

FEDERAL GOVERNMENT'S ROAD SAFETY INITIATIVE

**YOUNG DRIVER RESEARCH PROGRAM -
MASS CRASH DATA ANALYSIS**

**NSW CASUALTY CRASH FILE (1986-1990)
AND
VICTORIAN CASUALTY CRASH FILE (1984-1989)**

Prepared by

**Lyn Bowland
Eun-Young Yeo
Antonietta Cavallo
Wendy Macdonald**

**MONASH UNIVERSITY
ACCIDENT RESEARCH CENTRE**

CR 131 (1)

1994

FOR THE FEDERAL OFFICE OF ROAD SAFETY

**FEDERAL OFFICE OF ROAD SAFETY
REPORT DOCUMENTATION PAGE**

Report No	Report Date	Pages	ISBN	ISBN (Series)	ISSN
CR131 (1)	1994	351	0 642 51396 1	0 642 51388 0	0810 770X

Title and sub-title

Young Driver Research Program - Mass Crash Data Analyses:
NSW Casualty Crash File (1986-1990) and Victorian Casualty Crash File (1986-1989)

Author(s)

Bowland L, Yeo E-Y, Cavallo A, Macdonald WA

Performing Organization

Monash University Accident Research Centre
Wellington Road
Clayton, Victoria, 3168, Australia

Sponsoring Organization

Federal Office of Road Safety
PO Box 594
Canberra, ACT, 2601, Australia

Project Officer: K B Smith

Abstract

This report is first in a series examining young versus older driver differences in car crashes for both Australian and USA data. Bivariate analyses examining the similarities and differences between drivers of various age groups involved in reported severe casualty crashes for NSW (1986 to 1990) and Victoria 1984 to 1989) were conducted. Results are discussed and accompanied by a series of tables. The data was also examined for day and night-time differences with results presented in both tabular and pie chart form. Conclusions and comparisons between the two data sets are not presented as the 11th report of the series provides an overview of all findings.

Key Words

YOUNG DRIVER, CRASH ANALYSIS, DAY, NIGHT, CAR DRIVER

Notes

- (1) FORS reports are disseminated in the interest of information exchange.
- (2) The view expressed are those of the author(s) and do not necessarily represent those of the Commonwealth Government.
- (3) The Federal Office of Road Safety publishes four series of research reports:
 - (a) reports generated as a result of research done within FORS are published in the OR series
 - (b) reports of research conducted by other organizations on behalf of FORS are published in the CR series
 - (c) reports based on analyses of FORS' statistical databases are published in the SR series
 - (d) minor reports of research conducted by other organizations on behalf of FORS are published in the MR series.

TABLE OF CONTENTS

	Page
1.0 CHARACTERISTICS OF YOUNG DRIVER CRASHES - MASS CRASH DATA ANALYSIS	1
1.1 INTRODUCTION	1
1.2 USING MASS CRASH DATA	1
2.0 NSW CASUALTY CRASH FILE (1986-1990) - BIVARIATE ANALYSES	5
2.1 INTRODUCTION	5
2.2 DESCRIPTION OF CRASH	5
2.2.1 Severity of crash	5
2.2.2 Number of traffic units involved	6
2.2.3 Number of persons injured	6
2.2.4 Number of persons killed	6
2.3 WHEN DID THE CRASHES OCCUR?	6
2.3.1 Day of week	6
2.3.2 Hour of day	7
2.3.3 Weekdays versus weekend	8
2.4 WHERE DID THE CRASHES OCCUR?	8
2.4.1 Metropolitan/rural areas	8
2.4.2 Location of crashes (type of road)	10
2.4.3 Speed limit	10
2.4.4 Land use adjacent to crash site	11
2.4.5 Road alignment at crash site	11
2.4.6 Type of road surface at crash site	11
2.4.7 Traffic signals	11
2.4.8 Other traffic controls at crash site	11
2.5 WHAT WERE THE FACTORS WITHIN THE VEHICLE - DRIVER	12
2.5.1 Sex of driver	12
2.5.2 Highest BAC group in crash	12

	Page
2.5.3 Driver restrained/unrestrained	12
2.5.4 Status of licence held	13
2.5.5 Years of driving experience	13
2.5.6 State of licence issue	13
2.6 WHAT WERE THE FACTORS WITHIN THE VEHICLE - PASSENGERS	13
2.6.1 Number of occupants in vehicle	13
2.7 WHAT WERE THE VEHICLE FACTORS?	14
2.7.1 Speed of vehicle	14
2.7.2 Year of vehicle manufacture	15
2.8 WHAT WERE THE ENVIRONMENTAL CONDITIONS?	15
2.8.1 Natural light	15
2.8.2 Street lighting	16
2.8.3 Driver's view of road	16
2.8.4 Surface condition of road	16
2.9 WHAT OTHER FACTORS SURROUNDED THE CRASH?	17
2.9.1 Manoeuvre of this vehicle	17
2.9.2 Road user movement	18
2.9.3 First impact type in crash	18
2.9.4 Type of object impacted	19
2.9.5 Factors or errors made by this driver	20
2.10 LEGAL ACTION	22
2.11 TABLES - NSW CASUALTY CRASH FILE (1986-1990)	22
3.0 NSW CASUALTY CRASH FILE (1986-1989) - DAY/NIGHT COMPARISONS	98
3.1 INTERPRETATION OF PIE CHARTS	98
3.2 PIE CHARTS AND TABLES - NSW CASUALTY CRASH DATA (1986-1989)	100
4.0 VICTORIAN CASUALTY CRASH FILE (1984-1989) - BIVARIATE ANALYSES	195
4.1 INTRODUCTION	195

	Page
4.2 DESCRIPTION OF CRASH	195
4.2.1 Crash severity	195
4.2.2 Number of vehicles involved	196
4.2.3 Number of persons injured	196
4.2.4 Number of persons killed	196
4.3 WHEN DID THE CRASHES OCCUR?	197
4.3.1 Day of week	197
4.3.2 Hour of day	197
4.3.3 Weekdays versus weekend	198
4.4 WHERE DID THE CRASHES OCCUR?	200
4.4.1 Metropolitan versus rural areas	200
4.4.2 Geometry of location (type of road)	200
4.4.3 Speed limit	200
4.4.4 First road feature	200
4.4.5 Traffic controls at crash site	201
4.5 WHAT WERE THE FACTORS WITHIN THE VEHICLE - DRIVER	201
4.5.1 Sex of driver	201
4.5.2 BAC level of driver	201
4.5.3 Seatbelt wearing	202
4.5.4 Status and type of licence held	202
4.5.5 State of licence issue	203
4.5.6 Driving experience in years	203
4.6 WHAT WERE THE VEHICLE FACTORS?	203
4.6.1 Year of vehicle manufacture	203
4.7 WHAT WERE THE ENVIRONMENTAL CONDITIONS?	203
4.7.1 Light conditions	203
4.7.2 Road surface condition	204
4.7.3 Weather condition	204

