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**Title and Subtitle**  
ROAD FATALITY RATES IN AUSTRALIA 1984-85

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**Abstract**

This report describes the road crash fatality risks of Australians in 1984-85.

Risk measurements or fatality rates are calculated as the average number of fatalities per distance travelled, time spent travelling and number of trips. They are estimated for five groups of road user (car drivers, car passengers, motorcycle riders, bicyclists and pedestrians) tabulated for sex, age and each of five factors (time of day, day of week, season, State or Territory and holiday/non-holiday period).

The sources of the data are the FORS Fatal File for 1984 and 1985, and the Survey of Day-to-Day Travel in Australia 1985/86. Report CR 84 is a summary of this report

**Keywords**

Fatality rate; fatality risk; risk exposure; road crashes; travel survey

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Road Fatality Rates in Australia 1984-85

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## EXECUTIVE SUMMARY

This report describes the road crash fatality risks of various groups of Australian road users. Risk measurements or fatality rates were calculated as the average number of fatalities per ten million kilometres travelled, per million hours of travel and per one million trips taken.

The FORS Fatal File for the two years 1984 and 1985 provided details of road crash fatalities while estimates of travel were obtained from the Survey of Day-to-Day Travel in Australia 1985-86. The two data sources were combined to estimate fatality rates for car drivers, car passengers, motor cycle riders, bicyclists and pedestrians. For each of these groups, fatality and travel information was tabulated for sex, age and each of five factors: time of day, day of week, season, State or Territory and holiday/non-holiday periods within each State or Territory.

These measures of fatality rates are superior to traditional estimates which are based only on population figures with risk defined as deaths per person per year. These latter estimates can be seriously misleading since they do not take into account differences in the amount of travel undertaken by individuals within the population.

For each group, males had higher fatality rates than females and the rates varied with age. Of the other factors, time of day was the most important. Specific findings are given below. A separate summary report is also available (INTSTAT, 1989).

### Car drivers

The fatality rate was highest at age 16 and was lower each year until age 30. It was lowest between ages 30 and 60, but was higher for drivers over 60. The average rate for females was two-thirds that for males. This sex difference was more marked for younger than older persons.

Night time fatality rates were about 10 times the day time rates. Those for the evening period were intermediate. The day-night difference was greatest for drivers under 20 years old. The weekend rate was about 70% higher than for the first four days of the week, with an intermediate rate for Friday. However, the higher fatality rate on Friday, Saturday and Sunday was mostly confined to the younger age groups. In addition, the day-night difference was greatest on Friday and Saturday.

The ACT and Western Australia had the lowest fatality rates followed in increasing order by Victoria, New South Wales, South Australia, Queensland, Tasmania and the Northern Territory.

### Car passengers

Nine to 15 year olds had the lowest fatality rate, and this was similar for boys and girls. Sixteen to 25 year olds had a fatality rate over 4 times that of this younger group. The graph of the fatality rate is U-shaped between ages 25 and 70, with a minimum at about age 45, and similar rates at ages 25 and 70.

Night time fatality rates were about 6 times day time rates and about 3 times evening rates. Seventeen to 20 year old male car passengers were particularly at risk at night, with fatality rates 30 times those during the day.

For passengers aged 16 and over, males had an overall fatality rate 2.3 times that of females. However, this ratio varied with day of week. Lowest fatality rates were found for females at the weekend. Compared with these, fatality rates were 40% higher for females during the week, 70% higher for males during the week, and males at the weekend had four times the female weekend rate.

The Northern Territory had a particularly high fatality rate for car passengers. The rate was lowest in the ACT, then Victoria, Queensland, Western Australia, Tasmania, New South Wales and South Australia. The fatality rate during holidays was 68% of that at other times.

### Motor cyclists

Females had a fatality rate about half that of males. However, there are so few female motor cyclists that only males were included in further analysis. Overall, fatality rates for males were higher at night than during the day. The pattern of fatality rates with age was different for night and day. The day rates were highest for young adults, with a minimum between ages 30 and 50, and rising again for the oldest age groups. The night fatality rate was highest at ages 25 to 30.

The weekend fatality rate for males was 2.6 times that during the week. The Winter rate was only 39% of that at other times. Although there are large differences in fatality rates between the States and Territories, these were calculated from limited travel data and were not statistically significant.

### Bicyclists

The highest fatality rates were for bicyclists younger than 13 (although no data were available for those under 9 years), or older than 65. The lowest rates were for 20 to 30 year olds. The rate for females was about half that of males.

Fatality rates were 4 times greater at night than during the day. Cyclists under 21 years may be at increased risk during holiday periods, although this conclusion is based on limited data.

### Pedestrians

Fatality rates were highest for pedestrians over 65, but varied little below the age of 50. Overall, female rates were two-thirds those of males.

Late night rates were about 30 times those during the day and over 3 times those in the evening and early morning. These day-night differences varied with age.

Rates were 1.6-fold higher at the weekend than during the week. This difference was greater for males than females, and for younger than older persons. In Summer, the rate was three quarters that at other times. The Northern Territory had a rate at least 4 times that elsewhere.

### Intermodal comparisons

Overall, the fatality rates of car drivers and car passengers are similar, although the relative risk varies with age and sex. These two modes of travel have a lower risk than the other three, particularly at night.

Overall, motor cyclists have a fatality rate per kilometre 19 times that of car drivers, although the relative risk decreases with age. It is also greater during the day, when motor cyclists have the highest risk of all modes, than at night.

The overall relative risk of pedestrians compared with bicyclists is about 3 for distance travelled and 1.3 for time spent travelling. At night, pedestrians have the highest risk of all modes including bicyclists. During the day bicyclists and pedestrians have a similar fatality risk.

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## 1. Introduction and overview

### Rationale

Road crash fatality rates vary for different groups in the Australian population and possibly with the time of day, week or year. Such variation has important implications for road safety policy.

For any particular group, the road crash fatality rate per person per year can be calculated using the number of fatalities for that group in a year and the number of people in that group. In this case, the fatality rate equals the number of fatalities divided by the population of the group.

However, this calculation does not take into account that the amount of travel undertaken may differ between groups. For example, male 18 year-old car drivers have a much higher fatality rate per person than female 50 year-old car drivers. There are two possible reasons for such a difference. Firstly, the 18 year-olds may be intrinsically more at risk of having a fatal crash. Secondly, they may drive further and more frequently, so that they have a higher opportunity for crashes. Either or both of these two factors may be operating. Similarly, for all drivers the number of fatalities differs with the time of day. This may be because the amount of travel varies over the 24 hours in a day and/or the risk of a fatal crash varies over this period.

To distinguish between the two effects it is necessary to have an estimate of the amount of travel undertaken by different groups of Australians in various time periods. It is then possible to calculate the fatality rate per unit of distance travelled, for example, although other measures of travel could also be used. By using distance travelled rather than population as the "at-risk" measure, a more useful estimate of the risk of fatality is obtained. Variation in the number of fatalities can then be partitioned into variation due to the risk of fatality and variation due to distance travelled. These two components have different policy implications.

This report examines the fatality rates resulting from the travel of Australians in 1984-85. Two sources of data were used. The FORS Fatal File for 1984-85 provides details of road crash fatalities for these two years in Australia. Estimates of travel were obtained from the Survey of Day-to-Day Travel in Australia 1985-86 (SOCIALDATA, 1987; INTSTAT, 1987, 1988).

### Data sources

The FORS Fatal File contains detailed information on all fatal road crashes in Australia. At the time this report was being written, data were held for crashes between 1981 and 1985, although only data for 1984 and 1985 are analysed here.

Information in the FORS Fatal File is recorded in three hierarchical levels. The crash level contains details on the road environment, crash location, time, weather and similar items. The vehicle level includes details on each vehicle involved in a fatal crash, including vehicle type and impact characteristics. The third level is the person level, and includes information on each person involved in a crash, not only those that were killed or injured. The information recorded includes age, sex, restraint use and the nature and extent of injury.

The Travel Survey was of a geographically stratified, random sample of households throughout Australia. For a randomly chosen day in the year-long survey period, details of all trips made by all members of each selected household were collected on a self-completion, mail questionnaire. The final data set contains details of 145 000 trips of 45 000 persons from 18 000 households. It enables estimates of day-to-day travel for the Australian population to be made in terms of distance travelled, time spent travelling and number of trips undertaken.

Both sets of data cover five modes of travel - as a car driver, car passenger, motor cycle rider, bicyclist or pedestrian. By combining the two data sources, fatality rates for these five modes can be estimated. Note, however, that the periods covered by the two data sets were not identical: the Fatal File provided number of deaths in two full calendar years (1984 and 1985), whereas the Travel Survey was for one year from August 1985.

The Travel Survey was used to estimate the amount of travel that occurred in Australia in 1984 and 1985. This was done by doubling the single year estimates. Although this does not take account of the possibility of changed travel patterns between the time coverage of the two data sources, this is likely to have had a negligible effect on the derived estimates. Because the Travel Survey was limited to persons aged 9 or older, fatalities of persons younger than 9 years old could not be included in this report.

As with any survey, especially when it is performed for the first time, the Travel Survey has several limitations (INTSTAT, 1987, 1988). Several limitations of this survey are of particular relevance to this report.

First, although the survey was designed as a random sample of Australians, some persons selected for the survey declined to participate in it. Travel patterns of respondents and non-respondents differ, and the survey weights derived by Socialdata for this survey partially correct for this.

Second, some respondents participated on a day other than the one they were originally assigned. It is likely that the travel on the days chosen by these respondents differs from that on their assigned days. For example, respondents away from home (either on holiday or for work) on their allocated day may be less likely to participate on that day; this tends to lead to underestimation of long trips. Other respondents will have participated on a later day because their travel on the allocated day was particularly high or low, and they may have wished either to reduce the time spent answering the survey or to substitute a more 'typical' travel day. These considerations suggest that the amount of travel is probably underestimated by the survey, and this would lead to fatality rates being overestimated.



Third, many respondents underreported the number of trips, especially pedestrian trip segments which were part of trips by other modes. This also results in the overestimation of fatality rates, especially for pedestrians.

Fourth, the sample size is such that estimates of the amount of travel for less common modes of travel and for small groups are poorly defined (see also the Appendix). This means that the estimated fatality rates may vary greatly, making their interpretation difficult. The smoothing of rates described later in this chapter aims to overcome this limitation.

Fifth, the geographical stratification of the survey means that estimates for regions outside capital cities are probably biased. In particular, outside the capital cities, the travel survey concentrated on larger population centres, leading to relatively poor representation of remote rural areas. This, again, may lead to underestimation of the amount of travel.

It is possible that the overall underestimation of the amount of travel, and hence the overestimation of fatality rates, is relatively uniform with respect to the risk factors, so that the relationships between fatality rates and the risk factors are estimated without appreciable bias.

#### Report structure

Analyses of the five modes of travel are summarised in Chapters 2 to 6. For each mode, fatality and at-risk information are tabulated for sex, age group and each of five factors. These are time of day (by four-hourly periods), day of week, season, State or Territory and holiday/non-holiday periods within each State or Territory. Each factor is discussed in its own section.

Within each of these sections, there are seven tables. The numbers of fatalities for 1984-85 (the 'a' tables) were tabulated from the FORS Fatal File. The average distance travelled, time spent travelling and number of trip segments were estimated from the Day-to-Day Travel Survey (the 'b', 'd' and 'f' tables respectively). This at-risk information is given per person per day. Fatality rates were calculated as the average number of fatalities per ten million kilometres, per one million hours and per one million trip segments (the 'c', 'e' and 'g' tables). Most tables include population estimates as the last column. This information is required when calculating fatality rates (see the Appendix). Calculated fatality rates per ten million kilometres are graphed in the first, and sometimes third, figures of each chapter.

The precision of the numbers in the tables was fixed at a given number of decimal places. The number of decimal places was chosen primarily to facilitate comparisons across rows and between columns, and between males and females. Therefore, the precision displayed does not necessarily reflect the underlying accuracy of the estimates.

Blank cells in a fatality rate table indicate that a value could not be calculated. This occurs when no survey respondents of a particular age group and sex were recorded as travelling in certain time periods, so that the estimated at-risk is equal to zero. A zero ('.00') in a cell indicates that the value for this cell is less than 0.005. For cases for which the estimated at-risk is greater than zero but the number of fatalities is zero, then the fatality rate will be exactly zero.

Each table has one column (generally the second last) or two columns (in the case of State with holiday) titled 'Total' or 'Mean' which contains estimates for each age group and sex. Within each mode, for the tables of a particular type (ie the 'a' tables, the 'b' tables etc), this column in each table contains estimates of the same quantities. However, the numbers are not always exactly the same from table to table. (For example in Tables 2.1b and 2.2b (pages 22 and 32) the bottom numbers in the eighth column are 10.48 and 10.55 respectively. These two numbers are both estimates of the average distance travelled (km) per person per day for females of all ages.) This is because the amount of missing data varies between classifications. For example, a fatality may have day of week recorded but not time of day. Each table was formed so as to maximise the amount of data used for it.

Chapter 7 is an overall discussion of the variation in results due to using the different at-risk measures in analyses, and summarises the comparisons of the measures given in each section of Chapters 2 to 6. The results of analyses of comparisons of fatality rates between modes of travel are given in Chapter 8. The Appendix contains a more technical and detailed description of the statistical methods used in this report. There is also a glossary which explains the statistical terms and other definitions mentioned in the text.

At the beginning of each chapter there is a one page summary of results in point form with references to sources within that chapter. Thus [p17 ¶2-5, T2A, F2.2] refers to page 17, paragraphs 2 to 5; Table 2A and Figure 2.2.

#### Log-linear modelling of rates

The estimates of fatality rates shown in the tables usually display so much variation that it is difficult to discern the underlying relationships between the fatality rate and the risk factors. For this report, the fatality rates have been summarised using the technique of log-linear modelling. Conclusions from these models have been used to guide the text, and the smooth curves in the figures in this report show the estimated rates from log-linear models. These are the second, and sometimes fourth, figures in each chapter. The same figures are also given in the Appendix, but graphed on the normal scale instead of the log scale.

The fatality rates for each type of at-risk measure, mode of travel, age group, sex and the five temporal and geographic factors were analysed using log-linear models (Bishop et al., 1978). The data for each of these analyses were the number of fatalities for that mode and the corresponding at-risk estimate, classified by sex, age group and the temporal or geographic factor. The models were fitted using GLIM 3.77 (NAG, 1986).

The log-linear models for the fatality rate are regression-like models for the logarithm of the fatality rate. Differences between the log rates can be exponentiated and interpreted in terms of percentage differences in fatality rates, or as relative rates. Intermodal comparisons (for example, between car driver and car passenger risks) were also performed using log-linear models. Further details of log-linear models are given in the Appendix.

### Classifications chosen for the analyses

Limitations imposed by the method of computer access to the Survey of Day-to-Day Travel made it difficult to produce tables classified by more than three factors. Since major variation was expected by sex and age group, and because it is standard to control for these factors when analysing epidemiological data, all analyses included sex and age group as two of the factors. The third factor was a single temporal or geographical factor. For car drivers, a combined classification of time of day and day of week was constructed. In addition, the analyses of holiday and non-holiday periods included the geographical State or Territory factor.

Inclusion of sex and age group in each analysis also enabled interactions with these factors to be examined. These interactions are of interest for policy purposes.

Separate analyses were performed for each mode of travel because different patterns of variation were expected for each mode, and a combined analysis for the modes was not required. Nevertheless, it is likely that risk factors for fatalities for one mode would also be risk factors for other modes. Some analyses compared fatality rates between two modes (see Chapter 8).

The different bases for the rates (population, distance, time and number of trips) cannot be included simultaneously in the log-linear models, although the method of analysis is the same for each measure of the at-risk quantity. For each mode and factor, the results for the four at-risk measures were compared. Where the pattern of variation was similar the text mostly describes the analysis using the distance at-risk, otherwise the differences are outlined (see also Chapter 7).

It is possible that analyses of all factors together might have produced different conclusions. Certainly, if there were complex interactions between the factors, the current analysis could not detect them. However, what is already known about the combined effects of these factors suggests that any such interactions would be of much smaller magnitude than the main effects estimated here. Moreover, the problem of cells with no at-risk information (see the Appendix) increases as the fatalities are more finely classified.

## 2. Car drivers

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## Car drivers: summary of results

- . the fatality rate per distance driven is highest for the youngest drivers (age 16) and the fatality rate is lowest between ages 30 and 60 [p17 ¶2-5, T2A, F2.2]
- . overall males have average age-specific fatality rates approximately 1.5 times those of females
  - but young adult males have a fatality rate double that of similar aged females
  - and for older adults, the fatality rates of males approach those of females[p17 ¶4-6, T2A, T2B, F2.2]
- . fatality rates vary greatly with time of day: overall, rates at night were 10 times those during the day, with rates in the evening intermediate at about 4 times the daytime rates [p19 ¶3, F2.2]
  - the day-night difference is greatest for drivers under 20 [p19 ¶4, T2C]
- . the fatality rate at the weekend is 1.7 times that for Monday to Thursday, with that for Friday half-way in between [p29 ¶2]
  - this day-to-day variation is largely confined to the younger drivers [p29 ¶3, F2.4]
  - for all ages, late Friday and Saturday nights are particularly risky for fatalities, more so than would be expected by simply combining weekend and late night effects [p30 ¶1-2, T2D]
  - fatality rates vary 40-fold from a minimum in the middle of the day on Monday to Thursday to a maximum during early weekend mornings [p30 ¶2, T2D]
- . the ACT and Western Australia have the lowest fatality rates, followed, in ascending order, by Victoria, New South Wales, South Australia, Queensland, Tasmania and the Northern Territory
  - the fatality rate in the Northern Territory is approximately 3 times that in the ACT [p47 ¶1-2, T2E]
- . fatality rates do not vary significantly with season and holiday-non holiday periods [p39, p55]
- . all the above results for fatality rates per distance driven are similar when expressed as rates per time spent driving or rates per number of trips [T2B, p20 ¶2, p29 ¶5, p30 ¶3, p39, p47 ¶5, p55 ¶3]
- . when the rates are expressed as fatalities of car drivers per head of population, the results are broadly similar except that:
  - the relative risk of males to females no longer decreases with age but is similar at all ages [T2B, p18 ¶3, p19 ¶1]
  - the variation in fatality rates with age is less [p19 ¶1, p20 ¶3]
  - fatality rates are higher during the day than at night instead of being much greater at night [p20 ¶2-3]

Figure 2.1

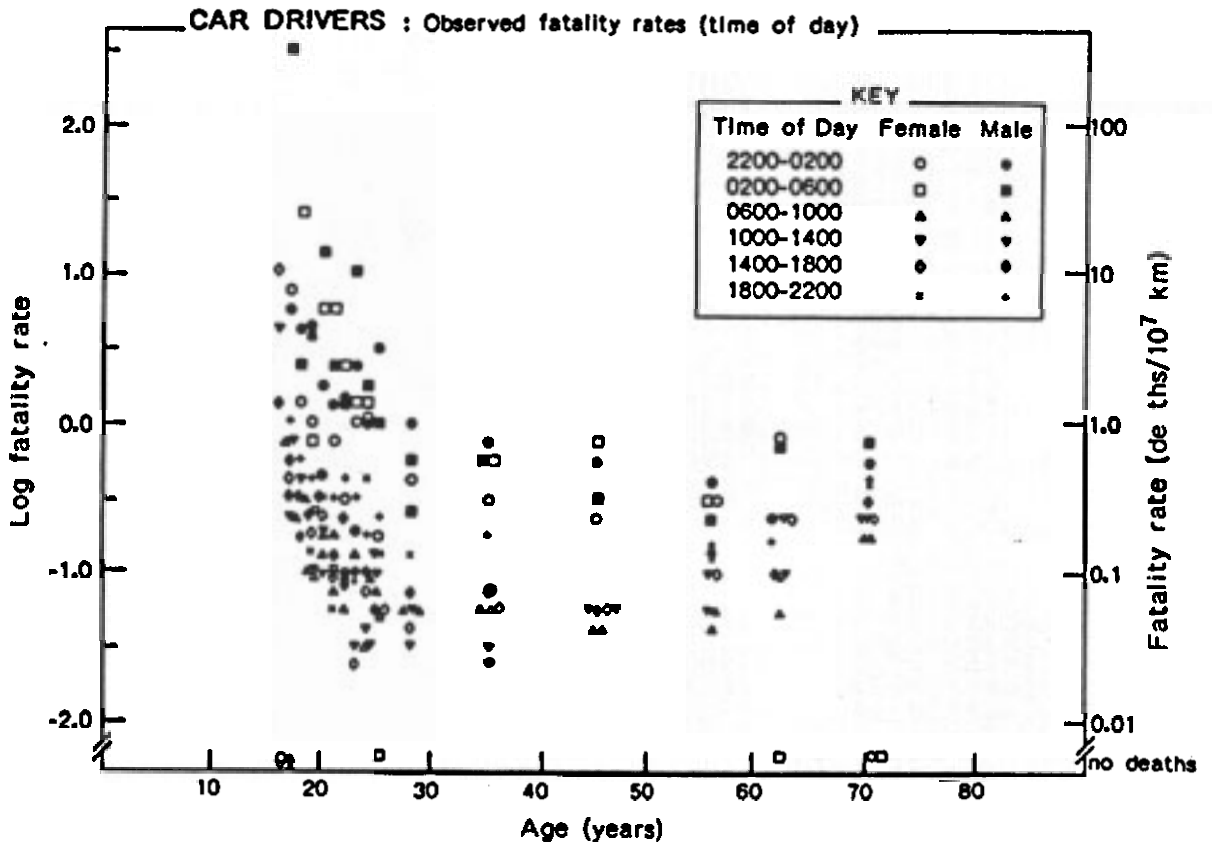
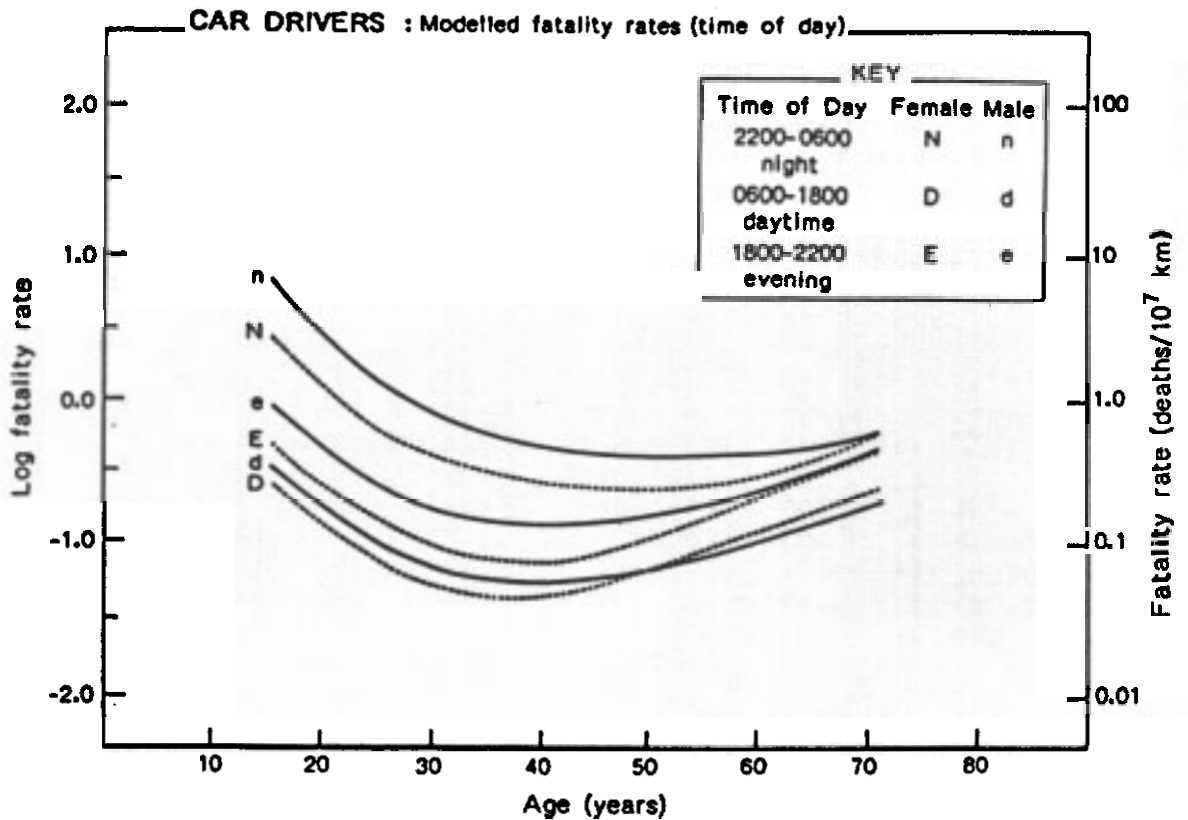


Figure 2.2



## 2. Car drivers

### 2.0 Age and sex variation in fatality rates

For the analyses of fatalities among car drivers, ages were grouped as ages 9 to 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 to 29, 30 to 39, 40 to 49, 50 to 59, 60 to 64, and 65 and over. These age groups were chosen because of the particular interest in the pattern of fatality rates between ages 16 and 25. Ages 9 to 15 were excluded as it was considered that information on the driving habits of persons below the legal driving age would not be reliable.

Figure 2.1 shows the observed fatality rate per ten million kilometres with age group for each sex, while Figure 2.2 graphs the modelled rates for a log-linear model for this rate. (Figure A2.2 in the Appendix is the same graph on a normal scale.) The model shows that the estimated fatality rate is highest for the youngest age group (age 16) then becomes much lower with increasing age up to 30 years. Between ages 30 and 60, the fatality rate is at a minimum. The rate is higher for the oldest age groups, although it does not reach the levels of the youngest groups. (Figures 2.1 and 2.2 also include information on how the rates vary with time of day.)

The variation of fatality rates with age can be described with a cubic function of age. (F statistic = 11, for 1 and 176 degrees of freedom (df),  $0.001 < p < 0.01$ ). This cubic function provides a reasonable approximation to the age-specific variation, and is used for later analyses in this chapter. Overall, males have a fatality rate 49% greater than females. The 95% confidence interval for this difference is 28% to 75% higher. As expected, this difference is highly statistically significant (F statistic = 26, for 1 and 176 df,  $p < 0.001$ ).

However, this difference is more marked for younger than older persons (Figure 2.2). Indeed, a linear age by sex term is a statistically significant addition to the model (F statistic = 14, for 1 and 176 df,  $p < 0.001$ ). Such a model estimates the relative fatality rate of males compared with females as being at a maximum at young ages, with almost no difference by age 60. For young adults, the fatality rate of males is estimated as being twice that of females.

The age-specific variation (as smoothed by the cubic function of age, and allowing for the age-specific sex difference in the rates) is:

Age	Fatality rate (deaths/ $10^7$ km)	
	Males	Females
17	.67	.32
20	.40	.20
25	.20	.11
30	.12	.07
45	.08	.06
60	.13	.13

There is no evidence for a more complex pattern with age of relative rates of males compared with females. (For example, a quadratic age interaction term with sex gives an F statistic of 0.2, for 1 and 176 df,  $p > 0.05$ .)

Similar results are obtained when using time spent travelling or number of trips, instead of distance travelled:

Table 2B

	At risk denominator -----			
	Distance travelled	Time spent travelling	Number of trips	Persons per year
<b>Relative fatality rate of males compared with females</b>				
Overall	1.5	1.7	2.2	3.5
95% confidence interval	(1.3,1.8)	(1.5,2.0)	(1.9,2.6)	(2.9,4.1)
Age-specific (linear trend)				
Age 17	2.1	2.4	3.1	3.5
Age 20	2.0	2.3	2.9	3.5
Age 25	1.8	2.1	2.7	3.5
Age 30	1.7	1.9	2.4	3.5
Age 45	1.3	1.5	1.9	3.4
Age 60	1.0	1.1	1.4	3.4
<b>Male-female differences, <math>F_{1,176}</math> test statistic</b>				
Overall	26***	69***	96***	210***
With age (linear trend)	14***	19***	12***	0.0

(\*\*\*  $p < 0.001$ )

This table also shows the estimated relative fatality rates for fatality rates expressed as being per person per year. For these rates, males appear to have a much higher relative risk (3.5 fold higher) than females, but this risk is apparently independent of age. Note that older males have the same risk as older females per distance travelled, so the reason they have a threefold higher risk per person per year is that older males drive much more than similar aged females. This is an example of where an analysis of the risk per distance travelled gives different results from an analysis of the risk per person per year.



There are large differences in the average amount of travel per day for persons of different ages (see Table 2.1b, for example). **Therefore, the conventional analyses of fatality rates per person per day give different conclusions from analyses of the rates per distance travelled. In particular, the former will underestimate the relative risk of drivers in the oldest and youngest age groups as compared to those in the middle age groups who travel more. For example, using fatality rates per person per day, the relative risk of 17 year olds to 30 year olds was about 1.2 compared with about 5 for distance travelled. Similarly the relative risk of 60 year olds to 30 year olds was 0.5 compared with 1.2.**

## 2.1 Time of Day

Tables 2.1a to 2.1g give the number of fatalities, at-risk information and fatality rates, classified by age, sex and time of day. **When the rate could not be calculated for a cell, that cell is left blank in the fatality rate tables (2.1c, 2.1e and 2.1g). This occurs when there were no survey respondents of the given sex and age group recorded as travelling in the time period, for example, male 16 year-olds from 0200 to 0600.**

Fatality rates varied greatly with time of day. **(For example, in the analysis of fatality rates per distance travelled, the F statistic, on 5 and 176 df, was 130,  $p < 0.001$ .) The highest rates occurred in the two periods from 2200 to 0600 and were about ten times those in the three daytime periods between 0600 and 1800. The remaining period (1800-2200) had an intermediate rate of about four times that of the daytime. Most of the variation in rates was between these three aggregated periods (F statistic for differences in rates between the three aggregated time periods = 310, for 2 and 176 df,  $p < 0.001$ ), while there was little variation remaining within the aggregated time periods (F statistic, for 3 and 176 df, = 3.0,  $0.01 < p < 0.05$ ).**

There was a statistically significant interaction between age and time of day (linear age interaction with the three aggregated time periods gives an F statistic = 19, for 2 and 176 df,  $p < 0.001$ ; linear age interaction within the aggregated time periods gives F statistic, for 3 and 176 df, = 2.0,  $p > 0.05$ ). This interaction shows that the day-night difference was greater for drivers aged below 20 years, than for those aged 40 years or older. **There was also evidence for sex differences differing by time of day (F statistic for a sex interaction with the three aggregated time periods, for 2 and 176 df, = 3.4,  $0.01 < p < 0.05$ ).**

Typical estimated fatality rates for car drivers from the above model (with a cubic function of age and linear age interactions with sex and aggregated time of day) are:

Table 2C		Estimated fatality rate (deaths/10 <sup>7</sup> km)		
Sex	Age	Day	Evening	Night
		0600-1800	1800-2200	2200-0600
Males	17	.27	.72	4.9
	20	.17	.45	2.8
	25	.10	.25	1.3
	45	.05	.13	.38
	60	.10	.24	.45
Females	17	.19	.35	2.1
	20	.12	.23	1.3
	25	.07	.14	.63
	45	.05	.09	.23
	60	.12	.19	.32

This is the model graphed in Figure 2.2.

Similar differences between the different times of day were also seen for rates expressed in terms of time spent travelling and number of trips. However, contradictory results were obtained from a model using population as the at-risk measure. This predicted that the period 1400 - 1800 would have the highest fatality rate of about twice the rate for the period 0200 - 0600 the lowest rate. This model is misleading because it ignores the great variation in the distance travelled in different time periods (see Table 2.1b). This model is equivalent to making predictions from Table 2.1a, instead of Table 2.1c.

When a model includes significant interaction terms (in this case age by sex and age by time day), the discrepancy between at-risk measures may be particularly large for some groups. For example, from Table 2C the fatality rate for 17 year old males driving at night is about 100 times that for females aged 45 driving during the day. Using population instead of distance as the at-risk measure reduces this ratio to only 7.

