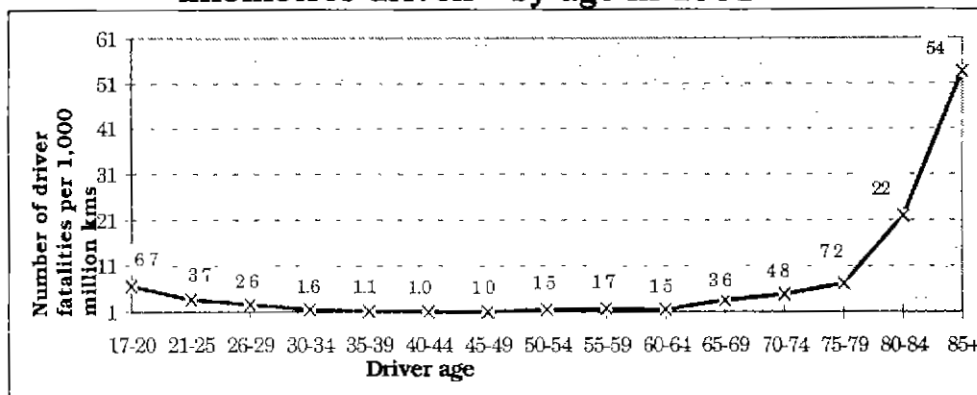
For illustrative purposes these adjustments are presented below in separate steps. Adjustment for exposure is presented in the first step. This adjustment is made solely in terms of kilometres driven. No attempt is made to take account of age differences in the characteristics of driving exposure such as time of day of travel, road type used, type and size of vehicle driven and options for avoiding problematic routes and times.

(b) Driver fatalities adjusted for kilometres driven

Figure 1 examines age differences in Australian driver fatalities after adjustment for the distance driven by each age group (ie driver fatalities per 1,000 million kms). These values are presented relative to a value of 1 for drivers aged 45 to 49.

Data are presented for 1991, this being the most recent year for which there are estimates of distance driven in Australia⁽¹⁾. Smoothed fatality counts have been used for in order to reduce chance fluctuation, these being averages for the period July 1990 to June 1992.

Figure 1 Australian driver fatalities per 1,000 million kilometres driven^(a) by age in 1991



(a) Relative to a value of 1 for drivers aged 45-49, based on average annual driver fatalities for July 1990 - June 1992 and estimated kilometres driven in 1991⁽¹⁾

Figure 1 shows that when adjusted for kilometres driven the incidence of fatality amongst Australian drivers in 1991 was highest amongst young and old drivers. It was:

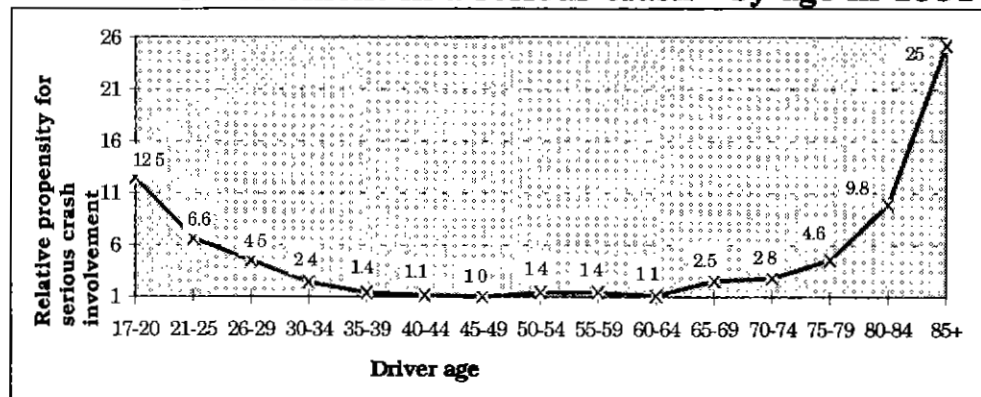
- about 54 times larger amongst drivers aged 85+ than amongst those aged 45 to 49, and
- almost 7 times larger amongst drivers aged 17 to 20 than amongst those aged 45 to 49.