	Page
4.8 WHAT OTHER FACTORS SURROUNDED THE CRASH?	204
4.8.1 Definition for Classifying Accidents	204
4.8.2 Type of crash	205
4.9 TABLES - VICTORIAN CASUALTY CRASH FILE (1984-1989)	205
5.0 VICTORIAN CASUALTY CRASH FILE (1986-1989) - DAY/NIGHT COMPARISONS	277
5.1 INTERPRETATION OF PIE CHARTS	277
5.2 PIE CHARTS AND TABLES - VICTORIAN CASUALTY CRASH FILE (1986-1989)	279
REFERENCES	351
APPENDIX	352

LIST OF TABLES

Page

NSW CASUALTY CRASH FILE (1986-1990) - BIVARIATE ANALYSES:

Crash degree	24
Number of traffic units	25
Number of persons injured	27
Number of persons killed	29
Day of week	31
Hour of day	33
Weekday vs weekend - hour of day	38
Local government area	43
Crash location	44
Speed limit	47
Adjacent land use	49
Alignment of road	51
Road surface	52
Traffic signal operation	53
Other traffic controls	54
Sex of driver	57
Highest BAC group	58
Driver restraint use	60
Status of licence	61
Years of driving experience	63
State of licence	65
Number of occupants	67
Stated speed of vehicle	69
Year of vehicle manufacture	71
Natural light	73
Street lighting	75
View	76
Road surface conditions	77
Manoeuvres of unit	78
Road user movement	80
First impact type	85
Object impacted	88
Factors/errors of this unit	90
Legal action	95

NSW CASUALTY FILE (1986-1989) - DAY/NIGHT COMPARISONS:

Crash degree	101
Number of traffic units	104
Number of persons injured	107
Number of persons killed	110
Day of week	113
Weekday vs weekend	114
Local government area	116

	Page
Crash location	118
Speed limit	122
Adjacent land use	124
Alignment of road	127
Road surface	129
Traffic signal operation	131
Other traffic controls	134
Sex of driver	138
Highest BAC group	140
Seatbelt wearing by driver	143
Status of licence	146
Years of driving experience	148
State of licence	150
Number of occupants	152
Stated speed of vehicle	155
Year of vehicle manufacture	158
Natural light	162
Street lighting	165
View	168
Road surface conditions	170
Manoeuvres of unit	173
Road user movement	176
First impact type	181
Object impacted	184
Factors/errors of this unit	186
Legal action	191

VICTORIAN CASUALTY CRASH FILE (1984-1989) - BIVARIATE ANALYSES:

Crash severity	207
Number of vehicles involved	209
Number of seriously injured	211
Number of other injury	213
Number not injured	215
Number of persons killed	217
Day of week	219
Hour of day	221
Weekday versus weekend	227
Metro versus rural	233
Geometry of location	234
Speed limit	236
First road feature	238
Traffic control	240
Sex of driver	243
BAC of driver	244
Driver restraint use	245

VICTORIAN CASUALTY CRASH FILE (1984-1989) - BIVARIATE ANALYSES (CONT):

Licence status	247
Licence type	249
State of licence issue	251
Driver experience in years	253
Year of vehicle manufacture	255
Light conditions	257
Road surface condition	259
Weather condition	261
DCA event	263
Type of crash	269
Object hit	271

VICTORIAN CASUALTY FILE (1986-1989) - DAY/NIGHT COMPARISONS:

Crash severity	280
Number of vehicles involved	283
Number of seriously injured	286
Number of other injury	289
Number killed	292
Day of week	293
Weekday versus weekend	294
Metro versus rural	295
Geometry of location	297
Speed limit	299
First road feature	302
Traffic control	304
Sex of driver	306
BAC	310
Driver restraint use	312
Licence status	314
Licence type	316
State of licence issue	319
Driver experience in years	322
Year of vehicle manufacture	325
Light conditions	327
Road surface condition	331
Weather condition	334
DCA event	339
Type of crash	342
Object hit	345

LIST OF FIGURES

		Page
1	NSW (1990): HOUR OF DAY BY AGE GROUP	7
2	NSW (1990): HOUR OF DAY BY WEEKDAY/WEEKEND BY AGE GROUP	9
3	NSW (1990): LOCATION (ROAD TYPE) BY AGE GROUP	10
4	NSW (1990): NUMBER OF OCCUPANTS IN VEHICLE BY DRIVER AGE GROUP	14
5	NSW (1990): NATURAL LIGHT BY AGE GROUP	16
6	NSW (1990): MANOEUVRE OF VEHICLE BY AGE GROUP	17
7	VICTORIA (1989): HOUR OF DAY BY AGE GROUP	197
8	VICTORIA (1989): WEEKDAY VERSUS WEEKEND BY AGE GROUP	199

1 CHARACTERISTICS OF YOUNG DRIVER CRASHES - MASS CRASH DATA ANALYSIS

1.1 INTRODUCTION

The Monash University Accident Research Centre was commissioned by the Federal Office of Road Safety to undertake the Young Driver Research Program as part of the Federal Government's Road Safety Initiative.

One of the research projects in the Young Driver Research Program involved identifying the characteristics of young driver crashes through supplementing previous literature reviews which identify the known characteristics of young driver crashes, behaviour and performance from experimental, field and evaluation studies.

In addition, this project involved deriving information from a systematic analysis of Australian and US mass crash data to complement information from the literature review. The results of this analysis are presented in a series of reports which are outlined below:

Australian data

Report N°	Data File	State	Year(s)
1	Casualty crash	New South Wales	1986-1990
	"	Victoria	1984-1989
2	"	South Australia	1986-1990
3	FORS Fatality	New South Wales	1988
4	"	Victoria	"
5	"	South Australia	"
6	"	NSW, Victoria and SA combined	"

USA data

Report N°	Data File	US Region	Year(s)
7	GES	North-west	1989
8	"	Mid-west	"
9	"	West	"
10	"	South	"

Overview report

Report N°	
11	Reviews the main findings presented in Report N°s 1 to 10

The tables presented in the first report are accompanied by a discussion of results highlighting the main findings contained in that report, as well as noting some of the difficulties inherent in analysis of large data sets. Reports 2 to 10 contain results presented in tabular form only, although a brief description of the data used is given. Report N° 11 contains an overview of results comprising two sections: the first notes similarities and differences in results between States and compared to the US data; the second compares results with the main literature findings (see Macdonald; 1994a and 1994b).