Table 2.1a. Car drivers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons ( '000)
<b>Males</b>								
9-15	0	0	0	0	3	0	3	962
16	6	2	0	2	2	0	12	157
17	16	10	4	8	7	10	55	143
18	17	11	9	7	13	11	68	132
19	20	16	7	4	16	18	81	115
20	14	18	9	4	16	14	75	116
21	21	21	4	5	11	16	78	121
22	16	18	6	3	16	19	78	107
23	23	7	10	9	7	13	69	125
24	18	11	7	3	9	11	59	114
25	23	5	6	6	6	12	58	117
26-29	43	12	18	14	33	46	166	457
30-39	64	36	39	25	58	79	301	1043
40-49	33	16	27	32	44	47	199	848
50-59	15	7	24	24	51	33	154	692
60-64	5	4	10	19	18	12	68	347
65+	5	4	19	56	52	18	154	601
<b>Total</b>	<b>339</b>	<b>198</b>	<b>199</b>	<b>221</b>	<b>362</b>	<b>359</b>	<b>1678</b>	<b>6197</b>
<b>Females</b>								
9-15	0	0	0	0	1	1	2	913
16	0	2	0	0	1	0	3	138
17	2	0	4	1	4	2	13	136
18	5	6	4	5	3	3	26	124
19	4	1	2	4	6	2	19	105
20	3	2	3	4	7	10	29	112
21	4	3	4	2	3	1	17	111
22	2	2	2	2	6	3	17	110
23	4	2	4	1	1	2	14	113
24	5	2	1	1	3	7	19	113
25	1	0	2	4	3	3	13	118
26-29	8	3	7	6	11	11	46	501
30-39	12	7	16	10	25	15	85	1056
40-49	6	3	10	12	16	13	60	769
50-59	3	2	6	13	22	8	54	689
60-64	3	0	5	11	11	1	31	357
65+	0	0	7	19	16	6	48	828
<b>Total</b>	<b>62</b>	<b>35</b>	<b>77</b>	<b>95</b>	<b>139</b>	<b>88</b>	<b>496</b>	<b>6291</b>

Source: FORS Fatal File 1984-85

Table 2.1b. Car drivers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons ( '000)
<b>Males</b>								
9-15	.01	.00	.01	.02	.07	.02	.13	962
16	.00	.00	.13	.04	.13	.12	.41	157
17	.24	.00	1.12	1.03	1.12	1.05	4.57	143
18	.46	.44	2.72	2.95	3.80	2.23	12.60	132
19	.65	.47	7.56	5.16	8.04	5.49	27.36	115
20	.96	.14	5.92	4.19	6.53	4.37	22.12	116
21	1.88	.92	6.35	6.29	8.88	6.39	30.71	121
22	1.50	1.88	7.46	5.18	7.72	5.43	29.17	107
23	1.10	.09	6.09	5.87	7.02	4.52	24.69	125
24	2.43	.71	7.41	7.41	11.76	6.46	36.17	114
25	.86	.55	9.67	7.91	11.28	5.60	35.88	117
26-29	1.32	.61	8.62	7.93	11.68	6.64	36.82	457
30-39	1.16	.80	9.70	9.45	11.62	5.51	38.23	1043
40-49	1.04	.81	9.56	8.20	11.33	5.48	36.42	848
50-59	.76	.58	9.26	7.64	10.99	4.35	33.58	692
60-64	.74	.24	6.10	7.83	7.11	2.33	24.34	347
65+	.19	.13	2.76	5.50	3.87	1.05	13.50	601
Mean	.77	.48	6.25	6.00	7.64	3.68	24.82	6197
<b>Females</b>								
9-15	.01	.00	.03	.06	.07	.02	.20	913
16	.01	.00	.03	.02	.01	.03	.10	138
17	.03	.00	.62	.43	1.08	.65	2.80	136
18	.43	.03	1.80	1.19	2.08	2.12	7.66	124
19	.45	.16	2.35	2.44	4.54	1.95	11.89	105
20	.83	.04	2.63	2.43	3.93	4.04	13.90	112
21	.58	.06	3.08	2.79	3.47	2.00	11.98	111
22	.72	.11	4.86	3.76	6.91	3.70	20.06	110
23	.46	.19	3.48	3.78	5.30	2.48	15.70	113
24	.61	.16	3.65	3.66	5.54	1.99	15.61	113
25	.63	.12	3.90	3.52	5.42	2.58	16.18	118
26-29	.52	.30	3.75	5.65	6.37	2.39	18.99	501
30-39	.55	.18	4.05	4.85	6.38	2.29	18.31	1056
40-49	.44	.07	3.91	3.75	5.29	1.96	15.42	769
50-59	.20	.12	2.47	2.54	3.73	1.25	10.31	689
60-64	.17	.17	.97	1.76	1.95	.42	5.43	357
65+	.06	.00	.75	1.35	1.15	.21	3.52	828
Mean	.32	.10	2.36	2.72	3.59	1.40	10.48	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.1c. Car drivers:  
Average number of fatalities per ten million kilometres  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Mean	Persons ( '000)
<b>Males</b>								
9-15	.00		.00	.00	.60	.00	.33	962
16			.00	4.22	1.39	.00	.85	157
17	6.35	291.26	.34	.74	.60	.91	1.15	143
18	3.83	2.61	.34	.25	.35	.51	.56	132
19	3.67	4.06	.11	.09	.24	.39	.35	115
20	1.71	14.95	.18	.11	.29	.38	.40	116
21	1.26	2.58	.07	.09	.14	.28	.29	121
22	1.36	1.22	.10	.07	.26	.45	.34	107
23	2.29	8.75	.18	.17	.11	.32	.31	125
24	.89	1.87	.11	.05	.09	.20	.20	114
25	3.13	1.06	.07	.09	.06	.25	.19	117
26-29	.97	.59	.06	.05	.08	.21	.13	457
30-39	.73	.59	.05	.03	.07	.19	.10	1043
40-49	.51	.32	.05	.06	.06	.14	.09	848
50-59	.39	.24	.05	.06	.09	.15	.09	692
60-64	.27	.67	.06	.10	.10	.20	.11	347
65+	.60	.72	.16	.23	.31	.39	.26	601
Mean	.95	.91	.07	.08	.10	.22	.15	6197
<b>Females</b>								
9-15	.00		.00	.00	.22	.60	.15	913
16	.00		.00	.00	10.61	.00	1.01	138
17	7.21		.65	.24	.37	.31	.47	136
18	1.27	23.41	.24	.46	.16	.16	.37	124
19	1.15	.82	.11	.21	.17	.13	.21	105
20	.44	6.31	.14	.20	.22	.30	.26	112
21	.86	6.19	.16	.09	.11	.06	.18	111
22	.35	2.24	.05	.07	.11	.10	.11	110
23	1.04	1.28	.14	.03	.02	.10	.11	113
24	1.00	1.53	.03	.03	.07	.43	.15	113
25	.18	.00	.06	.13	.06	.14	.09	118
26-29	.42	.27	.05	.03	.05	.13	.07	501
30-39	.28	.50	.05	.03	.05	.08	.06	1056
40-49	.24	.76	.05	.06	.05	.12	.07	769
50-59	.30	.34	.05	.10	.12	.13	.10	689
60-64	.68	.00	.20	.24	.22	.09	.22	357
65+	.00	.00	.15	.23	.23	.46	.23	828
Mean	.43	.71	.07	.08	.08	.14	.10	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.1d. Car drivers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons ( '000)
<b>Males</b>								
9-15	.02	.00	.02	.03	.12	.05	.23	962
16	.00	.00	.33	.08	.21	.28	.91	157
17	.43	.08	2.21	1.87	2.31	2.02	8.93	143
18	.94	.48	4.46	5.99	8.23	4.02	24.11	132
19	1.58	1.03	10.60	10.06	13.03	7.86	44.16	115
20	2.18	1.20	10.38	9.08	14.65	8.70	46.20	116
21	3.11	1.04	10.02	10.86	16.11	9.32	50.46	121
22	2.42	1.40	12.06	9.19	14.50	9.31	48.88	107
23	1.85	.17	10.57	9.63	13.01	8.39	43.62	125
24	3.27	1.95	12.01	10.67	17.28	9.90	55.08	114
25	1.63	1.03	13.92	13.11	17.31	10.09	57.09	117
26-29	2.26	1.19	13.68	13.55	18.30	10.48	59.46	457
30-39	1.88	1.37	15.31	15.23	19.54	9.19	62.53	1043
40-49	1.72	1.38	15.77	14.58	19.23	9.12	61.80	848
50-59	1.29	.81	14.16	13.13	17.90	7.19	54.47	692
60-64	1.81	1.41	11.43	15.37	14.49	4.83	49.34	347
65+	.58	.93	6.00	11.54	8.57	2.12	29.74	601
Mean	1.35	.92	10.20	10.55	13.15	6.19	42.35	6197
<b>Females</b>								
9-15	.02	.00	.06	.08	.12	.04	.33	913
16	.06	.00	.11	.02	.05	.10	.34	138
17	.07	.00	1.34	1.20	2.48	1.28	6.36	136
18	.95	.40	3.84	3.16	4.88	3.74	16.96	124
19	.91	.63	4.82	4.93	8.51	3.72	23.52	105
20	1.30	.04	5.85	5.60	8.72	7.45	28.97	112
21	1.15	.99	5.95	6.85	8.31	3.75	26.99	111
22	1.23	.94	8.47	6.69	12.30	6.32	35.96	110
23	1.03	.23	5.59	7.92	9.12	5.08	28.96	113
24	1.13	.24	7.31	6.37	9.44	4.09	28.57	113
25	1.18	.23	6.44	6.41	9.14	4.04	27.44	118
26-29	.80	.56	6.81	9.31	10.85	3.79	32.13	501
30-39	1.00	.38	8.03	10.14	12.91	4.48	36.93	1056
40-49	.90	.24	7.90	8.00	10.82	3.96	31.82	769
50-59	.46	.27	4.98	6.34	8.02	2.15	22.22	689
60-64	.56	.60	2.26	4.50	4.68	1.14	13.73	357
65+	.13	.08	1.44	3.14	2.45	.46	7.69	828
Mean	.61	.28	4.62	5.68	7.15	2.62	20.95	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.1e. Car drivers:  
Average number of fatalities per one million hours  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Mean	Persons ( '000)
<b>Males</b>								
9-15	.00		.00	.00	2.13	.00	1.09	962
16			.00	13.23	4.86	.00	2.30	157
17	21.27	69.96	1.04	2.46	1.74	2.84	3.54	143
18	11.32	14.24	1.26	.73	.98	1.70	1.76	132
19	9.04	11.12	.47	.28	.88	1.64	1.31	115
20	4.54	10.57	.61	.31	.77	1.14	1.15	116
21	4.60	13.75	.27	.31	.46	1.17	1.05	121
22	5.07	9.83	.38	.25	.84	1.56	1.22	107
23	8.21	26.77	.62	.62	.35	1.02	1.04	125
24	3.95	4.06	.42	.20	.37	.80	.77	114
25	9.89	3.42	.30	.32	.24	.84	.71	117
26-29	3.41	1.81	.24	.19	.32	.79	.50	457
30-39	2.69	2.07	.20	.13	.23	.68	.38	1043
40-49	1.86	1.13	.17	.21	.22	.50	.31	848
50-59	1.38	1.03	.20	.22	.34	.55	.34	692
60-64	.66	.67	.21	.29	.29	.59	.33	347
65+	1.18	.59	.43	.66	.83	1.16	.71	601
Mean	3.26	2.81	.26	.28	.36	.77	.52	6197
<b>Females</b>								
9-15	.00		.00	.00	.73	2.05	.55	913
16	.00		.00	.00	11.69	.00	1.74	138
17	17.38		1.80	.50	.98	.94	1.23	136
18	3.50	9.88	.69	1.05	.41	.53	1.01	124
19	3.44	1.25	.33	.64	.55	.42	.63	105
20	1.69	39.81	.38	.52	.59	.99	.73	112
21	2.58	2.24	.50	.22	.27	.20	.47	111
22	1.21	1.59	.18	.22	.36	.36	.35	110
23	2.81	6.26	.52	.09	.08	.29	.35	113
24	3.23	6.11	.10	.11	.23	1.25	.48	113
25	.59	.00	.22	.44	.23	.52	.33	118
26-29	1.64	.88	.17	.11	.17	.48	.23	501
30-39	.93	1.43	.16	.08	.15	.26	.18	1056
40-49	.71	1.36	.14	.16	.16	.35	.20	769
50-59	.77	.88	.14	.24	.33	.44	.29	689
60-64	1.24	.00	.51	.56	.54	.20	.52	357
65+	.00	.00	.48	.60	.65	1.29	.62	828
Mean	1.34	1.56	.22	.22	.25	.44	.31	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.1f. Car drivers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons ( '000)
<b>Males</b>								
9-15	.00	.00	.00	.00	.01	.00	.01	962
16	.00	.00	.01	.01	.01	.02	.04	157
17	.03	.00	.13	.12	.18	.12	.58	143
18	.08	.02	.25	.35	.58	.28	1.56	132
19	.09	.03	.41	.44	.63	.49	2.10	115
20	.14	.02	.48	.50	.65	.51	2.30	116
21	.18	.04	.45	.53	.72	.50	2.42	121
22	.17	.05	.54	.55	.71	.59	2.60	107
23	.12	.01	.53	.60	.72	.55	2.53	125
24	.17	.06	.55	.63	.82	.59	2.82	114
25	.10	.05	.57	.55	.70	.61	2.57	117
26-29	.13	.05	.62	.73	.85	.61	2.98	457
30-39	.10	.04	.73	.82	.93	.50	3.12	1043
40-49	.09	.04	.75	.73	.91	.50	3.01	848
50-59	.06	.03	.61	.66	.77	.33	2.47	692
60-64	.07	.02	.53	.74	.67	.23	2.26	347
65+	.02	.01	.28	.58	.41	.12	1.42	601
Mean	.07	.03	.47	.54	.62	.34	2.07	6197
<b>Females</b>								
9-15	.00	.00	.00	.00	.01	.00	.02	913
16	.01	.00	.01	.01	.01	.01	.04	138
17	.01	.00	.07	.07	.14	.08	.36	136
18	.06	.00	.21	.18	.30	.22	.98	124
19	.07	.01	.25	.33	.50	.26	1.43	105
20	.08	.00	.33	.36	.54	.36	1.67	112
21	.07	.01	.30	.43	.60	.26	1.68	111
22	.06	.02	.41	.48	.76	.36	2.09	110
23	.08	.02	.34	.49	.56	.28	1.77	113
24	.07	.01	.44	.45	.61	.24	1.81	113
25	.08	.02	.39	.47	.53	.27	1.75	118
26-29	.04	.02	.46	.66	.71	.25	2.13	501
30-39	.05	.01	.60	.76	.92	.30	2.64	1056
40-49	.04	.01	.53	.59	.74	.27	2.18	769
50-59	.03	.01	.30	.43	.46	.11	1.32	689
60-64	.01	.00	.12	.27	.23	.05	.69	357
65+	.01	.00	.07	.17	.13	.03	.40	828
Mean	.03	.01	.30	.40	.46	.16	1.36	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86



Table 2.lg. Car drivers:  
Average number of fatalities per one million trip segments  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Mean	Persons ( '000)
<b>Males</b>								
9-15	.00		.00	.00	.72	.00	.32	962
16			.00	2.67	2.27	.00	.82	157
17	5.12	228.15	.29	.64	.38	.81	.91	143
18	2.29	6.88	.37	.21	.23	.41	.45	132
19	2.72	5.82	.20	.11	.30	.44	.46	115
20	1.21	10.55	.22	.09	.29	.32	.38	116
21	1.36	6.25	.10	.11	.17	.36	.37	121
22	1.19	4.92	.14	.07	.29	.41	.38	107
23	2.10	13.02	.21	.16	.11	.26	.30	125
24	1.28	2.13	.15	.06	.13	.22	.25	114
25	2.65	1.27	.12	.13	.10	.23	.26	117
26-29	.97	.74	.09	.06	.12	.23	.17	457
30-39	.83	1.12	.07	.04	.08	.21	.13	1043
40-49	.61	.62	.06	.07	.08	.15	.11	848
50-59	.48	.41	.08	.07	.13	.20	.12	692
60-64	.28	.68	.07	.10	.11	.21	.12	347
65+	.51	.91	.15	.22	.29	.35	.25	601
Mean	1.02	1.58	.09	.09	.13	.23	.18	6197
<b>Females</b>								
9-15	.00		.00	.00	.18	.74	.15	913
16	.00		.00	.00	1.61	.00	.26	138
17	2.56		.62	.15	.29	.25	.36	136
18	.96	13.53	.21	.30	.11	.15	.29	124
19	.80	1.12	.10	.16	.16	.10	.17	105
20	.48	5.73	.11	.13	.16	.34	.21	112
21	.71	4.77	.16	.06	.06	.05	.13	111
22	.40	1.49	.06	.05	.10	.10	.10	110
23	.63	1.36	.14	.02	.02	.09	.10	113
24	.87	1.99	.03	.03	.06	.36	.13	113
25	.15	.00	.06	.10	.07	.13	.09	118
26-29	.52	.52	.04	.03	.04	.12	.06	501
30-39	.31	1.01	.03	.02	.04	.06	.04	1056
40-49	.24	.50	.03	.04	.04	.09	.05	769
50-59	.22	.46	.04	.06	.10	.15	.08	689
60-64	.82	.00	.17	.15	.18	.07	.17	357
65+	.00	.00	.16	.19	.21	.37	.20	828
Mean	.42	1.02	.06	.05	.07	.12	.08	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Figure 2.3

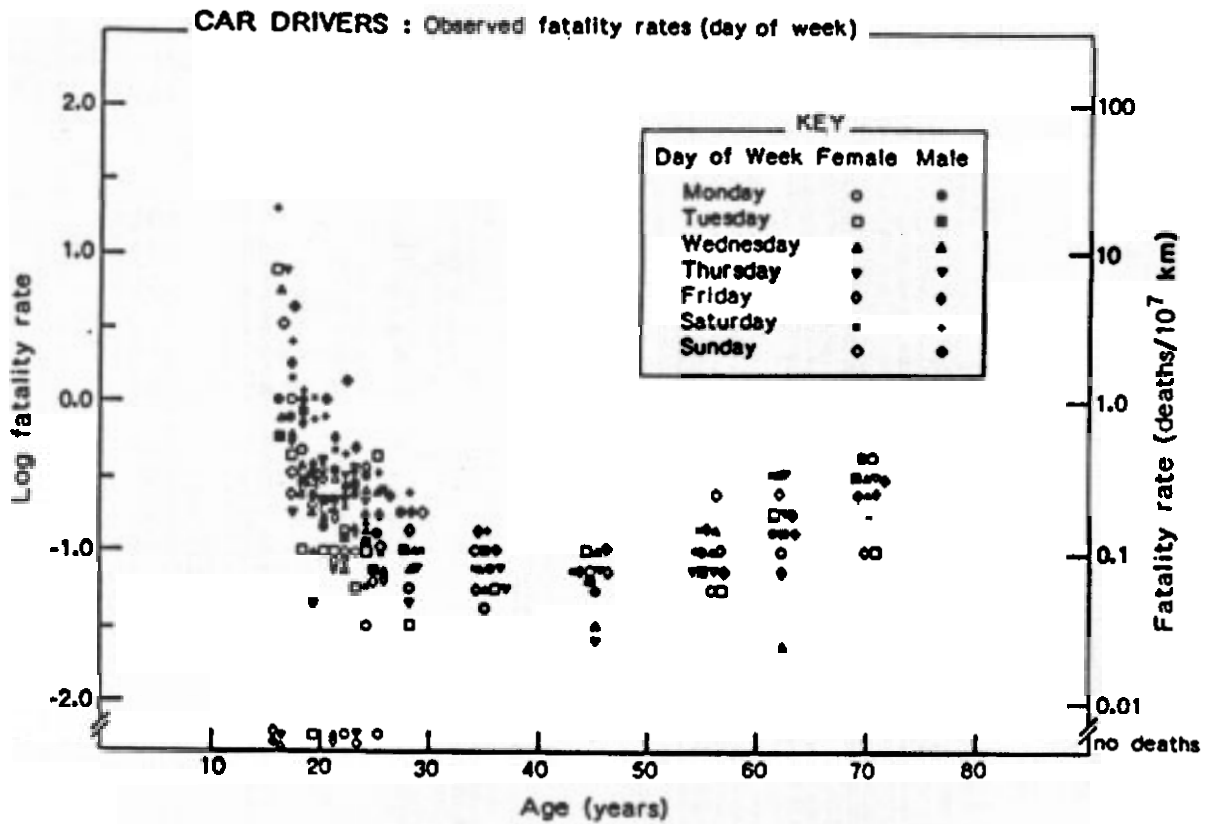
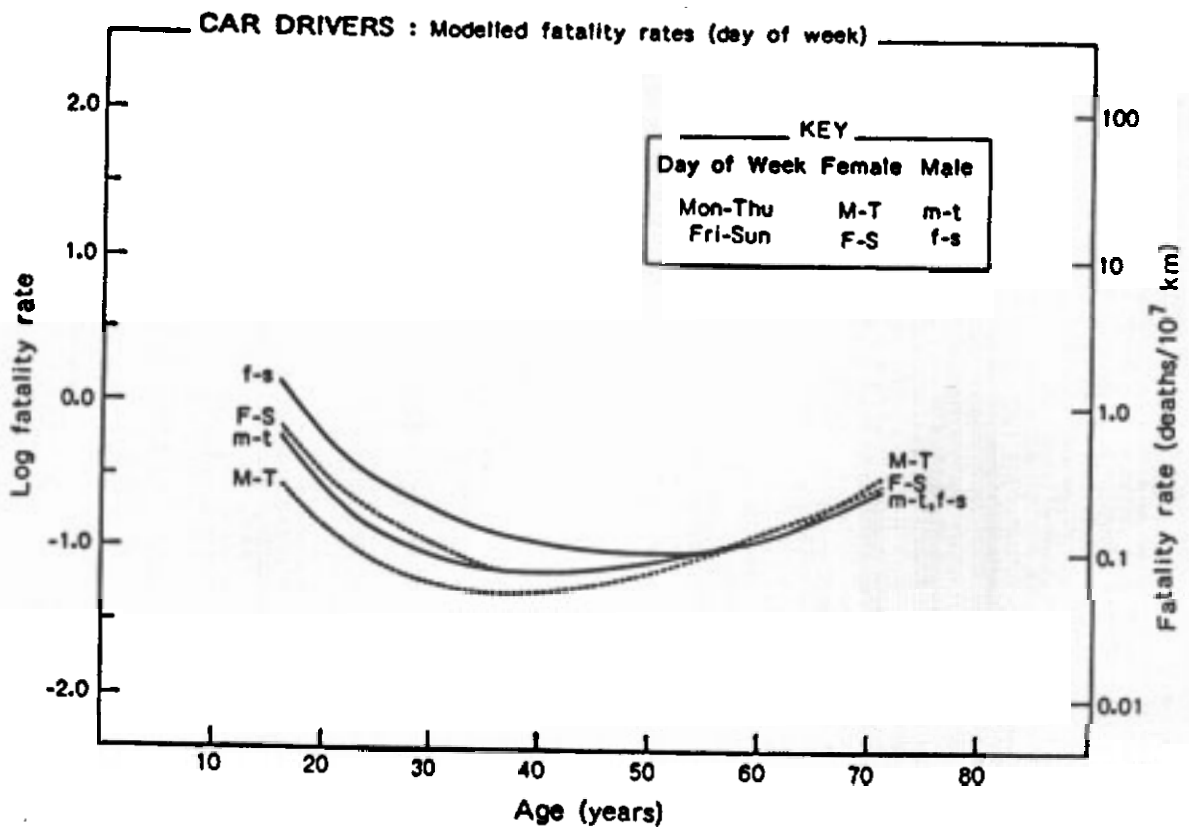


Figure 2.4



## 2.2 Day of week

Travel by car drivers was spread evenly throughout the week (Tables 2.2b, d and f). However, the fatality rate for both males and females varied significantly with day of the week (Tables 2.2c, e and f). (For example, in the analysis of rates per distance travelled, the F statistic for day of week variation was 12, for 6 and 216 df,  $p < 0.001$ .)

For risk of fatalities by car drivers, the days of the week can be divided into three periods - Monday to Thursday, Friday, and Saturday-Sunday (F statistic for variation between these these periods, for 2 and 216 df, = 35,  $p < 0.001$ ; F statistic for variation within the periods, for 4 and 216 df, = 0.0,  $p > 0.05$ ). After adjusting for age and sex, the weekend rate (per distance travelled) was approximately 70% higher than that for the first four days. Friday's rate was about half-way between the two.

An age by day of week interaction term was also statistically significant (F statistic for linear age by aggregated day of week interaction, for 3 and 216 df, = 7.1,  $p < 0.001$ ). This showed that the higher fatality rate on Friday, Saturday and Sunday was present only for the younger age groups. By age 60, there was little difference effect of day of week apparent. There was no evidence that the relative fatality rate of males compared with females differed by aggregated day of the week (F statistic, for 3 and 216 df, = 0.6,  $p > 0.05$ ).

Figure 2.3 shows the observed fatality rates (per distance travelled) with day of week, and Figure 2.4 shows the modelled rates. (The model used for Figure 2.4 distinguishes week days (Monday to Thursday) from the weekend (Friday to Sunday), and has a linear age by type of day term. The sex difference is modelled with a linear interaction with age, but with no dependence on day of week.)

Very similar trends and levels of significance were found for models using time, number of trips or population as the at-risk measure. (Estimates of the fatality rate for the weekend compared to the rest of the week varied from 58% greater using population to 72% greater using number of trips). There is no discrepancy between measures because the amount of travel per day by drivers varies little between the weekend and the rest of the week.

The difference in fatality rates between the working week and the weekend varied according to the time of day. For the time period 0200 - 0600, the rate for Saturday and Sunday (ie late Friday and Saturday nights) was four times higher than the rate for this period during the working week. By contrast, for the period 1000 - 1400, the weekend rate was less than the Monday to Friday rate. The other time periods over the weekend had rates closer to the average for the weekend (namely, 1.7 times the working week).

This means that the combined effect of the late night time periods and the weekend was greater than would be expected by simply multiplying the effects together. The difference between fatality rates for day and night times was greater for Saturday (and to a lesser extent, Friday and Sunday) than it was during the rest of the week. Over all time periods in a week and over all ages, the fatality rate varied nearly 40-fold from a minimum for the middle of the day on Monday to Thursday to a maximum during early weekend mornings. This variation was greatest for young drivers and decreased with age (eg. rates for 17 year olds varied by a factor of 45, while those for 65 year olds varied by a factor of 17).

Table 2D  
Estimated fatality rate (persons/10<sup>7</sup> km) for males of different ages

	Time of day					
	2200-0200	0200-0600	0600-1000	1000-1400	1400-1800	1800-2200
<u>Age 20</u>						
Monday-						
Thursday	1.7	1.5	.14	.17	.18	.27
Friday	2.8	1.1	.14	.18	.21	.47
Saturday	3.7	5.9	.23	.14	.31	.56
Sunday	2.8	5.7	.21	.15	.31	.59
<u>Age 30</u>						
Monday-						
Thursday	.59	.44	.05	.05	.06	.14
Friday	1.0	.33	.05	.05	.07	.25
Saturday	1.3	1.7	.09	.04	.10	.29
Sunday	1.0	1.7	.08	.04	.10	.31
<u>Age 60</u>						
Monday-						
Thursday	.31	.30	.06	.12	.11	.14
Friday	.53	.23	.06	.13	.13	.24
Saturday	.68	1.2	.10	.10	.19	.28
Sunday	.52	1.1	.09	.11	.19	.30
<u>Fatality rates relative to Monday-Thursday for each time of day - all ages</u>						
Monday-						
Thursday	1	1	1	1	1	1
Friday	1.7	.7	1.0	1.1	1.2	1.7
Saturday	2.2	4.0	1.6	.8	1.7	2.1
Sunday	1.7	3.8	1.4	.9	1.7	2.2

Using time spent travelling or number of trips as the at-risk measure results in a similar pattern. As might be expected from the results for time of day, this is not the case for population fatality rates (see section 2.1). For this measure the fatality rates of young drivers vary only by a factor of less than 4 across all time periods in a week. As was seen in section 2.1, the variation for rates per person per year may be much less than that predicted for rates per kilometre, particularly if the model that has been fitted includes interaction terms.

Table 2.2a. Car drivers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total	Persons ( '000)
<b>Males</b>									
9-15	0	0	0	0	0	0	3	3	962
16	1	1	2	2	0	4	2	12	157
17	5	6	4	7	9	12	12	55	143
18	8	7	8	4	11	22	10	70	132
19	5	8	5	6	14	27	20	85	115
20	4	7	5	4	11	20	26	77	116
21	10	5	7	4	17	17	21	81	121
22	8	3	5	7	8	25	23	79	107
23	9	4	7	9	13	19	8	69	125
24	8	4	7	7	11	8	14	59	114
25	4	7	7	9	6	12	13	58	117
26-29	12	20	18	15	31	44	30	170	457
30-39	27	47	34	36	54	62	46	306	1043
40-49	17	24	37	25	29	34	34	200	848
50-59	25	17	22	20	31	24	15	154	692
60-64	10	11	2	13	10	12	10	68	347
65+	19	23	23	22	28	19	21	155	601
<b>Total</b>	<b>172</b>	<b>194</b>	<b>193</b>	<b>190</b>	<b>283</b>	<b>361</b>	<b>308</b>	<b>1701</b>	<b>6197</b>
<b>Females</b>									
9-15	0	0	0	1	0	1	0	2	913
16	0	1	0	0	0	1	1	3	138
17	1	2	2	1	1	4	2	13	136
18	3	1	3	4	5	7	3	26	124
19	2	0	3	1	3	6	4	19	105
20	2	2	6	5	5	6	3	29	112
21	5	2	3	0	2	5	0	17	111
22	0	4	1	2	4	3	3	17	110
23	2	1	3	0	0	3	5	14	113
24	1	2	3	4	6	1	2	19	113
25	0	4	2	2	2	1	2	13	118
26-29	7	4	7	4	12	7	6	47	501
30-39	10	11	11	14	12	11	20	89	1056
40-49	8	14	5	3	11	7	12	60	769
50-59	3	5	12	9	8	8	9	54	689
60-64	2	7	4	4	5	4	5	31	357
65+	11	4	8	7	5	7	7	49	828
<b>Total</b>	<b>57</b>	<b>64</b>	<b>73</b>	<b>61</b>	<b>81</b>	<b>82</b>	<b>84</b>	<b>502</b>	<b>6291</b>

Source: FORS Fatal File 1984-85

Table 2.2b. Car drivers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15	.00	.04	.33	.25	.01	.02	.25	.13	962
16	.58	1.25	.21	.15	.60	.09	.00	.41	157
17	4.73	5.50	4.36	9.04	3.26	3.92	1.92	4.67	143
18	16.57	7.93	15.17	7.53	16.26	16.92	9.07	12.78	132
19	20.23	20.29	46.20	16.13	36.31	32.73	21.62	27.65	115
20	21.61	23.73	26.43	15.58	23.21	24.45	23.07	22.58	116
21	24.92	16.74	34.85	42.13	24.77	37.50	40.33	31.61	121
22	29.51	21.12	45.05	19.06	29.65	46.26	15.78	29.49	107
23	28.56	12.53	24.78	24.74	24.85	45.31	17.56	25.48	125
24	23.23	27.51	44.78	24.28	52.78	42.10	45.94	37.23	114
25	22.36	76.24	23.99	35.53	25.58	29.38	41.30	36.34	117
26-29	29.36	46.78	33.78	40.20	38.26	36.21	35.23	37.12	457
30-39	32.06	42.23	38.05	42.37	33.22	38.78	42.57	38.47	1043
40-49	34.96	33.15	44.77	36.86	38.25	33.63	35.20	36.69	848
50-59	35.16	29.66	34.93	39.73	34.67	37.10	26.94	34.03	692
60-64	22.73	23.78	22.40	22.98	39.95	20.02	19.52	24.48	347
65+	13.53	12.32	14.09	12.58	17.88	11.93	12.30	13.52	601
Mean	22.53	24.98	26.61	25.85	25.99	25.51	24.02	25.07	6197
<b>Females</b>									
9-15	.08	.19	.10	.06	.39	.11	.45	.20	913
16	.00	.10	.20	.15	.04	.00	.20	.10	138
17	.72	3.33	2.04	3.62	2.97	2.17	4.96	2.83	136
18	4.81	6.78	9.88	9.22	8.69	7.71	6.80	7.70	124
19	9.03	8.57	14.30	22.20	15.40	6.34	9.92	12.25	105
20	8.94	18.43	14.36	13.34	13.72	12.86	17.90	14.22	112
21	16.16	17.03	9.84	9.21	9.86	8.91	13.60	12.09	111
22	39.01	24.05	11.98	12.54	32.95	11.11	10.52	20.31	110
23	16.14	13.96	21.83	12.93	15.26	19.81	11.57	15.93	113
24	25.29	15.63	11.83	14.48	17.30	13.42	11.60	15.65	113
25	13.37	7.73	21.91	24.05	23.58	8.48	15.82	16.42	118
26-29	26.24	23.38	18.18	16.59	18.62	23.85	6.82	19.10	501
30-39	18.88	19.94	19.51	20.27	21.18	12.92	16.26	18.42	1056
40-49	14.71	15.36	17.35	16.59	19.97	11.19	13.50	15.52	769
50-59	7.80	11.56	12.80	14.61	11.84	8.85	4.82	10.33	689
60-64	5.31	9.55	3.67	3.70	4.91	3.45	7.42	5.43	357
65+	2.63	4.90	2.77	2.80	5.79	3.98	1.74	3.52	828
Mean	10.95	11.64	10.96	11.13	12.38	8.78	8.03	10.55	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.2c. Car drivers:  
Average number of fatalities per ten million kilometres  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15		.00	.00	.00	.00	.00	1.17	.33	962
16	1.05	.49	5.90	8.33	.00	27.04		2.12	157
17	.71	.73	.62	.52	1.85	2.06	4.19	1.13	143
18	.35	.64	.38	.39	.49	.94	.80	.57	132
19	.21	.33	.09	.31	.32	.69	.77	.37	115
20	.15	.24	.16	.21	.39	.67	.93	.40	116
21	.32	.24	.16	.08	.54	.36	.41	.29	121
22	.24	.13	.10	.33	.24	.48	1.30	.34	107
23	.24	.25	.22	.28	.40	.32	.35	.30	125
24	.29	.12	.13	.24	.17	.16	.26	.19	114
25	.15	.08	.24	.21	.19	.33	.26	.19	117
26-29	.09	.09	.11	.08	.17	.25	.18	.14	457
30-39	.08	.10	.08	.08	.15	.15	.10	.10	1043
40-49	.05	.08	.09	.08	.09	.11	.11	.09	848
50-59	.10	.08	.09	.07	.12	.09	.08	.09	692
60-64	.12	.13	.02	.16	.07	.17	.14	.11	347
65+	.22	.30	.26	.28	.25	.25	.27	.26	601
Mean	.12	.12	.11	.11	.17	.22	.20	.15	6197
<b>Females</b>									
9-15	.00	.00	.00	1.91	.00	.97	.00	.15	913
16		6.69	.00	.00	.00		3.55	2.02	138
17	.98	.42	.69	.19	.24	1.30	.28	.46	136
18	.48	.11	.23	.33	.44	.70	.34	.37	124
19	.20	.00	.19	.04	.18	.87	.37	.20	105
20	.19	.09	.36	.32	.31	.40	.14	.25	112
21	.27	.10	.26	.00	.18	.49	.00	.17	111
22	.00	.15	.07	.14	.11	.24	.25	.10	110
23	.10	.06	.12	.00	.00	.13	.37	.11	113
24	.03	.11	.22	.23	.29	.06	.15	.15	113
25	.00	.42	.07	.07	.07	.10	.10	.09	118
26-29	.05	.03	.07	.05	.12	.06	.17	.07	501
30-39	.05	.05	.05	.06	.05	.08	.11	.06	1056
40-49	.07	.11	.04	.02	.07	.08	.11	.07	769
50-59	.05	.06	.13	.09	.09	.13	.26	.10	689
60-64	.10	.20	.29	.29	.27	.31	.18	.22	357
65+	.48	.09	.33	.29	.10	.20	.46	.23	828
Mean	.08	.08	.10	.08	.10	.14	.16	.10	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.2d. Car drivers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15	.00	.10	.64	.33	.05	.06	.46	.23	962
16	1.24	1.40	.52	.32	1.67	1.22	.00	.91	157
17	12.83	8.34	7.15	14.39	9.76	7.70	3.17	9.05	143
18	28.58	17.47	23.13	20.51	27.59	37.23	16.81	24.47	132
19	45.06	34.52	59.24	33.41	42.86	51.31	46.15	44.65	115
20	41.71	62.29	44.31	28.60	40.98	48.06	63.05	47.00	116
21	38.50	38.39	47.00	65.17	40.86	71.68	61.18	51.82	121
22	65.47	40.97	52.74	29.48	56.73	67.66	32.35	49.34	107
23	49.33	26.17	45.07	48.82	43.77	71.44	28.88	44.78	125
24	36.04	42.53	64.50	46.73	92.76	55.78	56.20	56.36	114
25	48.27	82.50	44.77	63.74	42.87	51.77	70.68	57.80	117
26-29	54.73	65.18	61.81	75.58	59.33	52.78	50.16	59.94	457
30-39	61.38	66.30	61.98	66.79	58.38	63.72	61.67	62.89	1043
40-49	60.88	60.62	74.92	67.58	62.12	57.67	51.61	62.20	848
50-59	53.26	52.91	58.74	63.61	55.35	61.31	40.90	55.16	692
60-64	45.51	40.40	42.59	63.20	66.26	46.42	43.05	49.63	347
65+	28.49	25.74	27.70	31.25	46.59	28.87	19.90	29.79	601
Mean	40.96	41.67	44.34	46.54	44.71	43.62	37.29	42.73	6197
<b>Females</b>									
9-15	.17	.29	.28	.12	.56	.19	.69	.33	913
16	.00	.74	.38	.85	.13	.00	.30	.34	138
17	1.69	7.15	7.38	8.47	7.57	4.82	7.74	6.40	136
18	9.21	13.87	23.87	19.08	20.02	22.86	10.47	17.05	124
19	17.19	17.54	30.48	36.88	29.88	13.36	24.28	24.23	105
20	26.60	34.58	30.39	27.64	23.31	34.16	31.20	29.70	112
21	29.84	34.07	17.93	37.57	18.37	15.75	36.78	27.19	111
22	82.82	38.82	24.20	19.51	54.15	17.37	17.23	36.30	110
23	31.43	23.39	38.69	24.42	29.38	31.57	26.79	29.38	113
24	39.67	31.20	23.74	27.81	31.41	31.02	15.51	28.62	113
25	23.61	16.04	35.50	42.25	32.73	18.35	27.45	27.99	118
26-29	36.74	41.87	33.79	34.83	32.77	33.35	12.82	32.31	501
30-39	39.37	42.25	40.25	39.44	43.69	29.36	26.01	37.20	1056
40-49	32.02	33.57	34.79	35.11	41.54	24.48	23.37	32.12	769
50-59	16.20	25.66	26.03	28.29	28.19	22.19	9.18	22.25	689
60-64	12.73	19.42	9.59	10.25	16.14	9.87	18.15	13.73	357
65+	5.18	10.40	7.41	6.21	11.27	7.87	5.51	7.69	828
Mean	21.31	23.75	22.32	22.61	25.03	18.06	14.66	21.10	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86