(c) Driver fatalities adjusted for kilometres driven and vulnerability

Figure 2 examines age differences in 1991 driver fatalities after adjustment for age differences in (i) distance driven and (ii) vulnerability to death from injuries sustained in a crash. These values are presented relative to a value of 1 for drivers aged 45 to 49. They utilise estimates obtained by Evans⁽²⁾ in renowned studies of USA driver fatalities that vulnerability to death from a given crash impact increases by about 2.3% for males and 2.0% for females for each year above age 20.

As indicated above, these values indicate the relative propensity of each driver age group for involvement in a serious crash.

Figure 2 Relative propensity of Australian drivers for involvement in a serious crash^(a) by age in 1991



- (a) Estimated by driver fatalities per 1,000 million kms driven (weighted average of males and females) adjusted for influence of age on vulnerability to fatality in a crash, relative to a value of 1 for drivers aged 45-49, using the following data:
- average annual male and female driver fatalities for July 1990 - June 1992,
 - estimated kilometres driven by males and females in 1991⁽¹⁾,
 - estimated vulnerability of males and of females relative to 20 year-olds⁽²⁾ of that sex

[It might be noted that the point in time snapshot represented by Figure 2 causes older drivers to appear in a slightly less favourable light than they should. A set of crash propensities derived instead over the lifetime of a single generation would currently show slightly smaller values with advancing age and this would remain the case whilst crash propensities continue to decline across all driver age groups ⁽³⁾.]

Figure 2 shows that in 1991:

- when young drivers' fatality rates are adjusted to take account of relatively greater ability to survive crash injuries, their road safety performance appears in a very poor light, for example:
 - propensity for serious crash involvement amongst those aged 17 to 20 was 12.5 times that of drivers aged 45 to 49,
- in contrast, when older drivers' fatality rates are discounted by the contribution stemming solely from relatively greater vulnerability to death from crash injuries, it is evident that the road safety of drivers up to about age 80 compares favourably with most other drivers, for example:
 - propensity for serious crash involvement amongst those aged 65 to 69 was 2.5 times that of drivers aged 45 to 49 (about the same as for those aged 30 to 34), and
 - propensity for serious crash involvement amongst those aged 75 to 79 was 4.6 times that of drivers aged 45 to 49 (about the same as for those aged 26 to 29),
- but from about 80 years of age drivers' propensity for serious crash involvement is relatively high.

Policy Implications

Despite being somewhat dated, these results should be generally transferable to 1996. The following policy implications are forthcoming:

- The crash propensity of young drivers is substantially higher than that of other drivers except the very elderly and warrants a continuation of extensive targeting on this group, in particular those aged 17 to 20.
- When canvassing older driver safety measures such as driver's licence re-testing, policy makers should make allowance for the strong influence that physical frailty has on the fatality rates of older drivers.
- When this allowance is made, the crash propensities for older drivers up to about 80 years of age do not indicate a strong case for driver's licence re-testing.
 - To reduce fatalities of these drivers it may prove more effective to address their greater physical frailty by additional measures of vehicle occupant protection.
- There is a stronger case for re-testing of driving skills after about 80 years of age.

3. AGE DIFFERENCES IN DRIVER FATALITY TRENDS

(a) Introduction

This chapter examines age differences in driver fatality trends from 1989 to 1994. Trends are presented of (a) Australian driver fatalities, (b) Australian driver fatalities adjusted for population shifts and (c) New South Wales driver fatalities adjusted for shifts in total driving exposure as approximated by shifts in the number of drivers' licences on issue in that State.

From this combination of Australian and New South Wales material, inferences are drawn about underlying improvement in the road safety of individual driver age groups. An overall quantification is also provided (for New South Wales) of the relative contributions to overall fatality trends in each driver age group deriving from this underlying improvement and from changes in population size and level of driver's licence ownership.