This report presents results for both NSW and Victorian casualty crashes, and outlines, in turn:

- the role of mass crash data in identifying problem areas for young driver safety
- the data sets used in the study
- the methodology used
- results:
 - overview of young driver crash involvement
 - general bivariate patterns
 - daytime vs night-time young driver crashes
- conclusions

This study provides a systematic analysis and review of young driver crashes as represented in mass crash data; to date only ad-hoc, fragmented investigations of young driver crashes using mass crash data have been undertaken. This series of reports, therefore, serve as a comprehensive source document on young driver crashes.

1.2 USING MASS CRASH DATA

Mass crash data provide the most complete and readily available details about crash events, in terms of:

- the temporal and spatial details about the crash incident (where and when it occurred)
- driver (and other involved road user) demographics
- environmental conditions when the crash occurred
- the sequence of events preceding the crash (crash types), including the traffic context and vehicle/road user actions.

Due to reporting criteria, these data are also more representative of crashes involving injury (particularly more serious injury) to the road user(s) involved in the crash than of less severe crashes (eg. property damage only crashes).

Information derived from analysis of mass crash data is essential for identifying target areas or 'problems' where countermeasures should be directed. Analysis of mass crash data allows:

- the magnitude of the 'problem' to be ascertained
- the stability of the 'problem' to be determined

- the generality/specificity of the 'problem' to be determined (eg. Are both males and females affected? Does the 'problem' occur at both day and night; in metropolitan and rural locations?).

In using mass crash data to describe the young driver 'problem' and identify target areas, it is important to balance the need to disaggregate the crash problem into homogeneous sub-problems (with similar characteristics), with the number of levels by which the problem is disaggregated. The more homogeneous the sub-problem, the more likely it is that an appropriate countermeasure can be developed that will be effective in reducing that sub-problem; however, in terms of cost-effectiveness, the sub-problem must be sufficiently large for the cost of the countermeasure to be distributed amongst sub-problem members to allow benefits of the countermeasure to, at least, match its costs (Cameron, 1990).

Countermeasures are also more likely to be cost-effective if they target a sub-problem which has a higher than average risk of crash involvement, or of severe injury when involved (Cameron, 1990). The lack of comparable exposure data to determine crash or severity risk of sub-problems compared with average risks, however, means that 'high' risk sub-problems cannot be identified directly in this study.

Information derived from analysis of mass crash data is inherently descriptive in nature; that is, it does not provide information regarding the causal mechanisms or factors leading to a crash occurring. Road user 'errors' or factors causally related to the behaviour and context identified in a crash may only be inferred.

To be successful, a countermeasure must either:

- control and decrease the opportunity for the occurrence of behaviour related to crash problem types via external impositions, or
- 'correct' the causes and behavioural problem related to the critical actions leading to the crash.

Although the former approach has been applied successfully to other road safety problems, it has not led to significant gains in the young driver area. This is because the over-involvement of young drivers in crashes is **not** limited to a small number of crash types (where each could be addressed by a specific strategy), but is a more general phenomenon (Drummond & Triggs, 1991).

In the case of young driver safety, the latter approach is more likely to lead to more **efficient** countermeasures (those which provide greater overlap between a behavioural problem and a countermeasure). However, this can only be achieved by obtaining a better understanding of the behavioural problem (a product of the interaction between performance and motivational factors). A better understanding of the driving process, skilled performance and motivational factors is the first step to achieving this. A description of the behavioural problem may lead to effective countermeasures, but these will be generally less efficient.

Notwithstanding the limitations of mass crash data analysis outlined above, the identification of sub-problems by their relative incidence within the population of young

driver crashes is an important criterion for selecting targets for cost-beneficial countermeasures and understanding/interpreting other young driver performance findings.

2 NSW CASUALTY CRASH FILE (1986-1990) - BIVARIATE ANALYSES

2.1 INTRODUCTION

Data was obtained from the Traffic Authority of New South Wales of reported NSW crashes for the years 1986 to 1990. Prior to conducting bivariate analyses (age by variable of interest), the data was modified as follows:

- As the focus of primary interest was young *car* drivers, a driver-based file consisting of car and car derivative drivers was created. Included were drivers of cars, station wagons/hatchbacks/liftbacks, convertibles, panel vans, utilities, forward control passenger vans and 4WD vehicles.
- Most casualty crash files contain a variable which stipulates the severity of the crash ranging from a fatality to property damage, but this system creates problems in making across state comparisons due to differing reporting requirements for the lower severity levels in each state. Hence, only the three most severe crash levels were included in the analyses: fatalities, injuries requiring hospitalization (admitted injuries) and injuries not requiring hospitalization (treated injuries).
- Age of drivers was grouped as follows: 0 to 16, 17 to 25 (17 being the minimum licensing age in NSW), 26 to 40 years, 41 to 55 years and 56 to 98 years (the latter being the oldest age found in the data). The benefit of this grouping is that there are only four age group categories which facilitates presentation and discussion of results. The term 'young drivers' refers to 17 to 25 year old drivers only.
- Reporting of all categories within some variables (eg. road user movement) would have been unwieldy and often unnecessary due to low frequency counts for certain categories. The general practice has been to present categories with a reasonable number of cases and collapse all others. A guide to how variables were collapsed appears in Appendix 1.

A discussion of the results of the bivariate analyses is presented below. It should be noted that percentage rates generally refer to findings **within** an age group rather than as percentages of total drivers. All tables can be found in Section 2.11.

2.2 DESCRIPTION OF CRASH

2.2.1 Severity of crash

There was little variation from year to year and between age groups on crash severity levels. Only 2-3% of drivers in each age group were involved in fatal car crashes, while drivers involved in crashes resulting in injuries requiring hospitalization fell into the 20% range. The majority of drivers were involved in crashes where the worst injury to occur needed treatment without hospitalization (each age group fell into the 70% range, except for the 0-16 group who were in the low 60% range).