Table 2.2e. Car drivers:  
Average number of fatalities per one million hours  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15		.00	.00	.00	.00	.00	3.87	1.09	962
16	2.94	2.60	14.04	22.85	.00	12.02		5.74	157
17	1.57	2.89	2.25	1.96	3.71	6.27	15.26	3.49	143
18	1.22	1.75	1.51	.85	1.74	2.58	2.59	1.78	132
19	.55	1.16	.42	.90	1.63	2.63	2.17	1.36	115
20	.47	.56	.56	.69	1.33	2.06	2.04	1.16	116
21	1.24	.62	.71	.29	1.98	1.13	1.63	1.06	121
22	.66	.39	.51	1.27	.76	1.98	3.81	1.23	107
23	.84	.71	.72	.85	1.37	1.23	1.28	1.02	125
24	1.12	.47	.55	.75	.60	.72	1.25	.75	114
25	.41	.42	.77	.69	.69	1.14	.90	.70	117
26-29	.28	.39	.37	.25	.66	1.05	.75	.51	457
30-39	.24	.39	.30	.30	.51	.54	.41	.38	1043
40-49	.19	.27	.33	.25	.32	.40	.45	.31	848
50-59	.39	.27	.31	.26	.47	.33	.30	.33	692
60-64	.36	.45	.08	.34	.25	.43	.39	.32	347
65+	.64	.85	.79	.67	.57	.63	1.01	.71	601
Mean	.39	.43	.40	.38	.59	.77	.76	.53	
									6197
<b>Females</b>									
9-15	.00	.00	.00	5.13	.00	3.35	.00	.55	913
16		5.62	.00	.00	.00		13.90	3.47	138
17	2.50	1.18	1.14	.50	.56	3.51	1.09	1.23	136
18	1.51	.33	.58	.97	1.16	1.42	1.33	1.01	124
19	.64	.00	.54	.15	.55	2.47	.90	.61	105
20	.39	.30	1.01	.93	1.10	.90	.49	.72	112
21	.87	.30	.87	.00	.57	1.65	.00	.46	111
22	.00	.54	.22	.54	.39	.90	.91	.35	110
23	.32	.22	.39	.00	.00	.48	.95	.35	113
24	.13	.33	.64	.73	.97	.16	.66	.48	113
25	.00	1.22	.28	.23	.30	.27	.36	.32	118
26-29	.22	.11	.24	.13	.42	.24	.54	.24	501
30-39	.14	.14	.15	.19	.15	.20	.42	.19	1056
40-49	.19	.31	.11	.06	.20	.21	.38	.20	769
50-59	.15	.16	.38	.27	.24	.30	.82	.29	689
60-64	.25	.58	.67	.63	.50	.65	.44	.52	357
65+	1.47	.27	.75	.78	.31	.62	.88	.63	828
Mean	.24	.25	.30	.25	.30	.41	.52	.31	
									6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.2f. Car drivers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15	.00	.02	.01	.02	.01	.00	.02	.01	962
16	.12	.02	.05	.02	.07	.01	.00	.04	157
17	.82	.51	.42	.88	.75	.45	.24	.58	143
18	1.87	1.92	1.09	1.21	2.09	2.09	.61	1.55	132
19	2.50	1.56	2.56	2.06	1.59	2.23	1.78	2.04	115
20	2.43	2.69	1.89	1.94	2.80	2.32	1.71	2.26	116
21	2.27	1.80	2.53	3.00	2.57	2.20	2.30	2.38	121
22	2.34	2.82	2.51	1.98	3.47	3.29	1.63	2.58	107
23	2.64	1.58	3.06	2.46	2.50	3.83	1.65	2.53	125
24	2.73	2.53	2.88	2.53	3.37	2.83	2.77	2.81	114
25	2.17	2.21	2.57	2.33	2.16	2.65	3.17	2.46	117
26-29	2.79	2.80	3.10	3.71	2.90	2.97	2.09	2.91	457
30-39	2.75	3.15	2.83	2.98	3.04	3.40	2.99	3.02	1043
40-49	2.92	2.89	3.41	2.91	2.94	3.09	2.24	2.91	848
50-59	2.26	2.48	2.41	2.51	2.44	2.82	1.83	2.39	692
60-64	2.41	1.99	2.07	2.57	2.51	2.03	1.74	2.19	347
65+	1.41	1.49	1.36	1.65	1.72	1.19	.88	1.39	601
Mean	1.97	2.00	2.06	2.11	2.12	2.18	1.65	2.01	6197
<b>Females</b>									
9-15	.01	.02	.02	.01	.05	.02	.02	.02	913
16	.00	.09	.05	.09	.03	.00	.06	.04	138
17	.16	.31	.35	.43	.54	.24	.41	.35	136
18	.78	.86	1.10	1.47	1.14	.96	.60	.99	124
19	.74	1.57	2.33	1.66	2.02	.99	.82	1.45	105
20	1.70	2.16	1.49	1.63	1.40	1.63	1.55	1.65	112
21	1.82	2.58	1.61	1.59	1.35	1.46	1.24	1.66	111
22	3.66	2.30	2.05	.95	2.90	1.26	1.21	2.05	110
23	2.37	1.60	1.65	1.65	1.58	2.02	1.27	1.74	113
24	1.85	2.47	1.61	1.51	2.71	1.48	1.05	1.81	113
25	1.44	1.09	2.13	2.96	1.79	1.34	1.45	1.74	118
26-29	1.84	2.89	2.67	2.34	2.36	1.83	.76	2.10	501
30-39	2.99	3.12	2.82	3.07	2.89	1.96	1.32	2.60	1056
40-49	2.17	2.29	2.64	2.38	2.66	1.76	1.15	2.15	769
50-59	1.13	1.46	1.58	1.63	1.68	1.06	.58	1.30	689
60-64	.59	.73	.65	.77	.86	.60	.56	.68	357
65+	.33	.54	.43	.42	.56	.30	.21	.40	828
Mean	1.38	1.58	1.54	1.53	1.59	1.09	.72	1.34	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.2g. Car drivers:  
Average number of fatalities per one million trip segments  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15		.00	.00	.00	.00	.00	1.83	.39	962
16	.52	3.91	2.23	6.66	.00	27.11		2.12	157
17	.41	.79	.64	.53	.80	1.78	3.31	.91	143
18	.31	.27	.53	.24	.38	.76	1.18	.47	132
19	.17	.43	.16	.24	.73	1.01	.94	.50	115
20	.14	.21	.22	.17	.32	.71	1.25	.40	116
21	.35	.22	.22	.11	.53	.61	.73	.39	121
22	.31	.10	.18	.32	.21	.68	1.26	.39	107
23	.26	.19	.18	.28	.40	.38	.37	.30	125
24	.25	.13	.20	.23	.27	.24	.42	.25	114
25	.15	.26	.22	.32	.23	.37	.34	.28	117
26-29	.09	.15	.12	.08	.22	.31	.30	.17	457
30-39	.09	.14	.11	.11	.16	.17	.14	.13	1043
40-49	.07	.09	.12	.10	.11	.12	.17	.11	848
50-59	.15	.10	.13	.11	.18	.12	.11	.13	692
60-64	.11	.15	.03	.14	.11	.16	.16	.12	347
65+	.22	.25	.27	.21	.26	.25	.38	.25	601
Mean	.13	.15	.14	.14	.21	.26	.29	.19	6197
<b>Females</b>									
9-15	.00	.00	.00	.81	.00	.54	.00	.14	913
16		.78	.00	.00	.00		1.21	.44	138
17	.43	.45	.40	.16	.13	1.16	.34	.37	136
18	.30	.09	.21	.21	.34	.56	.39	.29	124
19	.25	.00	.12	.05	.14	.55	.44	.17	105
20	.10	.08	.35	.26	.31	.31	.17	.21	112
21	.24	.07	.16	.00	.13	.30	.00	.13	111
22	.00	.15	.04	.18	.12	.21	.22	.10	110
23	.07	.05	.15	.00	.00	.13	.33	.10	113
24	.05	.07	.16	.22	.19	.06	.16	.13	113
25	.00	.30	.08	.06	.09	.06	.11	.09	118
26-29	.07	.03	.05	.03	.10	.07	.15	.06	501
30-39	.03	.03	.04	.04	.04	.05	.14	.04	1056
40-49	.05	.08	.02	.02	.05	.05	.13	.05	769
50-59	.04	.05	.11	.08	.07	.11	.22	.08	689
60-64	.09	.26	.16	.14	.16	.18	.24	.17	357
65+	.38	.09	.22	.19	.10	.27	.39	.20	828
Mean	.06	.06	.07	.06	.08	.11	.18	.08	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.3a. Car drivers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Total	Persons ( '000)
<b>Males</b>						
9-15	0	1	1	1	3	962
16	2	5	3	2	12	157
17	11	14	16	14	55	143
18	16	19	23	12	70	132
19	27	14	22	22	85	115
20	17	22	22	16	77	116
21	21	22	23	15	81	121
22	24	23	16	16	79	107
23	18	21	14	16	69	125
24	9	17	16	17	59	114
25	11	12	16	19	58	117
26-29	35	50	43	42	170	457
30-39	67	82	67	90	306	1043
40-49	40	52	50	58	200	848
50-59	40	42	37	36	155	692
60-64	16	18	18	16	68	347
65+	39	49	27	40	155	601
<b>Total</b>	<b>393</b>	<b>463</b>	<b>414</b>	<b>432</b>	<b>1702</b>	<b>6197</b>
<b>Females</b>						
9-15	1	1	0	0	2	913
16	0	1	2	0	3	138
17	1	3	6	3	13	136
18	4	7	9	6	26	124
19	3	6	8	2	19	105
20	7	10	6	6	29	112
21	6	4	4	3	17	111
22	3	5	5	4	17	110
23	2	6	4	2	14	113
24	4	3	6	6	19	113
25	2	3	5	3	13	118
26-29	11	10	16	10	47	501
30-39	24	28	21	16	89	1056
40-49	14	18	14	14	60	769
50-59	14	21	10	9	54	689
60-64	4	14	4	9	31	357
65+	8	11	15	15	49	828
<b>Total</b>	<b>108</b>	<b>151</b>	<b>135</b>	<b>108</b>	<b>502</b>	<b>6291</b>

Source: FORS Fatal File 1984-85

### 2.3 Season

The amount of travel by car drivers varied little from season to season (Tables 2.3b, d and f). The fatality rates also varied little (Tables 2.3c, e and g). Compared with the fatality rate in Winter, the relative rates (per distance travelled) for Spring, Summer and Autumn were 1.15, 1.04 and 1.07, respectively. These differences between seasons were not statistically significant (F statistic, for 3 and 119 df, = 1.1,  $p > 0.05$ ). This was also true for the other three measures (time, number of trips and population).

Table 2.3b. Car drivers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.04	.12	.32	.04	.13	962
16	.10	.11	1.07	.37	.41	157
17	3.21	5.86	2.65	6.98	4.67	143
18	11.93	17.56	13.53	8.08	12.78	132
19	38.06	22.16	29.97	20.39	27.65	115
20	24.31	31.18	19.18	15.66	22.58	116
21	39.27	38.00	25.40	23.76	31.61	121
22	24.53	33.44	22.58	37.41	29.49	107
23	20.85	19.56	24.64	36.86	25.48	125
24	30.04	37.87	35.56	45.46	37.23	114
25	28.82	34.20	54.29	28.04	36.34	117
26-29	39.52	35.00	39.00	34.95	37.12	457
30-39	34.93	42.01	39.53	37.41	38.47	1043
40-49	30.91	37.68	41.09	37.08	36.69	848
50-59	32.33	29.31	41.20	33.26	34.03	692
60-64	21.11	26.87	21.02	28.92	24.48	347
65+	13.27	14.64	12.52	13.64	13.52	601
Mean	23.31	25.59	26.54	24.84	25.07	6197
<b>Females</b>						
9-15	.16	.26	.33	.04	.20	913
16	.11	.07	.17	.04	.10	138
17	4.79	2.13	1.14	3.26	2.83	136
18	7.97	7.44	10.81	4.57	7.70	124
19	9.58	9.61	12.06	17.75	12.25	105
20	15.81	11.91	16.93	12.24	14.22	112
21	12.01	13.72	13.98	8.64	12.09	111
22	20.27	17.47	21.39	22.09	20.31	110
23	17.25	17.98	13.24	15.24	15.93	113
24	12.77	17.41	17.98	14.43	15.65	113
25	14.61	21.61	17.66	11.80	16.42	118
26-29	24.48	16.97	18.14	16.80	19.10	501
30-39	17.41	19.47	18.21	18.60	18.42	1056
40-49	16.14	15.02	15.32	15.61	15.52	769
50-59	9.37	9.62	11.96	10.35	10.33	689
60-64	3.22	7.62	5.46	5.43	5.43	357
65+	3.32	3.63	3.16	3.96	3.52	828
Mean	10.59	10.61	10.71	10.30	10.55	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.3c. Car drivers:  
Average number of fatalities per ten million kilometres  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.00	.48	.18	1.38	.33	962
16	7.18	16.37	.98	1.88	2.54	157
17	1.31	.92	2.31	.77	1.13	143
18	.56	.45	.71	.62	.57	132
19	.34	.30	.35	.51	.37	115
20	.33	.33	.54	.48	.40	116
21	.24	.26	.41	.29	.29	121
22	.50	.35	.36	.22	.34	107
23	.38	.47	.25	.19	.30	125
24	.14	.22	.22	.18	.19	114
25	.18	.16	.14	.32	.19	117
26-29	.11	.17	.13	.14	.14	457
30-39	.10	.10	.09	.13	.10	1043
40-49	.08	.09	.08	.10	.09	848
50-59	.10	.11	.07	.09	.09	692
60-64	.12	.11	.14	.09	.11	347
65+	.27	.30	.20	.27	.26	601
Mean	.15	.16	.14	.15	.15	6197
<b>Females</b>						
9-15	.38	.23	.00	.00	.15	913
16	.00	5.86	4.58	.00	3.04	138
17	.08	.57	2.12	.37	.46	136
18	.22	.41	.37	.58	.37	124
19	.16	.33	.35	.06	.20	105
20	.22	.41	.17	.24	.25	112
21	.25	.14	.14	.17	.17	111
22	.07	.14	.12	.09	.10	110
23	.06	.16	.15	.06	.11	113
24	.15	.08	.16	.20	.15	113
25	.06	.06	.13	.12	.09	118
26-29	.05	.06	.10	.07	.07	501
30-39	.07	.07	.06	.04	.06	1056
40-49	.06	.09	.07	.06	.07	769
50-59	.12	.17	.07	.07	.10	689
60-64	.19	.28	.11	.25	.22	357
65+	.16	.20	.31	.25	.23	828
Mean	.09	.12	.11	.09	.10	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.3d. Car drivers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.09	.26	.53	.05	.23	962
16	.83	.48	1.57	.76	.91	157
17	7.67	11.44	7.20	9.88	9.05	143
18	21.79	38.01	22.52	15.57	24.47	132
19	54.65	31.82	45.18	46.96	44.65	115
20	44.49	59.53	38.16	45.81	47.00	116
21	58.02	59.45	37.49	52.33	51.82	121
22	48.38	54.39	41.02	53.58	49.34	107
23	40.30	36.46	41.86	60.51	44.78	125
24	59.96	54.20	51.79	59.51	56.36	114
25	62.35	61.68	64.16	43.01	57.80	117
26-29	62.19	59.68	60.19	57.70	59.94	457
30-39	58.00	65.26	61.26	67.02	62.89	1043
40-49	57.04	65.00	65.73	61.03	62.20	848
50-59	53.65	52.83	58.12	56.02	55.16	692
60-64	47.08	55.68	43.33	52.45	49.63	347
65+	27.81	33.16	23.54	34.64	29.79	601
Mean	41.06	44.34	41.71	43.82	42.73	6197
<b>Females</b>						
9-15	.17	.49	.57	.08	.33	913
16	.20	.29	.64	.24	.34	138
17	11.55	5.16	3.37	5.53	6.40	136
18	22.69	13.69	20.56	11.27	17.05	124
19	25.74	17.35	23.98	29.85	24.23	105
20	35.57	24.09	31.74	27.38	29.70	112
21	32.99	24.84	34.22	16.69	27.19	111
22	35.81	32.21	32.50	44.68	36.30	110
23	30.22	29.76	27.30	30.25	29.38	113
24	22.02	35.93	29.69	26.85	28.62	113
25	26.48	30.89	30.58	24.01	27.99	118
26-29	37.52	34.32	28.18	29.23	32.31	501
30-39	36.80	38.60	35.82	37.56	37.20	1056
40-49	32.12	33.11	30.59	32.67	32.12	769
50-59	20.73	23.31	23.04	21.93	22.25	689
60-64	9.83	17.77	12.71	14.61	13.73	357
65+	7.72	7.47	8.25	7.33	7.69	828
Mean	21.36	21.73	20.62	20.71	21.10	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86



Table 2.3e. Car drivers:  
Average number of fatalities per one million hours  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.00	1.33	.64	6.40	1.09	962
16	5.02	21.79	3.99	5.52	6.89	157
17	3.30	2.81	5.11	3.26	3.49	143
18	1.83	1.24	2.54	1.92	1.78	132
19	1.41	1.26	1.39	1.34	1.36	115
20	1.08	1.04	1.63	.99	1.16	116
21	.98	1.01	1.67	.78	1.06	121
22	1.52	1.30	1.19	.91	1.23	107
23	1.18	1.52	.88	.70	1.02	125
24	.43	.90	.89	.82	.75	114
25	.50	.55	.70	1.24	.70	117
26-29	.40	.60	.51	.52	.51	457
30-39	.36	.40	.34	.42	.38	1043
40-49	.27	.31	.29	.37	.31	848
50-59	.35	.38	.30	.31	.33	692
60-64	.32	.31	.39	.29	.32	347
65+	.77	.81	.63	.63	.71	601
Mean	.51	.55	.53	.52	.53	6197
<b>Females</b>						
9-15	2.07	.73	.00	.00	.55	913
16	.00	8.08	7.44	.00	5.21	138
17	.21	1.40	4.30	1.31	1.23	136
18	.47	1.35	1.16	1.41	1.01	124
19	.37	1.08	1.05	.21	.61	105
20	.58	1.22	.55	.64	.72	112
21	.54	.48	.35	.53	.46	111
22	.25	.46	.46	.27	.35	110
23	.19	.59	.43	.19	.35	113
24	.53	.24	.59	.65	.48	113
25	.21	.27	.46	.35	.32	118
26-29	.19	.19	.37	.22	.24	501
30-39	.20	.23	.18	.13	.19	1056
40-49	.19	.23	.20	.18	.20	769
50-59	.32	.43	.21	.20	.29	689
60-64	.37	.73	.29	.57	.52	357
65+	.41	.58	.72	.81	.63	828
Mean	.26	.36	.34	.27	.31	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.3f. Car drivers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.01	.01	.02	.00	.01	962
16	.01	.05	.03	.07	.04	157
17	.43	.72	.62	.56	.58	143
18	1.48	2.34	1.24	1.16	1.55	132
19	2.34	1.53	2.00	2.29	2.04	115
20	2.37	3.07	1.91	1.68	2.26	116
21	2.85	2.32	2.15	2.22	2.38	121
22	2.47	2.20	2.28	3.36	2.58	107
23	2.14	2.16	2.48	3.34	2.53	125
24	2.91	2.56	2.89	2.88	2.81	114
25	2.27	3.23	2.01	2.34	2.46	117
26-29	2.92	2.87	3.08	2.76	2.91	457
30-39	2.93	3.20	2.92	3.04	3.02	1043
40-49	2.76	2.86	3.03	3.00	2.91	848
50-59	2.38	2.39	2.39	2.41	2.39	692
60-64	2.11	2.16	2.16	2.33	2.19	347
65+	1.31	1.46	1.27	1.50	1.39	601
Mean	1.96	2.06	1.98	2.05	2.01	6197
<b>Females</b>						
9-15	.01	.02	.04	.01	.02	913
16	.01	.04	.08	.04	.04	138
17	.67	.20	.19	.35	.35	136
18	.91	1.13	1.32	.59	.99	124
19	1.62	1.31	1.17	1.70	1.45	105
20	1.91	1.38	1.46	1.85	1.65	112
21	1.82	1.60	1.73	1.50	1.66	111
22	2.09	2.20	1.98	1.92	2.05	110
23	1.69	1.47	1.83	1.95	1.74	113
24	1.62	2.17	1.49	1.98	1.81	113
25	1.73	2.14	1.42	1.69	1.74	118
26-29	2.21	2.36	1.69	2.13	2.10	501
30-39	2.60	2.51	2.54	2.73	2.60	1056
40-49	2.21	2.07	2.12	2.20	2.15	769
50-59	1.26	1.37	1.18	1.39	1.30	689
60-64	.63	.67	.73	.69	.68	357
65+	.33	.40	.43	.42	.40	828
Mean	1.35	1.35	1.28	1.39	1.34	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.3g. Car drivers:  
Average number of fatalities per one million trip segments  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.00	.51	.26	1.48	.39	962
16	4.89	3.34	3.46	1.03	2.54	157
17	.98	.75	.98	.96	.91	143
18	.45	.34	.77	.43	.47	132
19	.55	.43	.52	.46	.50	115
20	.34	.34	.54	.45	.40	116
21	.33	.43	.49	.31	.39	121
22	.50	.53	.36	.24	.39	107
23	.37	.43	.25	.21	.30	125
24	.15	.32	.27	.28	.25	114
25	.23	.17	.37	.38	.28	117
26-29	.14	.21	.17	.18	.17	457
30-39	.12	.13	.12	.16	.13	1043
40-49	.09	.12	.11	.12	.11	848
50-59	.13	.14	.12	.12	.13	692
60-64	.12	.13	.13	.11	.12	347
65+	.27	.30	.19	.24	.25	601
Mean	.18	.20	.18	.19	.19	6197
<b>Females</b>						
9-15	.68	.29	.00	.00	.14	913
16	.00	.90	1.00	.00	.66	138
17	.06	.62	1.24	.35	.37	136
18	.19	.27	.30	.45	.29	124
19	.10	.24	.36	.06	.17	105
20	.18	.35	.20	.16	.21	112
21	.16	.12	.11	.10	.13	111
22	.07	.11	.13	.10	.10	110
23	.06	.20	.11	.05	.10	113
24	.12	.07	.20	.15	.13	113
25	.05	.07	.16	.08	.09	118
26-29	.05	.05	.10	.05	.06	501
30-39	.05	.06	.04	.03	.04	1056
40-49	.05	.06	.05	.05	.05	769
50-59	.09	.12	.07	.05	.08	689
60-64	.10	.32	.08	.20	.17	357
65+	.16	.18	.23	.23	.20	828
Mean	.07	.10	.09	.07	.08	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.4a. Car drivers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Total
<b>Males</b>									
9-15	0	1	0	0	1	1	0	0	3
16	0	4	3	2	2	1	0	0	12
17	0	25	4	12	5	7	1	1	55
18	2	20	15	12	10	5	5	1	70
19	1	27	25	11	8	7	5	1	85
20	1	25	18	10	7	8	7	1	77
21	1	31	18	11	6	7	4	3	81
22	0	26	23	13	3	8	4	2	79
23	0	22	26	9	5	6	1	0	69
24	1	20	17	10	6	4	1	0	59
25	2	24	11	10	5	4	0	2	58
26-29	2	48	46	39	10	10	5	10	170
30-39	4	105	78	57	21	24	10	7	306
40-49	2	62	43	52	13	19	7	2	200
50-59	1	70	31	28	17	6	1	1	155
60-64	0	31	12	10	7	5	3	0	68
65+	1	64	35	27	10	11	6	1	155
Total	18	605	405	313	136	133	60	32	1702
<b>Females</b>									
9-15	0	0	1	1	0	0	0	0	
16	0	0	0	0	3	0	0	0	3
17	0	6	1	3	2	1	0	0	13
18	1	17	1	3	3	2	0	0	27
19	0	2	6	5	2	3	1	0	19
20	0	13	3	5	4	3	1	0	29
21	0	8	6	1	1	0	1	0	17
22	0	9	6	1	1	0	0	0	17
23	0	3	5	3	1	1	0	1	14
24	0	10	6	1	1	1	0	0	19
25	0	7	2	1	1	1	1	0	13
26-29	1	19	9	9	4	1	2	2	47
30-39	3	28	24	13	12	3	4	2	89
40-49	0	24	13	11	3	7	2	0	60
50-59	2	14	12	14	7	4	1	0	54
60-64	0	7	12	4	3	3	2	0	31
65+	1	15	17	5	3	6	2	0	49
Total	8	182	124	80	51	36	17	5	503

Source: FORS Fatal File 1984-85

## 2.4 State or Territory

The average distance travelled varied with State or Territory between 20 and 30 kilometres per person per day (Table 2.4b). Tables 2.4c, e and g show that the ACT and Western Australia had the lowest fatality rate followed, in increasing order, by Victoria, New South Wales, South Australia, Queensland, Tasmania and the Northern Territory.

Table 2E. Relative fatality rates (persons/10<sup>7</sup> km) for States and Territories, compared with the ACT.

	Relative rate
Australian Capital Territory	1
Western Australia	1.0
Victoria	1.2
New South Wales	1.4
South Australia	1.4
Queensland	1.5
Tasmania	1.8
Northern Territory	2.8

The differences between the States and Territories listed were statistically significant (F statistic = 4.2, for 7 and 233 df,  $p < 0.001$ ). The modelled rates for Tasmania and Northern Territory were about two and three times those for the ACT and Western Australia. Note, however, that the estimates of travel for the smaller states and territories are not as precise as for the larger regions, because they had smaller samples of respondents in the Day-to-Day Travel Survey.

Tasmania, ACT and Northern Territory were therefore excluded from further analysis. Among the remaining States, there was no evidence for different age specific patterns in the fatality rates (F statistic for a linear age by State interaction, for 4 and 144 df, = 0.4,  $p > 0.05$ ). Nor was there any evidence for the sex difference varying between these States (F statistic for a sex by State interaction, for 4 and 144 df, = 0.6,  $p > 0.05$ ).

The above ordering of the States and Territories was similar for all at-risk measures. However, the modelled differences were slightly smaller for time, number of trips and population. (For example, for these three measures the Northern Territory had relative rates to the ACT of 2.3, 2.4 and 2.4, respectively; and Tasmania had relative rates of 1.4, 1.5 and 1.5, respectively.)

Table 2.4b. Car drivers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	.00	.02	.41	.02	.03	.02	.01	.25	.13
16	.00	.30	.00	1.28	1.29	.00	.00	.00	.41
17	.00	6.20	.15	2.51	10.45	4.09	13.45	10.09	4.67
18	14.80	16.45	10.74	7.39	10.00	18.18	6.60	7.73	12.78
19	11.42	23.31	23.57	40.42	18.85	39.05	19.54	11.48	27.65
20	25.60	21.91	24.52	14.30	16.95	37.05	41.72	18.77	22.58
21	11.15	24.97	41.78	28.84	21.14	46.89	19.03	34.22	31.61
22	37.45	29.10	28.31	36.93	25.85	30.15	21.11	12.56	29.49
23	23.28	25.35	28.86	17.91	25.77	33.02	22.30	6.50	25.48
24	28.17	36.37	38.16	37.02	36.99	43.18	19.90	47.21	37.23
25	49.79	47.59	37.77	22.91	26.27	22.55	29.09	24.79	36.34
26-29	40.50	39.89	37.90	27.48	44.96	35.40	42.49	35.66	37.12
30-39	42.29	39.59	40.60	39.91	28.22	37.70	29.74	30.58	38.48
40-49	44.33	37.38	37.74	31.21	35.32	43.74	28.73	22.00	36.69
50-59	39.44	34.21	35.82	36.51	20.48	35.35	27.51	86.59	34.03
60-64	57.63	21.84	24.47	30.66	25.41	24.64	12.62	25.73	24.48
65+	6.83	13.12	13.66	16.92	9.09	11.45	17.45	22.89	13.52
Mean	28.29	25.43	26.00	24.65	20.75	26.61	20.86	27.13	25.07
<b>Females</b>									
9-15	.61	.24	.27	.06	.20	.01	.24	.00	.20
16	.00	.05	.18	.04	.24	.05	.00	.00	.10
17	.00	2.88	2.23	2.77	2.37	3.19	10.50	3.52	2.83
18	9.96	9.45	2.11	12.56	6.62	13.17	.74	8.26	7.70
19	8.65	9.21	11.69	12.94	9.37	28.90	12.00	7.75	12.25
20	42.00	10.52	15.18	20.13	10.52	18.11	4.17	8.59	14.22
21	16.47	9.45	16.26	13.63	10.30	14.91	1.67	12.79	12.09
22	12.61	14.82	24.60	21.03	10.65	31.85	20.14	3.88	20.31
23	24.90	10.47	18.46	24.49	6.33	15.84	6.80	10.53	15.93
24	14.70	16.11	18.14	11.30	12.20	19.07	12.18	14.98	15.65
25	16.94	12.67	17.72	21.77	8.65	24.72	8.01	24.92	16.42
26-29	20.39	21.76	15.67	22.34	12.20	16.42	35.49	10.15	19.10
30-39	25.30	19.56	17.72	16.62	14.92	22.51	15.66	13.19	18.43
40-49	23.14	13.57	16.23	16.24	13.33	19.93	19.84	10.81	15.52
50-59	11.43	9.16	9.58	13.32	10.55	13.72	6.14	4.35	10.33
60-64	3.05	6.58	5.60	4.21	4.07	4.64	4.15	.40	5.43
65+	2.71	3.31	3.75	1.85	6.71	3.38	3.45	.07	3.52
Mean	14.41	10.29	10.41	10.97	8.65	12.98	10.39	7.65	10.55

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.4c. Car drivers:  
Average number of fatalities per ten million kilometres  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
Males									
9-15		1.67	.00	.00	5.97	8.74	.00	.00	.33
16		3.43		.98	1.33				1.70
17		.94	10.15	4.01	.42	1.95	.34	1.59	1.13
18	.54	.37	.56	1.19	1.04	.30	2.84	.95	.57
19	.62	.44	.46	.17	.71	.20	1.62	1.73	.37
20	.24	.39	.32	.52	.51	.33	.85	.66	.40
21	.84	.46	.18	.24	.36	.18	.62	1.20	.29
22	.00	.36	.35	.30	.15	.42	.73	1.68	.34
23	.00	.26	.39	.34	.21	.26	.20	.00	.30
24	.24	.19	.18	.20	.23	.16	.35	.00	.19
25	.30	.17	.13	.32	.31	.22	.00	2.38	.19
26-29	.12	.11	.14	.23	.09	.08	.11	.57	.14
30-39	.08	.10	.10	.12	.12	.10	.18	.25	.10
40-49	.04	.08	.07	.17	.07	.07	.13	.18	.09
50-59	.04	.11	.06	.10	.17	.04	.03	.03	.09
60-64	.00	.15	.08	.08	.13	.11	.24	.00	.11
65+	.52	.31	.23	.21	.27	.27	.27	.32	.26
Mean	.10	.15	.13	.18	.16	.12	.22	.30	.15
Females									
9-15	.00	.00	.21	1.50	.00	.00	.00		.15
16		.00	.00	.00	13.73	.00			3.04
17		.59	.19	.73	.78	.36	.00	.00	.46
18	.67	.53	.20	.19	.55	.22	.00	.00	.39
19	.00	.10	.23	.26	.33	.18	.41	.00	.20
20	.00	.51	.08	.22	.48	.24	.72	.00	.25
21	.00	.28	.18	.06	.14	.00	1.88	.00	.17
22	.00	.24	.10	.04	.19	.00	.00	.00	.10
23	.00	.11	.11	.08	.29	.08	.00	2.29	.11
24	.00	.22	.15	.07	.12	.08	.00	.00	.15
25	.00	.19	.05	.03	.16	.04	.40	.00	.09
26-29	.09	.07	.06	.07	.10	.02	.06	.37	.07
30-39	.09	.05	.06	.07	.13	.02	.12	.19	.06
40-49	.00	.09	.06	.08	.04	.07	.07	.00	.07
50-59	.26	.08	.10	.14	.15	.07	.13	.00	.10
60-64	.00	.11	.31	.22	.28	.37	.58	.00	.22
65+	.89	.20	.28	.28	.08	.39	.34	.00	.23
Mean	.08	.11	.10	.10	.14	.07	.12	.19	.10

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.4d. Car drivers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	.00	.03	.74	.06	.07	.04	.11	.53	.23
16	.00	.76	.00	1.44	4.45	.00	.00	.00	.91
17	.00	12.32	.17	4.38	18.14	7.48	22.71	68.10	9.05
18	22.94	30.80	20.55	15.87	22.05	32.74	15.85	12.24	24.47
19	20.72	38.74	39.32	54.14	69.90	48.60	28.76	50.30	44.65
20	40.46	42.72	58.98	32.59	43.78	53.45	76.14	25.60	47.00
21	17.43	53.59	54.47	40.90	35.62	64.16	87.44	55.71	51.82
22	61.13	49.94	56.70	40.88	45.93	48.10	34.54	22.12	49.34
23	33.45	43.80	50.97	37.01	47.15	47.09	40.45	5.85	44.78
24	34.56	57.33	57.91	50.02	72.30	54.23	32.29	43.03	56.36
25	54.80	65.99	65.36	48.24	58.04	27.58	49.07	36.81	57.80
26-29	54.33	61.38	60.66	57.79	67.82	49.93	62.14	67.63	59.94
30-39	53.05	63.44	62.09	71.13	57.47	57.18	64.39	50.43	62.92
40-49	66.05	67.17	62.25	55.02	61.75	61.06	47.53	48.52	62.20
50-59	53.65	56.73	58.59	53.09	45.29	54.69	41.52	77.18	55.16
60-64	46.39	52.85	46.80	52.50	53.20	45.68	24.91	64.25	49.63
65+	16.90	29.20	31.07	33.99	26.13	24.23	31.37	26.59	29.79
Mean	38.15	44.08	43.40	42.67	40.92	39.79	37.97	41.63	42.74
<b>Females</b>									
9-15	.86	.34	.45	.16	.42	.02	.45	.00	.33
16	.00	.12	.56	.08	1.36	.19	.00	.00	.34
17	.00	6.90	3.13	5.12	10.44	7.80	18.00	10.89	6.40
18	24.12	15.02	6.31	22.94	25.88	48.25	2.30	14.85	17.05
19	14.85	18.07	24.74	29.42	18.91	40.56	22.94	34.99	24.23
20	42.86	25.35	27.81	36.66	31.03	45.85	12.00	19.51	29.70
21	33.27	28.04	29.51	25.84	25.74	30.45	4.11	21.54	27.19
22	19.09	26.16	47.43	38.23	28.14	43.66	30.75	12.99	36.30
23	36.65	19.12	34.50	41.87	13.59	32.24	15.55	64.95	29.38
24	25.39	29.24	31.47	23.23	25.62	30.08	29.87	27.57	28.62
25	21.94	24.89	29.32	32.03	20.01	37.72	14.82	48.39	27.99
26-29	30.06	32.25	30.46	35.47	36.26	29.24	41.14	15.82	32.31
30-39	37.52	38.22	36.51	34.96	37.55	40.15	35.84	28.95	37.21
40-49	35.56	29.88	33.79	31.93	33.21	34.90	32.17	29.03	32.12
50-59	24.02	18.39	21.99	29.25	23.74	29.11	13.90	11.41	22.25
60-64	6.24	14.44	18.21	8.08	11.68	11.77	10.50	2.00	13.73
65+	6.95	7.59	7.78	5.58	11.51	8.70	5.42	.65	7.69
Mean	22.55	20.06	21.49	21.46	21.37	24.24	18.67	17.16	21.11

Source: Survey of Day-to-Day Travel in Australia 1985-86



Table 2.4e. Car drivers:  
Average number of fatalities per one million hours  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15		9.25	.00	.00	14.32	21.69	.00	.00	1.09
16		8.15		5.21	2.30				4.59
17		2.85	55.83	13.80	1.47	6.39	1.22	1.41	3.49
18	2.08	1.20	1.77	3.31	2.84	.99	7.09	3.59	1.78
19	2.06	1.58	1.65	.77	1.15	.96	6.62	2.37	1.36
20	.90	1.20	.80	1.36	1.18	1.39	2.79	2.89	1.16
21	3.22	1.28	.83	1.02	1.27	.79	.80	4.43	1.06
22	.00	1.25	1.06	1.61	.52	1.59	2.69	5.71	1.23
23	.00	.89	1.32	.97	.70	1.11	.67	.00	1.02
24	1.20	.74	.72	.88	.70	.77	1.29	.00	.75
25	1.64	.73	.45	.90	.84	1.07	.00	9.60	.70
26-29	.53	.43	.54	.67	.34	.36	.44	1.80	.51
30-39	.38	.36	.38	.41	.35	.38	.49	.93	.38
40-49	.15	.26	.26	.59	.23	.32	.47	.49	.31
50-59	.18	.40	.24	.41	.46	.16	.12	.22	.33
60-64	.00	.38	.24	.27	.36	.35	.74	.00	.32
65+	1.27	.83	.60	.63	.56	.77	.90	1.64	.71
Mean	.43	.52	.47	.61	.50	.50	.73	1.18	.53
<b>Females</b>									
9-15	.00	.00	.75	3.51	.00	.00	.00		.55
16		.00	.00	.00	14.75	.00			5.21
17		1.48	.80	2.36	1.06	.89	.00	.00	1.23
18	1.67	1.99	.39	.61	.85	.37	.00	.00	1.05
19	.00	.30	.65	.68	.98	.75	1.29	.00	.61
20	.00	1.26	.25	.71	.99	.57	1.51	.00	.72
21	.00	.56	.60	.20	.34	.00	4.59	.00	.46
22	.00	.82	.32	.12	.44	.00	.00	.00	.35
23	.00	.37	.37	.27	.81	.22	.00	2.23	.35
24	.00	.74	.52	.21	.33	.30	.00	.00	.48
25	.00	.58	.19	.13	.42	.17	1.31	.00	.32
26-29	.38	.26	.19	.28	.20	.06	.33	1.44	.24
30-39	.36	.16	.19	.19	.31	.07	.31	.53	.19
40-49	.00	.24	.16	.24	.10	.24	.25	.00	.20
50-59	.76	.24	.25	.38	.39	.20	.33	.00	.29
60-64	.00	.31	.57	.69	.59	.88	1.37	.00	.52
65+	2.08	.53	.81	.56	.27	.90	1.30	.00	.63
Mean	.32	.34	.28	.31	.35	.23	.42	.52	.31