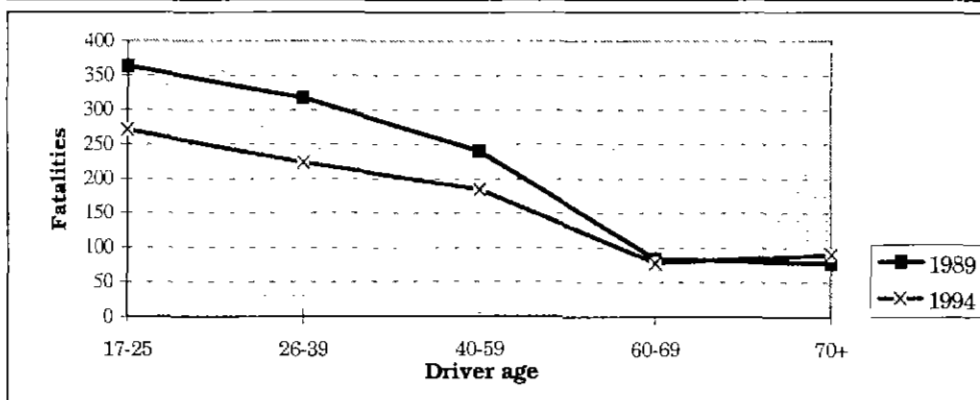
Finally, use is made of information in FORS' fatal crash database about high risk road use involved in fatal crashes to make broad inferences about the extent to which the road safety improvement in each driver age group over the period in question derives from reduction in high risk road use.

(b) Fatalities

Figure 3 shows the change in Australian driver fatalities by age from 1989 to 1994. Smoothed fatality counts have been employed in order to reduce chance fluctuation, these being averages for July 1988 - June 1990 and July 1993 - June 1995.

Figure 3 Australian driver fatalities by age in 1989 and 1994

17-25	363	271	-25%
26-39	317	224	-29%
40-59	241	185	-23%
60-69	84	78	-7%
70+	78	90	+16%
All drivers	1,092	856	-22%



(a) Average annual fatalities for July 1988 - June 1990 and July 1993 - June 1995.

Figure 3 shows a large reduction in driver fatalities from 1989 to 1994, the extent of which differed substantially with age. There was:

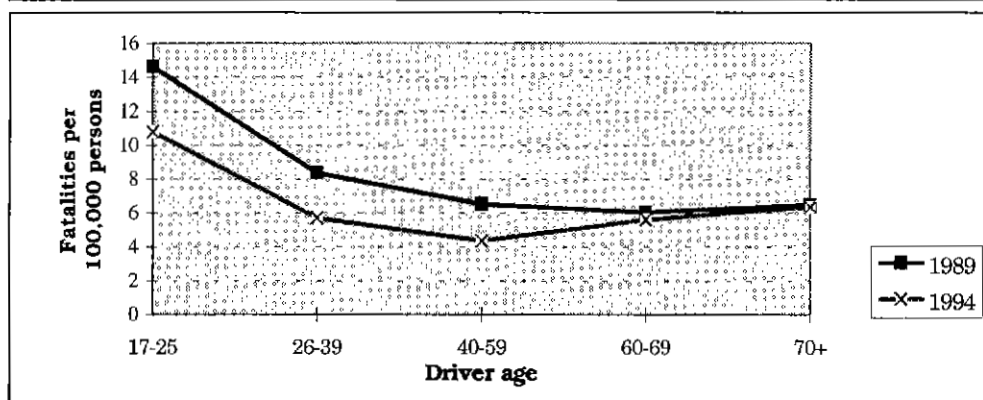
- a relatively small reduction for drivers aged 60 to 69, and
- an increase for drivers aged 70 years and over.

(c) Fatalities per capita

In view of the aging character of Australia's population one would expect to see relatively less improvement in older driver fatalities. Figure 4 presents per capita driver fatality rates to take account of this external factor.

Figure 4 Australian driver fatalities per 100,000 persons by age in 1989 and 1994

17-25	14.6	10.8	-26%
26-39	8.4	5.7	-32%
40-59	6.5	4.4	-33%
60-69	6.0	5.6	-7%
70+	6.5	6.3	-2%
All drivers (b)	8.7	6.3	-27%



(a) Based on average annual fatalities for July 1988 - June 1990 and July 1993 - June 1995 and estimated Australian population at June 1989 and June 1994 respectively.