2.2.2 Number of traffic units involved

The majority of drivers within each age group (excluding the 0-16s) were involved in collisions comprising two traffic units (a traffic unit can be another vehicle, pedestrian, bicycle, etc) although there was a trend for each increasing age group to have a greater proportion of units involved. In 1990, for example, the proportions were: 60.0% - 17-25, 65.4% - 26-40, 66.5% - 41-55 and 69.0% - 56-98). Most other drivers were involved in either three unit or single unit crashes. The within-group proportions in 1990 for three unit crashes showed only minor between-group differences: 12.8% - 17-25, 15.4% - 26-40, 16.8% - 41-55 and 13.8% - 56-98. There were, however, differences for the single vehicle crashes with young drivers showing a greater proportion of their crashes than other age groups in this category: 22.8% - 17-25, 13.5% - 26-40, 10.5% - 41-55 and 11.8% - 56-98.

The 0-16 year old drivers tended to be involved in either one or two unit crashes. The proportions varied from year to year, but generally single vehicle crashes formed the greater proportion.

2.2.3 Number of persons injured

It should be noted that the coder's manual does not specify the level of injury for this variable. Each year, approximately 1% of drivers within each age group were involved in crashes in which no-one was injured. Presumably this finding relates to no-one being injured but someone having died due to the sample selection of the three severest crash severity levels. Most drivers, regardless of age group, were involved in crashes where one person was injured (69-70% in 1990, 57.4% for the 0-16 group). A lower proportion were involved in crashes where two people were injured (19-21% in 1990, 23.8% for the 0-16 group).

2.2.4 Number of persons killed

A significant proportion of drivers within each group were involved in crashes in which no-one was killed (97-98% in 1990). The results also indicated that where a driver was involved in a fatal crash, it was more likely that only one person died (2% of drivers within each age group in 1990 compared with percentages less than .5 for multiple deaths).

2.3 WHEN DID THE CRASHES OCCUR?

2.3.1 Day of Week

In each of the sampled years, young drivers incurred half (51-52%) of the crashes for their age group during the Friday to Sunday period. This contrasts with 44-46% for the 26-40 group, 43-44% for the 41-55 group and 41-42% for the 56-98 group for the same weekend period. While Sunday generally showed the lowest number of crash frequencies for drivers aged between 26-98 than any other day, this was not the case for the 17-25 age group. Although the proportion of all crashes for that age group would decline on Sundays (by approximately 2% from the figures for Saturdays), the proportion was still always greater than for Monday, Tuesday, Wednesday and Thursday. In 1990, for example, approximately 12% of crashes for this age group occurred on Monday, Tuesday

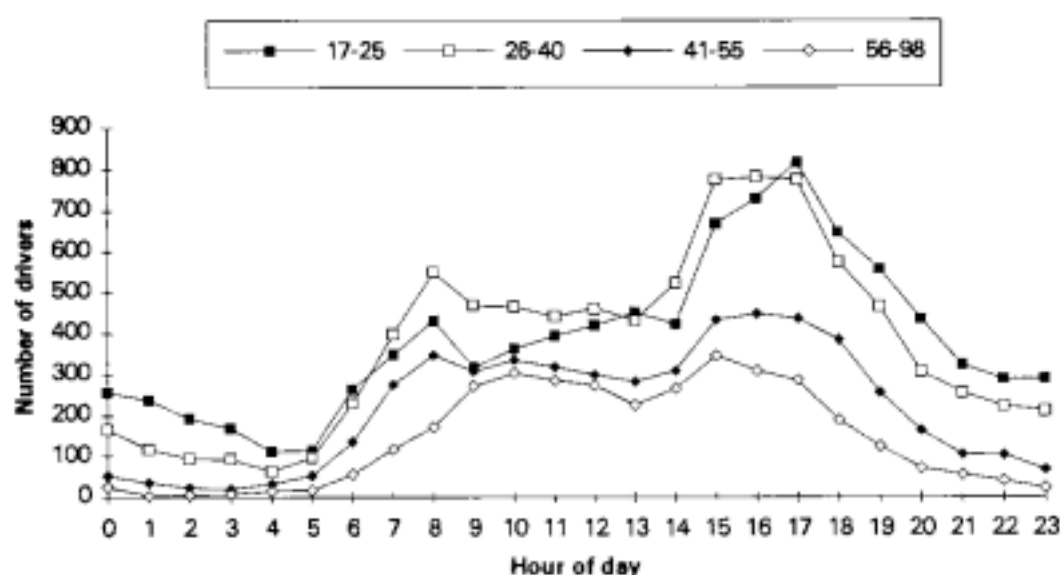
and Wednesday, approximately 14% on Thursday, 17% on Friday, 18% on Saturday and 16% on Sunday.

2.3.2 Hour of day

Figure 1 shows the pattern of results for hour of day for each age group during 1990 as this year was representative of results for other years. It should be noted that each hour includes the full hour - for example, crashes which occurred between 10.00 and 10.59 am have been recorded as 10 am crashes. The main findings using the 1990 figures were:

- the 26-40 age group showed the highest frequencies of drivers involved in crashes between the hours of 7-11 am (up to 12 noon in 1990) and 2-4 pm. These two time periods accounted for 49.1% of drivers in this age group. Although frequencies were lower, a large proportion of the 41-55 crashes (53.2%) and 56-98 drivers (59.4%) also had crashes during these hours. These figures compare to 39.7% for the 17-25 group.
- the 17-25 group showed the highest frequencies of drivers involved in crashes between the hours of 5 pm and 5 am. This time period accounted for 48.0% of all drivers in this age group, but only 38.4% of the 26-40, 33.1% of the 41-55 and 24.7% of the 56-98 age group drivers.
- the peak time for crashes for the 17-25 and 26-40 age groups was roughly the period between 3-6 pm; that is, more drivers in these age groups were involved in crashes during this time than at any other period of the day, including the morning peak period. The 41-55 and 56-98 age groups also showed an afternoon peak, but one which was less distinct from crashes which occurred during the morning (from 6 am onwards).

Figure 1: NSW Casualty File (1990) - Hour of day by age group



2.3.3 Weekdays versus weekend

In order to examine differences for the time of crashes during the working week and weekend, the 'day' variable was collapsed into two groups: frequencies for Monday to Friday were summed to create 'workday' and Saturday and Sunday to create 'weekend'. As noted earlier, the majority of crashes for all age groups occurred during the working week but the proportion is lower for the young driver group. For example, the proportions for 1990 were 66.1% for the 17-25s, 71.9% for the 26-40s, 73.8% for the 41-55s and 75.1% for the 56-98s.