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.4f. Car drivers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	.00	.01	.02	.01	.01	.01	.01	.04	.01
16	.00	.07	.00	.02	.14	.00	.00	.00	.04
17	.00	.83	.02	.21	1.28	.34	1.97	1.25	.58
18	1.45	2.21	.94	.99	1.15	2.17	2.02	.92	1.55
19	1.78	1.75	1.82	2.37	2.50	2.65	1.49	3.51	2.04
20	3.10	1.90	2.16	2.10	2.13	3.95	4.28	1.48	2.26
21	1.24	2.43	2.53	1.58	2.31	3.25	2.65	4.31	2.38
22	3.87	2.44	2.59	2.12	3.18	2.52	4.11	1.26	2.58
23	2.54	2.53	2.53	2.35	2.57	2.89	2.91	.26	2.53
24	2.58	2.71	2.73	3.12	2.78	3.27	2.18	1.97	2.81
25	3.54	2.33	2.72	2.03	2.81	2.14	3.42	3.62	2.46
26-29	3.74	2.72	3.04	2.79	3.10	2.92	3.23	3.74	2.91
30-39	3.00	2.81	2.92	3.19	3.48	3.44	2.86	3.76	3.02
40-49	3.23	2.81	2.82	2.96	2.96	3.21	3.28	3.18	2.91
50-59	3.12	2.31	2.36	2.31	2.34	2.95	2.20	3.30	2.39
60-64	2.18	2.22	2.17	2.01	2.11	2.87	1.46	3.92	2.19
65+	1.20	1.31	1.42	1.41	1.41	1.54	1.56	.46	1.39
Mean	2.19	1.94	1.97	2.00	2.10	2.30	2.11	2.48	2.02
<b>Females</b>									
9-15	.02	.03	.02	.01	.02	.00	.05	.00	.02
16	.00	.02	.06	.04	.14	.01	.00	.00	.04
17	.00	.39	.18	.29	.49	.50	.65	.84	.35
18	2.28	.96	.26	1.55	1.52	1.95	.28	.90	.99
19	1.56	1.14	1.45	1.67	1.09	2.23	1.55	2.85	1.45
20	2.12	1.64	1.56	1.69	1.70	1.94	1.43	1.48	1.65
21	2.29	.96	2.16	2.30	1.44	2.89	.51	2.22	1.66
22	1.76	1.72	2.17	1.95	1.89	2.94	2.35	.90	2.05
23	2.81	1.22	1.80	2.11	1.51	2.26	2.21	1.25	1.74
24	1.89	1.60	1.88	1.68	1.91	2.42	2.11	1.90	1.81
25	1.70	1.53	1.86	1.65	1.28	2.68	1.37	3.21	1.74
26-29	2.28	1.92	2.23	1.95	2.16	2.59	2.60	1.51	2.10
30-39	2.75	2.55	2.44	2.65	2.73	2.97	2.74	2.70	2.60
40-49	2.54	2.05	2.11	2.19	2.10	2.57	2.12	2.46	2.15
50-59	1.89	1.24	1.23	1.30	1.36	1.70	1.21	1.16	1.30
60-64	.56	.75	.70	.53	.54	.80	.78	.20	.68
65+	.46	.38	.41	.33	.45	.59	.29	.07	.40
Mean	1.67	1.27	1.32	1.34	1.33	1.71	1.37	1.46	1.35

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.4g. Car drivers:  
Average number of fatalities per one million trip segments  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15		.78	.00	.00	2.38	2.51	.00	.00	.39
16		1.42		7.82	1.21				1.69
17		.71	3.37	4.81	.35	2.32	.23	1.29	.91
18	.55	.28	.65	.88	.91	.25	.93	.80	.47
19	.40	.58	.59	.29	.54	.29	2.12	.56	.50
20	.20	.45	.36	.35	.40	.31	.83	.84	.40
21	.76	.47	.30	.44	.33	.26	.44	.95	.39
22	.00	.43	.39	.52	.12	.50	.38	1.67	.39
23	.00	.26	.44	.25	.21	.30	.16	.00	.30
24	.27	.26	.25	.23	.30	.21	.32	.00	.25
25	.42	.34	.18	.36	.29	.23	.00	1.62	.28
26-29	.13	.16	.18	.23	.12	.10	.14	.54	.17
30-39	.11	.14	.13	.15	.10	.10	.18	.21	.13
40-49	.05	.10	.10	.18	.08	.10	.11	.12	.11
50-59	.05	.16	.10	.16	.15	.05	.04	.09	.13
60-64	.00	.15	.08	.12	.15	.09	.21	.00	.12
65+	.30	.31	.22	.25	.17	.20	.30	1.57	.25
Mean	.12	.20	.17	.22	.16	.14	.22	.33	.19
<b>Females</b>									
9-15	.00	.00	.23	1.07	.00	.00	.00		.14
16		.00	.00	.00	2.36	.00			.66
17		.43	.24	.70	.37	.23	.00	.00	.37
18	.29	.52	.16	.15	.24	.15	.00	.00	.30
19	.00	.08	.19	.20	.28	.23	.32	.00	.17
20	.00	.32	.07	.26	.30	.22	.21	.00	.21
21	.00	.27	.14	.04	.10	.00	.62	.00	.13
22	.00	.21	.12	.04	.11	.00	.00	.00	.10
23	.00	.10	.12	.09	.12	.05	.00	1.92	.10
24	.00	.22	.14	.05	.07	.06	.00	.00	.13
25	.00	.16	.05	.04	.11	.04	.24	.00	.09
26-29	.08	.07	.04	.09	.06	.01	.09	.25	.06
30-39	.08	.04	.05	.04	.07	.01	.07	.09	.04
40-49	.00	.06	.04	.06	.03	.05	.06	.00	.05
50-59	.16	.06	.07	.14	.11	.06	.06	.00	.08
60-64	.00	.10	.25	.18	.21	.22	.31	.00	.17
65+	.52	.18	.26	.16	.12	.22	.41	.00	.20
Mean	.07	.09	.08	.08	.09	.05	.09	.10	.08

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.5 School holidays (including Easter Thursday to Monday) for 1984-86.

State or Territory	1984	1985	1986
ACT	01/01/84-31/01/84 19/04/84-23/04/84 05/05/84-21/05/84 13/07/84-16/07/84 25/08/84-09/09/84 15/12/84-31/12/84	01/01/85-29/01/85 04/04/85-08/04/85 04/05/85-19/05/85 12/07/85-15/07/85 24/08/85-08/09/85 14/12/85-31/12/85	01/01/86-28/01/86 27/03/86-31/03/86 03/05/86-18/05/86 11/07/86-14/07/86 23/08/86-27/08/86
New South Wales	01/01/84-31/01/84 19/04/84-23/04/84 05/05/84-20/05/84 25/08/84-09/09/84 14/12/84-31/12/84	01/01/85-29/01/85 04/04/85-08/04/85 04/05/85-19/05/85 24/08/85-08/09/85 13/12/85-31/12/85	01/01/86-28/01/86 27/03/86-31/03/86 03/05/86-18/05/86 23/08/86-27/08/86
Victoria	01/01/84-30/01/84 19/04/84-23/04/84 05/05/84-20/05/84 18/08/84-02/09/84 19/12/84-31/12/84	01/01/85-04/02/85 04/04/85-08/04/85 11/05/85-26/05/85 24/08/85-08/09/85 20/12/85-31/12/85	01/01/86-02/02/86 27/03/86-31/03/86 10/05/86-25/05/86 23/08/86-27/08/86
Queensland	01/01/84-23/01/84 14/04/84-23/04/84 23/06/84-08/07/84 15/09/84-30/09/84 08/12/84-31/12/84	01/01/85-29/01/85 04/04/85-13/04/85 23/06/85-06/07/85 22/09/85-05/10/85 10/12/85-31/12/85	01/01/86-27/01/86 27/03/86-06/04/86 14/06/86-29/06/86
South Australia	01/01/84-05/02/84 19/04/84-23/04/84 12/05/84-27/05/84 25/08/84-09/09/84 15/12/84-31/12/84	01/01/85-10/02/85 04/04/85-08/04/85 18/05/85-02/06/85 31/08/85-15/09/85 21/12/85-31/12/85	01/01/86-09/02/86 27/03/86-31/03/86 17/05/86-01/06/86
Western Australia	01/01/84-05/02/84 19/04/84-23/04/84 12/05/84-27/05/84 25/08/84-09/09/84 20/12/84-31/12/84	01/01/85-10/02/85 04/04/85-08/04/85 18/05/85-03/06/85 31/08/85-15/09/85 19/12/85-31/12/85	01/01/86-04/02/86 27/03/86-06/04/86 21/06/86-08/07/86
Tasmania	01/01/84-20/02/84 19/04/84-23/04/84 19/05/84-11/06/84 01/09/84-16/09/84 21/12/84-31/12/84	01/01/85-18/02/85 04/04/85-08/04/85 18/05/85-16/06/85 31/08/85-15/09/85 20/12/85-31/12/85	01/01/86-17/02/86 27/03/86-31/03/86 31/05/86-15/06/86
Northern Territory	01/01/84-22/01/84 31/03/84-08/04/84 19/04/84-23/04/84 23/06/84-22/07/84 29/09/84-07/10/84 15/12/84-31/12/84	01/01/85-28/01/85 04/04/85-14/04/85 22/06/85-21/07/85 28/09/85-06/10/85 14/12/85-31/12/85	01/01/86-28/01/86 27/03/86-31/03/86 12/04/86-20/04/86 05/07/86-04/08/86

## 2.5 Holidays

Table 2.5 shows the holiday periods in each of the States and Territories for the two years for which the fatalities were recorded (1984 and 1985), and for the duration of the Day-to-Day Travel Survey. (Note that the actual dates of holidays differ slightly between the years for which fatalities were recorded, and the period of the Survey. This means that a particular date (eg 29th January) may be a holiday in one year when fatalities were recorded but not a holiday for the purposes of estimating amount of travel or vice versa. This slight discrepancy is likely to have a negligible affect on the results obtained.)

There was no statistically significant difference between the holiday and non-holiday fatality rates (Table 2.5c; F statistic, for 1 and 464 df, = 0.0,  $p > 0.05$ ). Although the two observed rates differ greatly for some of the smaller States and Territories (Tables 2.5c, e and g), this reflects their small sample sizes for the holiday periods, and the differences are not statistically significant (F statistic, for 7 and 450 df, = 1.3,  $p > 0.05$ ).

These results were similar for the three exposure measures (distance, time and number of trips) and for population.

Table 2.5a. Car drivers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	0	0	1	0	0	0	0	0	1	0
16	0	0	3	1	3	0	2	0	1	1
17	0	0	16	9	4	0	11	1	4	1
18	2	0	17	3	13	2	7	5	9	1
19	1	0	21	6	19	6	8	3	5	3
20	1	0	19	6	15	3	6	4	4	3
21	1	0	20	11	12	6	8	3	5	1
22	0	0	20	6	17	6	9	4	1	2
23	0	0	19	3	21	5	6	3	3	2
24	0	1	16	4	14	3	7	3	4	2
25	1	1	18	6	7	4	9	1	3	2
26-29	2	0	32	16	33	13	33	6	9	1
30-39	3	1	79	26	58	20	44	13	16	5
40-49	2	0	45	17	35	8	35	17	9	4
50-59	1	0	52	18	24	7	18	10	12	4
60-64	0	0	24	7	11	1	7	3	6	1
65+	1	0	53	11	24	11	17	10	10	0
<b>Total</b>	<b>15</b>	<b>3</b>	<b>455</b>	<b>150</b>	<b>310</b>	<b>95</b>	<b>227</b>	<b>86</b>	<b>102</b>	<b>33</b>
<b>Females</b>										
9-15	0	0	0	0	1	0	1	0	0	0
16	0	0	0	0	0	0	0	0	3	0
17	0	0	4	2	0	1	1	2	2	0
18	1	0	11	5	1	0	3	0	2	1
19	0	0	1	1	6	0	1	4	2	0
20	0	0	11	2	3	0	4	1	3	1
21	0	0	7	1	6	0	1	0	0	1
22	0	0	6	3	5	1	1	0	1	0
23	0	0	3	0	4	1	3	0	1	0
24	0	0	8	2	5	1	1	0	1	0
25	0	0	6	1	1	1	1	0	1	0
26-29	0	1	11	8	7	2	6	3	2	2
30-39	3	0	20	8	20	4	10	3	10	2
40-49	0	0	19	5	8	5	8	3	3	0
50-59	2	0	9	5	11	1	9	5	7	0
60-64	0	0	7	0	9	3	2	2	2	1
65+	0	1	13	2	13	4	4	1	2	1
<b>Total</b>	<b>6</b>	<b>2</b>	<b>136</b>	<b>45</b>	<b>100</b>	<b>24</b>	<b>56</b>	<b>24</b>	<b>42</b>	<b>9</b>

Note : H = school holiday period; NH = other period  
Source: FORS Fatal File 1984-85

(continued)

Table 2.5a. Car drivers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Total	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	1	0	0	0	0	0	3	0
16	1	0	0	0	0	0	10	2
17	4	3	1	0	0	1	40	15
18	4	1	5	0	1	0	58	12
19	7	0	3	2	0	1	64	21
20	6	2	3	4	1	0	55	22
21	4	3	2	2	2	1	54	27
22	6	2	3	1	2	0	58	21
23	5	1	0	1	0	0	54	15
24	3	1	0	1	0	0	44	15
25	3	1	0	0	2	0	43	15
26-29	10	0	4	1	7	3	130	40
30-39	20	4	7	3	4	3	231	75
40-49	15	4	7	0	2	0	150	50
50-59	4	2	1	0	1	0	113	41
60-64	4	1	3	0	0	0	55	13
65+	10	1	5	1	1	0	121	34
Total	107	26	44	16	23	9	1283	418
<b>Females</b>								
9-15	0	0	0	0	0	0	2	0
16	0	0	0	0	0	0	3	0
17	1	0	0	0	0	0	8	5
18	1	1	0	0	0	0	19	7
19	2	1	1	0	0	0	13	6
20	1	2	1	0	0	0	23	6
21	0	0	0	1	0	0	14	3
22	0	0	0	0	0	0	13	4
23	1	0	0	0	1	0	13	1
24	1	0	0	0	0	0	16	3
25	1	0	1	0	0	0	11	2
26-29	0	1	2	0	2	0	30	17
30-39	3	0	3	1	1	1	70	19
40-49	7	0	1	1	0	0	46	14
50-59	4	0	1	0	0	0	43	11
60-64	2	1	2	0	0	0	24	7
65+	5	1	2	0	0	0	39	10
Total	29	7	14	3	4	1	387	116

Note : H = school holiday period; NH = other period  
Source: FORS Fatal File 1984-85

Table 2.5b. Car drivers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	.00	.00	.03	.01	.18	1.13	.01	.07	.04	.00
16	.00	.00	.12	.88	.00	.00	.00	5.21	1.42	.87
17	.00	.00	6.63	4.88	.20	.00	3.33	.00	6.33	23.46
18	17.42	7.02	14.00	24.07	9.95	13.27	7.32	7.58	12.03	3.60
19	14.60	1.99	24.63	19.21	20.27	34.10	40.05	41.56	19.13	17.98
20	32.62	4.75	18.80	31.58	28.45	11.94	13.47	16.85	14.97	23.18
21	13.84	3.14	25.66	22.85	36.17	59.73	29.74	26.10	25.25	8.18
22	46.62	10.24	35.41	9.50	29.02	26.05	48.02	3.00	21.28	40.24
23	29.26	5.50	29.84	11.41	32.41	17.52	14.89	27.17	28.81	16.17
24	28.37	27.60	34.93	40.82	40.68	30.09	40.07	27.70	30.04	58.86
25	62.96	10.70	57.50	16.84	39.70	31.57	13.76	50.91	22.20	39.09
26-29	33.93	60.02	38.34	44.71	36.02	43.88	29.64	20.90	52.83	20.17
30-39	36.48	59.54	38.81	41.96	41.74	36.96	38.80	43.30	31.03	19.38
40-49	50.37	26.39	33.75	48.65	37.97	36.97	31.50	30.31	35.82	33.75
50-59	44.87	23.30	32.90	38.27	35.75	36.03	31.64	51.38	16.57	32.80
60-64	47.71	87.11	23.98	15.17	27.56	14.59	35.90	14.62	25.33	25.64
65+	7.34	5.32	14.20	9.76	15.03	9.28	12.48	30.52	9.02	9.28
Mean	29.01	26.18	25.06	26.54	26.41	24.72	23.99	26.67	21.06	19.75
<b>Females</b>										
9-15	.81	.00	.10	.67	.31	.13	.03	.17	.03	.76
16	.00	.00	.07	.00	.16	.24	.05	.00	.32	.00
17	.00	.00	3.61	.62	.91	6.45	2.25	4.36	2.54	1.83
18	10.33	8.86	9.94	7.90	2.74	.07	13.24	10.48	6.71	6.34
19	3.66	23.47	8.42	11.68	10.43	15.75	14.72	7.49	10.32	6.36
20	56.14	.00	11.18	8.45	15.97	12.65	21.96	14.51	13.32	1.68
21	22.01	.00	8.35	12.84	16.79	14.56	15.11	9.13	11.46	6.67
22	10.76	18.10	15.94	11.36	22.96	29.83	17.29	32.49	8.14	18.54
23	13.38	59.13	12.45	4.33	19.93	13.79	26.79	17.49	7.16	3.74
24	13.30	18.88	19.64	5.15	16.16	24.46	11.93	9.39	11.45	14.58
25	22.65	.00	10.14	20.51	18.79	14.32	15.77	40.11	9.87	4.83
26-29	22.47	14.21	25.24	10.93	16.69	12.41	14.30	46.94	12.58	11.01
30-39	29.67	12.34	19.78	18.87	20.04	10.30	17.55	13.74	15.41	13.37
40-49	27.50	10.17	13.85	12.68	17.29	12.81	17.65	11.92	15.44	6.68
50-59	13.74	4.57	10.48	5.08	10.89	5.41	12.84	14.80	7.93	18.79
60-64	4.07	.00	7.80	2.79	6.37	3.14	3.47	6.46	3.55	5.72
65+	3.62	.00	3.28	3.41	4.23	2.23	1.99	1.41	8.14	2.18
Mean	16.39	8.52	10.91	8.34	11.23	7.78	10.56	12.21	8.97	7.63

Source: Survey of Day-to-Day Travel in Australia 1985-86

(continued)



Table 2.5b. Car drivers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	.02	.00	.02	.00	.34	.00	.07	.32
16	.00	.00	.00	.00	.00	.00	.18	1.11
17	4.43	3.11	16.97	3.71	11.76	5.65	4.62	4.90
18	15.03	27.40	4.94	11.19	10.64	.00	11.70	16.09
19	41.43	32.08	18.18	23.30	13.50	6.11	27.40	28.54
20	47.66	6.01	46.01	29.85	17.76	21.46	23.28	20.51
21	31.37	92.31	18.64	20.13	41.10	15.97	29.45	38.22
22	35.29	15.09	19.89	24.47	13.97	8.81	33.48	17.27
23	36.02	24.21	16.69	37.78	8.96	.00	27.99	17.56
24	47.58	30.29	2.06	69.23	5.90	156.8	36.89	37.98
25	12.14	53.01	26.93	35.05	34.13	.00	37.72	31.80
26-29	31.35	47.26	23.67	94.53	38.67	27.67	36.08	40.11
30-39	36.21	41.69	31.28	25.46	35.47	17.60	38.44	38.52
40-49	40.98	51.83	21.93	47.53	21.18	24.17	35.22	41.14
50-59	29.31	53.02	26.91	29.15	15.20	275.9	31.48	41.60
60-64	23.88	26.89	14.57	7.25	26.82	22.83	26.86	17.07
65+	12.10	9.55	14.70	25.05	30.31	3.20	13.48	13.55
Mean	24.84	31.72	17.99	28.78	21.64	41.71	24.70	26.13
<b>Females</b>								
9-15	.01	.00	.33	.00	.00	.00	.15	.36
16	.07	.00	.00	.00	.00	.00	.11	.06
17	4.28	.01	9.69	12.72	4.85	.00	2.80	2.96
18	15.31	6.91	.75	.69	9.56	4.81	8.33	5.75
19	33.48	15.47	9.01	20.27	3.68	18.55	12.19	12.48
20	15.11	26.90	3.42	6.25	4.71	18.88	15.12	11.39
21	14.99	14.71	2.28	.00	11.48	16.24	12.20	11.73
22	27.11	45.73	26.88	1.50	5.34	.00	19.30	23.49
23	14.96	18.41	4.14	14.16	11.55	7.82	17.12	12.15
24	13.75	34.64	12.26	11.94	19.62	2.69	15.92	14.82
25	22.75	30.50	8.92	5.51	34.31	.00	14.82	21.33
26-29	18.80	9.44	18.18	83.37	12.54	3.80	19.34	18.18
30-39	21.96	24.01	14.84	17.91	12.71	14.46	19.31	15.60
40-49	20.84	17.27	13.88	36.33	10.72	11.08	16.32	13.00
50-59	12.00	18.73	6.16	6.09	4.53	3.86	10.74	9.00
60-64	5.37	2.50	3.94	4.71	.55	.00	5.95	3.80
65+	3.82	2.06	4.17	1.46	.09	.00	3.85	2.47
Mean	12.94	13.09	8.65	15.21	8.17	6.30	10.94	9.32

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.5c. Car drivers:  
Average number of fatalities per ten million kilometres  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15			1.78	.00	.00	.00	.00	.00	5.97	
16			8.78	1.21				.00	.79	4.10
17			.75	1.77	10.15		3.68		.74	.16
18	.61	.00	.49	.16	.69	.26	.93	1.95	1.03	1.20
19	.65	.00	.42	.48	.53	.32	.17	.18	.58	1.16
20	.25	.00	.46	.27	.30	.46	.44	.71	.43	.66
21	.90	.00	.38	.73	.18	.18	.23	.30	.33	.64
22	.00	.00	.30	1.04	.34	.42	.21	4.57	.08	.27
23	.00	.00	.25	.32	.37	.52	.36	.30	.15	.57
24	.00	.99	.21	.14	.18	.17	.17	.32	.25	.20
25	.16	2.78	.14	.49	.10	.24	.63	.06	.29	.34
26-29	.19	.00	.10	.13	.14	.15	.24	.19	.09	.08
30-39	.09	.06	.10	.09	.09	.11	.13	.10	.11	.17
40-49	.04	.00	.08	.07	.08	.06	.15	.24	.06	.09
50-59	.05	.00	.11	.10	.07	.06	.10	.10	.20	.10
60-64	.00	.00	.14	.20	.08	.04	.06	.20	.14	.07
65+	.65	.00	.31	.29	.19	.44	.24	.18	.36	.00
Mean	.10	.07	.15	.15	.13	.14	.17	.18	.16	.17
<b>Females</b>										
9-15	.00		.00	.00	.24	.00	4.53	.00	.00	.00
16			.00		.00	.00	.00		13.73	
17			.42	3.79	.00	.27	.39	1.25	.96	.00
18	.87	.00	.43	.76	.20	.00	.23	.00	.48	.80
19	.00	.00	.07	.16	.34	.00	.06	1.44	.40	.00
20	.00		.53	.40	.09	.00	.21	.24	.38	3.15
21	.00		.36	.10	.23	.00	.07	.00	.00	.90
22	.00	.00	.20	.43	.12	.06	.06	.00	.33	.00
23	.00	.00	.13	.00	.11	.13	.09	.00	.34	.00
24	.00	.00	.19	.57	.18	.08	.09	.00	.16	.00
25	.00		.27	.07	.03	.14	.06	.00	.19	.00
26-29	.00	.54	.04	.22	.06	.07	.10	.05	.06	.23
30-39	.10	.00	.05	.06	.06	.08	.06	.08	.14	.10
40-49	.00	.00	.09	.08	.04	.11	.07	.12	.05	.00
50-59	.29	.00	.06	.22	.10	.06	.12	.18	.25	.00
60-64	.00		.13	.00	.27	.58	.18	.29	.29	.28
65+	.00		.24	.11	.25	.47	.28	.30	.06	.33
Mean	.07	.07	.10	.14	.10	.11	.10	.11	.15	.12

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86 (continued)

Table 2.5c. Car drivers:  
Average number of fatalities per ten million kilometres  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	8.74		.00		.00		.80	.00
16							2.50	.64
17	1.38	4.32	.37	.00	.00	10.37	1.10	1.12
18	.39	.16	5.16	.00	.95		.68	.32
19	.25	.00	1.43	2.05	.00	11.85	.37	.36
20	.26	2.02	.45	2.55	.96	.00	.37	.52
21	.21	.15	.43	1.10	.92	3.13	.28	.33
22	.36	.83	.79	.60	2.08	.00	.29	.64
23	.27	.23	.00	.45	.00		.28	.38
24	.15	.23	.00	.38	.00	.00	.19	.19
25	.41	.09	.00	.00	2.38		.18	.23
26-29	.13	.00	.21	.04	.50	.80	.14	.12
30-39	.11	.06	.16	.23	.17	.69	.10	.10
40-49	.08	.05	.23	.00	.26	.00	.09	.08
50-59	.04	.04	.04	.00	.25	.00	.09	.08
60-64	.12	.08	.29	.00	.00	.00	.11	.12
65+	.31	.12	.36	.12	.33	.00	.27	.23
Mean	.14	.08	.26	.16	.38	.20	.15	.14
<b>Females</b>								
9-15	.00		.00				.27	.00
16	.00						3.58	.00
17	.36	.00	.00	.00	.00		.38	.70
18	.13	.84	.00	.00	.00	.00	.33	.55
19	.14	.43	.75	.00	.00	.00	.18	.26
20	.13	.42	1.20	.00	.00	.00	.25	.26
21	.00	.00	.00		.00	.00	.19	.09
22	.00	.00	.00	.00	.00		.11	.09
23	.11	.00	.00	.00	2.87	.00	.12	.04
24	.15	.00	.00	.00	.00	.00	.16	.10
25	.06	.00	.49	.00	.00		.11	.04
26-29	.00	.13	.17	.00	.42	.00	.06	.10
30-39	.03	.00	.13	.10	.14	.32	.06	.06
40-49	.09	.00	.06	.07	.00	.00	.07	.08
50-59	.11	.00	.17	.00	.00	.00	.11	.10
60-64	.29	.90	.83	.00	.00		.20	.29
65+	.38	.41	.38	.00	.00		.22	.25
Mean	.08	.05	.17	.04	.20	.17	.10	.11

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.5d. Car drivers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	.00	.00	.03	.01	.35	2.00	.03	.14	.09	.00
16	.00	.00	.44	1.75	.00	.00	.00	5.86	5.43	1.35
17	.00	.00	12.49	11.77	.22	.00	5.81	.00	13.66	32.25
18	26.91	11.13	29.88	33.64	19.32	24.50	16.28	14.61	23.38	17.86
19	26.59	3.31	42.32	27.63	32.27	61.85	57.22	44.75	70.27	68.76
20	50.88	9.53	43.35	40.78	69.78	24.42	34.75	26.00	31.07	83.84
21	19.91	10.06	59.21	36.16	47.58	76.53	34.25	61.25	41.17	18.14
22	75.67	17.93	60.02	18.65	59.84	46.64	51.90	7.17	41.60	59.58
23	40.74	11.78	49.76	25.30	58.42	27.12	32.86	49.70	49.46	39.88
24	29.71	48.97	59.06	51.96	63.07	41.40	51.26	46.24	53.80	130.6
25	68.91	12.89	78.42	27.39	70.39	49.24	26.70	114.1	38.46	119.7
26-29	45.10	81.72	62.26	58.67	59.08	65.70	63.74	39.56	76.77	39.61
30-39	48.81	65.63	63.63	62.72	65.15	52.30	64.19	92.37	60.72	47.22
40-49	78.16	30.10	66.90	67.99	62.75	60.65	54.69	56.02	66.07	48.14
50-59	56.74	44.48	57.02	55.82	60.60	52.15	50.71	60.34	42.81	53.10
60-64	36.52	75.70	58.61	34.98	53.57	25.14	52.53	52.41	56.69	42.18
65+	19.06	10.50	31.57	21.82	33.66	22.76	29.59	47.45	27.62	21.42
Mean	40.13	32.25	45.44	39.85	44.97	38.37	40.94	47.97	41.78	38.21
<b>Females</b>										
9-15	1.14	.00	.16	.91	.51	.27	.09	.38	.05	1.58
16	.00	.00	.16	.00	.21	1.69	.11	.00	1.80	.00
17	.00	.00	8.44	2.12	2.51	5.11	3.93	8.73	12.13	5.10
18	26.65	16.61	15.53	13.46	8.17	.37	25.02	16.58	17.62	51.91
19	5.40	42.94	15.30	26.69	23.54	28.58	35.93	9.51	21.28	11.46
20	57.29	.00	25.28	25.57	30.23	20.05	39.12	29.11	39.54	4.20
21	44.48	.00	31.75	16.52	30.84	25.24	28.89	16.53	27.01	21.75
22	16.81	25.85	26.85	24.03	48.66	43.49	39.19	35.32	23.02	44.25
23	16.84	95.51	22.51	8.60	38.47	21.78	44.01	35.31	14.60	10.44
24	24.17	29.04	34.95	11.53	30.67	34.06	23.43	22.61	25.92	24.65
25	29.32	.00	22.09	33.61	31.09	23.63	28.31	43.41	20.97	17.00
26-29	35.37	14.30	37.31	16.52	31.88	25.90	28.68	56.23	31.46	51.40
30-39	43.96	18.38	40.47	31.23	41.52	20.50	36.03	31.71	37.00	39.31
40-49	42.07	16.20	32.02	23.24	36.10	26.38	33.82	26.16	38.50	16.54
50-59	26.99	15.21	20.65	11.37	24.86	12.82	25.36	41.14	22.01	29.21
60-64	8.34	.00	16.78	7.18	20.90	9.62	7.41	10.14	9.57	18.29
65+	9.29	.00	7.50	7.86	8.85	4.35	6.37	3.16	13.03	6.71
Mean	25.56	13.62	21.66	15.08	23.52	14.96	21.21	22.21	21.53	20.88

Source: Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 2.5d. Car drivers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	.06	.00	.15	.00	.73	.00	.13	.56
16	.00	.00	.00	.00	.00	.00	.70	1.54
17	6.20	11.25	28.20	7.51	88.45	14.13	8.94	9.49
18	27.46	48.21	9.83	32.52	16.86	.00	23.54	27.31
19	47.84	50.82	26.24	35.73	63.50	15.28	44.49	45.38
20	63.58	23.78	80.33	64.55	20.23	39.85	50.29	36.76
21	54.47	92.51	36.44	228.5	68.64	21.41	48.25	62.26
22	56.04	24.87	35.00	33.25	19.94	27.91	55.58	30.13
23	49.38	40.37	36.77	50.61	8.06	.00	48.58	32.80
24	57.23	45.43	7.98	99.54	10.33	129.7	56.41	55.87
25	18.74	53.47	54.64	33.68	50.68	.00	58.22	56.25
26-29	47.10	58.23	42.47	116.5	58.68	91.38	60.43	58.14
30-39	58.46	52.13	73.70	38.65	56.04	35.55	63.35	61.43
40-49	59.63	65.23	43.67	58.19	46.17	54.74	62.52	61.12
50-59	49.61	69.58	44.03	34.56	29.97	202.4	54.55	56.78
60-64	42.74	54.31	28.97	13.71	66.22	59.01	53.64	37.03
65+	26.99	16.14	28.09	40.46	33.74	7.62	30.85	26.41
Mean	38.97	41.97	35.77	44.05	37.52	52.54	43.29	40.91
<b>Females</b>								
9-15	.03	.00	.62	.00	.00	.00	.25	.58
16	.25	.00	.00	.00	.00	.00	.31	.44
17	10.25	.60	16.15	23.12	14.99	.00	7.03	4.50
18	55.83	26.08	2.51	1.72	13.44	18.59	17.89	14.57
19	46.24	23.93	18.07	36.43	4.47	116.0	24.37	23.76
20	23.44	111.4	9.81	18.05	12.31	38.61	29.81	28.91
21	31.03	28.74	5.59	.00	22.96	17.77	29.71	19.38
22	35.58	67.31	39.17	7.48	7.99	26.25	36.34	36.16
23	32.54	31.34	10.31	30.05	12.34	204.5	31.36	22.95
24	24.35	46.87	32.36	22.99	34.48	9.23	30.06	24.15
25	33.40	50.38	14.46	15.85	66.63	.00	26.61	32.17
26-29	33.13	17.85	29.91	72.20	19.05	7.25	33.29	29.22
30-39	40.62	38.37	38.18	29.36	29.53	27.41	39.70	29.35
40-49	35.75	32.42	29.35	39.98	28.35	30.83	34.40	25.00
50-59	28.74	30.21	14.20	13.07	10.90	12.77	23.10	19.52
60-64	13.92	5.48	7.74	18.12	2.75	.00	15.05	9.60
65+	9.83	5.38	6.38	2.76	.90	.00	8.35	5.67
Mean	24.48	23.47	18.10	20.22	17.01	17.57	22.24	17.54

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.5e. Car drivers:  
Average number of fatalities per one million hours  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15			10.38	.00	.00	.00	.00	.00	14.32	
16			13.89	3.64				.00	1.24	15.73
17			2.38	4.40	55.83		12.65		2.06	.69
18	2.37	.00	1.39	.68	2.14	.83	2.50	6.08	3.18	1.46
19	2.15	.00	1.48	2.02	2.00	1.05	.70	1.03	.95	1.83
20	.96	.00	1.18	1.23	.74	1.34	1.01	2.76	1.25	1.10
21	3.77	.00	.99	2.76	.83	.83	1.18	.76	1.21	1.73
22	.00	.00	1.06	3.17	.98	1.42	1.17	11.48	.25	1.11
23	.00	.00	.90	.86	1.22	2.01	.97	.98	.53	1.38
24	.00	3.35	.76	.67	.71	.74	.79	1.15	.83	.54
25	.87	13.85	.61	1.80	.35	.91	1.94	.15	1.00	.67
26-29	.86	.00	.37	.61	.52	.59	.68	.61	.36	.24
30-39	.41	.31	.36	.37	.35	.48	.47	.29	.33	.42
40-49	.17	.00	.25	.29	.27	.21	.53	.77	.20	.38
50-59	.22	.00	.39	.43	.23	.25	.37	.53	.45	.38
60-64	.00	.00	.35	.53	.25	.15	.25	.33	.38	.27
65+	1.50	.00	.84	.79	.50	1.08	.60	.68	.70	.00
Mean	.45	.33	.50	.58	.45	.53	.61	.60	.48	.54
<b>Females</b>										
9-15	.00		.00	.00	.88	.00	8.34	.00	.00	.00
16			.00		.00	.00	.00		14.75	
17			1.07	6.61	.00	2.06	1.36	3.74	1.20	.00
18	2.02	.00	1.65	2.69	.40	.00	.74	.00	1.09	.59
19	.00	.00	.23	.42	.90	.00	.15	6.81	1.15	.00
20	.00		1.41	.79	.30	.00	.71	.73	.76	7.55
21	.00		.57	.49	.76	.00	.23	.00	.00	1.65
22	.00	.00	.70	1.22	.34	.24	.16	.00	.70	.00
23	.00	.00	.42	.00	.35	.49	.33	.00	1.00	.00
24	.00	.00	.65	1.53	.58	.33	.28	.00	.43	.00
25	.00		.75	.25	.12	.50	.19	.00	.53	.00
26-29	.00	3.20	.17	.89	.19	.21	.31	.24	.15	.29
30-39	.41	.00	.14	.23	.18	.23	.19	.20	.35	.21
40-49	.00	.00	.24	.27	.12	.33	.22	.33	.11	.00
50-59	.90	.00	.18	.58	.27	.15	.37	.39	.55	.00
60-64	.00		.35	.00	.49	1.13	.50	1.12	.63	.52
65+	.00		.62	.28	.72	1.44	.52	.80	.21	.65
Mean	.28	.26	.31	.45	.27	.33	.29	.37	.37	.26