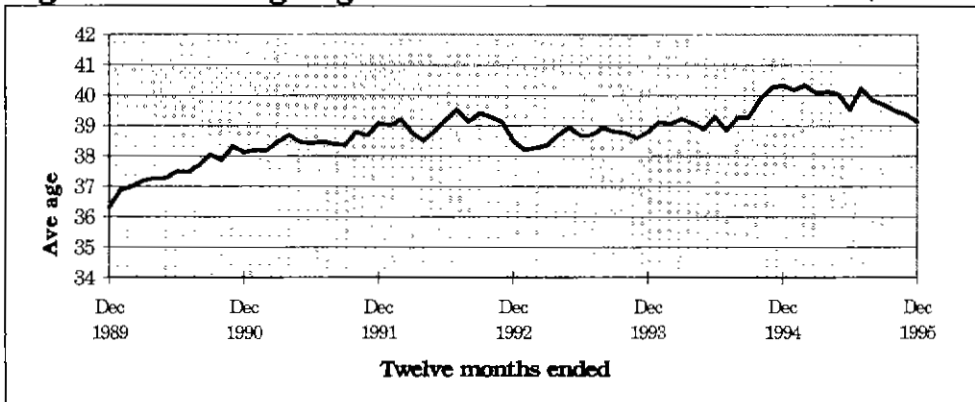
(b) Rate per 100,000 persons aged 17 years and over.

Figure 4 shows that all age groups had a reduction in driver fatalities when adjusted for population shift, but the reduction was nevertheless relatively small for drivers aged 60+.

(d) Average age of driver fatalities

The relatively small reduction since 1989 in older driver fatalities has resulted in a substantial increase in the average age of fatally injured drivers in Australia. Figure 5 indicates an increase of about 3 years in the average age of driver fatalities since 1989 even though the average age of the Australian population has increased by just over one year in that period.

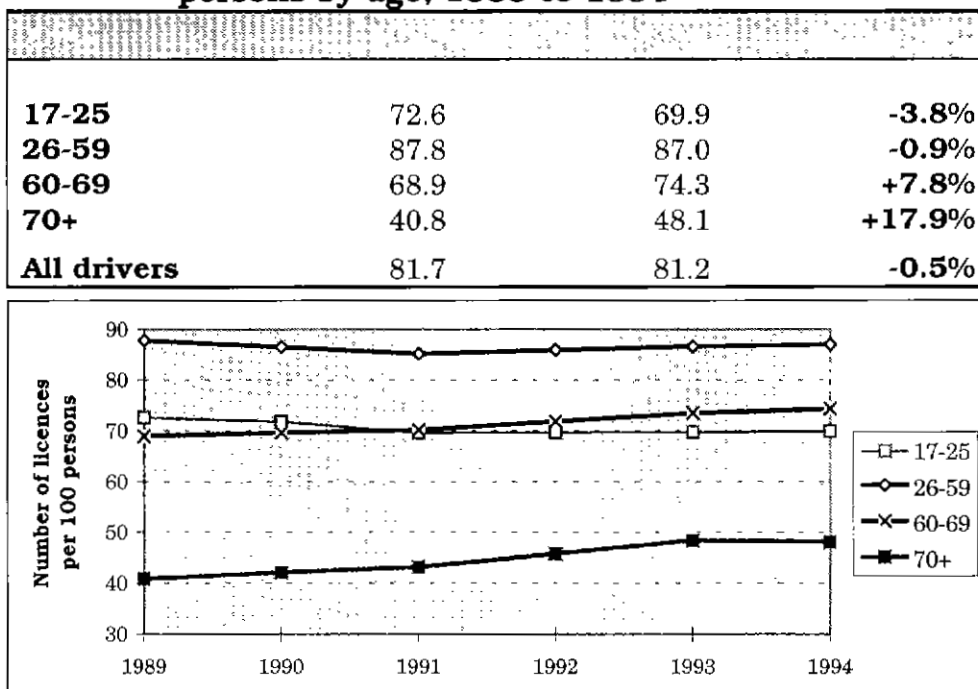
Figure 5 Average age of Australian driver fatalities, 1989-1995



(e) Ownership of motor drivers' licences

Figure 6 presents recent trends in drivers' licence holding. Data are readily available for New South Wales only, and these are given from 1989 to 1994.

Figure 6 New South Wales motor driver's licences per 100 persons by age, 1989 to 1994^(a)



(a) Based on number of drivers' licences and number of persons at 30 June of each year.