Results for the workday/weekend split using 1990 figures are presented in Figure 2:

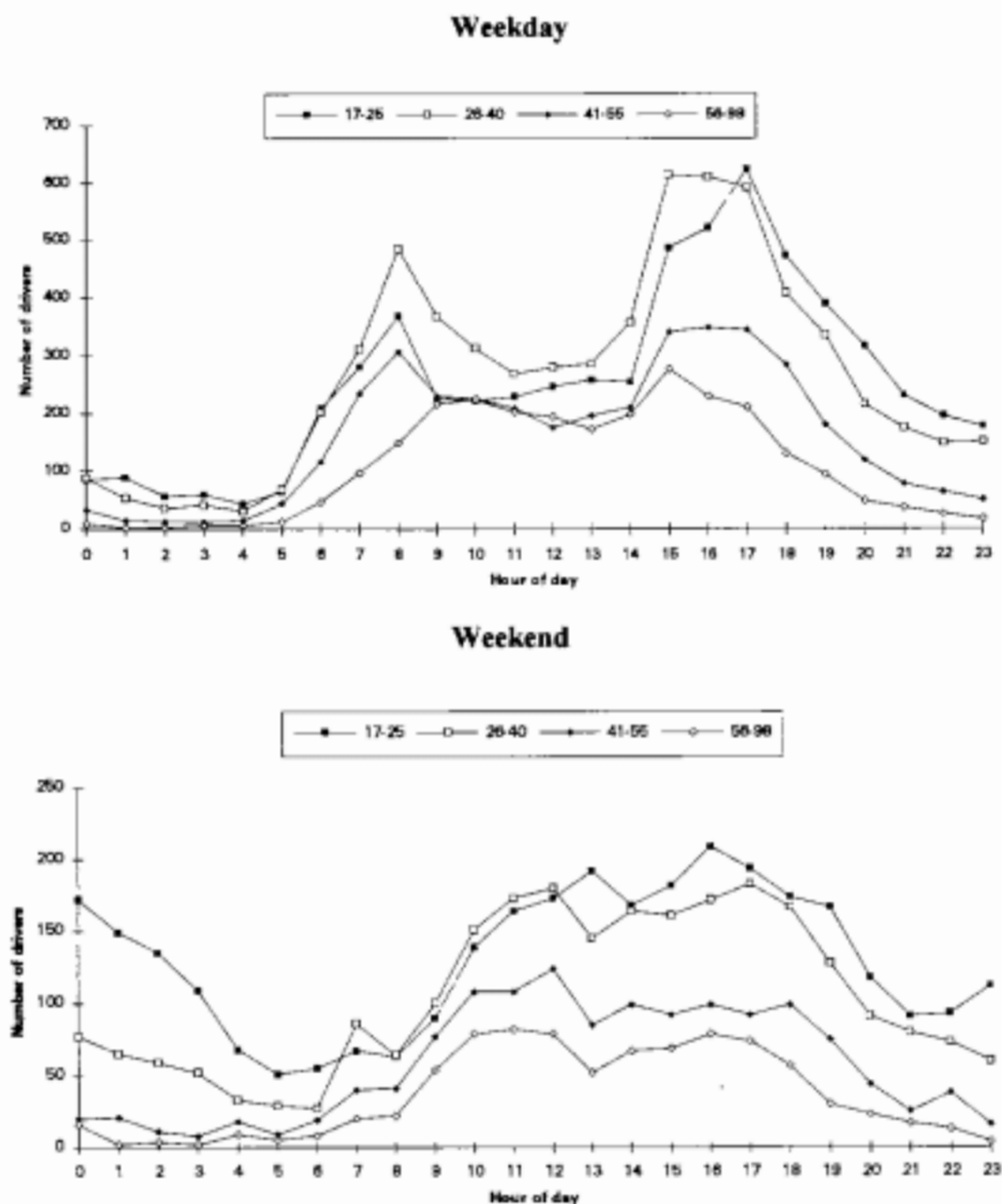
- a comparison of Figure 1 showing time as a single variable with Figure 2 which show the separation of working week and weekend reveals that it is important to make this distinction because of the differing pattern of results. The major difference is that the plots for the 17-25 and 26-40 age groups show a greater dip between the morning and afternoon peak periods for the working week than appears on the chart showing total frequencies. The pattern of higher frequencies for young drivers between 5 pm and 5 am remains.
- the working week showed an increase in the number of young drivers involved in crashes for both the morning and afternoon peak periods. The morning peak was between 7-9 am and accounted for 10.6% of the working week crashes incurred by young drivers. The afternoon peak increased substantially at 3 pm, with another jump at 5 pm, followed by a tapering off effect for all remaining hours. The proportion of all young drivers involved in crashes between 3-6 pm was 26.7%. Both these proportions, however, are comparable to the proportions for other age groups and so do not particularly distinguish the young driver group.
- the weekend chart shows that more young drivers were involved in crashes during the hours of 1-10 pm than any other age group. However, the proportion of drivers in this age group did not differ greatly from other age groups (17-25 - 50.7%, 26-40 - 54.1%, 41-55 - 54.7% and 56-98 - 55.5%).
- the most startling finding for the weekend figures is the substantially greater proportion of young drivers involved in crashes between the hours of 11 pm to 4 am. In 1990, 21.6% of the drivers aged 17-25 were involved in crashes during these hours compared to 12.4% of the 26-40, 5.6% of the 41-55 and 3.2% of the 56-98 age groups.

2.4 WHERE DID THE CRASHES OCCUR?

2.4.1 Metropolitan/rural areas

Local government area codes were collapsed into 'metropolitan' (001 to 099) and 'rural' (all other codes). Results showed that 17-18% more drivers were involved in metro than rural crashes, although in 1987 this increased to 21%. In 1990, for example 58.7% of all drivers had crashes in the metro area.

Figure 2: NSW Casualty File (1990) - Hour of day by weekday/weekend by age group



An examination of age groups revealed that the metro/rural split differed for each age group. Generally, more 0-16 aged drivers were involved in rural than metro crashes, but the difference was not consistent from year to year. In fact, in 1990, this age group had 50% of drivers in each area type. The 56-98 group also had a nearly equivalent number of drivers involved in crashes in each area type, but this was a consistent finding for each year. For the remaining age groups, drivers involved in metro crashes outnumbered drivers involved in rural crashes by 15-18% for the 17-25 group, 23-29% for the 26-40 group and 23-27% for the 41-55 group.