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 2.5e. Car drivers:  
Average number of fatalities per one million hours  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	21.69		.00		.00		2.54	.00
16							3.92	2.77
17	5.91	7.15	1.34	.00	.00	24.90	3.42	3.47
18	1.27	.53	15.58	.00	3.59		2.03	1.12
19	1.31	.00	5.93	8.02	.00	28.45	1.36	1.36
20	1.17	3.06	1.54	7.08	5.04	.00	1.02	1.73
21	.71	.92	1.31	.58	3.30	14.03	1.01	1.19
22	1.37	3.01	2.71	2.63	8.73	.00	1.06	2.20
23	1.18	.85	.00	2.01	.00		.97	1.23
24	.74	.90	.00	1.58	.00	.00	.74	.79
25	1.59	.54	.00	.00	9.60		.69	.77
26-29	.51	.00	.70	.18	2.00	1.46	.51	.50
30-39	.41	.27	.41	.92	.66	2.06	.38	.39
40-49	.34	.25	.69	.00	.71	.00	.31	.32
50-59	.16	.17	.16	.00	.77	.00	.33	.35
60-64	.40	.23	.87	.00	.00	.00	.32	.34
65+	.84	.41	1.14	.44	1.78	.00	.71	.72
Mean	.55	.37	.78	.64	1.30	.96	.52	.55
<b>Females</b>								
9-15	.00		.00				.96	.00
16	.00						7.53	.00
17	.91	.00	.00	.00	.00		.91	2.73
18	.21	1.34	.00	.00	.00	.00	.93	1.30
19	.59	1.66	2.23	.00	.00	.00	.55	.81
20	.50	.61	2.51	.00	.00	.00	.75	.62
21	.00	.00	.00		.00	.00	.46	.31
22	.00	.00	.00	.00	.00	.00	.35	.34
23	.29	.00	.00	.00	16.13	.00	.40	.13
24	.49	.00	.00	.00	.00	.00	.51	.37
25	.26	.00	1.83	.00	.00		.38	.18
26-29	.00	.40	.62	.00	1.65	.00	.20	.39
30-39	.09	.00	.30	.36	.36	1.02	.18	.21
40-49	.32	.00	.18	.37	.00	.00	.19	.24
50-59	.28	.00	.45	.00	.00	.00	.29	.27
60-64	.66	2.47	2.52	.00	.00		.48	.69
65+	.89	.95	1.50	.00	.00		.61	.65
Mean	.24	.18	.48	.17	.57	.37	.30	.34

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 2.5f. Car drivers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	.00	.00	.00	.01	.01	.06	.00	.01	.01	.00
16	.00	.00	.04	.18	.00	.00	.00	.06	.15	.11
17	.00	.00	.76	1.02	.02	.00	.28	.00	1.01	2.11
18	1.77	.51	1.89	3.18	1.01	.70	1.05	.82	1.45	.20
19	2.15	.66	2.01	.91	1.57	2.63	2.48	2.04	2.14	3.61
20	3.78	1.09	1.91	1.88	2.50	1.05	2.20	1.82	2.20	1.90
21	1.25	1.21	2.62	1.84	2.33	3.18	1.43	2.05	2.64	1.27
22	4.45	2.13	2.91	.97	2.56	2.69	2.64	.52	3.59	1.90
23	3.13	.78	2.81	1.66	2.78	1.73	2.13	3.04	2.67	2.26
24	2.34	3.29	2.71	2.70	2.96	2.01	3.10	3.17	2.82	2.63
25	4.30	1.29	2.51	1.75	2.79	2.49	1.51	3.63	2.22	4.70
26-29	3.18	5.42	2.66	2.90	3.00	3.14	2.84	2.63	3.21	2.78
30-39	2.91	3.25	2.92	2.46	3.09	2.37	3.28	2.93	3.75	2.62
40-49	3.77	1.64	2.86	2.65	2.95	2.40	3.08	2.58	3.15	2.38
50-59	3.03	3.38	2.44	1.90	2.46	2.04	2.23	2.56	2.19	2.79
60-64	2.27	1.91	2.45	1.53	2.43	1.36	2.18	1.47	2.15	1.96
65+	1.36	.71	1.38	1.08	1.53	1.05	1.42	1.38	1.46	1.26
Mean	2.30	1.86	2.01	1.71	2.06	1.69	2.03	1.90	2.17	1.89
<b>Females</b>										
9-15	.03	.00	.01	.08	.02	.03	.01	.02	.00	.07
16	.00	.00	.03	.00	.02	.20	.05	.00	.19	.00
17	.00	.00	.44	.26	.16	.23	.33	.15	.52	.42
18	2.31	2.21	.97	.94	.31	.11	1.64	1.29	1.00	3.18
19	.64	4.29	1.10	1.26	1.53	1.18	2.00	.66	1.31	.42
20	2.83	.00	1.64	1.64	1.77	.89	1.77	1.46	2.13	.34
21	3.06	.00	1.00	.84	2.25	1.86	2.74	.97	1.56	1.06
22	1.31	3.10	1.81	1.44	2.16	2.19	1.70	2.71	1.41	3.43
23	1.28	7.34	1.41	.63	1.96	1.31	2.02	2.39	1.60	1.23
24	1.73	2.34	1.90	.68	1.86	1.95	1.67	1.70	1.84	2.11
25	2.27	.00	1.58	1.37	1.99	1.44	1.81	1.16	1.21	1.48
26-29	2.65	1.17	2.23	.97	2.34	1.86	1.85	2.24	2.41	1.37
30-39	3.32	1.06	2.74	1.95	2.77	1.37	2.77	2.29	2.98	1.93
40-49	3.05	1.02	2.20	1.56	2.29	1.54	2.38	1.61	2.30	1.50
50-59	2.09	1.28	1.36	.87	1.40	.70	1.39	1.00	1.36	1.33
60-64	.74	.00	.82	.56	.74	.54	.54	.48	.42	.90
65+	.62	.00	.37	.40	.42	.37	.35	.25	.47	.40
Mean	1.88	1.03	1.37	.95	1.44	.93	1.40	1.14	1.40	1.09

Source: Survey of Day-to-Day Travel in Australia 1985-86

(continued)



Table 2.5f. Car drivers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	.01	.00	.01	.00	.05	.00	.01	.02
16	.00	.00	.00	.00	.00	.00	.03	.08
17	.32	.40	2.06	1.72	1.19	1.41	.54	.73
18	1.94	2.83	.95	4.96	1.27	.00	1.47	1.81
19	2.33	3.59	1.35	1.89	4.26	1.53	2.03	2.10
20	4.80	1.47	4.00	5.06	.91	2.97	2.44	1.69
21	3.28	3.19	2.53	2.98	5.26	1.77	2.39	2.35
22	2.87	1.51	4.73	2.40	1.35	1.01	2.89	1.60
23	3.06	2.39	2.86	3.04	.36	.00	2.69	2.04
24	3.52	2.52	.66	6.39	.88	4.83	2.85	2.65
25	2.09	2.31	4.10	1.54	4.99	.00	2.46	2.49
26-29	2.83	3.20	2.40	5.53	2.39	7.34	2.83	3.12
30-39	3.67	2.66	2.93	2.64	4.13	2.80	3.17	2.56
40-49	3.24	3.12	3.83	1.75	3.27	2.93	3.03	2.55
50-59	2.62	3.92	2.20	2.19	2.58	5.20	2.41	2.34
60-64	2.47	4.04	1.72	.73	3.04	6.28	2.35	1.69
65+	1.73	.96	1.53	1.65	.45	.49	1.46	1.14
Mean	2.31	2.24	2.13	2.05	2.34	2.86	2.08	1.82
<b>Females</b>								
9-15	.01	.00	.07	.00	.00	.00	.01	.04
16	.02	.00	.00	.00	.00	.00	.04	.05
17	.63	.12	.54	.96	1.16	.00	.39	.25
18	2.18	1.26	.25	.34	.91	.88	.98	1.00
19	2.37	1.80	1.35	2.10	.43	9.28	1.51	1.25
20	1.72	2.59	1.49	1.25	.64	3.69	1.76	1.30
21	2.97	2.65	.69	.00	2.68	1.02	1.80	1.25
22	2.48	4.28	2.93	.75	.90	.88	1.99	2.24
23	2.32	2.11	1.12	5.22	1.10	1.65	1.78	1.58
24	2.14	3.23	2.37	1.39	2.36	.67	1.89	1.58
25	2.52	3.12	.91	2.65	4.42	.00	1.80	1.58
26-29	2.98	1.45	2.78	2.11	1.72	.94	2.30	1.49
30-39	3.20	2.26	3.01	1.99	3.07	1.73	2.83	1.85
40-49	2.64	2.39	2.35	1.50	2.27	2.97	2.32	1.63
50-59	1.60	2.01	1.22	1.20	1.03	1.49	1.40	1.00
60-64	.91	.48	.61	1.24	.28	.00	.71	.59
65+	.65	.40	.31	.23	.09	.00	.41	.36
Mean	1.78	1.49	1.45	1.16	1.55	1.24	1.44	1.04

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 2.5g. Car drivers:  
Average number of fatalities per one million trip segments  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15			1.77	.00	.00	.00	.00	.00	2.38	
16			2.57	.61				.00	.74	3.27
17			.65	.84	8.37		4.41		.46	.17
18	.60	.00	.36	.12	.68	.48	.65	1.81	.85	2.21
19	.44	.00	.52	1.02	.68	.41	.27	.38	.52	.58
20	.22	.00	.45	.45	.34	.52	.27	.66	.29	.80
21	1.00	.00	.37	.91	.28	.33	.47	.38	.31	.41
22	.00	.00	.36	1.01	.38	.41	.38	2.62	.05	.58
23	.00	.00	.26	.22	.43	.53	.25	.27	.16	.40
24	.00	.83	.28	.21	.25	.25	.22	.28	.26	.44
25	.23	2.31	.32	.47	.15	.30	.57	.08	.29	.29
26-29	.20	.00	.14	.21	.17	.21	.25	.15	.14	.06
30-39	.12	.10	.13	.16	.12	.18	.15	.15	.09	.12
40-49	.06	.00	.10	.12	.10	.09	.16	.28	.07	.13
50-59	.07	.00	.15	.21	.10	.11	.14	.21	.15	.12
60-64	.00	.00	.14	.20	.09	.05	.10	.20	.17	.10
65+	.35	.00	.32	.27	.18	.39	.21	.39	.22	.00
Mean	.13	.10	.19	.23	.17	.20	.21	.25	.15	.18
<b>Females</b>										
9-15	.00		.00	.00	.33	.00	2.27	.00	.00	.00
16			.00		.00	.00	.00		2.36	.00
17			.34	.89	.00	.78	.27	3.74	.47	.00
18	.39	.00	.44	.64	.17	.00	.19	.00	.32	.16
19	.00	.00	.05	.15	.23	.00	.04	1.63	.31	.00
20	.00		.36	.20	.09	.00	.26	.24	.24	1.57
21	.00		.30	.16	.17	.00	.04	.00	.00	.56
22	.00	.00	.17	.34	.13	.08	.06	.00	.19	.00
23	.00	.00	.11	.00	.11	.14	.12	.00	.15	.00
24	.00	.00	.20	.43	.16	.10	.07	.00	.10	.00
25	.00		.17	.10	.03	.14	.05	.00	.15	.00
26-29	.00	.65	.05	.25	.04	.05	.08	.10	.03	.18
30-39	.09	.00	.04	.06	.05	.06	.04	.05	.07	.07
40-49	.00	.00	.06	.07	.03	.09	.05	.09	.03	.00
50-59	.19	.00	.05	.13	.08	.05	.11	.27	.15	.00
60-64	.00		.12	.00	.23	.33	.11	.39	.24	.18
65+	.00		.21	.09	.25	.28	.16	.17	.10	.18
Mean	.06	.06	.08	.12	.07	.09	.07	.12	.10	.08

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 2.5g. Car drivers:  
Average number of fatalities per one million trip segments  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	2.51		.00		.00		.75	.00
16							1.59	.90
17	1.90	3.31	.31	.00	.00	4.15	.95	.76
18	.30	.15	2.67	.00	.80		.54	.28
19	.45	.00	1.92	2.53	.00	4.74	.50	.49
20	.26	.82	.52	1.51	1.87	.00	.35	.62
21	.20	.45	.32	.74	.72	2.83	.34	.53
22	.45	.83	.33	.61	2.15	.00	.34	.69
23	.32	.24	.00	.56	.00		.29	.33
24	.20	.27	.00	.41	.00	.00	.24	.28
25	.24	.21	.00	.00	1.62		.27	.29
26-29	.14	.00	.21	.06	.82	.30	.18	.16
30-39	.11	.09	.17	.23	.15	.43	.13	.16
40-49	.11	.09	.13	.00	.17	.00	.11	.13
50-59	.05	.05	.05	.00	.15	.00	.12	.14
60-64	.12	.05	.24	.00	.00	.00	.12	.12
65+	.22	.12	.35	.18	2.21	.00	.25	.28
Mean	.15	.11	.22	.23	.35	.29	.18	.21
<b>Females</b>								
9-15	.00		.00				.29	.00
16	.00						.93	.00
17	.25	.00	.00	.00	.00		.28	.82
18	.09	.46	.00	.00	.00	.00	.28	.32
19	.19	.37	.50	.00	.00	.00	.15	.25
20	.11	.44	.28	.00	.00	.00	.21	.23
21	.00	.00	.00		.00	.00	.13	.08
22	.00	.00	.00	.00	.00	.00	.11	.09
23	.07	.00	.00	.00	3.01	.00	.12	.03
24	.09	.00	.00	.00	.00	.00	.14	.09
25	.06	.00	.48	.00	.00		.09	.06
26-29	.00	.08	.11	.00	.30	.00	.05	.13
30-39	.02	.00	.06	.09	.06	.27	.04	.05
40-49	.07	.00	.04	.17	.00	.00	.05	.06
50-59	.08	.00	.09	.00	.00	.00	.08	.09
60-64	.17	.47	.54	.00	.00		.17	.19
65+	.22	.21	.52	.00	.00		.21	.17
Mean	.06	.05	.10	.05	.11	.09	.08	.10

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

### 3. Car passengers

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## Car passengers: summary of results

- . average fatality rates per distance travelled for car drivers and passengers are similar [p73 ¶1]
- . fatality rates vary with age [p73 ¶2, F3.2]
  - 9-15 year old passengers have the lowest fatality rates [p73 ¶3]
  - 16-25 year old passengers have fatality rates over 4 times that of 9-15 year olds, and about double that of 45 year olds [p73 ¶4-5]
  - the graph of the fatality rate is U-shaped between ages 25 and 70, with a minimum at about age 45, and similar rates at ages 25 and 70 [p73 ¶5]
- . males have a fatality rate 2.3 times that of females, except for ages 9-15 for which there is no difference in rates [p73 ¶3, ¶6]
- . overall, night time fatality rates are 6 times those during the day, and 3 times those in the evening [p74 ¶1]
  - but for passengers aged 17-20 the night time is particularly risky - about a 30-fold risk compared with the day time for males [p74 ¶2, T3A]
- . overall for passengers over age 15, males have a greater risk at the weekend than during the week, whereas the opposite holds for females
  - but for females this weekend-weekday difference is confined to those of age 26 and older [p83 ¶1-3]
- . fatality rates for passengers are similar for all seasons [p91 ¶1]
- . a 5-fold variation in fatality rates occurs between the States and Territories
  - the order of the fatality rates was the ACT (lowest), Victoria, Queensland, Western Australia, Tasmania, New South Wales, South Australia and the Northern Territory [p99 ¶1, T3B]
- . the fatality rate during the holidays was two thirds that during the rest of the year [p107 ¶1]
- . all the above results for the rate per distance travelled hold also for the rate per time spent travelling and rate per number of trips [p73 ¶7, p74 ¶5, p83 ¶4, p91 ¶1, p99 ¶2, p107 ¶2]
- . the results for the rate per person are generally similar except that
  - the difference between sexes is less [p73 ¶7]
  - the variation with age is less [p73 ¶7]
  - the night time rate is less than the day time rate [p74 ¶5]
  - the difference between weekend and weekdays is less [p83 ¶3]

Figure 3.1

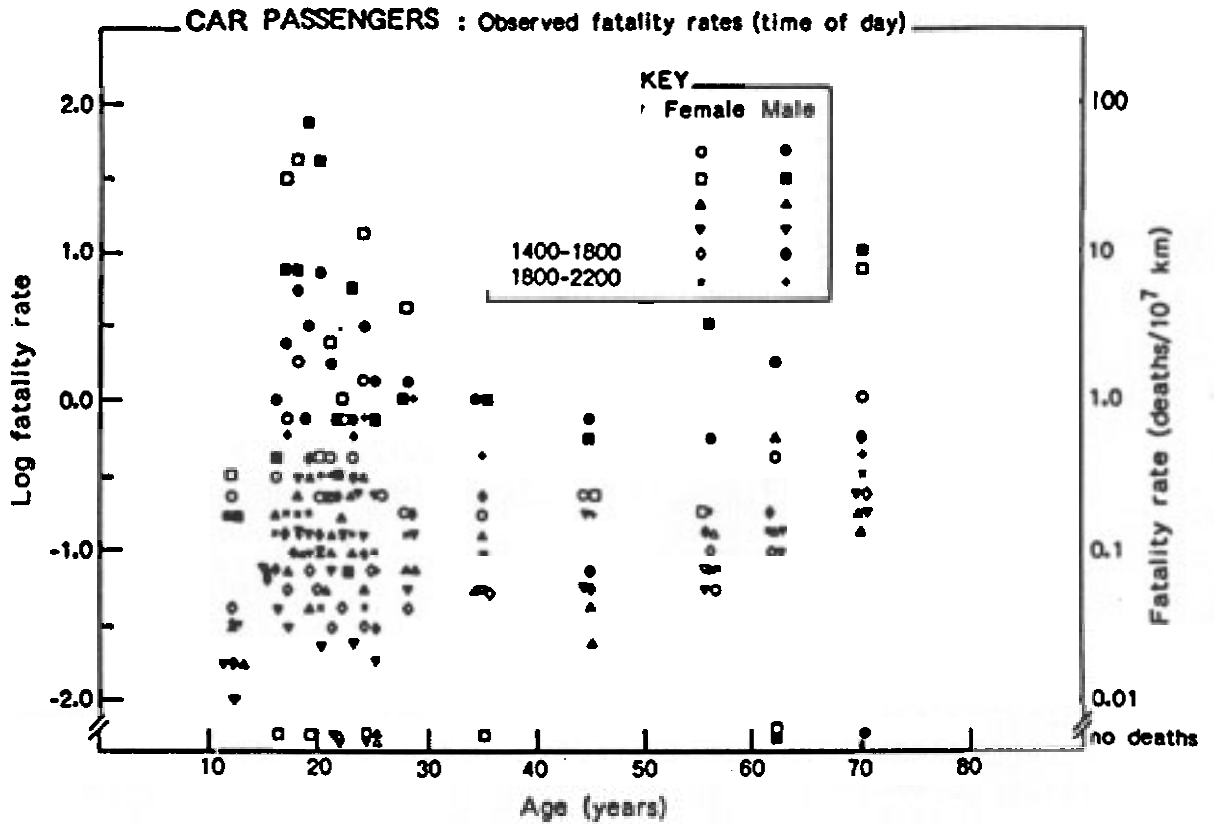
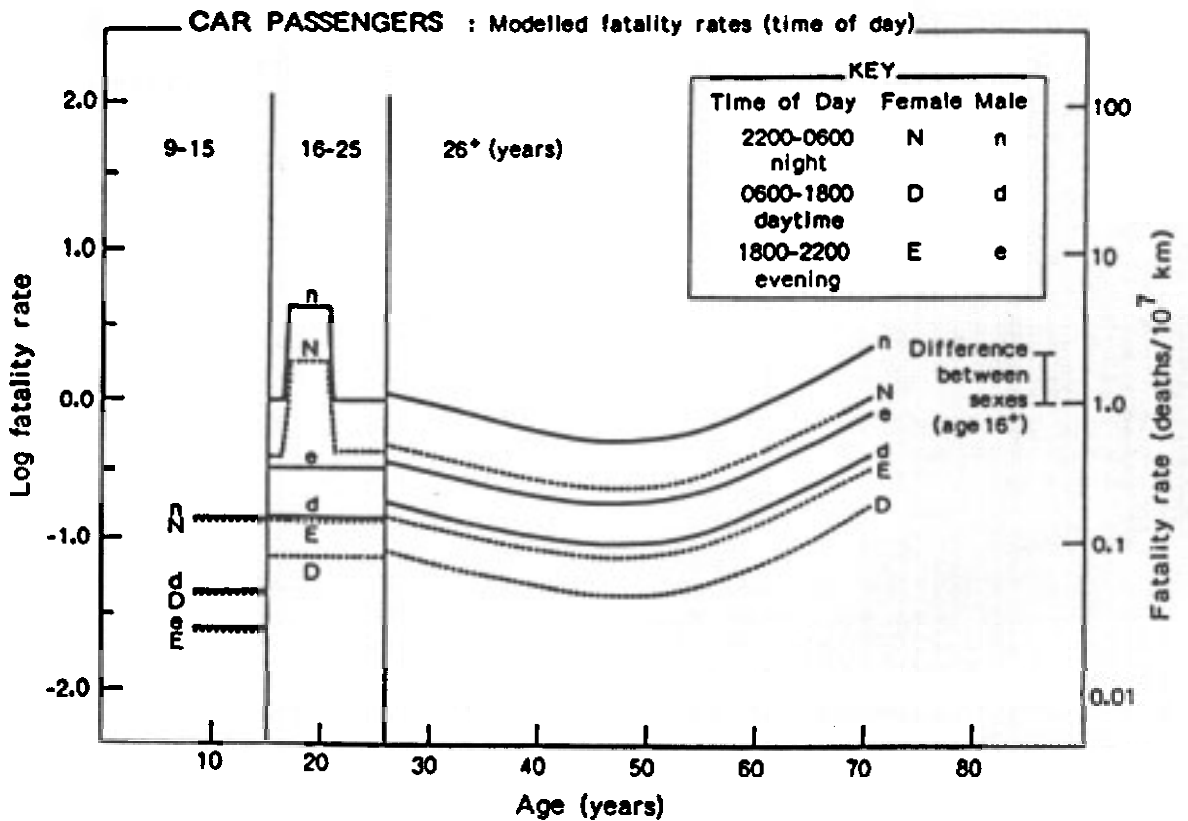


Figure 3.2



### 3.0 Age and sex variation in fatality rates

The age groups considered for car passengers were the same as those for car drivers, except that the 9-15 year-olds were included in the analysis. On average over all age groups, females travelled about the same distance per day as drivers and as passengers, whereas males drove three times as much as they were driven (comparison of Tables 2.1b and 3.1b). The observed fatality rates for drivers and passengers were similar: 0.10 deaths per ten million kilometres travelled as a driver and 0.09 as a passenger for females, and 0.15 and 0.17 for male drivers and passengers, respectively (see Tables 2.1c and 3.1c).

Car passengers had observed fatality rates distributed over a wide range. From examination of the data, it appeared reasonable to group the ages of passengers into ages 9-15, 16-25, and 26 and over (see Figs. 3.1 and 3.2). The youngest group had fatality rates obviously much lower than the second group. The oldest group had rates which appeared to vary more consistently with age than in the middle group. **These three groups were used as the basis of a model of the variation in rates with sex and age.**

The 9-15 year olds had the lowest fatality rate per distance travelled, and this did not vary with sex (F statistic for sex difference in rates, for 1 and 194 df, = 0.4,  $p > 0.05$ ). This group, of course, comprises children who might be expected to be passengers of their parents or other adults, and so at low risk independent of gender of the child.

The 16 to 25 year olds had a modelled fatality rate over four times that of the youngest group. Some passengers in this group would be expected to be with young car drivers of about their own age. **These drivers have a high fatality risk, as reported in Chapter 2.**

The modelled fatality rate for the oldest group began at the level of the 25-year olds but fell to a minimum between ages 40 and 50, where it was about twice that of the 9-15 year olds. The rate was higher at older ages. At age 70, it was similar to that of the 16 to 25 year olds. **This variation was modelled using a quadratic function of age (F statistic for the age squared term, for 1 and 194 df, = 23,  $p < 0.001$ ; F statistic for an age cubed term, for 1 and 194 df, = 0.0,  $p > 0.05$ ).**

For both the 16 to 25 year olds and for those aged 26 and older, males had an average modelled risk of 2.3 times that of females (for 16-25 year olds, F statistic, for 1 and 194 df, = 23,  $p < 0.001$ ; 95% confidence interval for the relative rate from 1.7 to 3.2; for 26 years and older, F statistic for sex difference in rates, for 1 and 194 df, = 37,  $p < 0.001$ ; 95% confidence interval for relative rate of 1.8 to 3.0; F statistic for a different relative rate in the two age groups, for 1 and 194 df, = 0.1,  $p > 0.05$ ; 95% confidence interval for the combined relative rate of 1.9 to 2.9).

Results for age and sex were similar for the three exposure measures (distance, time and number of trips). However, for population as the at-risk measure, modelled male fatality rates were only 1.2 times that of females and this difference was not statistically significant. **Because on average females have more travel as passengers than do males (see Tables 3.1b, d and f), population rates mask the greater risk of males.** Relative rates for older ages were also less than for the other measures because the amount of travel decreases with increasing age. (For example, relative rates compared with 9-15 year olds for ages 30, 45, 60 and 70 were 2.7, 2.0, 3.2 and 6.3 for distance and 1.9, 1.1, 1.4 and 2.5 for population.)

### 3.1 Time of day

Fatality rates of car passengers varied with time of day with a very similar pattern to that seen for car drivers. **The two night time periods (between 2200 and 0600)** had a rate about six times that of the day time periods (0600 to 1800), and about three times that of the intermediate evening period (1800-2200). (F statistic for variation in rates between these three time periods, for 2 and 194 df, = 120,  $p < 0.001$ ; F statistic for variation in rates within these time periods, for 3 and 194 df, = 1.6,  $p > 0.05$ .)

In addition, 17 to 20 year old car passengers had a fatality rate about five times greater than otherwise predicted for the night periods (F statistic, for 1 and 194 df, = 41,  $p < 0.001$ ; 95% confidence interval for the relative rate is 3.0 to 7.5). This agrees with the age by time of day interaction found for car drivers, although for passengers the effect is concentrated in a much smaller age range.

Sex	Age	Estimated fatality rate (deaths/10 <sup>7</sup> km)		
		Day 0600-1800	Evening 1800-2200	Night 2200-0600
Males	9-15	.02	.04	.14
	17-20	.15	.28	4.26
	16,21-25	.15	.28	.88
	30	.15	.27	.84
	45	.11	.20	.61
	60	.17	.32	.99
Females	9-15	.02	.04	.14
	17-20	.07	.12	1.84
	16,21-25	.07	.12	.38
	30	.06	.12	.36
	45	.05	.08	.26
	60	.08	.14	.43

This is the model graphed in Figure 3.2.

There was some evidence that this additional risk for 17 to 20 year olds was confined to the males (F statistic for the relative rate differing for 17-20 year olds compared with 16 and 21-25 year olds, for 1 and 194 df, = 4.2,  $0.01 < p < 0.05$ ). Relative risk estimates (compared with females aged 16 or 21-25) were 1.4 (females 17-20), 2.2 (males 16, 21-25) and 6.4 (males 17-20).

It is also possible that the relative risk between males and females varied with time of day. It was estimated as 1.7 for the daytime and 3.2 for the evening and night (F statistic, for 2 and 194 df, = 4.8,  $0.001 < p < 0.01$ ). There was no evidence that the risks between the time periods vary with age of the passenger (F statistic for linear age interaction, for 3 and 194 df, = 1.3,  $p > 0.05$ ).

The above results are for distance travelled but are similar time and number of trips. As with car drivers, using population as the at-risk measure gives misleading results for time of day. Modelled fatality rates were lowest for night (66% of daytime), and evening rates were similar to day rates. This is because the amount of travel varies considerably with time of day.



Table 3.1a. Car passengers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons ('000)
<b>Males</b>								
9-15	6	4	9	3	8	8	38	962
16	7	2	3	2	5	3	22	157
17	9	6	2	1	7	11	36	143
18	18	8	2	7	4	4	43	132
19	11	7	5	2	10	10	45	115
20	10	4	2	1	4	7	28	116
21	14	4	2	0	8	5	33	121
22	8	9	2	0	6	6	31	107
23	7	2	2	3	3	10	27	125
24	7	0	4	2	2	6	21	114
25	7	3	0	3	1	1	15	117
26-29	12	8	5	7	9	14	55	457
30-39	16	6	8	9	19	21	79	1043
40-49	9	2	2	9	7	9	38	848
50-59	2	6	4	4	9	4	29	692
60-64	2	0	5	3	3	1	14	347
65+	0	2	4	10	18	8	42	601
Total	145	73	61	66	123	128	596	6197
<b>Females</b>								
9-15	3	3	4	6	15	7	38	913
16	2	0	6	2	4	4	18	138
17	2	5	3	4	2	6	22	136
18	5	5	4	2	4	5	25	124
19	7	0	1	4	2	6	20	105
20	1	1	1	2	2	1	8	112
21	2	4	3	2	1	5	17	111
22	2	1	0	2	1	2	8	110
23	5	1	1	1	4	3	15	113
24	6	2	1	0	1	2	12	113
25	1	1	0	1	5	2	10	118
26-29	4	7	4	8	7	11	41	501
30-39	5	0	10	14	14	12	55	1056
40-49	5	2	4	11	14	7	43	769
50-59	1	1	13	13	17	6	51	689
60-64	4	0	6	10	10	4	34	357
65+	9	1	10	37	38	15	110	828
Total	64	34	71	119	141	98	527	6291