Figure 6 shows that by 1994:

- motor driver's licences were held by a substantially larger proportion of persons aged 70 years and over in New South Wales than was the case five years earlier,
- to a lesser extent, this was also the case for persons aged 60 to 69, and
- there was a small decline in licence holding amongst persons aged 17 to 25.

Increased licence holding amongst older persons reflects the growing representation in this age group of individuals having an extensive history of reliance on

motorisation. A similar trend has occurred in the USA⁽⁴⁾. The reason for decreased licence holding amongst the young is unknown: it has been greater amongst males.

The dual effects of population growth and increased licence holding have resulted in a substantial increase in older driver exposure relative to that of other drivers. From 1989 to 1994 the number of drivers' licences on issue in New South Wales:

- decreased 4% for persons aged 17-25,
- increased 7% for persons aged 26-59,
- increased 6% for persons aged 60-69, and
- increased 39% for persons aged 70 years and over.

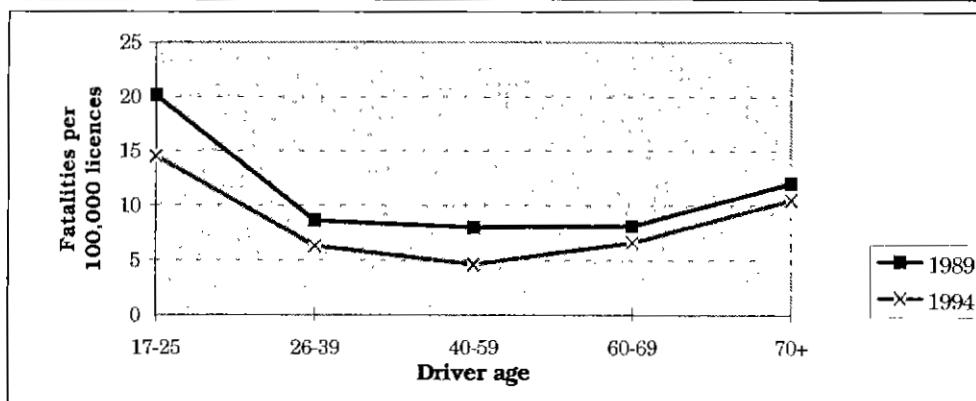
(f) Fatalities per driver's licence

Figure 7 presents trends from 1989 to 1994 in New South Wales driver fatalities adjusted for shifts in volume of driving exposure of each driver age group.

In the absence of up-to-date estimates of distance driven, number of drivers' licences has been used to approximate driving exposure. Results are therefore subject to some qualifications, as detailed below, but the road safety improvement in any given driver age group can be broadly compared with that in other age groups. (The fatality rates themselves should not, however, be compared between driver age groups. Number of drivers' licences is not a sufficiently precise measure of driving exposure upon which to base judgements about the relative safety of driver age groups at any given time. Driving volumes differ too much with age, particularly between persons of working age and retirees.)

Figure 7 New South Wales driver fatalities per 100,000 driver's licences by age in 1989 and 1994

17-25	20.1	14.5	-28%
26-39	8.6	6.3	-27%
40-59	8.0	4.6	-43%
60-69	8.1	6.6	-19%
70+	12.0	10.5	-12%
All drivers	11.1	8.1	-27%



(a) Based on average annual fatalities for July 1988 - June 1990 and July 1993 - June 1995 and number of drivers' licences on issue at June 1989 and June 1994 respectively.

Figure 7 shows that age differences in New South Wales driver fatality trends were generally less pronounced when adjusted for driving licences on issue. Specifically:

- older drivers appear in a much better light than before but their improvement was nevertheless inferior to that of other drivers, and
- the greatest improvement is seen to have occurred amongst late-middle-aged drivers.

[Results derived using driver's licence counts to approximate exposure will be distorted by shift over time in average annual distance driven. Both 1989 and 1994 were periods in which transport activity is likely to have been high (GDP growth of 4.2% and 5.1% respectively) but perhaps slightly less so in 1994 due to higher unemployment levels at that time. The extent of road safety improvement indicated in Figure 7 may therefore be marginally over-estimated in all age groups but perhaps more so for young drivers given their higher levels of discretionary travel.]