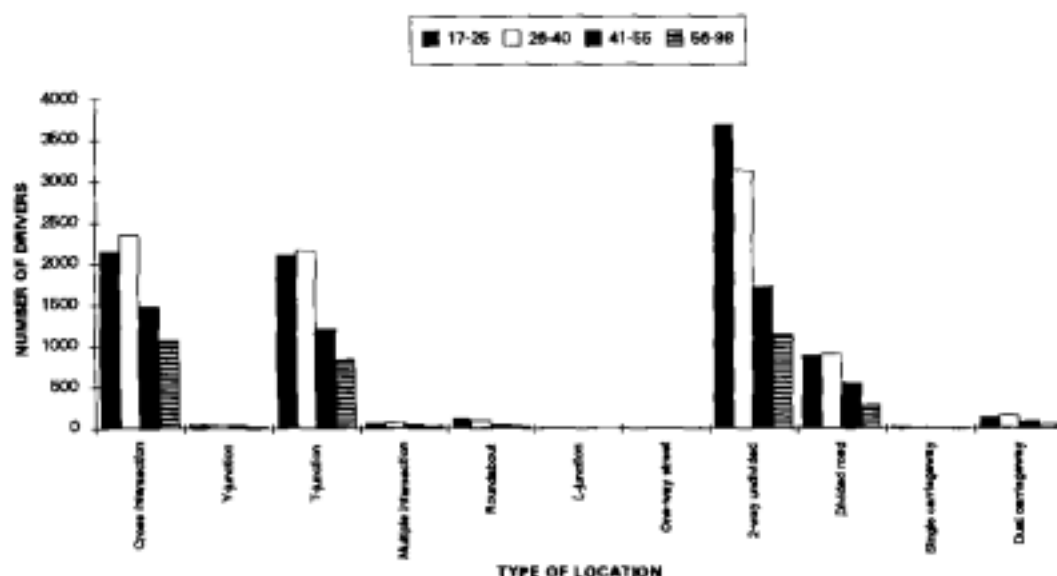
2.4.2 Location of crashes (type of road)

The distribution of drivers per road type within each year showed a consistent pattern. Because of this consistency, the findings reported below refer to 1990 figures only.

Figure 3 shows that the problematic road type for the 17-25 and 26-40 age groups were 2-way undivided roads: 39.8% of the 17-25 age group drivers and 39.8% of the 26-40 age group drivers had crashes on these road types. Also problematic, but less so, were cross intersections (23.3% within the 17-25 age group drivers and 26.3% for the 26-40 age group drivers) and T-junctions (22.8% and 24.1% respectively). This was followed by divided roads (9.6% and 10.1% respectively). The remaining age groups also showed the majority of drivers involved in crashes occurring on these four road types, but the frequency distributions were reasonably equivalent.

The remaining road types: Y-junction, multiple intersections, roundabout, L-junctions, one-way streets, and single and dual carriageways all showed extremely low driver frequencies for all age groups

Figure 3: NSW Casualty File (1990) - Location (road type) by age group



2.4.3 Speed limit

There were slightly more missing cases for this variable than other variables, but they accounted for only 7.8% of the total over the five sample years. The value levels for 1986 to 1988 were: 20, 40, 60, 80 100 and 110 km/h, but this increased to 20, 30, 40, 50, 60, 70, 80, 90, 100 and 110 for 1989 to 1990. The difficulty here is knowing whether these latter additional speed limits existed during 1986 to 1988 but were categorized into the other levels. Despite this coding change, the results were very clear cut over all years - 77-80% of drivers were involved in crashes in 60 km/h zones, 13% in 100 km/h zones and 6-8% in 80 km/h zones. This pattern of results was also found within each age group, although the 0-16 drivers tended to have a greater proportion of crashes than other age groups in 100 km/h zones. However this proportion was not consistent from year to year.

It should be noted that this variable by itself does not hold much meaning - it is only in the context of speed of vehicle versus speed limit that the contribution of speed can be assessed. Although this analysis has not been conducted, the results for speed of traffic unit are presented below. These results indicate that most drivers were travelling at 60 km/h or less which seems to indicate that most crashes were not the result of *high* speeds. This does not mean, however, that the traffic unit speed was appropriate for the situation arising at the time of the crash.

2.4.4 Land use adjacent to crash site

The number of missing cases for this variable was so large that it renders any interpretation virtually useless. For the whole five year period, only 11,228 cases were usable with 150,128 (93%) cases listed as missing or unknown.

2.4.5 Road alignment at crash site

For each of the sample years, approximately 81% of drivers were involved in crashes on straight sections of road - a finding that reflects the higher incidence of straight versus curved road sections. The relationship between drivers involved in crashes occurring on the two road section types remain reasonably constant within an age group, but there was also a constant difference between age groups. For example, the crashes on straight roads for drivers aged between 17-25 was in the range of 78-79%; however, the range for the 56-98 age group was 84-86%. In other words, the younger drivers were slightly more likely to have been involved in an crash occurring on a curved road section than their older counterparts.

2.4.6 Type of road surface at crash site

In each of the sampled years, approximately 97% of drivers had crashes on sealed roads versus unsealed roads. This proportion remains true within each of the age groups, although fractionally more young drivers were likely to have crashes on unsealed roads; ie. the percentage rate is about 1% less for drivers having crashes on sealed roads compared to each of the other age groups.

2.4.7 Traffic signals

The levels contained within this variable are not readily comprehensible, and are not explained in the coder's manual. The three levels are 'on', 'off' and 'nil'. While 'nil' clearly indicates that there was no traffic signal at the crash scene, it would seem that 'on' and 'off' refers to the lights being functional or dysfunctional. Given this difficulty with interpretation, the results for each age group do not differ substantially: approximately 13% of drivers had crashes in the 'on' category, 5 to 7% in the 'off' category' and roughly 85 to 86% in the 'nil' category.