Source: FORS Fatal File 1984-85

Table 3.1b. Car passengers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons ( '000)
<b>Males</b>								
9-15	.45	.31	3.67	4.70	5.97	3.14	18.24	962
16	.69	.46	3.70	4.58	6.50	3.34	19.28	157
17	.36	.07	2.95	2.95	4.93	2.09	13.34	143
18	.31	.10	1.46	2.11	4.30	2.70	10.97	132
19	.42	.01	1.91	2.73	3.16	1.45	9.68	115
20	.17	.01	2.28	5.56	3.47	2.47	13.97	116
21	.89	1.49	1.85	.63	3.44	1.60	9.91	121
22	1.37	1.53	1.41	1.67	3.45	3.31	12.75	107
23	1.06	.04	.97	1.54	.96	1.75	6.32	125
24	.24	.10	1.50	1.88	2.28	1.02	7.02	114
25	.71	.46	2.05	1.30	3.25	1.35	9.12	117
26-29	.27	.21	2.07	1.72	1.69	.47	6.43	457
30-39	.22	.09	.80	1.04	1.21	.69	4.05	1043
40-49	.17	.05	.84	.76	1.66	.88	4.37	848
50-59	.08	.03	1.04	1.27	1.17	.51	4.10	692
60-64	.05	.01	.34	.77	.69	.24	2.10	347
65+	.10	.00	.53	1.05	.71	.41	2.82	601
Mean	.30	.17	1.58	1.94	2.47	1.30	7.75	6197
<b>Females</b>								
9-15	.20	.15	3.41	4.84	5.53	3.16	17.28	913
16	.65	.56	3.39	2.63	5.42	2.58	15.23	138
17	.30	.02	2.31	2.73	3.79	3.59	12.75	136
18	.34	.01	2.14	2.52	4.13	3.19	12.34	124
19	1.26	.05	3.01	3.86	3.25	4.04	15.48	105
20	.47	.25	1.99	2.57	4.26	2.84	12.37	112
21	.64	.23	3.66	3.29	3.40	2.28	13.51	111
22	.32	.14	1.08	2.06	2.61	2.03	8.23	110
23	1.62	1.80	1.37	4.88	6.29	2.89	18.86	113
24	.54	.02	1.91	2.92	3.38	5.20	13.97	113
25	.47	.00	4.26	6.11	6.89	2.59	20.32	118
26-29	.61	.05	1.62	4.30	4.27	2.33	13.17	501
30-39	.40	.21	2.01	3.45	3.53	2.35	11.94	1056
40-49	.34	.17	2.62	3.82	4.66	2.42	14.03	769
50-59	.37	.11	1.80	3.82	3.45	1.54	11.08	689
60-64	.39	.17	1.58	4.20	3.70	1.05	11.08	357
65+	.14	.00	1.17	3.15	2.60	.84	7.91	828
Mean	.39	.16	2.19	3.79	4.05	2.26	12.84	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.1c. Car passengers:  
Average number of fatalities per ten million kilometres  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Mean	Persons ( '000)
<b>Males</b>								
9-15	.19	.18	.03	.01	.02	.04	.03	962
16	.88	.38	.07	.04	.07	.08	.10	157
17	2.42	8.07	.07	.03	.14	.51	.26	143
18	6.12	8.01	.14	.34	.10	.15	.41	132
19	3.15	76.05	.31	.09	.38	.82	.55	115
20	6.80	43.77	.10	.02	.14	.33	.24	116
21	1.78	.30	.12	.00	.26	.36	.38	121
22	.75	.75	.18	.00	.22	.23	.31	107
23	.73	4.92	.23	.21	.34	.63	.47	125
24	3.47	.00	.32	.13	.11	.71	.36	114
25	1.16	.76	.00	.27	.04	.09	.19	117
26-29	1.35	1.14	.07	.12	.16	.89	.26	457
30-39	.95	.90	.13	.11	.21	.40	.26	1043
40-49	.85	.65	.04	.19	.07	.16	.14	848
50-59	.50	3.64	.08	.06	.15	.16	.14	692
60-64	1.57	.00	.58	.15	.17	.17	.26	347
65+	.00	10.69	.17	.22	.57	.44	.34	601
Mean	1.08	.93	.09	.08	.11	.22	.17	6197
<b>Females</b>								
9-15	.22	.30	.02	.02	.04	.03	.03	913
16	.30	.00	.18	.08	.07	.15	.12	138
17	.66	28.33	.13	.15	.05	.17	.17	136
18	1.60	41.31	.21	.09	.11	.17	.22	124
19	.73	.00	.04	.14	.08	.19	.17	105
20	.26	.48	.06	.10	.06	.04	.08	112
21	.39	2.15	.10	.08	.04	.27	.16	111
22	.78	.87	.00	.12	.05	.12	.12	110
23	.37	.07	.09	.02	.08	.13	.10	113
24	1.35	13.43	.06	.00	.04	.05	.10	113
25	.25	.00	.00	.02	.08	.09	.05	118
26-29	.18	3.65	.07	.05	.04	.13	.09	501
30-39	.16	.00	.06	.05	.05	.07	.06	1056
40-49	.26	.21	.03	.05	.05	.05	.05	769
50-59	.05	.18	.14	.07	.10	.08	.09	689
60-64	.40	.00	.15	.09	.10	.15	.12	357
65+	1.03	8.00	.14	.19	.24	.29	.23	828
Mean	.36	.44	.07	.07	.08	.09	.09	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 3.1d. Car passengers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons <sup>a</sup> ('000)
<b>Males</b>								
9-15	.92	.52	5.76	7.46	9.53	5.13	29.32	962
16	1.46	1.32	6.72	8.34	10.21	6.17	34.21	157
17	.99	.10	4.23	5.30	7.36	3.59	21.57	143
18	1.60	.17	2.81	2.93	6.35	5.84	19.69	132
19	.48	.03	2.50	4.00	4.55	2.79	14.35	115
20	.37	.03	3.28	3.64	4.08	3.27	14.67	116
21	1.06	.84	2.15	1.36	5.01	2.02	12.44	121
22	1.52	1.81	2.60	2.77	4.85	3.37	16.93	107
23	1.54	.06	1.52	1.67	1.92	2.79	9.51	125
24	.48	.20	2.12	2.51	3.58	1.45	10.34	114
25	1.04	.51	2.63	1.82	4.25	2.10	12.35	117
26-29	.44	.24	2.26	2.16	2.77	.90	8.77	457
30-39	.36	.11	1.19	1.44	1.88	1.13	6.11	1043
40-49	.34	.08	1.16	1.06	2.22	1.23	6.08	848
50-59	.21	.04	1.33	1.43	1.79	.77	5.58	692
60-64	.16	.10	.79	1.34	1.34	.53	4.26	347
65+	.14	.21	.91	1.93	1.38	.65	5.23	601
Mean	.54	.26	2.34	2.85	3.81	2.10	11.91	6197
<b>Females</b>								
9-15	.66	.32	4.87	6.97	9.16	5.19	27.16	913
16	1.16	1.16	5.22	5.04	7.89	5.50	25.98	138
17	.69	.07	4.07	3.74	6.66	5.95	21.19	136
18	.99	.06	3.51	4.79	7.79	4.65	21.80	124
19	1.65	.17	5.57	5.92	5.15	5.47	23.93	105
20	1.00	.32	3.66	5.53	7.60	5.17	23.27	112
21	1.24	.32	6.24	6.47	7.73	4.81	26.82	111
22	.57	.31	2.15	3.98	4.72	4.31	16.05	110
23	1.76	1.54	2.03	6.26	7.91	5.45	24.94	113
24	.85	.33	3.57	4.88	6.08	6.02	21.73	113
25	.84	.00	4.67	7.75	8.24	4.42	25.92	118
26-29	.88	.24	2.61	5.78	6.15	3.85	19.51	501
30-39	.70	.24	2.70	5.15	5.44	3.60	17.83	1056
40-49	.62	.21	3.66	5.51	6.41	3.66	20.07	769
50-59	.70	.36	3.13	6.11	5.90	2.89	19.09	689
60-64	.71	1.19	3.26	7.32	5.90	1.81	20.19	357
65+	.40	.05	1.97	5.51	4.52	1.56	14.02	828
Mean	.73	.33	3.37	5.83	6.41	3.71	20.37	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.1e. Car passengers:  
Average number of fatalities per one million hours  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Mean	Persons ( '000)
<b>Males</b>								
9-15	.56	.66	.13	.03	.07	.13	.11	962
16	2.51	.79	.23	.13	.26	.25	.34	157
17	5.23	33.46	.27	.11	.55	1.76	.96	143
18	7.00	30.01	.44	1.49	.39	.43	1.36	132
19	16.45	167.28	1.43	.36	1.57	2.56	2.24	115
20	19.22	84.00	.43	.19	.69	1.51	1.35	116
21	9.01	3.24	.63	.00	1.09	1.68	1.80	121
22	4.02	3.80	.59	.00	.95	1.36	1.40	107
23	2.99	21.07	.87	1.18	1.03	2.36	1.87	125
24	10.50	.00	1.36	.57	.40	2.98	1.46	114
25	4.75	4.13	.00	1.16	.17	.33	.85	117
26-29	4.94	5.91	.40	.58	.58	2.80	1.13	457
30-39	3.49	4.28	.53	.49	.80	1.46	1.02	1043
40-49	2.60	2.46	.17	.82	.31	.71	.61	848
50-59	1.12	16.48	.36	.33	.60	.62	.62	692
60-64	2.94	.00	1.50	.53	.53	.44	.78	347
65+	.00	1.27	.60	.71	1.78	1.69	1.10	601
Mean	3.53	3.70	.35	.31	.43	.81	.66	6197
<b>Females</b>								
9-15	.41	.84	.07	.08	.15	.12	.13	913
16	1.02	.00	.68	.24	.30	.43	.41	138
17	1.74	42.07	.44	.65	.18	.61	.63	136
18	3.32	50.93	.75	.28	.34	.71	.76	124
19	3.34	.00	.14	.53	.30	.86	.66	105
20	.73	2.29	.20	.27	.19	.14	.25	112
21	1.20	9.21	.36	.23	.10	.77	.47	111
22	2.61	2.38	.00	.38	.16	.35	.37	110
23	2.07	.47	.36	.12	.37	.40	.44	113
24	5.14	4.40	.20	.00	.12	.24	.40	113
25	.83	.00	.00	.09	.42	.32	.24	118
26-29	.74	4.86	.25	.23	.19	.47	.34	501
30-39	.56	.00	.29	.21	.20	.26	.24	1056
40-49	.86	1.01	.12	.21	.23	.20	.23	769
50-59	.17	.33	.50	.25	.34	.25	.32	689
60-64	1.30	.00	.42	.31	.39	.51	.39	357
65+	2.23	2.02	.50	.67	.83	.95	.78	828
Mean	1.15	1.32	.28	.27	.29	.35	.34	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 3.1f. Car passengers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Total	Persons ( '000)
<b>Males</b>								
9-15	.04	.00	.31	.31	.49	.28	1.43	962
16	.04	.02	.24	.18	.28	.26	1.01	157
17	.05	.01	.19	.23	.32	.19	.98	143
18	.04	.01	.16	.15	.25	.16	.78	132
19	.02	.00	.11	.19	.20	.13	.66	115
20	.03	.00	.11	.13	.15	.13	.55	116
21	.03	.01	.09	.08	.15	.06	.41	121
22	.05	.02	.07	.09	.17	.12	.52	107
23	.06	.00	.06	.12	.10	.12	.47	125
24	.04	.02	.12	.10	.17	.09	.53	114
25	.03	.01	.09	.09	.17	.10	.49	117
26-29	.03	.00	.08	.07	.12	.06	.37	457
30-39	.02	.00	.06	.07	.09	.06	.29	1043
40-49	.01	.00	.05	.05	.07	.05	.24	848
50-59	.01	.00	.05	.05	.07	.04	.23	692
60-64	.01	.00	.03	.07	.07	.04	.21	347
65+	.01	.00	.03	.07	.05	.03	.19	601
Mean	.02	.00	.11	.12	.17	.10	.52	6197
<b>Females</b>								
9-15	.03	.00	.31	.35	.55	.29	1.54	913
16	.06	.00	.26	.29	.48	.36	1.45	138
17	.05	.01	.25	.22	.39	.35	1.27	136
18	.07	.01	.23	.28	.37	.29	1.25	124
19	.08	.01	.19	.28	.29	.28	1.12	105
20	.08	.01	.17	.34	.32	.32	1.23	112
21	.08	.01	.21	.33	.31	.31	1.24	111
22	.04	.01	.10	.24	.21	.25	.86	110
23	.08	.01	.11	.28	.34	.36	1.18	113
24	.04	.00	.13	.21	.33	.29	1.01	113
25	.05	.00	.13	.30	.32	.25	1.05	118
26-29	.06	.00	.12	.23	.25	.21	.86	501
30-39	.04	.00	.11	.22	.23	.16	.76	1056
40-49	.03	.01	.13	.21	.22	.16	.76	769
50-59	.03	.00	.12	.23	.24	.12	.75	689
60-64	.03	.01	.10	.28	.23	.09	.75	357
65+	.01	.00	.10	.24	.17	.06	.58	828
Mean	.04	.00	.15	.26	.29	.19	.93	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.1g. Car passengers:  
Average number of fatalities per one million trip segments  
classified by age, sex and time of day.

	2200 -0200	0200 -0600	0600 -1000	1000 -1400	1400 -1800	1800 -2200	Mean	Persons ( '000)
<b>Males</b>								
9-15	.21	1.36	.04	.01	.02	.04	.04	962
16	1.36	1.00	.11	.10	.16	.10	.19	157
17	1.85	10.27	.10	.04	.21	.57	.35	143
18	4.92	7.80	.13	.49	.16	.26	.58	132
19	6.47	26.11	.52	.13	.58	.91	.81	115
20	4.06	14.00	.22	.09	.31	.64	.60	116
21	6.10	6.48	.26	.00	.61	.88	.91	121
22	1.91	7.39	.35	.00	.45	.63	.76	107
23	1.25	5.58	.36	.27	.33	.89	.62	125
24	2.05	.00	.41	.25	.14	.79	.47	114
25	2.83	3.43	.00	.39	.07	.12	.36	117
26-29	1.32	4.82	.19	.28	.22	.68	.45	457
30-39	1.09	2.05	.19	.18	.29	.47	.36	1043
40-49	1.02	.86	.06	.31	.16	.28	.25	848
50-59	.34	4.55	.14	.15	.24	.22	.25	692
60-64	1.39	.00	.57	.17	.18	.11	.26	347
65+	.00	3.11	.27	.34	.81	.66	.51	601
Mean	1.36	3.53	.13	.13	.16	.28	.25	6197
<b>Females</b>								
9-15	.13	.94	.02	.03	.04	.04	.04	913
16	.34	.00	.23	.07	.08	.11	.12	138
17	.37	5.28	.12	.18	.05	.17	.17	136
18	.75	9.92	.19	.08	.12	.19	.22	124
19	1.11	.00	.07	.19	.09	.28	.23	105
20	.15	1.54	.07	.07	.08	.04	.08	112
21	.31	5.40	.18	.08	.04	.20	.17	111
22	.61	.85	.00	.11	.06	.10	.12	110
23	.76	.91	.11	.04	.14	.10	.15	113
24	1.69	6.78	.09	.00	.04	.08	.14	113
25	.26	.00	.00	.04	.18	.09	.10	118
26-29	.20	6.11	.09	.10	.08	.14	.13	501
30-39	.17	.00	.12	.08	.08	.10	.09	1056
40-49	.26	.64	.05	.09	.11	.08	.10	769
50-59	.06	.50	.22	.11	.14	.10	.14	689
60-64	.53	.00	.22	.13	.17	.17	.17	357
65+	1.14	8.05	.17	.26	.37	.39	.31	828
Mean	.36	1.46	.10	.10	.11	.11	.12	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 3.2a. Car passengers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total	Persons ('000)
<b>Males</b>									
9-15	4	3	2	8	6	9	6	38	962
16	1	1	4	2	3	4	7	22	157
17	4	4	4	3	9	7	8	39	143
18	2	5	5	0	5	18	9	44	132
19	1	4	5	3	6	16	10	45	115
20	0	2	2	6	4	7	7	28	116
21	2	1	2	3	4	15	6	33	121
22	1	4	4	2	7	7	7	32	107
23	2	3	1	0	7	10	6	29	125
24	1	1	1	2	4	3	9	21	114
25	0	0	0	3	3	5	4	15	117
26-29	5	5	4	4	13	9	16	56	457
30-39	10	7	11	5	10	20	18	81	1043
40-49	6	3	3	1	10	12	3	38	848
50-59	3	1	3	4	3	11	4	29	692
60-64	1	0	1	1	4	4	3	14	347
65+	7	5	7	2	6	7	8	42	601
Total	50	49	59	49	104	164	131	606	6197
<b>Females</b>									
9-15	3	2	1	3	6	12	12	39	913
16	2	2	1	0	7	5	1	18	138
17	2	1	4	3	3	3	6	22	136
18	1	2	4	1	2	6	9	25	124
19	1	3	0	1	3	7	5	20	105
20	0	2	2	0	1	1	2	8	112
21	1	1	4	0	6	3	2	17	111
22	1	0	3	1	0	4	1	10	110
23	0	0	0	4	4	2	5	15	113
24	0	0	1	2	5	1	4	13	113
25	3	0	1	0	1	2	3	10	118
26-29	7	4	4	7	3	11	7	43	501
30-39	9	4	9	11	8	12	2	55	1056
40-49	4	4	9	6	4	7	9	43	769
50-59	8	5	9	6	9	6	10	53	689
60-64	2	3	6	5	7	4	7	34	357
65+	14	20	16	15	13	15	17	110	828
Total	58	53	74	65	82	101	102	535	6291

Source: FORS Fatal File 1984-85



### 3.2 Day of week

As for drivers, the day of week effect could be summarised as weekend (here including Friday, Saturday and Sunday - because as with car drivers Friday had fatality rates much more like Saturday and Sunday than Monday to Thursday) and weekday effects (F statistic for weekend compared with weekday, for 1 and 230 df, = 8.0,  $0.001 < p < 0.01$ ; F statistic for variation in rates within the weekend and weekday periods, for 5 and 230 df, = 1.7,  $p > 0.05$ ).

The weekend-weekday difference differed for males and females over 15 years of age (F statistic, for 1 and 230 df, = 31,  $p < 0.001$ ). **Surprisingly, the lowest modelled fatality rate was for females on the weekend, followed by females during the week (40% greater), males during the week (70% greater) and, most strikingly, males during the weekend (nearly 4 times as great).**

For females, the difference in risk between the weekend and the working week was apparent only for passengers aged 26 and over (F statistic for difference between age groups, for 1 and 106 df, = 4.6,  $0.01 < p < 0.05$ ). For those in the 16 to 25 age group there was no statistically significant difference between the weekend and the working week (F statistic, for 1 and 54 df, = 0.3,  $p > 0.05$ ). There was no evidence for the weekend-weekday difference differing by age group for males (F statistic, for 1 and 106 df, = 1.1,  $p > 0.05$ ).

The results above are for distance travelled but those for time and number of trips are similar. **There was a different trend for modelled fatality rates per person per year.** Compared with females on the weekend, these rates were 29% less for females during the week, 43% less for males during the week and 52% greater for males on the weekend. **This different pattern is due to a combination of two effects.** Firstly, since more travel is undertaken over the weekend by both sexes (see Tables 3.2b, d and f; this is in contrast to car drivers who have similar amounts of travel throughout the week and implies that, on average, on the weekend there are more people per car than during the week), using population as the at-risk measure overestimates the risk during the weekend. However, the relative risk of males to females is underestimated as seen before (see section 3.0).

Table 3.2b. Car passengers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15	13.93	7.92	7.61	19.27	12.42	34.12	32.73	18.29	962
16	37.16	5.45	3.94	9.51	14.70	46.29	18.08	19.31	157
17	13.43	10.72	6.65	8.53	24.73	14.67	15.53	13.47	143
18	8.47	7.43	2.90	9.15	14.53	9.40	25.09	10.99	132
19	11.75	5.66	11.35	4.72	5.52	13.90	16.40	9.90	115
20	8.34	28.03	8.07	2.52	25.01	3.06	23.70	14.10	116
21	6.74	4.10	28.88	13.08	1.10	7.89	8.07	9.98	121
22	5.58	4.31	26.74	3.11	11.91	33.88	8.28	13.40	107
23	.24	1.71	3.55	9.67	4.14	8.86	16.48	6.38	125
24	7.77	3.71	6.98	12.94	4.22	6.51	7.97	7.16	114
25	8.04	8.38	11.08	3.02	11.90	1.73	19.84	9.14	117
26-29	11.80	8.97	4.82	3.31	7.36	6.18	3.76	6.60	457
30-39	2.46	5.36	3.02	3.82	4.14	4.26	5.74	4.12	1043
40-49	4.27	5.04	6.81	3.47	2.65	3.47	5.32	4.43	848
50-59	4.96	7.87	2.82	5.70	3.71	2.12	1.67	4.12	692
60-64	1.76	1.81	1.45	2.41	2.83	1.88	2.73	2.12	347
65+	5.76	2.38	.89	4.23	1.59	1.35	3.70	2.84	601
Mean	7.58	6.28	5.57	7.10	6.70	10.52	11.01	7.82	6197
<b>Females</b>									
9-15	15.35	8.08	7.57	14.50	15.06	24.92	35.78	17.32	913
16	9.89	12.38	16.03	7.04	15.65	21.00	24.99	15.28	138
17	11.52	5.30	6.39	17.54	10.67	13.61	25.88	12.99	136
18	3.97	7.61	17.13	19.31	9.54	15.49	15.17	12.60	124
19	4.01	11.47	10.00	6.04	20.62	19.07	40.37	15.94	105
20	5.77	5.39	10.37	5.00	15.71	32.75	14.45	12.78	112
21	4.87	3.64	24.11	11.93	8.89	24.67	17.92	13.72	111
22	8.48	5.89	5.18	3.99	13.67	5.15	16.15	8.36	110
23	9.79	6.92	3.66	7.65	17.60	35.34	52.48	19.06	113
24	12.05	6.72	6.71	6.45	25.54	12.98	30.39	14.40	113
25	4.10	36.72	9.89	4.61	6.07	29.79	51.19	20.34	118
26-29	6.92	5.08	6.16	10.03	20.34	23.51	21.34	13.34	501
30-39	6.73	9.25	6.75	11.53	8.61	19.15	22.19	12.03	1056
40-49	14.11	5.98	8.46	11.03	12.34	19.99	26.87	14.11	769
50-59	7.71	8.42	10.53	9.35	12.37	14.44	16.86	11.38	689
60-64	8.89	12.83	5.27	13.03	15.96	11.03	11.04	11.15	357
65+	7.53	4.30	6.16	7.55	11.86	7.04	11.09	7.93	828
Mean	9.39	8.00	8.08	10.67	13.25	18.19	23.21	12.97	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.2c. Car passengers:  
Average number of fatalities per ten million kilometres  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ( '000)
<b>Males</b>									
9-15	.03	.04	.03	.04	.05	.03	.02	.03	962
16	.02	.11	.62	.13	.12	.05	.24	.10	157
17	.20	.25	.40	.24	.24	.32	.35	.28	143
18	.17	.49	1.25	.00	.25	1.39	.26	.42	132
19	.07	.59	.37	.53	.91	.96	.51	.54	115
20	.00	.06	.20	1.96	.13	1.89	.24	.23	116
21	.24	.19	.05	.18	2.90	1.51	.59	.37	121
22	.16	.83	.13	.57	.53	.18	.76	.30	107
23	6.47	1.35	.22	.00	1.30	.87	.28	.50	125
24	.11	.23	.12	.13	.79	.39	.95	.35	114
25	.00	.00	.00	.81	.21	2.38	.17	.19	117
26-29	.09	.12	.17	.25	.37	.30	.89	.25	457
30-39	.37	.12	.33	.12	.22	.43	.29	.26	1043
40-49	.16	.07	.05	.03	.43	.39	.06	.14	848
50-59	.08	.02	.15	.10	.11	.72	.33	.14	692
60-64	.16	.00	.19	.11	.39	.59	.30	.26	347
65+	.19	.34	1.25	.08	.60	.83	.35	.34	601
Mean	.10	.12	.16	.11	.24	.24	.18	.17	6197
<b>Females</b>									
9-15	.02	.03	.01	.02	.04	.05	.04	.03	913
16	.14	.11	.04	.00	.31	.17	.03	.12	138
17	.12	.13	.44	.12	.20	.16	.16	.17	136
18	.19	.20	.18	.04	.16	.30	.46	.22	124
19	.23	.24	.00	.15	.13	.34	.11	.16	105
20	.00	.32	.17	.00	.05	.03	.12	.08	112
21	.18	.24	.14	.00	.58	.11	.10	.15	111
22	.10	.00	.51	.22	.00	.68	.05	.15	110
23	.00	.00	.00	.44	.19	.05	.08	.10	113
24	.00	.00	.13	.26	.17	.07	.11	.11	113
25	.60	.00	.08	.00	.13	.05	.05	.06	118
26-29	.19	.15	.12	.13	.03	.09	.06	.09	501
30-39	.12	.04	.12	.09	.08	.06	.01	.06	1056
40-49	.04	.08	.13	.07	.04	.04	.04	.05	769
50-59	.14	.08	.12	.09	.10	.06	.08	.09	689
60-64	.06	.06	.31	.10	.12	.10	.17	.12	357
65+	.22	.54	.30	.23	.13	.25	.18	.23	828
Mean	.09	.10	.14	.09	.09	.08	.07	.09	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 3.2d. Car passengers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15	23.95	14.18	13.57	25.35	20.47	59.39	48.85	29.40	962
16	68.78	8.86	8.97	22.86	18.03	88.77	23.67	34.28	157
17	19.41	27.81	11.17	21.15	28.76	22.21	22.52	21.86	143
18	30.07	11.58	6.14	17.91	22.12	26.96	26.84	20.23	132
19	12.82	11.63	17.46	10.06	8.14	19.47	23.57	14.74	115
20	10.61	24.92	16.61	6.19	15.57	8.25	22.34	14.93	116
21	7.51	10.15	24.98	16.38	2.42	14.76	11.55	12.54	121
22	7.77	6.80	21.80	6.46	30.84	40.13	11.27	17.87	107
23	.65	3.68	6.80	10.74	8.07	18.13	19.35	9.63	125
24	10.58	5.91	13.99	14.56	7.80	10.64	10.68	10.60	114
25	12.92	10.12	13.64	4.31	16.89	5.25	24.22	12.48	117
26-29	11.94	10.23	7.89	6.08	8.93	12.49	5.68	9.03	457
30-39	3.43	7.98	4.28	6.18	6.14	6.75	9.03	6.25	1043
40-49	5.49	5.82	6.55	5.08	5.25	5.66	9.51	6.19	848
50-59	6.69	6.98	4.53	7.29	6.02	4.43	3.36	5.62	692
60-64	2.93	3.53	2.92	5.38	6.83	3.75	4.75	4.30	347
65+	6.44	5.97	1.98	5.32	5.64	3.63	7.83	5.26	601
Mean	11.47	9.14	7.93	10.50	10.43	18.61	16.24	12.04	6197
<b>Females</b>									
9-15	29.40	14.88	17.32	20.11	27.53	41.07	43.45	27.68	913
16	20.60	18.45	24.99	19.86	21.47	43.04	34.64	26.15	138
17	16.31	12.35	15.16	31.98	18.40	24.01	32.85	21.58	136
18	10.27	15.71	31.53	27.26	15.49	24.00	32.17	22.35	124
19	7.96	23.01	17.67	11.20	33.78	34.56	45.69	24.84	105
20	12.64	12.92	22.83	8.35	38.37	47.13	25.25	23.93	112
21	9.79	8.02	33.64	29.42	21.27	57.85	30.68	27.24	111
22	20.03	11.32	9.23	6.88	18.41	10.26	38.09	16.32	110
23	14.49	12.56	6.30	16.72	20.23	44.14	62.77	25.31	113
24	15.37	9.33	18.47	11.65	25.39	16.96	57.73	22.13	113
25	8.54	33.12	14.70	9.00	10.98	44.43	61.01	25.97	118
26-29	9.89	12.64	11.24	17.52	25.36	33.06	29.02	19.82	501
30-39	15.49	12.18	9.84	16.06	12.87	29.18	30.28	17.99	1056
40-49	17.75	12.46	12.79	13.51	17.58	33.04	34.48	20.23	769
50-59	12.86	14.85	16.00	15.95	19.66	28.73	27.54	19.37	689
60-64	15.81	19.37	10.92	20.83	35.31	22.98	17.44	20.38	357
65+	14.67	8.91	8.95	18.31	16.30	13.71	17.53	14.06	828
Mean	16.64	13.58	13.84	17.31	20.76	30.26	32.05	20.63	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.2e. Car passengers:  
Average number of fatalities per one million hours  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ( '000)
<b>Males</b>									
9-15	.10	.13	.09	.19	.18	.09	.07	.11	962
16	.05	.41	1.63	.32	.61	.16	1.08	.34	157
17	.83	.58	1.44	.57	1.26	1.27	1.43	1.03	143
18	.29	1.88	3.55	.00	.99	2.91	1.46	1.35	132
19	.39	1.72	1.43	1.49	3.69	4.11	2.12	2.18	115
20	.00	.40	.60	4.79	1.27	4.19	1.55	1.32	116
21	1.27	.47	.38	.87	7.86	4.84	2.47	1.79	121
22	.69	3.15	.98	1.66	1.22	.94	3.33	1.37	107
23	14.23	3.76	.68	.00	4.00	2.54	1.43	1.98	125
24	.48	.85	.36	.69	2.58	1.42	4.24	1.43	114
25	.00	.00	.00	3.42	.87	4.68	.81	.84	117
26-29	.53	.61	.64	.83	1.83	.91	3.54	1.11	457
30-39	1.61	.48	1.42	.45	.90	1.63	1.10	1.02	1043
40-49	.74	.35	.31	.13	1.29	1.44	.21	.59	848
50-59	.37	.12	.55	.46	.41	2.06	.99	.61	692
60-64	.57	.00	.57	.31	.97	1.77	1.05	.77	347
65+	1.04	.80	3.38	.36	1.02	1.84	.98	1.09	601
Mean	.40	.50	.69	.43	.92	.82	.75	.67	6197
<b>Females</b>									
9-15	.06	.08	.04	.09	.14	.18	.17	.13	913
16	.40	.45	.17	.00	1.36	.48	.12	.41	138
17	.52	.34	1.11	.40	.69	.53	.77	.62	136
18	.45	.59	.59	.17	.60	1.16	1.29	.74	124
19	.69	.72	.00	.49	.49	1.11	.60	.63	105
20	.00	.80	.45	.00	.13	.11	.41	.25	112
21	.53	.65	.62	.00	1.47	.27	.34	.46	111
22	.26	.00	1.70	.76	.00	2.04	.14	.46	110
23	.00	.00	.00	1.22	1.00	.23	.40	.43	113
24	.00	.00	.28	.88	1.00	.30	.35	.43	113
25	1.72	.00	.33	.00	.45	.22	.24	.27	118
26-29	.81	.36	.41	.46	.14	.38	.28	.36	501
30-39	.32	.18	.50	.37	.34	.22	.04	.24	1056
40-49	.17	.24	.53	.33	.17	.16	.20	.23	769
50-59	.52	.28	.47	.31	.38	.17	.30	.33	689
60-64	.20	.25	.89	.39	.32	.28	.65	.38	357
65+	.66	1.56	1.24	.57	.55	.76	.67	.78	828
Mean	.32	.36	.49	.34	.36	.31	.29	.34	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 3.2f. Car passengers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15	1.12	1.19	1.04	1.34	1.06	1.95	1.93	1.38	962
16	.87	.63	.71	1.08	.99	1.31	.90	.93	157
17	1.09	1.01	.82	.78	.97	1.08	.85	.94	143
18	.74	.67	.41	.82	.82	.75	.79	.71	132
19	.34	.65	.92	.45	.39	.92	.73	.63	115
20	.30	.44	.58	.49	.68	.63	.64	.54	116
21	.18	.53	.42	.42	.15	.49	.60	.40	121
22	.38	.21	.59	.33	.36	.83	.70	.48	107
23	.09	.21	.36	.21	.75	1.09	.60	.47	125
24	.45	.35	.59	.63	.57	.53	.57	.53	114
25	.72	.39	.58	.26	.52	.30	.39	.45	117
26-29	.39	.39	.36	.30	.35	.52	.26	.37	457
30-39	.15	.37	.22	.27	.31	.34	.30	.28	1043
40-49	.22	.20	.17	.25	.22	.27	.28	.23	848
50-59	.25	.25	.18	.25	.27	.21	.15	.22	692
60-64	.16	.16	.16	.28	.30	.22	.24	.22	347
65+	.19	.20	.15	.16	.16	.16	.22	.18	601
Mean	.42	.47	.41	.48	.46	.65	.60	.50	6197
<b>Females</b>									
9-15	1.57	1.01	1.22	1.25	1.71	2.03	1.65	1.49	913
16	1.41	1.09	1.39	1.27	1.10	1.84	1.82	1.42	138
17	.58	1.08	1.10	1.56	1.08	1.57	1.71	1.24	136
18	.55	1.15	1.60	1.41	.86	1.54	1.75	1.27	124
19	.62	1.06	.88	.79	1.31	1.59	1.51	1.11	105
20	.88	.82	1.36	.55	1.25	2.06	1.55	1.21	112
21	.64	.53	1.03	1.51	.93	1.72	2.01	1.20	111
22	1.19	.62	.61	.66	.97	.72	1.15	.84	110
23	.87	.68	.47	1.17	.79	1.49	2.74	1.17	113
24	.59	.70	1.27	.77	.65	1.13	1.90	1.00	113
25	.62	.60	.73	.62	.51	1.52	2.32	.99	118
26-29	.45	.73	.66	.70	.75	1.58	.94	.83	501
30-39	.46	.43	.52	.59	.58	1.35	1.18	.73	1056
40-49	.47	.50	.63	.56	.75	1.07	1.03	.71	769
50-59	.65	.54	.52	.76	.71	1.02	.79	.71	689
60-64	.56	.64	.66	.81	.82	.81	.71	.71	357
65+	.62	.49	.42	.75	.69	.49	.47	.56	828
Mean	.73	.66	.74	.83	.89	1.29	1.17	.90	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.2g. Car passengers:  
Average number of fatalities per one million trip segments  
classified by age, sex and day of week.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mean	Persons ('000)
<b>Males</b>									
9-15	.04	.03	.02	.06	.06	.05	.03	.04	962
16	.07	.10	.35	.11	.18	.19	.47	.21	157
17	.25	.26	.33	.26	.62	.44	.63	.40	143
18	.20	.55	.89	.00	.44	1.74	.82	.64	132
19	.24	.51	.45	.56	1.28	1.46	1.14	.85	115
20	.00	.38	.28	1.02	.48	.91	.90	.61	116
21	.87	.15	.38	.56	2.17	2.42	.80	.94	121
22	.24	1.68	.60	.55	1.76	.76	.89	.84	107
23	1.79	1.12	.21	.00	.72	.70	.76	.67	125
24	.19	.24	.14	.27	.59	.47	1.33	.48	114
25	.00	.00	.00	.95	.48	1.39	.83	.39	117
26-29	.27	.27	.24	.28	.77	.36	1.29	.46	457
30-39	.62	.17	.45	.17	.30	.54	.54	.38	1043
40-49	.30	.17	.20	.05	.51	.51	.12	.27	848
50-59	.17	.06	.24	.22	.15	.73	.37	.26	692
60-64	.17	.00	.17	.10	.37	.51	.35	.26	347
65+	.59	.39	.75	.20	.59	.68	.57	.54	601
Mean	.18	.16	.22	.16	.35	.39	.34	.27	6197
<b>Females</b>									
9-15	.02	.02	.01	.03	.04	.06	.08	.04	913
16	.10	.13	.05	.00	.44	.19	.04	.13	138
17	.24	.07	.26	.14	.20	.13	.25	.18	136
18	.14	.13	.19	.05	.18	.30	.40	.22	124
19	.15	.26	.00	.12	.21	.40	.30	.24	105
20	.00	.21	.13	.00	.07	.04	.11	.08	112
21	.14	.16	.34	.00	.56	.15	.09	.18	111
22	.07	.00	.43	.13	.00	.49	.08	.15	110
23	.00	.00	.00	.29	.43	.11	.15	.15	113
24	.00	.00	.07	.22	.65	.08	.18	.16	113
25	.39	.00	.11	.00	.16	.11	.11	.12	118
26-29	.30	.10	.12	.19	.08	.13	.14	.14	501
30-39	.18	.08	.16	.17	.13	.08	.02	.10	1056
40-49	.11	.10	.18	.13	.07	.08	.11	.11	769
50-59	.17	.13	.24	.11	.18	.08	.18	.15	689
60-64	.10	.13	.24	.17	.23	.13	.27	.18	357
65+	.26	.47	.44	.23	.22	.35	.42	.32	828
Mean	.12	.12	.15	.12	.14	.12	.13	.13	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

3.3a. Car passengers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Total	Persons ( '000)
<b>Males</b>						
9-15	9	7	7	15	38	962
16	2	5	6	9	22	157
17	8	11	12	8	39	143
18	9	15	12	8	44	132
19	7	9	12	17	45	115
20	6	11	5	6	28	116
21	8	6	10	9	33	121
22	7	10	9	6	32	107
23	9	8	7	5	29	125
24	4	5	5	7	21	114
25	4	6	5	0	15	117
26-29	12	16	17	11	56	457
30-39	14	20	19	28	81	1043
40-49	10	11	7	10	38	848
50-59	6	8	10	5	29	692
60-64	5	3	3	3	14	347
65+	9	11	12	10	42	601
<b>Total</b>	<b>129</b>	<b>162</b>	<b>158</b>	<b>157</b>	<b>606</b>	<b>6197</b>
<b>Females</b>						
9-15	5	11	14	9	39	913
16	4	3	8	3	18	138
17	1	8	9	4	22	136
18	5	6	11	3	25	124
19	4	10	3	3	20	105
20	0	2	3	3	8	112
21	1	5	7	4	17	111
22	4	2	1	3	10	110
23	2	4	3	6	15	113
24	1	6	2	4	13	113
25	3	2	4	1	10	118
26-29	9	11	14	9	43	501
30-39	12	14	15	14	55	1056
40-49	10	11	7	15	43	769
50-59	17	9	11	16	53	689
60-64	9	6	7	12	34	357
65+	24	26	31	29	110	828
<b>Total</b>	<b>111</b>	<b>136</b>	<b>150</b>	<b>138</b>	<b>535</b>	<b>6291</b>

Source: FORS Fatal File 1984-85



### 3.3 Season

Travel by car passengers was not as evenly spread with season as it was for car drivers. Summer had the greatest amount of travel, but the lowest modelled fatality rate. The per distance travelled rate for Summer was 21% less than for the other three seasons combined. However, the differences in rates between seasons were not statistically significant for any of the at-risk measures including population (for example, for distance travelled, F statistic, for 3 and 120 df, = 1.6,  $p > 0.05$ ). The possible small effect of season may be confounded with an effect of holiday time (see Section 3.5), since about one half of school holidays occur in Summer.

Evidence for this was provided by an analysis by month. January had a significantly lower predicted rate than all other months, followed by December, although the rate for February was one of the highest. If there were less accidents in Summer due to better weather conditions or more hours of daylight, for example, all months in Summer would be expected to show a similar effect.

There was no evidence for the low rate in Summer differing for males and females (F statistic, for 1 and 230 df, = 1.8,  $p > 0.05$ ).