(g) Overall quantification of influences on fatality trends

Figure 8 quantifies the changes in New South Wales driver fatalities since 1989 into estimated contributions from (i) external factors of altered population size and altered licence holding and (ii) improved road safety, as gauged by change in fatalities per driver's licence. A notable feature of Figure 8 is the contribution made by external factors to the relatively good result for young drivers and the relatively poor result for older drivers, particularly those aged 70 and over.

Figure 8 Factors contributing to change in New South Wales driver fatalities by age, 1989 to 1994

17-25	+0%	-4%	-28%	-31%
26-39	+3%	-3%	-27%	-27%
40-59	+13%	+1%	-43%	-35%
60-69	-1%	+8%	-19%	-14%
70+	+18%	+18%	-12%	+21%
All drivers	+6%	-1%	-27%	-26%

(a) Change in number of drivers' licences per capita (from Figure 6).

(b) As estimated by change in driver fatalities per 100,000 drivers' licences, based on average annual fatalities for July 1988 - June 1990 and July 1993 - June 1995 and number of drivers' licences on issue at June 1989 and June 1994 (from Figure 7).

(h) Fatality trends for low-risk drivers and high-risk drivers

The above data suggest that, for New South Wales at least, when allowance is made for relative shifts in external factors, road safety measures since 1989 are seen to have been more effective in reducing fatalities amongst drivers aged 40 to 59 than amongst other drivers. Ostensibly, road safety measures should have had most

impact on fatalities of drivers involved in high risk road use such as intoxication and speeding - this being more common amongst the young.

This is further explored in Figure 9 using FORS' fatal crash database for 1988 and 1992. Separate trends in Australian driver fatalities per licence from 1988 to 1992 are presented for drivers classified as (i) 'high-risk' (ie intoxicated or speeding) and (ii) 'low-risk' (neither intoxicated nor speeding).

Figure 9 Estimated change in Australian driver fatalities per licence by age and driver risk category, 1988 to 1992

17-25	142	117	-16%	242	142	-41%
26-39	155	119	-23%	179	113	-37%
40-59	173	108	-44%	77	66	-24%
60+	142	115	-29%	26	15	-50%(c)

(a) "High risk" denotes drivers intoxicated (BAC of 0.05+) or speeding (those classified as possibly or definitely speeding or at a speed excessive for conditions). "Low risk" denotes drivers neither intoxicated nor speeding.

(b) Based on FORS' 1988 and 1992 Fatal File data and estimated number of drivers' licences in Australia in 1988 and 1992 (based on the assumption that NSW licence ownership levels applied Australia-wide).

(c) Based on small counts.

The following findings and policy implications are forthcoming from Figure 9:

- Except for drivers aged 40 to 59, road safety measures over the period in question had greatest impact on driver fatalities associated with high risk road use.
- Very substantial improvement occurred, however, amongst 'low-risk' drivers aged 40 to 59 (down 44%). The predominance of low-risk drivers in this age group would explain the superior overall result indicated earlier for New South Wales drivers aged 40 to 59.
- On the other hand, specific attention needs to be directed at fatalities associated with high risk road use amongst drivers aged 40 to 59 where gains were relatively poor. This is perhaps indicative of greater reluctance at this age to modify high risk road use.
- Amongst older drivers, both the high-risk and low-risk categories improved by margins comparable with their counterparts in other age groups. This suggests that the relatively poor safety improvement indicated earlier for New South Wales older drivers is solely attributable to a relative absence at that age of high risk road use.
- There was a relatively small reduction in young driver fatalities not associated with high risk road use. These fatalities, perhaps more associated with inexperience, now represent a substantial proportion of total young driver fatalities. This warrants consideration of road safety measures directed at more general aspects of the driving performance of the young in addition to those directed at high risk road use.

4. PROJECTED AGE PROFILE OF DRIVER FATALITIES

As an aid to long-term planning of road safety measures, Table 10 presents projections of the age profile of Australian driver fatalities in the years 2005 and 2015.

These projections are based on:

- the projected population size of each age group⁽⁵⁾,
- extension to the year 2000 of trends since 1989 in per capita driver fatality rates for each age group,
- an assumption of no change in fatality rates after the year 2000, and
- an assumption of no major new road safety initiatives.