2.4.8 Other traffic controls at crash site

This variable covers traffic controls other than traffic signals and includes signs (eg. stop signs) and official personnel directing traffic (eg. police, road/railway worker). Each year, approximately 80% of drivers had crashes on road sections where there were no traffic

controls whatsoever. Further, only three of the traffic control categories showed substantial frequencies: approximately 11% of drivers had crashes at 'give way' sign intersections, approximately 7% at 'stop' sign intersections and roughly 2% at pedestrian crossings. These proportions hold true (approximately) within each age group, although there was a clear trend for each increasing age group to show a higher proportion of drivers at each of the three traffic controls with a concurrent decrease in the number at 'no traffic control' areas of road. The figures for 1987 shown below illustrate this point:

	<u>17-25</u>	<u>26-40</u>	<u>41-55</u>	<u>56-98</u>	<u>Total</u>
Give way sign	1122 (9.8%)	1169 (10.9%)	657 (11.5%)	677 (16.7%)	3632

2.5 WHAT WERE THE FACTORS WITHIN THE VEHICLE - DRIVER

2.5.1 Sex of driver

Although the the number of males involved in crashes always far exceeded the number of females, it is interesting to note that the proportions showed a decreasing trend over the sampled years. In 1986, crash-involved males outnumbered females by 36.4%; a difference which decreased to 29.6% in 1990. Furthermore, the decrease was found in each age group.

In 1990, males involved in crashes outnumbered females by the following proportions: 49.2% for the 0-16 group, 32.1% for the 17-25 group, 24.7% for the 26-40 group, 25.1% for the 41-55 group and 41.6% for the 56-98 group. The main point of interest here is that the difference between the number of males and females involved in crashes was greatest for the younger and older drivers.

2.5.2 Highest BAC group in crash

This variable showed a rate of 21% missing cases for the total sample of 161356 cases. Despite this, the results showed clearly that the majority of drivers (ranging across years from 82-87%) had a zero blood alcohol content. However older drivers were more likely to be involved in crashes where the BACs registered zero than the younger age groups. In 1990, for example, 93% of drivers aged 56-98 fell into the 'nil' category compared with 84% of the 17-25 year old drivers. Consequently, a greater proportion of drivers within the younger age groups were involved in crashes where the highest BAC reading was greater than the legal limit of .05 when compared to elderly drivers. In 1990, 13% of 17-25 and 26-40 year olds, 9% of 41-55 year olds and 5% of 56-98 year olds fell into this category.

2.5.3 Driver restrained/unrestrained

Each year, seat belt restraints were worn by approximately 97-98% of the drivers involved in casualty crashes. For the remainder of the driver population, 2% were not wearing seat belts while less than 1% did not have seat belts fitted in their vehicle. These rates did not vary significantly between age groups, except for drivers in the under 17 age group. Within the 0-16 age group, 15.9% of drivers were not wearing belts in 1986, 8.2% in

1987, 10.7% in 1988, 15.9 in 1989 and a lower 7.9% in 1990. Further examination would reveal some of the circumstances surrounding these cases; for example, how many cases involved stolen cars, drunk drivers, etc.

2.5.4 Status of licence held

The only adjustment to the categories listed within this variable was to combine 'licence expired', 'unlicensed', 'disqualified' and 'cancelled' into the single category of 'non-licensed'. Missing cases formed only 7.6% of the total sample.

Excluding the 0-16 age group, by far the majority of drivers involved in crashes were full licence holders. The proportions for 1990 were: 72.9% - 17-25, 92.7% - 26-40, 97.6% - 41-55, and 97.9% - 56-98. Twenty-one percent of the 17-25 year old drivers held provisional licences. What is revealing about this finding is that most of the young drivers involved in crashes had progressed past the 'novice driver' stage.

The results for the 0-16 group, unsurprisingly, were quite different. The majority of drivers in this category were either non-licensed (48.7% in 1990) or held a learner's permit (34.8% in 1990). Only 15.7% held a provisional licence.

2.5.5 Years of driving experience

Missing cases for this variable accounted for 13.0% of the total five year sample.

A significantly high percentage of older drivers who were involved in crashes had more than five years of driving experience. In 1990, 87.8% of 26-40, 96.7% of 41-55 and 98.8% of 56-98 year old drivers fell into this category. This contrasts quite strongly with the proportional distribution for the 17-25 age group where 82.3% of drivers have five years or less driving experience, and where the proportions were more or less evenly distributed over each year (the lowest proportion was 10.4% for five years experience, the highest 17.5% for two years experience). Finally, 91.2% of drivers aged 0-16 had less than one year of driving experience.

2.5.6 State of licence issue

Although this variable is not directly a driver factor variable, it has been included in this section in order to remain with the associated variables of licence status and years of driving experience. Unsurprisingly, the vast majority of drivers in each age group involved in these crashes held licences issued in NSW (94-95% in 1990). Interstate licence holders tended to be either from Queensland or Victoria (1-2% in each age group in 1990). Licence holders from other states and overseas constituted less than 1% of drivers in each age group.

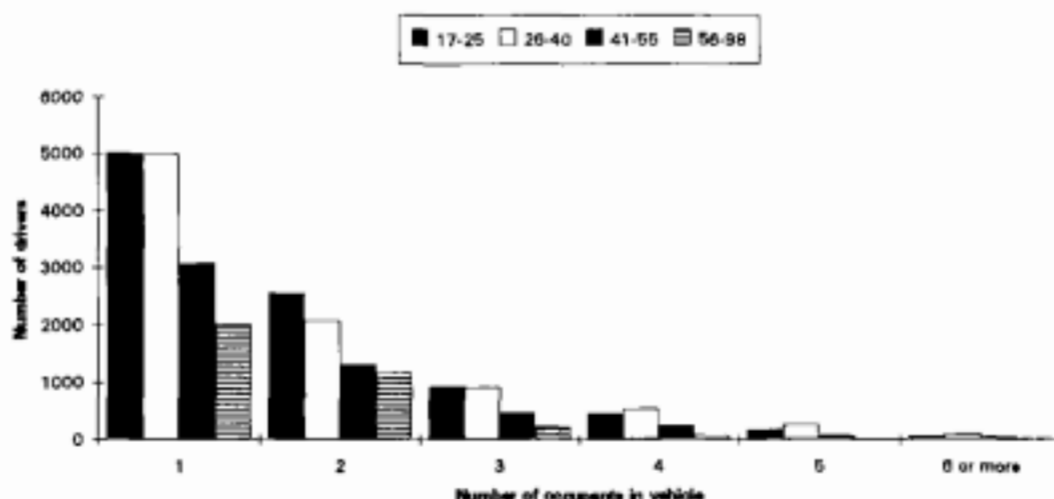
2.6 WHAT WERE THE FACTORS WITHIN THE VEHICLE - PASSENGERS

2.6.1 Number of occupants in vehicle

Over 50% of all the drivers in each of the sampled years were in single occupant vehicles. Generally speaking, for each additional occupant the proportion towards the total number

of drivers reduces by half. Thus approximately 27% of the drivers involved in crashes carried one passenger, 10% with two passengers, 5% with three passengers, and so on. These proportions were roughly true within each age group. The only apparent, though slight, differences were that the percentage for single occupant young drivers were always the lowest when compared to the older age groups, and that the 56-98 year old age group were less likely to be carrying two or more passengers (but more likely to be carrying one passenger) when compared with their younger counterparts. Results for 1990 can be seen in Figure 4.