3.3b. Car passengers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	13.74	17.04	25.50	16.86	18.29	962
16	23.87	10.84	29.52	13.00	19.31	157
17	6.90	3.94	30.62	12.41	13.47	143
18	7.46	9.21	20.73	6.58	10.99	132
19	9.85	7.63	8.03	14.09	9.90	115
20	7.12	21.75	20.13	7.41	14.10	116
21	4.83	19.01	9.16	6.92	9.98	121
22	7.01	24.70	14.91	6.98	13.40	107
23	4.47	12.89	4.67	3.48	6.38	125
24	9.15	5.72	5.35	8.43	7.16	114
25	7.93	10.88	11.12	6.63	9.14	117
26-29	5.73	4.11	12.28	4.27	6.60	457
30-39	3.49	3.33	5.86	3.78	4.12	1043
40-49	2.82	4.62	6.16	4.14	4.43	848
50-59	1.81	7.12	3.41	4.16	4.12	692
60-64	3.17	1.64	1.80	1.89	2.12	347
65+	1.52	2.47	3.58	3.80	2.84	601
Mean	5.92	7.75	10.79	6.84	7.82	6197
<b>Females</b>						
9-15	14.44	17.30	21.26	16.29	17.32	913
16	9.85	16.78	19.15	15.34	15.28	138
17	9.12	17.17	19.19	6.47	12.99	136
18	15.81	15.97	10.65	7.99	12.60	124
19	16.35	7.37	21.28	18.76	15.94	105
20	8.69	13.25	14.29	14.89	12.78	112
21	19.69	9.43	16.31	9.45	13.72	111
22	9.63	11.21	5.73	6.86	8.36	110
23	17.27	20.38	25.93	12.67	19.06	113
24	13.09	12.36	20.29	11.88	14.40	113
25	10.43	16.49	31.81	22.63	20.34	118
26-29	10.96	12.67	15.36	14.38	13.34	501
30-39	10.11	10.62	14.96	12.44	12.03	1056
40-49	13.51	13.16	17.22	12.57	14.11	769
50-59	8.72	11.35	11.74	13.72	11.38	689
60-64	12.04	13.10	8.86	10.60	11.15	357
65+	5.13	8.58	8.46	9.56	7.93	828
Mean	11.03	12.70	15.29	12.85	12.97	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

3.3c. Car passengers:

Average number of fatalities per ten million kilometres  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.04	.02	.02	.05	.03	962
16	.03	.16	.07	.24	.10	157
17	.44	1.07	.15	.25	.28	143
18	.50	.68	.24	.51	.42	132
19	.34	.56	.71	.57	.54	115
20	.40	.24	.12	.38	.23	116
21	.75	.14	.49	.59	.37	121
22	.51	.21	.31	.44	.30	107
23	.88	.27	.66	.63	.50	125
24	.21	.42	.45	.40	.35	114
25	.24	.26	.21	.00	.19	117
26-29	.25	.47	.17	.31	.25	457
30-39	.21	.31	.17	.39	.26	1043
40-49	.23	.15	.07	.16	.14	848
50-59	.26	.09	.23	.10	.14	692
60-64	.25	.29	.26	.25	.26	347
65+	.54	.41	.31	.24	.34	601
Mean	.19	.18	.13	.20	.17	
						6197
<b>Females</b>						
9-15	.02	.04	.04	.03	.03	913
16	.16	.07	.17	.08	.12	138
17	.04	.19	.19	.25	.17	136
18	.14	.17	.46	.17	.22	124
19	.13	.71	.07	.08	.16	105
20	.00	.07	.10	.10	.08	112
21	.03	.26	.21	.21	.15	111
22	.21	.09	.09	.22	.15	110
23	.06	.09	.06	.23	.10	113
24	.04	.24	.05	.16	.11	113
25	.13	.06	.06	.02	.06	118
26-29	.09	.10	.10	.07	.09	501
30-39	.06	.07	.05	.06	.06	1056
40-49	.05	.06	.03	.09	.05	769
50-59	.15	.06	.07	.09	.09	689
60-64	.11	.07	.12	.17	.12	357
65+	.31	.20	.24	.20	.23	828
Mean	.09	.09	.09	.09	.09	
						6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

3.3d. Car passengers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	29.00	27.80	33.35	27.43	29.40	962
16	49.57	15.13	44.90	27.52	34.28	157
17	15.13	9.31	48.02	14.99	21.86	143
18	18.06	21.52	28.96	12.39	20.23	132
19	13.36	12.39	12.99	20.20	14.74	115
20	8.66	17.43	24.43	9.20	14.93	116
21	6.65	21.58	12.01	9.90	12.54	121
22	11.51	21.43	27.31	11.22	17.87	107
23	8.90	13.47	8.48	7.69	9.63	125
24	14.00	7.17	9.63	11.59	10.60	114
25	12.65	13.66	14.10	9.51	12.48	117
26-29	9.30	7.18	12.30	7.35	9.03	457
30-39	5.08	5.31	8.45	6.18	6.25	1043
40-49	4.84	5.77	7.44	6.72	6.19	848
50-59	3.36	7.94	5.30	5.85	5.62	692
60-64	5.40	4.31	3.81	3.67	4.30	347
65+	4.28	5.97	4.99	5.81	5.26	601
Mean	11.20	11.30	14.70	10.97	12.04	6197
<b>Females</b>						
9-15	26.87	24.70	30.97	28.19	27.68	913
16	19.18	23.93	34.81	26.68	26.15	138
17	16.68	28.12	28.09	13.43	21.58	136
18	23.73	23.74	24.46	17.45	22.35	124
19	24.21	16.50	28.58	30.06	24.84	105
20	15.61	33.11	22.26	24.73	23.93	112
21	38.34	28.98	27.52	14.13	27.24	111
22	17.14	22.13	11.07	14.94	16.32	110
23	20.83	25.99	32.11	22.32	25.31	113
24	26.33	21.77	25.20	15.22	22.13	113
25	14.51	22.94	35.19	31.24	25.97	118
26-29	18.58	20.22	21.05	19.43	19.82	501
30-39	16.04	14.53	21.60	19.77	17.99	1056
40-49	19.14	20.17	22.23	19.39	20.23	769
50-59	18.25	20.00	19.59	19.64	19.37	689
60-64	20.41	21.67	21.40	18.04	20.38	357
65+	10.98	16.20	13.19	15.86	14.06	828
Mean	19.03	20.29	22.70	20.51	20.63	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

3.3e. Car passengers:

Average number of fatalities per one million hours  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.11	.09	.07	.19	.11	962
16	.08	.69	.28	.68	.34	157
17	1.22	2.72	.57	1.23	1.03	143
18	1.24	1.74	1.03	1.61	1.35	132
19	1.50	2.08	2.64	2.40	2.18	115
20	1.96	1.78	.58	1.84	1.32	116
21	3.27	.76	2.27	2.47	1.79	121
22	1.86	1.43	1.01	1.64	1.37	107
23	2.67	1.57	2.18	1.71	1.98	125
24	.82	2.01	1.49	1.74	1.43	114
25	.89	1.23	1.00	.00	.84	117
26-29	.93	1.60	.99	1.07	1.11	457
30-39	.87	1.19	.71	1.43	1.02	1043
40-49	.80	.74	.36	.58	.59	848
50-59	.85	.48	.90	.41	.61	692
60-64	.88	.66	.75	.77	.77	347
65+	1.15	1.01	1.32	.94	1.09	601
Mean	.61	.76	.57	.76	.67	6197
<b>Females</b>						
9-15	.07	.16	.16	.11	.13	913
16	.50	.30	.55	.27	.41	138
17	.14	.69	.77	.72	.62	136
18	.56	.67	1.19	.45	.74	124
19	.52	1.90	.33	.31	.63	105
20	.00	.18	.40	.36	.25	112
21	.08	.51	.76	.84	.46	111
22	.70	.27	.27	.60	.46	110
23	.28	.45	.27	.78	.43	113
24	.11	.80	.23	.77	.43	113
25	.58	.24	.32	.09	.27	118
26-29	.32	.36	.44	.30	.36	501
30-39	.23	.30	.22	.22	.24	1056
40-49	.22	.23	.13	.33	.23	769
50-59	.44	.21	.27	.39	.33	689
60-64	.41	.26	.30	.61	.38	357
65+	.87	.64	.93	.73	.78	828
Mean	.30	.35	.35	.35	.34	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

3.3f. Car passengers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	1.21	1.38	1.44	1.47	1.38	962
16	.84	.66	.99	1.21	.93	157
17	1.07	.71	1.33	.67	.94	143
18	.52	.69	1.04	.60	.71	132
19	.62	.57	.57	.76	.63	115
20	.34	.75	.76	.31	.54	116
21	.32	.62	.33	.32	.40	121
22	.54	.34	.46	.59	.48	107
23	.48	.54	.45	.43	.47	125
24	.59	.27	.60	.65	.53	114
25	.53	.69	.28	.29	.45	117
26-29	.39	.37	.34	.36	.37	457
30-39	.26	.28	.33	.25	.28	1043
40-49	.23	.25	.24	.20	.23	848
50-59	.16	.26	.22	.24	.22	692
60-64	.25	.27	.16	.19	.22	347
65+	.15	.16	.18	.23	.18	601
Mean	.46	.50	.53	.50	.50	6197
<b>Females</b>						
9-15	1.48	1.35	1.63	1.50	1.49	913
16	1.26	1.52	1.49	1.39	1.42	138
17	1.06	1.53	1.27	1.10	1.24	136
18	1.21	1.38	1.44	1.03	1.27	124
19	1.05	.85	.86	1.68	1.11	105
20	.96	1.34	1.24	1.30	1.21	112
21	1.41	1.42	1.09	.87	1.20	111
22	.86	.81	.75	.96	.84	110
23	.86	1.05	1.35	1.44	1.17	113
24	.85	1.25	.98	.93	1.00	113
25	.52	1.19	1.13	1.12	.99	118
26-29	.82	.87	.86	.77	.83	501
30-39	.68	.65	.83	.76	.73	1056
40-49	.68	.76	.72	.70	.71	769
50-59	.63	.67	.82	.73	.71	689
60-64	.80	.66	.61	.80	.71	357
65+	.47	.64	.62	.51	.56	828
Mean	.84	.90	.96	.90	.90	6291

Source: Survey of Day-to-Day Travel in Australia 1985-86

Road Fatality Rates in Australia 1984-85

3.3g. Car passengers:  
Average number of fatalities per one million trip segments  
classified by age, sex and season.

	Winter	Spring	Summer	Autumn	Mean	Persons ( '000)
<b>Males</b>						
9-15	.04	.03	.03	.06	.04	962
16	.08	.26	.21	.26	.21	157
17	.29	.59	.35	.46	.40	143
18	.72	.90	.48	.55	.64	132
19	.54	.76	1.00	1.07	.85	115
20	.84	.69	.31	.92	.61	116
21	1.13	.44	1.36	1.27	.94	121
22	.66	1.48	.99	.52	.84	107
23	.83	.66	.68	.51	.67	125
24	.32	.89	.40	.51	.48	114
25	.35	.41	.83	.00	.39	117
26-29	.37	.51	.60	.36	.46	457
30-39	.28	.37	.31	.58	.38	1043
40-49	.28	.28	.19	.33	.27	848
50-59	.30	.24	.35	.17	.26	692
60-64	.31	.18	.30	.26	.26	347
65+	.54	.65	.61	.40	.54	601
Mean	.25	.28	.26	.27	.27	6197
<b>Females</b>						
9-15	.02	.05	.05	.04	.04	913
16	.13	.08	.21	.09	.13	138
17	.04	.21	.29	.15	.18	136
18	.18	.19	.34	.13	.22	124
19	.20	.62	.18	.09	.24	105
20	.00	.07	.12	.11	.08	112
21	.04	.17	.32	.23	.18	111
22	.23	.12	.07	.16	.15	110
23	.11	.18	.11	.20	.15	113
24	.06	.23	.10	.21	.16	113
25	.27	.08	.17	.04	.12	118
26-29	.12	.14	.18	.13	.14	501
30-39	.09	.11	.09	.10	.10	1056
40-49	.10	.10	.07	.15	.11	769
50-59	.21	.11	.11	.17	.15	689
60-64	.17	.14	.18	.23	.18	357
65+	.34	.27	.33	.38	.32	828
Mean	.11	.13	.14	.13	.13	6291

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

3.4a. Car passengers:  
 Number of fatalities in 1984-85 in Australia  
 classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Total
<b>Males</b>									
9-15	0	17	7	9	4	0	1	0	38
16	1	9	5	3	3	1	0	0	22
17	0	11	8	7	9	2	1	1	39
18	0	19	8	8	4	5	0	0	44
19	0	13	10	11	3	3	4	1	45
20	0	11	3	4	5	4	1	0	28
21	0	12	4	7	4	3	1	2	33
22	0	9	13	2	4	3	0	1	32
23	0	7	9	5	3	1	2	3	30
24	0	9	4	3	2	1	0	2	21
25	0	6	1	4	2	2	0	0	15
26-29	0	21	11	4	5	9	3	3	56
30-39	0	26	15	13	7	7	5	8	81
40-49	1	15	5	5	3	6	0	3	38
50-59	0	11	7	4	3	2	1	1	29
60-64	0	10	3	1	0	0	0	0	14
65+	0	16	8	5	6	7	0	0	42
<b>Total</b>	<b>2</b>	<b>222</b>	<b>121</b>	<b>95</b>	<b>67</b>	<b>56</b>	<b>19</b>	<b>25</b>	<b>607</b>
<b>Females</b>									
9-15	0	14	8	7	6	3	1	0	39
16	0	9	4	3	2	0	0	0	18
17	0	9	7	0	2	3	1	0	22
18	3	7	7	4	4	0	0	0	25
19	0	6	8	3	1	1	0	1	20
20	0	4	0	4	0	0	0	0	8
21	0	9	1	1	3	2	1	0	17
22	0	4	3	1	1	1	0	0	10
23	1	7	4	2	0	1	0	0	15
24	0	5	3	2	3	0	0	0	13
25	0	6	0	0	1	2	0	1	10
26-29	0	21	7	3	3	3	5	1	43
30-39	0	16	9	12	6	7	0	5	55
40-49	0	16	6	8	4	6	1	2	43
50-59	1	24	10	7	5	4	2	0	53
60-64	1	14	7	4	1	6	1	0	34
65+	6	52	21	10	15	5	1	0	110
<b>Total</b>	<b>12</b>	<b>223</b>	<b>105</b>	<b>71</b>	<b>57</b>	<b>44</b>	<b>13</b>	<b>10</b>	<b>535</b>

Source: FORS Fatal File 1984-85



### 3.4 State or Territory

From Table 3.4c it can be seen that there was variation between the States and Territories in fatality rates for car passengers per distance travelled (F statistic for the variation for 7 and 254 df, = 4.2,  $p < 0.001$ ):

Table 3B: Relative fatality rates (persons/10<sup>7</sup> km) for States and Territories, compared with the ACT.

	Relative rate
Australian Capital Territory	1
Victoria	1.5
Queensland	1.8
Western Australia	1.8
Tasmania	2.0
New South Wales	2.4
South Australia	2.5
Northern Territory	4.9

Similar results were obtained using travel time, number of trips and population as the at-risk measure. In each case the Northern Territory was particularly high.

There was no evidence that the differences between States and Territories differed for males compared with females (F statistic, for 7 and 254 df, = 0.7,  $p > 0.05$ ). These differences did not appear to depend on age (F statistic for linear age trend for persons aged over 26, for 7 and 254 df, = 2.0,  $p > 0.05$ ; F statistic for differences between the 9-15, 16-25 and 26+ age groups, for 14 and 254 df, = 0.9,  $p > 0.05$ ).

3.4b. Car passengers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	40.52	16.23	14.83	21.16	20.18	21.56	24.31	37.28	18.29
16	39.09	33.06	12.22	7.31	19.76	10.29	6.82	4.44	19.31
17	41.02	7.97	22.73	6.72	25.35	7.26	.83	3.41	13.47
18	6.92	8.89	15.43	9.47	10.44	13.41	2.35	7.75	10.99
19	17.76	7.54	6.04	14.19	10.70	17.61	12.41	.00	9.90
20	9.62	6.70	16.66	13.66	8.27	47.73	19.11	4.27	14.10
21	5.35	9.41	7.79	24.46	3.27	1.68	2.03	1.33	9.98
22	1.42	4.21	9.95	31.08	34.28	3.08	26.08	1.32	13.40
23	.00	3.65	4.83	9.51	14.91	9.47	1.01	.00	6.38
24	16.72	3.29	7.84	9.31	10.37	11.69	3.93	12.70	7.16
25	7.24	8.61	8.87	4.80	1.42	24.00	13.85	.00	9.14
26-29	4.87	5.24	5.10	5.54	4.25	10.82	5.24	63.82	6.60
30-39	5.82	4.15	4.05	3.54	1.72	7.04	3.94	5.28	4.12
40-49	21.08	2.97	5.01	4.73	3.25	5.75	4.42	.55	4.43
50-59	14.58	4.12	2.70	6.93	4.75	1.99	2.49	.29	4.12
60-64	10.75	1.93	2.55	1.18	2.55	1.80	2.97	.00	2.12
65+	2.83	2.85	3.41	2.61	1.80	1.70	5.99	.38	2.84
Mean	18.07	6.81	7.16	8.49	8.06	9.69	8.28	16.43	7.82
<b>Females</b>									
9-15	24.36	17.62	15.41	16.66	11.16	28.40	15.40	16.92	17.32
16	93.00	12.78	12.66	20.99	7.20	16.97	8.36	4.01	15.28
17	22.55	14.01	15.18	9.67	8.90	15.32	5.39	3.14	12.99
18	32.28	11.39	10.30	18.10	5.22	14.47	30.71	4.37	12.60
19	28.27	19.09	20.37	6.98	16.91	7.56	12.39	1.73	15.94
20	4.66	15.34	8.55	13.46	18.80	15.50	6.97	19.11	12.78
21	11.14	10.86	12.05	14.64	8.30	37.59	9.68	6.34	13.72
22	9.96	5.45	8.39	9.59	6.00	8.97	22.48	11.77	8.36
23	13.20	10.02	16.27	19.47	70.99	25.05	2.59	8.44	19.06
24	17.44	14.13	13.49	15.90	19.31	10.61	13.89	9.27	14.40
25	11.66	19.15	19.24	12.11	14.35	32.48	59.06	12.63	20.34
26-29	14.81	11.74	14.40	13.11	11.39	20.52	6.65	14.94	13.34
30-39	21.43	12.34	13.77	12.19	7.25	9.56	8.71	5.16	12.04
40-49	20.20	14.83	13.07	15.16	12.59	15.67	3.76	19.58	14.11
50-59	15.34	9.25	17.59	8.49	7.74	9.97	10.98	16.11	11.38
60-64	4.22	15.38	9.59	7.41	9.81	7.64	6.89	38.32	11.15
65+	2.47	7.00	9.07	10.56	5.31	5.70	10.23	13.04	7.93
Mean	20.44	12.56	13.47	12.74	10.36	15.54	11.42	12.36	12.97

Source: Survey of Day-to-Day Travel in Australia 1985-86

3.4c. Car passengers:

Average number of fatalities per ten million kilometres  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	.00	.04	.03	.04	.03	.00	.02	.00	.03
16	.12	.07	.14	.26	.13	.08	.00	.00	.10
17	.00	.32	.14	.87	.32	.31	5.57	4.70	.28
18	.00	.66	.21	.62	.40	.40	.00	.00	.42
19	.00	.65	.71	.49	.47	.19	2.04		.53
20	.00	.56	.08	.22	.74	.13	.26	.00	.23
21	.00	.47	.22	.18	1.54	2.16	1.44	20.55	.37
22	.00	.85	.57	.05	.15	1.55	.00	7.98	.30
23		.57	.80	.35	.22	.15	8.89		.46
24	.00	.96	.21	.24	.27	.15	.00	1.55	.35
25	.00	.23	.05	.60	2.28	.10	.00		.19
26-29	.00	.37	.26	.12	.45	.25	.52	.10	.25
30-39	.00	.23	.18	.31	.64	.15	.67	1.68	.26
40-49	.04	.23	.06	.11	.17	.18	.00	10.73	.14
50-59	.00	.15	.19	.08	.13	.25	.35	9.79	.14
60-64	.00	.56	.18	.20	.00	.00	.00		.26
65+	.00	.36	.21	.25	.81	1.16	.00	.00	.34
Mean	.02	.20	.14	.16	.21	.15	.18	.33	.17
<b>Females</b>									
9-15	.00	.04	.03	.04	.09	.02	.03	.00	.03
16	.00	.20	.12	.09	.31	.00	.00	.00	.12
17	.00	.18	.19	.00	.21	.23	.71	.00	.17
18	.62	.18	.28	.17	.94	.00	.00	.00	.22
19	.00	.14	.18	.29	.09	.22	.00	9.62	.16
20	.00	.11	.00	.26	.00	.00	.00	.00	.08
21	.00	.27	.04	.06	.52	.08	.32	.00	.15
22	.00	.29	.15	.08	.34	.14	.00	.00	.15
23	.57	.28	.10	.06	.00	.05	.00	.00	.10
24	.00	.13	.10	.10	.22	.00	.00	.00	.11
25	.00	.11	.00	.00	.10	.07	.00	1.38	.06
26-29	.00	.13	.05	.04	.08	.04	.86	.13	.09
30-39	.00	.05	.03	.08	.13	.11	.00	1.23	.06
40-49	.00	.05	.03	.06	.06	.08	.18	.32	.05
50-59	.10	.14	.04	.11	.14	.10	.14	.00	.09
60-64	1.33	.10	.10	.13	.04	.45	.17	.00	.12
65+	5.85	.33	.14	.10	.49	.19	.06	.00	.23
Mean	.09	.11	.06	.08	.13	.07	.09	.24	.09

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

3.4d. Car passengers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	42.55	31.46	24.30	31.01	30.72	29.67	30.78	27.84	29.40
16	36.41	60.63	26.98	11.53	22.69	18.65	14.10	4.49	34.28
17	46.46	16.63	34.86	12.46	29.34	15.28	2.04	5.73	21.86
18	9.64	21.66	20.97	15.50	26.46	21.66	7.48	11.46	20.23
19	24.45	9.66	11.97	21.56	23.46	18.51	13.70	.00	14.74
20	16.59	13.70	11.09	16.72	8.67	35.58	26.34	5.30	14.93
21	6.51	13.71	10.88	24.83	4.86	2.56	4.00	3.33	12.54
22	2.91	11.18	21.45	26.43	31.55	3.43	19.35	2.79	17.87
23	.00	8.18	8.45	13.59	10.43	14.53	2.95	.00	9.63
24	16.58	6.88	9.81	14.07	13.25	18.12	9.57	18.60	10.60
25	6.38	12.42	12.33	7.69	4.07	27.20	17.67	.00	12.48
26-29	6.44	8.55	8.06	9.10	7.61	11.07	7.70	34.37	9.03
30-39	7.39	6.06	7.45	5.20	3.19	7.61	5.16	11.93	6.26
40-49	9.62	4.90	7.64	6.20	4.83	7.29	8.31	.82	6.19
50-59	8.78	5.95	4.54	6.96	7.05	3.83	3.84	.52	5.62
60-64	12.01	4.24	4.27	2.44	4.46	3.63	12.50	.00	4.30
65+	5.00	4.65	6.55	3.93	4.25	4.04	16.49	.96	5.26
Mean	16.79	12.23	11.61	11.64	11.70	12.53	12.75	13.19	12.05
<b>Females</b>									
9-15	38.51	25.51	26.92	26.03	28.00	33.81	43.21	23.25	27.68
16	65.31	23.45	26.79	28.13	19.12	31.53	24.54	12.61	26.15
17	27.80	24.76	21.79	18.12	19.08	20.87	13.64	4.75	21.58
18	30.12	20.24	18.15	26.90	13.24	40.94	44.18	8.21	22.35
19	41.29	33.50	25.01	13.81	24.81	18.28	19.19	2.89	24.84
20	7.46	31.86	15.49	22.61	31.80	28.55	12.40	36.50	23.93
21	14.33	24.14	29.58	32.89	19.07	40.42	14.78	15.70	27.24
22	107.5	12.95	13.03	21.23	15.64	15.36	19.59	15.43	16.32
23	24.58	18.01	25.70	25.73	63.48	26.34	4.37	13.53	25.31
24	16.26	27.88	18.93	18.27	26.79	15.11	20.04	13.11	22.13
25	15.62	23.88	27.53	16.35	22.80	36.03	59.90	27.30	25.97
26-29	21.01	19.83	19.52	18.20	20.29	21.91	19.93	24.10	19.82
30-39	26.32	18.29	18.13	21.07	16.14	14.23	11.71	9.86	18.00
40-49	20.45	22.87	19.81	17.88	19.12	19.29	8.30	26.36	20.23
50-59	19.98	18.98	25.23	14.73	16.44	14.75	16.36	25.91	19.37
60-64	5.35	26.93	17.30	13.34	19.53	19.06	15.86	39.77	20.38
65+	6.42	12.28	15.68	14.72	15.85	13.03	15.81	24.73	14.06
Mean	26.58	20.73	20.85	19.43	20.30	21.33	20.41	19.17	20.64

Source: Survey of Day-to-Day Travel in Australia 1985-86

3.4e. Car passengers:

Average number of fatalities per one million hours  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	.00	.13	.09	.16	.13	.00	.10	.00	.11
16	.80	.23	.39	.98	.68	.27	.00	.00	.34
17	.00	.93	.53	2.83	1.64	.89	13.60	16.80	1.03
18	.00	1.62	.92	2.26	.95	1.50	.00	.00	1.35
19	.00	3.05	2.16	1.93	1.29	1.08	11.11		2.13
20	.00	1.64	.71	1.06	4.25	1.04	1.15	.00	1.32
21	.00	1.94	.92	1.07	6.21	8.49	4.40	49.33	1.79
22	.00	1.93	1.59	.38	1.01	8.35	.00	22.63	1.37
23		1.52	2.76	1.47	1.90	.60	18.37		1.85
24	.00	2.77	.99	.94	1.27	.58	.00	6.37	1.43
25	.00	.97	.22	2.25	4.78	.54	.00		.84
26-29	.00	1.34	.97	.44	1.51	1.47	2.11	1.06	1.11
30-39	.00	.94	.60	1.28	2.08	.83	3.06	4.47	1.02
40-49	.52	.85	.24	.51	.69	.84	.00	43.61	.59
50-59	.00	.60	.69	.45	.52	.77	1.35	32.68	.61
60-64	.00	1.53	.65	.58	.00	.00	.00		.77
65+	.00	1.31	.65	1.01	2.06	2.94	.00	.00	1.09
Mean	.11	.68	.53	.68	.86	.67	.69	2.45	.66
<b>Females</b>									
9-15	.00	.15	.10	.15	.21	.09	.07	.00	.13
16	.00	.64	.34	.42	.70	.00	.00	.00	.41
17	.00	.62	.81	.00	.58	1.00	1.69	.00	.62
18	4.01	.61	.96	.70	2.21	.00	.00	.00	.74
19	.00	.48	.86	.87	.37	.55	.00	34.63	.63
20	.00	.31	.00	.93	.00	.00	.00	.00	.25
21	.00	.73	.10	.15	1.36	.43	1.28	.00	.46
22	.00	.74	.58	.22	.79	.51	.00	.00	.46
23	1.85	.93	.39	.29	.00	.27	.00	.00	.43
24	.00	.39	.43	.55	.96	.00	.00	.00	.43
25	.00	.52	.00	.00	.37	.36	.00	3.83	.27
26-29	.00	.48	.23	.18	.27	.25	1.72	.47	.36
30-39	.00	.19	.14	.29	.36	.44	.00	3.87	.24
40-49	.00	.21	.13	.32	.23	.37	.48	1.41	.23
50-59	.45	.40	.18	.37	.40	.40	.57	.00	.33
60-64	6.30	.33	.35	.42	.12	1.08	.45	.00	.38
65+	13.50	1.14	.50	.42	.99	.50	.22	.00	.78
Mean	.40	.40	.25	.31	.41	.31	.29	.92	.34

Sources: FORS Fatal File 1984-85

Survey of Day-to-Day Travel in Australia 1985-86

3.4f. Car passengers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	1.57	1.31	1.30	1.51	1.50	1.50	1.39	1.11	1.38
16	.80	.76	1.07	.72	.82	1.32	1.55	.31	.93
17	2.72	.93	.99	.84	.98	.93	.33	.52	.94
18	.55	.69	.84	.71	.47	.78	.69	.62	.71
19	.37	.55	.58	.79	.93	.56	.81	.00	.63
20	.98	.56	.45	.70	.31	.44	.98	.32	.54
21	.73	.41	.27	.61	.42	.37	.18	.13	.40
22	.41	.56	.49	.32	.77	.15	.51	.25	.48
23	.00	.50	.44	.39	.57	.66	.29	.00	.47
24	1.08	.35	.54	.58	.46	1.09	.62	.98	.53
25	.64	.34	.50	.61	.29	.44	.75	.00	.45
26-29	.31	.33	.37	.31	.44	.50	.27	.93	.37
30-39	.40	.28	.28	.28	.21	.31	.33	.37	.28
40-49	.23	.22	.25	.21	.27	.26	.21	.06	.23
50-59	.22	.25	.19	.23	.22	.21	.19	.05	.22
60-64	.34	.28	.19	.11	.24	.16	.24	.00	.22
65+	.29	.16	.16	.20	.24	.18	.23	.06	.18
Mean	.65	.48	.49	.50	.52	.56	.52	.48	.50
<b>Females</b>									
9-15	1.65	1.40	1.42	1.63	1.52	1.68	1.73	1.27	1.49
16	1.72	1.45	1.30	1.57	1.26	1.51	.65	1.18	1.42
17	1.36	1.30	1.23	1.20	1.27	1.26	.81	.39	1.24
18	1.15	1.16	1.08	1.77	.95	1.40	2.54	.84	1.27
19	1.69	1.22	.95	1.02	1.57	.99	.87	.14	1.11
20	.59	1.29	.94	1.02	1.57	1.67	1.70	1.85	1.21
21	.72	1.54	.72	1.35	1.16	.85	1.32	1.56	1.20
22	1.33	.74	.72	1.03	1.14	.94	.90	1.07	.84
23	1.32	.97	1.34	1.40	1.16	1.03	.55	.76	1.17
24	1.08	.88	1.04	1.05	1.39	.91	.91	1.06	1.00
25	1.24	.76	1.19	.84	1.25	1.16	1.34	.81	.99
26-29	1.34	.76	.84	.76	.86	1.07	.49	1.44	.83
30-39	.84	.72	.69	.84	.81	.69	.46	.74	.73
40-49	.67	.67	.73	.75	.70	.87	.52	.69	.71
50-59	.80	.71	.74	.68	.68	.70	.65	1.08	.71
60-64	.58	.70	.71	.62	.77	.91	.83	.41	.71
65+	.67	.51	.53	.49	.77	.75	.55	1.81	.56
Mean	1.06	.86	.87	.94	.96	1.01	.87	1.03	.90

Source: Survey of Day-to-Day Travel in Australia 1985-86

3.4g. Car passengers:

Average number of fatalities per one million trip segments classified by age, sex and state.

	ACT	NSW	Vic	Qld	SA	WA	Tas	NT	Mean
<b>Males</b>									
9-15	.00	.05	.03	.06	.04	.00	.04	.00	.04
16	.60	.30	.16	.26	.31	.06	.00	.00	.21
17	.00	.28	.31	.70	.82	.24	1.41	3.07	.40
18	.00	.84	.39	.82	.89	.69	.00	.00	.64
19	.00	.90	.75	.88	.54	.59	3.13		.83
20	.00	.67	.29	.42	1.95	1.40	.52	.00	.61
21	.00	1.08	.61	.73	1.19	.97	1.61	20.59	.94
22	.00	.64	1.15	.52	.68	3.09	.00	4.15	.84
23		.42	.89	.85	.58	.22	3.15		.62
24	.00	.91	.30	.38	.61	.16	.00	2.01	.48
25	.00	.58	.09	.48	1.12	.56	.00		.39
26-29	.00	.59	.35	.22	.44	.54	1.02	.66	.46
30-39	.00	.34	.27	.40	.51	.34	.80	2.42	.38
40-49	.36	.32	.13	.25	.21	.40	.00	9.29	.27
50-59	.00	.24	.27	.23	.28	.24	.44	5.56	.26
60-64	.00	.38	.24	.22	.00	.00	.00		.26
65+	.00	.65	.44	.32	.62	1.11	.00	.00	.54
Mean	.05	.29	.21	.26	.32	.25	.28	1.12	.27
<b>Females</b>									
9-15	.00	.04	.03	.04	.07	.03	.03	.00	.04
16	.00	.17	.12	.12	.18	.00	.00	.00	.13
17	.00	.20	.24	.00	.15	.27	.48	.00	.18
18	1.76	.18	.27	.18	.51	.00	.00	.00	.22
19	.00	.22	.38	.20	.10	.17	.00	11.50	.24
20	.00	.13	.00	.34	.00	.00	.00	.00	.08
21	.00	.19	.07	.06	.37	.34	.24	.00	.18
22	.00	.21	.17	.08	.18	.14	.00	.00	.15
23	.57	.29	.13	.09	.00	.12	.00	.00	.15
24	.00	.20	.13	.16	.31	.00	.00	.00	.16
25	.00	.27	.00	.00	.11	.18	.00	2.16	.12
26-29	.00	.21	.09	.07	.11	.09	1.16	.13	.14
30-39	.00	.08	.06	.12	.12	.15	.00	.86	.10
40-49	.00	.12	.06	.13	.10	.14	.13	.89	.11
50-59	.19	.18	.10	.13	.16	.14	.24	.00	.15
60-64	.97	.21	.14	.15	.05	.38	.14	.00	.18
65+	2.15	.46	.25	.21	.34	.14	.11	.00	.32
Mean	.17	.16	.10	.11	.14	.11	.11	.29	.13

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

### 3.5 Holidays

By contrast with drivers, there was a significant difference in the fatality rate per distance travelled between holiday and non-holiday periods (F statistic, for 1 and 487 df, = 14,  $p < 0.001$ ). The modelled rate for holidays was 70% (95% confidence interval from 65% to 75%) of that at other times. This was a greater effect than that for Summer (Section 3.3), which suggests that the slight differences with season reflect a holiday effect.

However, different results were obtained for the other at-risk measures. For time spent travelling, the modelled rate for holidays was 82% of that for non-holidays (F statistic, for 1 and 487 df, = 5,  $0.01 < p < 0.05$ ). For number of trips, it was greater by 5%, although this was not statistically significant (F statistic, for 1 and 487 df, = 2,  $p > 0.05$ ). For population, the fatality rate for holiday periods was 16% greater and this was statistically significant (F statistic, for 1 and 523 df, = 4.2,  $0.01 < p < 0.05$ ).

These discrepancies are probably explained by there being more travel during the holidays and the average trip being longer. Using population or number of trips therefore overestimates the risk during these times. This suggests that the number of car passenger deaths increases during holiday times simply because there are more people travelling, but not because it is more dangerous overall. It is possible that certain days may still be particularly dangerous (for example, those at the beginning and the end of holiday periods), but these data cannot address this.

There was little evidence for the holiday/non-holiday differences varying between the States and Territories (F statistic for distance, for 7 and 487 df, = 1.6,  $p > 0.05$ ).