Table 10 Projected age profiles of Australian driver fatalities in 2005 and 2015 compared with 1994

	<i>Number</i>	<i>Share</i>	<i>Number</i>	<i>Share</i>	<i>Number</i>	<i>Share</i>
15-24	260	30%	211	27%	222	26%
25-39	244	28%	189	24%	189	22%
40-59	185	22%	190	24%	205	24%
60-69	78	9%	80	10%	114	13%
70+	90	10%	111	14%	136	16%
All drivers	856	100%	781	100%	866	100%

(a) Average annual fatalities for July 1993 - June 1995.

Although new circumstances might lead to somewhat different fatality counts, the age profile of driver fatalities in 2005 is unlikely to differ substantially from that projected. At that time:

- fatalities will probably have decreased amongst drivers below 40 years of age and increased amongst drivers aged 40 years and over,
- as a result, drivers aged 40 years and over would have an increased share of total driver fatalities, but
- young drivers would continue to be the major target group.

The projected age profile of driver fatalities in 2015 should be regarded as quite speculative. This projection indicates that older drivers would continue to increase their number of fatalities and their share of total driver fatalities but that this would not occur rapidly. At that time:

- young drivers would continue to be the major target group,
- persons aged 60 years and over would increase their share of driver fatalities to no more than 30% in the year 2015 compared with 19% at present, and
- compared with the present, there would be about 80 additional fatalities each year of drivers aged 60+, approximately 20 of who would be drivers aged 80+.

5. DISCUSSION

Age differences in Australian drivers' propensity for involvement in serious crashes were examined taking into account differences in driving exposure and vulnerability to death from crash injuries. A mix of Australian and New South Wales data was used to also draw inferences about the relative contributions to recent fatality trends in each age class of Australian drivers deriving from improved road safety and from change in external factors, and projections were made of the long-term age profile of Australian driver fatalities.

(a) Older drivers

Older drivers have contributed relatively little to the decrease in road fatalities over recent years, and there has actually been an increase in fatalities for those aged 70 and over. This can be largely attributed to substantial population increase and more widespread ownership of drivers' licences in this age group. There has also been relatively less benefit from road safety measures that have tended to have greater effect on fatalities associated with high risk road use more common amongst younger drivers.

Demographic change will lead to additional increase in the representation of older persons amongst driver fatalities. This is projected to happen fairly slowly, but is nevertheless likely to focus attention on older driver fatality rates. When canvassing new safety measures such as driver's licence re-testing, policy makers should make allowance for the strong influence that physical frailty has on the fatality rates of older drivers compared to those of younger drivers. When this allowance is made, the crash propensities of drivers up to about 80 years of age do not indicate a strong case for licence re-testing. To reduce fatalities of these drivers it may prove more effective to address their greater physical frailty by additional measures of vehicle occupant protection. There is a stronger case for re-testing of driving skills after about 80 years of age.

(b) Young drivers

Notwithstanding the gradual ageing of Australia's population, young drivers are projected to remain the largest group of driver fatalities for at least two decades.

When young drivers' fatality rates are adjusted to take account of relatively greater ability to survive crash injuries, their road safety performance appears in a very poor light. This warrants a continuation of extensive targeting on this group, in particular those aged 17 to 20.

The substantial reductions in young driver fatalities over recent years are seen to be more modest when allowance is made for external factors.

The trend has differed, however, with crash circumstances. Impressive inroads have been made into young driver fatalities associated with high risk road use. There has been less reduction in other young driver fatalities that are perhaps more associated with inexperience. This warrants consideration of road safety measures directed at

more general aspects of the driving performance of the young in addition to those directed at high risk road use.

(c) Middle-aged drivers

When allowance is made for external factors, the biggest inroads into driver fatalities over recent years are seen to have been made amongst people aged 40 to 59, notwithstanding the greater scope for inroads amongst young drivers. A more modest result has been achieved amongst middle-aged drivers below 40 years of age.

The trend amongst drivers aged 40 to 59 has differed substantially, however, with crash circumstances. Whereas very impressive inroads have been made into driver fatalities not associated with high risk road use, there has been much less reduction in fatalities of those who were intoxicated or speeding, perhaps reflecting greater reluctance at this age to modify high risk road use. This warrants specific attention being directed at high risk road use by late-middle-aged drivers, notwithstanding the fact that this tends to be less prevalent at that age than amongst younger drivers.

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