Table 3.5a. Car passengers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	0	0	10	7	5	2	8	1	4	0
16	1	0	5	4	3	2	3	0	3	0
17	0	0	9	2	7	1	6	1	7	2
18	0	0	11	8	8	0	5	3	4	0
19	0	0	10	3	9	1	9	2	0	3
20	0	0	9	2	3	0	4	0	3	2
21	0	0	10	2	4	0	7	0	3	1
22	0	0	8	1	9	4	2	0	4	0
23	0	0	5	1	6	3	3	2	1	2
24	0	0	7	2	4	0	3	0	2	0
25	0	0	4	2	1	0	3	1	0	2
26-29	0	0	15	6	6	5	3	1	4	1
30-39	0	0	20	6	10	5	11	2	6	1
40-49	1	0	11	4	4	1	4	1	1	2
50-59	0	0	6	5	6	1	2	2	1	2
60-64	0	0	9	1	2	1	1	0	0	0
65+	0	0	11	5	6	2	2	3	3	3
Total	2	0	160	61	93	28	76	19	46	21
<b>Females</b>										
9-15	0	0	5	9	5	3	4	3	3	3
16	0	0	7	2	3	1	1	2	0	2
17	0	0	6	3	5	2	0	0	2	0
18	3	0	5	2	3	4	3	1	2	2
19	0	0	5	1	7	1	2	1	1	0
20	0	0	4	0	0	0	3	1	0	0
21	0	0	6	3	1	0	0	1	2	1
22	0	0	4	0	3	0	1	0	1	0
23	0	1	6	1	1	3	1	1	0	0
24	0	0	4	1	3	0	2	0	1	2
25	0	0	4	2	0	0	0	0	1	0
26-29	0	0	11	10	6	1	3	0	3	0
30-39	0	0	11	5	6	3	10	2	4	2
40-49	0	0	10	6	4	2	6	2	3	1
50-59	1	0	17	7	7	3	6	1	3	2
60-64	1	0	10	4	7	0	4	0	0	1
65+	5	1	35	17	20	1	5	5	12	3
Total	10	2	150	73	81	24	51	20	38	19

Source: FORS Fatal File 1984-85

(continued)

Table 3.5a. Car passengers:  
Number of fatalities in 1984-85 in Australia  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Total	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	0	0	0	1	0	0	27	11
16	1	0	0	0	0	0	16	6
17	2	0	0	1	0	1	31	8
18	5	0	0	0	0	0	33	11
19	3	0	3	1	1	0	35	10
20	3	1	0	1	0	0	22	6
21	3	0	0	1	1	1	28	5
22	2	1	0	0	0	1	25	7
23	1	0	1	1	3	0	20	9
24	0	1	0	0	2	0	18	3
25	2	0	0	0	0	0	10	5
26-29	6	3	0	3	1	2	35	21
30-39	6	1	4	1	6	2	63	18
40-49	6	0	0	0	3	0	30	8
50-59	2	0	1	0	0	1	18	11
60-64	0	0	0	0	0	0	12	2
65+	6	1	0	0	0	0	28	14
<b>Total</b>	<b>48</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>17</b>	<b>8</b>	<b>451</b>	<b>156</b>
<b>Females</b>								
9-15	2	1	1	0	0	0	20	19
16	0	0	0	0	0	0	11	7
17	2	1	0	1	0	0	15	7
18	0	0	0	0	0	0	16	9
19	0	1	0	0	1	0	16	4
20	0	0	0	0	0	0	7	1
21	1	1	1	0	0	0	11	6
22	1	0	0	0	0	0	10	0
23	0	1	0	0	0	0	8	7
24	0	0	0	0	0	0	10	3
25	1	1	0	0	1	0	7	3
26-29	3	0	4	1	0	1	30	13
30-39	6	1	0	0	4	1	41	14
40-49	5	1	1	0	2	0	31	12
50-59	4	0	1	1	0	0	39	14
60-64	2	4	1	0	0	0	25	9
65+	3	2	0	1	0	0	80	30
<b>Total</b>	<b>30</b>	<b>14</b>	<b>9</b>	<b>4</b>	<b>8</b>	<b>2</b>	<b>378</b>	<b>159</b>

Source: FORS Fatal File 1984-85

Table 3.5b. Car passengers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	47.19	20.70	10.63	33.61	10.39	29.04	16.35	35.84	10.67	50.13
16	6.95	134.6	10.39	103.4	11.55	14.35	5.49	12.87	8.70	54.59
17	25.29	87.73	6.24	13.35	12.36	55.88	7.24	5.14	15.00	57.96
18	9.25	.00	7.82	12.21	9.82	33.36	9.01	10.88	12.81	2.97
19	23.74	.00	7.63	7.25	4.96	9.48	18.10	2.21	7.81	19.82
20	11.26	4.72	6.17	8.35	17.87	12.77	16.07	6.28	9.13	5.54
21	1.70	16.17	5.62	21.14	3.36	21.93	32.18	.82	4.28	.08
22	1.90	.00	3.36	6.86	12.01	3.36	29.18	36.90	43.91	3.94
23	.00	.00	3.68	3.57	3.22	9.98	9.23	10.36	6.17	42.45
24	22.34	.00	2.38	6.12	4.97	17.01	11.50	2.63	12.35	4.10
25	9.68	.00	6.34	15.68	6.67	15.89	2.99	10.34	1.87	.00
26-29	4.96	4.62	3.61	10.32	6.10	1.90	5.15	6.71	3.94	5.23
30-39	5.37	7.17	3.08	7.49	4.34	3.13	3.73	2.96	1.90	1.14
40-49	28.13	.15	2.59	4.15	4.19	7.61	5.64	1.94	2.71	4.94
50-59	18.75	2.19	2.66	8.64	3.00	1.72	8.82	1.14	5.67	1.85
60-64	14.02	1.02	2.11	1.38	2.85	1.57	1.47	.29	2.53	2.61
65+	3.79	.00	2.93	2.60	3.52	3.07	2.57	2.71	2.13	.74
Mean	20.18	11.79	4.69	13.40	5.99	10.91	8.34	8.96	6.17	14.00
<b>Females</b>										
9-15	30.76	5.37	13.87	29.26	11.52	27.83	11.87	31.31	8.77	18.67
16	122.2	6.33	8.79	25.17	12.00	14.78	16.08	36.02	8.40	3.43
17	30.14	.00	13.32	16.16	10.85	29.02	10.99	5.60	5.97	18.10
18	41.60	4.58	10.30	14.78	10.88	8.42	19.05	15.22	4.90	6.21
19	33.75	11.99	12.74	38.82	21.83	15.71	7.46	5.52	21.69	1.88
20	6.23	.00	13.33	21.58	8.85	7.56	11.73	18.78	23.11	5.23
21	14.90	.00	12.18	6.78	13.02	8.94	17.47	5.96	10.53	1.25
22	13.31	.00	6.15	3.27	9.53	4.73	10.66	6.34	6.28	5.14
23	8.26	27.87	11.55	5.26	15.75	17.94	11.71	43.22	54.51	122.9
24	21.92	4.16	15.97	8.42	10.45	23.21	18.70	7.34	21.20	13.37
25	12.95	7.83	21.07	13.17	14.27	35.16	13.42	8.12	10.44	26.67
26-29	15.17	13.72	7.79	24.00	13.08	18.60	8.87	26.08	13.26	5.51
30-39	22.96	16.89	9.03	22.58	11.88	19.82	10.80	16.45	7.07	7.82
40-49	18.32	25.76	12.67	21.53	10.60	20.98	10.58	29.17	12.10	14.16
50-59	19.56	2.80	9.01	10.02	16.89	19.80	9.04	6.79	5.34	15.30
60-64	3.12	7.51	18.29	6.32	10.47	6.76	7.13	8.30	9.84	9.71
65+	3.13	.50	7.15	6.54	8.67	10.36	11.41	7.94	5.83	3.66
Mean	23.58	11.13	10.94	17.60	11.95	18.36	10.98	18.11	9.76	12.24

Source: Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 3.5b. Car passengers (Australia, 1985-86):  
Average distance travelled (km) per person per day  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	18.31	31.07	16.47	45.98	7.26	116.9	12.93	34.80
16	10.95	8.35	6.43	7.87	5.22	2.38	9.62	49.37
17	7.34	7.02	1.13	.00	3.85	2.26	8.99	27.65
18	10.81	21.04	.46	7.58	10.32	.91	9.16	16.78
19	21.76	5.46	.64	44.95	.00	.00	10.49	8.15
20	64.04	.00	21.46	12.61	5.88	.00	16.06	8.26
21	.94	3.84	2.77	.00	1.84	.00	9.01	13.14
22	4.13	.00	33.45	5.73	1.82	.00	14.71	9.31
23	10.25	7.19	1.38	.00	.00	.00	5.13	10.34
24	12.37	9.68	1.85	9.70	16.13	3.59	6.68	8.76
25	13.89	53.59	3.28	43.08	.00	.00	6.19	18.05
26-29	5.64	25.99	1.42	15.80	3.90	222.8	4.69	11.95
30-39	5.04	12.81	1.07	11.87	6.11	3.07	3.61	5.64
40-49	7.01	2.06	5.20	2.26	.44	.86	4.46	4.42
50-59	1.47	3.50	3.03	1.00	.39	.00	4.07	4.29
60-64	2.35	.20	3.61	1.19	.00	.00	2.41	1.25
65+	2.00	.81	7.87	.77	.00	1.40	3.01	2.35
Mean	8.73	12.50	6.42	13.41	4.39	48.38	6.37	12.30
<b>Females</b>								
9-15	26.70	33.38	18.68	6.35	21.93	3.63	14.15	27.29
16	12.06	31.34	11.38	.00	5.42	.28	13.13	21.95
17	11.21	27.38	6.33	2.79	2.60	4.59	11.39	18.01
18	8.92	30.71	33.87	21.95	2.39	9.63	12.28	13.58
19	5.69	13.03	9.82	19.52	2.38	.00	14.96	18.91
20	11.54	27.10	4.93	12.59	25.61	1.85	12.09	14.80
21	45.68	13.88	2.42	29.73	6.81	5.08	15.51	8.16
22	6.92	14.98	2.98	76.39	16.21	.00	7.93	9.29
23	28.93	13.68	2.51	2.80	11.62	.00	17.10	25.21
24	4.65	28.07	9.09	27.18	10.86	5.05	14.24	14.88
25	35.38	23.99	2.38	215.8	9.79	20.18	17.92	27.34
26-29	15.32	35.74	5.77	9.07	16.59	10.57	10.65	21.62
30-39	9.56	9.33	3.26	23.81	5.94	3.11	10.01	18.30
40-49	10.03	32.16	3.68	3.99	26.48	1.28	11.47	22.25
50-59	7.97	15.81	13.58	3.77	3.64	49.18	10.87	12.97
60-64	7.49	8.07	7.72	4.60	51.76	2.67	12.43	7.17
65+	5.10	7.46	8.54	14.90	.00	47.62	7.95	7.86
Mean	13.59	21.23	8.79	18.70	13.27	9.95	11.47	17.59

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.5c. Car passengers:  
Average number of fatalities per ten million kilometres  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	.00	.00	.05	.04	.03	.02	.06	.01	.08	.00
16	.93	.00	.16	.04	.12	.20	.45	.00	.39	.00
17	.00	.00	.45	.14	.29	.03	.92	.66	.55	.13
18	.00		.57	.83	.43	.00	.54	.82	.43	.00
19	.00		.65	.64	1.03	.19	.42	2.32	.00	1.06
20	.00	.00	.66	.33	.10	.00	.24	.00	.53	1.84
21	.00	.00	.87	.14	.65	.00	.18	.00	1.16	65.50
22	.00		1.26	.24	.43	2.18	.08	.00	.16	.00
23			.53	.34	1.06	.55	.29	.52	.24	.22
24	.00		1.37	.47	.43	.00	.25	.00	.30	.00
25	.00		.28	.17	.09	.00	.96	.28	.00	
26-29	.00	.00	.50	.22	.15	1.31	.13	.10	.51	.30
30-39	.00	.00	.31	.12	.15	.33	.34	.23	.66	.58
40-49	.04	.00	.26	.18	.08	.03	.10	.22	.09	.31
50-59	.00	.00	.16	.13	.20	.18	.04	.93	.05	.92
60-64	.00	.00	.61	.32	.14	.41	.21	.00	.00	.00
65+	.00		.32	.50	.20	.24	.14	.59	.45	4.09
Mean	.02	.00	.28	.12	.17	.09	.17	.12	.25	.14
<b>Females</b>										
9-15	.00	.00	.02	.06	.03	.03	.04	.04	.07	.11
16	.00	.00	.29	.09	.12	.11	.05	.15	.00	2.70
17	.00		.17	.22	.25	.12	.00	.00	.41	.00
18	.65	.00	.19	.16	.15	.83	.16	.21	.66	1.63
19	.00	.00	.23	.05	.19	.12	.24	.49	.09	.00
20	.00		.16	.00	.00	.00	.30	.19	.00	.00
21	.00		.21	.59	.05	.00	.00	.58	.36	4.78
22	.00		.34	.00	.17	.00	.10	.00	.43	.00
23	.00	1.08	.27	.31	.04	.30	.07	.06	.00	.00
24	.00	.00	.12	.18	.17	.00	.12	.00	.09	.88
25	.00	.00	.09	.22	.00	.00	.00	.00	.18	.00
26-29	.00	.00	.14	.13	.06	.02	.08	.00	.09	.00
30-39	.00	.00	.06	.03	.03	.03	.11	.04	.12	.17
40-49	.00	.00	.05	.06	.03	.03	.09	.03	.06	.05
50-59	.10	.00	.13	.15	.04	.05	.12	.08	.16	.12
60-64	2.41	.00	.08	.28	.13	.00	.17	.00	.00	.16
65+	5.14	18.96	.29	.48	.19	.03	.06	.27	.47	.59
Mean	.08	.11	.11	.10	.07	.05	.09	.06	.12	.16

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 3.5c. Car passengers:  
Average number of fatalities per ten million kilometres  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	.00	.00	.00	.04	.00	.00	.04	.02
16	.10	.00	.00	.00	.00	.00	.19	.04
17	.42	.00	.00		.00	25.93	.44	.10
18	.67	.00	.00	.00	.00	.00	.49	.28
19	.21	.00	40.30	.53			.51	.60
20	.10		.00	1.51	.00		.21	.29
21	5.17	.00	.00		10.28		.47	.11
22	1.03		.00	.00	.00		.29	.28
23	.19	.00	4.44				.48	.35
24	.00	.71	.00	.00	1.68	.00	.43	.17
25	.24	.00	.00	.00			.25	.08
26-29	.43	.14	.00	.65	.71	.07	.30	.21
30-39	.24	.05	2.68	.17	1.50	2.65	.30	.17
40-49	.20	.00	.00	.00	18.66	.00	.14	.12
50-59	.45	.00	.39	.00	.00		.12	.19
60-64	.00	.00	.00	.00			.26	.26
65+	1.13	1.37	.00	.00		.00	.28	.56
Mean	.19	.05	.15	.15	1.05	.10	.21	.11
<b>Females</b>								
9-15	.02	.02	.04	.00	.00	.00	.03	.04
16	.00	.00	.00		.00	.00	.11	.13
17	.28	.17	.00	5.17	.00	.00	.18	.16
18	.00	.00	.00	.00	.00	.00	.19	.30
19	.00	.51	.00	.00	9.62		.18	.11
20	.00	.00	.00	.00	.00	.00	.09	.03
21	.04	.41	1.77	.00	.00	.00	.12	.37
22	.25	.00	.00	.00	.00		.21	.00
23	.00	.34	.00	.00	.00		.07	.14
24	.00	.00	.00	.00	.00	.00	.11	.10
25	.04	.18	.00	.00	2.45	.00	.06	.05
26-29	.08	.00	1.08	.47	.00	.66	.10	.07
30-39	.12	.06	.00	.00	1.18	1.49	.07	.04
40-49	.13	.02	.24	.00	.32	.00	.06	.04
50-59	.17	.00	.08	.77	.00	.00	.09	.09
60-64	.21	1.12	.21	.00	.00	.00	.10	.20
65+	.17	.23	.00	.15		.00	.22	.26
Mean	.08	.07	.11	.06	.24	.22	.09	.08

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 3.5d. Car passengers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	46.52	30.77	21.68	61.81	19.66	39.13	26.10	46.01	22.96	55.19
16	15.10	99.68	16.21	198.5	28.98	20.57	10.16	15.74	14.75	47.72
17	36.13	77.14	12.60	29.14	28.47	55.27	12.50	12.32	23.05	49.17
18	12.88	.00	21.63	21.73	16.50	35.26	14.41	18.84	31.97	9.08
19	32.68	.00	10.31	7.63	10.56	16.47	27.45	3.54	19.75	35.16
20	18.92	9.68	14.67	10.69	9.56	15.97	15.77	19.66	7.89	11.14
21	3.01	16.90	9.88	25.57	5.48	28.17	32.46	1.48	6.33	.24
22	3.89	.00	9.79	15.48	16.39	37.63	22.22	39.29	38.64	9.22
23	.00	.00	9.59	3.81	6.47	14.81	11.59	19.71	10.53	10.11
24	22.16	.00	5.15	12.25	7.75	16.40	16.41	6.88	14.49	9.32
25	8.52	.00	9.61	21.15	10.30	18.82	5.71	13.74	5.36	.00
26-29	6.71	5.63	7.38	12.21	9.18	4.49	9.02	9.33	6.53	11.03
30-39	6.18	10.98	5.23	8.64	8.41	4.38	5.30	4.89	3.23	3.05
40-49	12.73	.38	4.62	5.77	7.63	7.68	7.45	2.40	4.39	6.20
50-59	10.58	3.43	5.37	7.75	4.89	3.46	8.72	1.58	8.11	3.74
60-64	15.27	2.32	4.65	2.98	4.36	3.97	3.02	.65	3.99	5.94
65+	6.68	.00	4.82	4.13	7.02	5.04	3.84	4.18	4.89	2.22
Mean	17.90	13.50	9.14	21.82	10.64	14.72	11.42	12.32	10.43	15.68
<b>Females</b>										
9-15	48.96	7.45	22.55	34.71	23.61	37.49	21.69	39.32	28.83	25.38
16	82.50	14.25	15.53	48.04	19.62	49.71	25.27	36.87	22.16	9.52
17	37.16	.00	23.64	28.23	17.56	35.32	20.37	11.25	15.55	30.22
18	35.30	14.72	20.12	20.62	18.90	15.73	30.03	17.33	13.05	13.84
19	46.58	25.59	25.89	57.13	23.93	28.48	14.24	12.49	30.84	5.83
20	9.97	.00	31.15	34.05	16.31	12.86	20.73	28.38	38.34	11.21
21	19.16	.00	26.81	15.87	33.83	15.97	39.38	13.03	24.06	3.35
22	143.8	.00	15.57	4.81	14.55	8.16	24.04	12.61	16.61	12.58
23	21.20	34.60	20.29	10.93	25.75	25.57	19.19	45.75	51.18	102.2
24	19.64	6.24	31.23	17.46	17.38	23.88	19.81	13.58	25.76	30.03
25	14.29	19.58	25.38	19.22	21.06	48.22	15.63	18.55	20.91	28.78
26-29	20.73	21.82	14.85	35.30	17.63	25.56	13.18	33.56	22.94	11.94
30-39	29.98	15.44	14.75	29.19	17.07	21.51	16.12	36.19	15.35	18.62
40-49	19.27	23.97	21.51	27.10	17.57	26.94	14.60	27.91	19.64	17.46
50-59	25.23	4.39	19.47	17.46	25.89	23.12	15.11	13.60	14.21	23.45
60-64	3.95	9.51	27.50	25.14	19.62	9.90	13.46	12.97	20.11	17.71
65+	7.73	2.52	12.62	11.22	15.91	14.95	16.47	9.35	17.61	10.30
Mean	31.14	13.04	19.18	25.54	19.75	24.38	17.53	25.23	20.69	19.06

Source: Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 3.5d. Car passengers (Australia, 1985-86):  
Average time spent travelling (minutes) per person per day  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	27.60	35.73	20.78	58.45	14.48	63.26	22.82	49.75
16	19.21	17.01	11.92	20.12	4.39	4.75	18.43	83.39
17	13.45	20.63	2.78	.00	6.30	4.24	17.72	34.88
18	14.67	42.13	1.91	22.92	14.56	3.24	18.77	24.70
19	23.20	4.78	2.14	45.66	.00	.00	15.83	11.48
20	47.73	.00	27.48	23.19	7.30	.00	15.64	12.95
21	1.77	4.87	5.44	.00	4.59	.00	11.35	16.43
22	4.60	.00	23.45	8.02	3.84	.00	16.25	23.03
23	15.18	12.63	4.01	.00	.00	.00	9.41	10.39
24	18.74	16.31	6.36	18.43	20.91	12.45	10.00	12.52
25	16.16	59.54	7.34	46.23	.00	.00	9.33	21.97
26-29	6.64	24.02	3.81	18.46	6.56	108.1	7.85	12.37
30-39	6.82	9.74	3.59	9.50	8.73	20.43	6.06	6.77
40-49	8.01	5.19	10.18	3.14	.74	1.01	6.43	5.51
50-59	3.53	4.72	4.53	1.90	.71	.00	5.88	4.81
60-64	4.66	.61	15.12	5.26	.00	.00	4.73	3.00
65+	4.52	2.63	21.84	1.71	.00	3.50	5.69	3.97
Mean	11.78	14.70	11.21	17.00	6.99	29.64	10.41	17.10
<b>Females</b>								
9-15	30.69	42.93	54.13	12.99	27.62	11.65	25.45	34.76
16	30.82	33.60	33.42	.00	17.10	.70	21.65	40.34
17	15.23	37.39	16.49	5.78	3.84	7.17	19.88	26.95
18	42.90	35.20	47.13	36.03	4.04	19.26	23.22	19.69
19	16.64	23.07	14.37	32.53	3.97	.00	22.80	31.12
20	19.29	55.68	7.94	24.73	48.53	4.62	23.49	25.06
21	47.65	19.25	5.95	39.20	14.92	17.77	31.01	15.45
22	12.14	24.79	6.94	54.56	21.25	.00	17.63	12.03
23	26.00	27.35	5.11	2.33	18.63	.00	23.88	29.74
24	10.55	28.44	21.18	16.88	14.63	9.09	22.77	20.16
25	35.50	37.56	5.93	209.1	14.77	60.55	22.50	36.19
26-29	18.41	32.16	23.68	9.55	23.97	24.44	16.78	29.21
30-39	13.71	15.16	5.45	29.02	11.46	5.63	15.51	25.61
40-49	15.21	31.25	8.65	7.33	25.27	29.27	18.35	26.02
50-59	12.60	21.05	19.51	7.68	5.91	78.94	19.45	19.08
60-64	19.91	16.58	16.79	13.27	52.34	6.45	21.39	17.22
65+	13.97	10.27	14.35	19.86	.00	90.33	14.67	12.12
Mean	19.55	26.47	19.64	22.52	18.02	22.20	19.42	24.39

Source: Survey of Day-to-Day Travel in Australia 1985-86



Table 3.5e. Car passengers:  
Average number of fatalities per one million hours  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	.00	.00	.15	.11	.11	.07	.23	.05	.23	.00
16	2.58	.00	.63	.13	.28	.85	1.47	.00	1.37	.00
17	.00	.00	1.33	.40	.75	.18	3.21	1.66	2.13	.90
18	.00		1.24	2.79	1.54	.00	2.02	2.83	1.03	.00
19	.00		2.90	3.65	2.89	.66	1.65	8.67	.00	3.57
20	.00	.00	1.66	1.57	1.07	.00	1.49	.00	3.69	5.49
21	.00	.00	2.96	.71	2.41	.00	1.09	.00	4.71	131.0
22	.00		2.59	.64	1.89	1.17	.61	.00	1.08	.00
23			1.23	1.91	3.16	2.20	1.37	1.65	.83	5.42
24	.00		3.80	1.42	1.65	.00	1.06	.00	1.53	.00
25	.00		1.10	.78	.34	.00	3.02	1.28	.00	
26-29	.00	.00	1.47	1.10	.61	3.32	.44	.43	1.86	.87
30-39	.00	.00	1.11	.62	.47	1.43	1.41	.85	2.31	1.29
40-49	.53	.00	.88	.79	.26	.20	.45	1.06	.33	1.49
50-59	.00	.00	.48	.86	.72	.54	.24	4.03	.20	2.72
60-64	.00	.00	1.66	.89	.55	.97	.63	.00	.00	.00
65+	.00		1.15	1.89	.60	.89	.55	2.31	1.18	8.20
Mean	.14	.00	.87	.43	.58	.40	.74	.52	.87	.75
<b>Females</b>										
9-15	.00	.00	.08	.28	.09	.11	.14	.18	.14	.49
16	.00	.00	.99	.28	.45	.19	.21	.86	.00	5.84
17	.00		.57	.74	.94	.60	.00	.00	.94	.00
18	4.58	.00	.58	.70	.52	2.66	.62	1.10	1.48	4.39
19	.00	.00	.69	.19	1.03	.40	.74	1.30	.40	.00
20	.00		.42	.00	.00	.00	1.00	.75	.00	.00
21	.00		.58	1.52	.11	.00	.00	1.58	.95	10.72
22	.00		.81	.00	.68	.00	.26	.00	.98	.00
23	.00	5.21	.93	.90	.13	1.25	.26	.33	.00	.00
24	.00	.00	.36	.51	.61	.00	.67	.00	.44	2.36
25	.00	.00	.43	.89	.00	.00	.00	.00	.53	.00
26-29	.00	.00	.44	.52	.29	.11	.34	.00	.31	.00
30-39	.00	.00	.22	.15	.13	.17	.42	.12	.33	.43
40-49	.00	.00	.19	.27	.12	.13	.39	.21	.22	.26
50-59	.48	.00	.37	.53	.16	.25	.41	.23	.37	.47
60-64	11.40	.00	.31	.42	.40	.00	.55	.00	.00	.54
65+	12.49	22.74	.99	1.68	.61	.10	.25	1.36	.94	1.26
Mean	.38	.54	.38	.43	.27	.20	.32	.27	.35	.60

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 3.5e. Car passengers:  
Average number of fatalities per one million hours  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	.00	.00	.00	.19	.00	.00	.13	.08
16	.35	.00	.00	.00	.00	.00	.60	.15
17	1.36	.00	.00		.00	82.97	1.33	.48
18	2.98	.00	.00	.00	.00	.00	1.45	1.14
19	1.15	.00	72.54	3.14			2.03	2.56
20	.78		.00	4.93	.00		1.32	1.12
21	16.47	.00	.00		24.67		2.22	.51
22	5.56		.00	.00	.00		1.56	.69
23	.77	.00	9.18				1.58	2.09
24	.00	2.52	.00	.00	7.80	.00	1.72	.71
25	1.23	.00	.00	.00			1.00	.39
26-29	2.18	.88	.00	3.32	2.55	.82	1.06	1.22
30-39	1.06	.36	4.78	1.25	6.31	2.38	1.08	.85
40-49	1.03	.00	.00	.00	66.10	.00	.60	.58
50-59	1.12	.00	1.55	.00	.00		.48	1.01
60-64	.00	.00	.00	.00			.80	.65
65+	3.02	2.53	.00	.00		.00	.89	1.98
Mean	.82	.24	.51	.72	3.94	.95	.75	.46
<b>Females</b>								
9-15	.09	.09	.08	.00	.00	.00	.09	.20
16	.00	.00	.00	.00	.00	.00	.40	.42
17	1.22	.73	.00	14.98	.00	.00	.60	.64
18	.00	.00	.00	.00	.00	.00	.60	1.23
19	.00	1.72	.00	.00	34.63		.73	.41
20	.00	.00	.00	.00	.00	.00	.29	.12
21	.24	1.77	4.31	.00	.00	.00	.35	1.17
22	.86	.00	.00	.00	.00		.56	.00
23	.00	1.02	.00	.00	.00		.32	.70
24	.00	.00	.00	.00	.00	.00	.42	.44
25	.24	.67	.00	.00	9.76	.00	.29	.23
26-29	.40	.00	1.58	2.70	.00	1.70	.39	.30
30-39	.52	.23	.00	.00	3.67	4.95	.27	.17
40-49	.53	.15	.63	.00	2.03	.00	.24	.20
50-59	.63	.00	.32	2.28	.00	.00	.32	.36
60-64	.46	3.26	.58	.00	.00	.00	.36	.49
65+	.38	1.00	.00	.67		.00	.72	1.01
Mean	.31	.32	.29	.31	1.08	.58	.34	.35

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

Table 3.5f. Car passengers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	1.60	1.48	1.29	1.35	1.30	1.29	1.54	1.45	1.33	2.06
16	.77	.91	.64	1.15	1.07	1.10	.70	.79	.83	.78
17	2.88	2.23	.79	1.38	.88	1.33	.78	1.01	1.08	.64
18	.74	.00	.57	1.07	.74	1.14	.77	.52	.31	.99
19	.49	.00	.63	.29	.49	.87	.96	.29	.82	1.28
20	.85	1.37	.54	.62	.34	.82	.51	1.30	.19	.70
21	.44	1.61	.38	.49	.21	.49	.77	.10	.53	.08
22	.55	.00	.47	.85	.54	.33	.29	.43	.89	.42
23	.00	.00	.61	.14	.42	.50	.26	.78	.64	.38
24	1.45	.00	.22	.75	.47	.75	.61	.48	.47	.44
25	.85	.00	.30	.47	.47	.58	.32	1.48	.38	.00
26-29	.30	.34	.35	.24	.41	.25	.31	.29	.41	.52
30-39	.34	.57	.28	.27	.30	.19	.29	.24	.23	.16
40-49	.29	.08	.22	.21	.26	.22	.25	.08	.28	.24
50-59	.24	.15	.25	.24	.20	.17	.28	.07	.21	.24
60-64	.27	.55	.31	.21	.19	.20	.12	.06	.23	.27
65+	.38	.00	.18	.10	.17	.15	.20	.22	.24	.22
Mean	.68	.57	.47	.50	.49	.49	.52	.47	.50	.59
<b>Females</b>										
9-15	2.04	.49	1.39	1.42	1.43	1.39	1.62	1.64	1.52	1.52
16	1.77	1.58	1.16	2.38	1.24	1.51	1.73	1.09	1.45	.67
17	1.81	.00	1.31	1.30	1.19	1.37	1.27	1.01	1.15	1.62
18	1.09	1.31	.96	1.79	1.09	1.05	1.98	1.13	1.00	.81
19	1.83	1.27	1.03	1.80	.82	1.39	1.02	1.03	1.94	.42
20	.78	.00	1.13	1.77	1.04	.64	.95	1.23	1.96	.33
21	.96	.00	1.71	1.01	.64	.98	1.61	.54	1.40	.38
22	1.78	.00	.92	.17	.73	.71	1.12	.76	1.08	1.32
23	.81	2.83	1.01	.85	1.29	1.50	1.34	1.58	.93	1.89
24	1.30	.42	.94	.70	1.14	.71	1.01	1.17	1.14	2.18
25	.86	2.35	.73	.85	.97	1.91	.85	.83	1.30	1.09
26-29	1.13	1.98	.70	.94	.78	1.03	.74	.83	.90	.72
30-39	1.00	.37	.69	.79	.67	.76	.85	.79	.83	.75
40-49	.57	.98	.66	.70	.69	.84	.75	.76	.70	.71
50-59	1.00	.19	.70	.75	.79	.60	.65	.79	.62	.86
60-64	.39	1.13	.83	.32	.80	.42	.58	.73	.72	.90
65+	.77	.38	.51	.53	.53	.52	.51	.40	.74	.83
Mean	1.17	.73	.84	.90	.86	.89	.95	.91	.97	.95

Source: Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 3.5f. Car passengers (Australia, 1985-86):  
Average number of trip segments per person per day  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	1.54	1.39	1.21	1.87	1.05	1.29	1.36	1.43
16	1.29	1.38	1.49	1.74	.37	.16	.88	1.08
17	.86	1.14	.45	.00	.61	.28	.86	1.20
18	.60	1.33	.08	2.38	.70	.39	.61	1.02
19	.61	.40	.21	2.46	.00	.00	.65	.56
20	.59	.00	.90	1.19	.43	.00	.46	.77
21	.19	.91	.25	.00	.18	.00	.39	.41
22	.21	.00	.48	.57	.35	.00	.48	.49
23	.74	.45	.39	.00	.00	.00	.51	.38
24	1.06	1.18	.49	.97	.96	1.05	.47	.71
25	.52	.20	.58	1.20	.00	.00	.39	.62
26-29	.44	.68	.21	.41	.82	1.20	.37	.34
30-39	.29	.35	.36	.24	.35	.41	.29	.25
40-49	.25	.28	.28	.02	.07	.04	.24	.19
50-59	.21	.21	.19	.21	.07	.00	.23	.19
60-64	.19	.08	.29	.11	.00	.00	.23	.18
65+	.20	.11	.24	.21	.00	.23	.19	.15
Mean	.56	.57	.49	.63	.46	.52	.50	.51
<b>Females</b>								
9-15	1.53	2.11	2.00	.97	1.52	.61	1.49	1.48
16	1.62	1.19	.89	.00	1.52	.28	1.35	1.63
17	1.23	1.36	1.03	.19	.27	.70	1.24	1.25
18	1.22	1.91	2.80	1.80	.43	1.92	1.22	1.41
19	.83	1.46	.87	.85	.20	.00	1.04	1.33
20	1.25	2.92	1.44	2.43	2.20	.92	1.18	1.29
21	.78	1.04	.77	2.82	1.76	1.02	1.28	.94
22	.84	1.26	.82	1.13	1.48	.00	.91	.65
23	.92	1.35	.66	.23	1.04	.00	1.13	1.31
24	.66	1.62	1.18	.14	1.08	1.01	1.02	.95
25	1.18	1.10	.86	2.67	.92	.50	.91	1.23
26-29	.99	1.30	.52	.42	1.29	1.84	.78	.97
30-39	.66	.73	.34	.79	.86	.40	.72	.76
40-49	.78	1.14	.55	.45	.82	.35	.69	.78
50-59	.64	.87	.75	.40	.44	2.78	.71	.73
60-64	.90	.93	.95	.50	.39	.44	.78	.52
65+	.81	.57	.50	.71	.00	6.61	.56	.56
Mean	.95	1.20	.90	.81	.99	1.15	.89	.93

Source: Survey of Day-to-Day Travel in Australia 1985-86

Table 3.5g. Car passengers:  
Average number of fatalities per one million trip segments  
classified by age, sex, state and holiday period.

	ACT		New South Wales		Victoria		Queensland		South Australia	
	NH	H	NH	H	NH	H	NH	H	NH	H
<b>Males</b>										
9-15	.00	.00	.04	.09	.03	.03	.06	.03	.07	.00
16	.85	.00	.27	.37	.13	.26	.36	.00	.41	.00
17	.00	.00	.35	.14	.41	.12	.85	.34	.76	1.15
18	.00		.78	.95	.57	.00	.63	1.72	1.79	.00
19	.00		.79	1.59	1.05	.21	.79	1.79	.00	1.64
20	.00	.00	.75	.45	.51	.00	.77	.00	2.50	1.47
21	.00	.00	1.27	.62	1.06	.00	.76	.00	.94	6.55
22	.00		.90	.19	.95	2.25	.79	.00	.79	.00
23			.32	.85	.81	1.10	1.01	.69	.23	2.41
24	.00		1.49	.38	.45	.00	.48	.00	.79	.00
25	.00		.58	.58	.12	.00	.90	.20	.00	
26-29	.00	.00	.51	.94	.23	.98	.21	.23	.49	.30
30-39	.00	.00	.34	.33	.22	.54	.43	.29	.54	.41
40-49	.39	.00	.31	.37	.13	.12	.22	.55	.09	.64
50-59	.00	.00	.17	.46	.29	.19	.12	1.43	.13	.72
60-64	.00	.00	.42	.21	.21	.32	.26	.00	.00	.00
65+	.00		.52	1.31	.42	.51	.17	.74	.40	1.36
Mean	.06	.00	.28	.32	.21	.20	.27	.23	.30	.33
<b>Females</b>										
9-15	.00	.00	.02	.12	.03	.05	.03	.07	.04	.13
16	.00	.00	.22	.10	.12	.10	.05	.49	.00	1.39
17	.00		.17	.27	.23	.26	.00	.00	.21	.00
18	2.47	.00	.20	.13	.15	.66	.16	.28	.32	1.25
19	.00	.00	.29	.10	.50	.14	.17	.26	.11	.00
20	.00		.19	.00	.00	.00	.37	.29	.00	.00
21	.00		.15	.40	.10	.00	.00	.64	.27	1.56
22	.00		.23	.00	.23	.00	.09	.00	.25	.00
23	.00	1.06	.31	.19	.04	.35	.06	.16	.00	.00
24	.00	.00	.20	.21	.16	.00	.22	.00	.16	.54
25	.00	.00	.25	.34	.00	.00	.00	.00	.14	.00
26-29	.00	.00	.15	.33	.11	.04	.10	.00	.13	.00
30-39	.00	.00	.08	.10	.06	.08	.13	.09	.10	.18
40-49	.00	.00	.10	.18	.05	.07	.13	.13	.10	.11
50-59	.20	.00	.17	.20	.09	.16	.16	.07	.14	.21
60-64	1.91	.00	.17	.55	.16	.00	.21	.00	.00	.18
65+	2.08	2.53	.41	.59	.31	.05	.13	.52	.37	.26
Mean	.17	.16	.14	.20	.10	.09	.10	.13	.12	.20

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86

(continued)

Table 3.5g. Car passengers:  
Average number of fatalities per one million trip segments  
classified by age, sex, state and holiday period.

	Western Australia		Tasmania		NT		Mean	
	NH	H	NH	H	NH	H	NH	H
<b>Males</b>								
9-15	.00	.00	.00	.10	.00	.00	.04	.04
16	.09	.00	.00	.00	.00	.00	.21	.20
17	.35	.00	.00	.00	.00	20.74	.46	.23
18	1.22	.00	.00	.00	.00	.00	.74	.46
19	.73	.00	12.08	.97	.00	.00	.82	.86
20	1.05	.00	.00	1.60	.00	.00	.74	.32
21	2.56	.00	.00	.00	10.29	.00	1.07	.34
22	2.06	.00	.00	.00	.00	.00	.87	.53
23	.26	.00	1.58	.00	.00	.00	.49	.95
24	.00	.58	.00	.00	2.84	.00	.61	.21
25	.63	.00	.00	.00	.00	.00	.39	.23
26-29	.55	.52	.00	2.47	.34	1.23	.37	.75
30-39	.41	.17	.79	.82	2.61	1.99	.38	.39
40-49	.56	.00	.00	.00	11.47	.00	.26	.28
50-59	.31	.00	.62	.00	.00	.00	.20	.43
60-64	.00	.00	.00	.00	.00	.00	.27	.18
65+	1.13	1.01	.00	.00	.00	.00	.45	.89
Mean	.29	.10	.20	.33	.99	.90	.26	.26
<b>Females</b>								
9-15	.03	.03	.03	.00	.00	.00	.03	.08
16	.00	.00	.00	.00	.00	.00	.11	.18
17	.25	.33	.00	7.48	.00	.00	.16	.23
18	.00	.00	.00	.00	.00	.00	.19	.29
19	.00	.45	.00	.00	11.50	.00	.27	.16
20	.00	.00	.00	.00	.00	.00	.10	.04
21	.25	.55	.55	.00	.00	.00	.14	.32
22	.21	.00	.00	.00	.00	.00	.18	.00
23	.00	.35	.00	.00	.00	.00	.11	.26
24	.00	.00	.00	.00	.00	.00	.16	.16
25	.12	.38	.00	.00	2.61	.00	.12	.12
26-29	.12	.00	1.20	1.02	.00	.38	.14	.15
30-39	.18	.08	.00	.00	.81	1.15	.10	.10
40-49	.17	.07	.17	.00	1.04	.00	.11	.11
50-59	.21	.00	.14	.73	.00	.00	.15	.16
60-64	.17	.97	.17	.00	.00	.00	.16	.27
65+	.11	.30	.00	.31	.00	.00	.31	.36
Mean	.11	.12	.10	.14	.33	.19	.12	.15

Sources: FORS Fatal File 1984-85  
Survey of Day-to-Day Travel in Australia 1985-86