Figure 4: NSW Casualty File (1990) - Number of occupants in vehicle by driver age group



2.7 WHAT WERE THE VEHICLE FACTORS?

2.7.1 Speed of vehicle

Missing cases for this variable formed 13.6% of the total sample of 161,356 cases. Speed was grouped into 20 km/h units as follows: 0-20, 21-40, 41-60, 61-80, 81-100, 101 and over and 'excessive'. This latter value applied to cases where the speed of the vehicle was not known but was judged by police to be excessive.

Surprisingly, the majority of drivers were involved in crashes where vehicle speeds were less than 60 km/h (85% in 1990, for example). Approximately 35-36% of drivers were travelling between 0-20 km/h, 33% at 41-60 km/h and 17-18% at 21-40 km/h. However, these proportions mask between group differences. Where speeds were 0-20 km/h, the proportion of all 17-25 year old drivers in 1990 was 27% compared to 46% for drivers aged 56-98. In fact, the proportions showed increases with each increasing age group. The converse was found for vehicle speeds of 41-60 km/h: in 1990 38.4% of 17-25 year old drivers had crashes at these speeds compared to 23.7% of 56-98 year old drivers. The position for speeds ranging from 21-40 was less distinct with only 3-4 percentage points separating the 17-25 and 56-98 age groups.

As noted earlier, the majority of drivers were involved in crashes in 60 km/h speed zones. Taken together with the results presented above, it would seem that most crashes were not due to *high* speeds although it is possible that the traffic unit speed was not appropriate given the traffic situation at the time of the crash.

2.7.2 Year of vehicle manufacture

The data for this variable was collapsed into five groups: 1986-1990, 1981-1985, 1976-1980, 1971-1975 and vehicles manufactured before 1971. Missing cases formed 11.8% of the total five year sample (N=161,356).

The data for 1990 showed that the majority of drivers were in cars that were less than nine years old (58%) with a further 25% driving cars that were 10-14 years old. The proportion of all 17-25 year old drivers driving cars manufactured between 1986 and 1990 was lower than for the older age groups: 17-25 - 20.1%, 26-40 - 30.5%, 41-55 - 34.5% and 56-98 - 28.3%. However, young drivers were more likely than other age groups to be driving cars manufactured between 1976 and 1980 (ie cars that were 10-14 years old). The proportions of each age group were: 17-25 - 28.8%, 26-40 - 23.6%, 41-55 - 22.1%, 56-98 - 21.4%. There was less difference between age groups for cars manufactured between 1981 and 1985 (28.5% for the 17-25 group, 34.0% for the 56-98 group).

Young drivers were also more likely to be driving cars that were over 15 years old (ie 1975 and earlier). In this instance, 22.6% of young drivers drove older cars compared to 14.8% of 26-40, 12.0% of 41-55 and 16.3% of 56-98 year old drivers.

2.8 WHAT WERE THE ENVIRONMENTAL CONDITIONS?

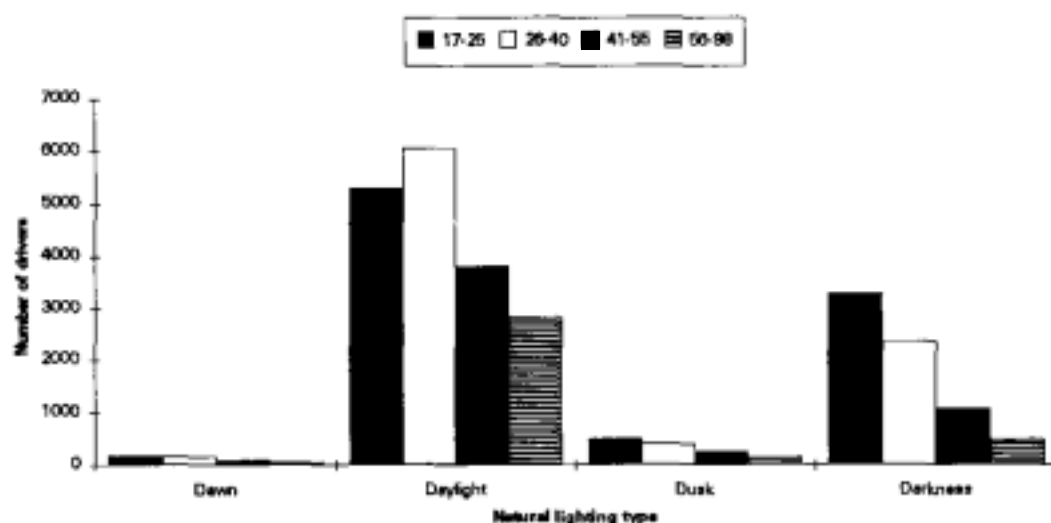
2.8.1 Natural light

There are four categories within this variable: dawn, daylight, dusk and darkness but the coders manual does not explain where the exact division for each of these times occurs. The frequencies for dawn and dusk are similar for each age group and from year to year with approximately 2% of drivers being involved in crashes at dawn and roughly 4% at dusk. However, there are substantial differences between the age groups on the daylight and darkness categories - although these differences remained constant from year to year. The results for 1990 are presented in Figure 5.

Approximately 57% of the 17-25 age group drivers had crashes during daylight hours. Each increasing age group showed an increasing percentage for the daylight category until reaching approximately 80% for the 56-98 age group drivers. This situation is reversed for the darkness category so that the 17-25 group showed approximately 35% of their drivers being crash-involved at this time, whereas the 56-98 age group showed only approximately 14%.

In summary, the majority of crashes for all age groups occurred during daylight. The distinction between crash frequencies during daylight and darkness were greatest for the older age group and least for the young driver group.

Figure 5: NSW Casualty File (1990) - Natural light by age group



2.8.2 Street lighting

There are three categories for this variable: on, off and nil (no street lighting). Excluding the 0-16 age group, the greatest frequencies occurred in the 'off' condition for all age groups: the range was 46% to 64% with the higher percentages indicating the older age groups. These differences were reversed for the 'on' condition where approximately 31% of the 17-25 age group drivers were found, while only approximately 13% of the 56-98 age group drivers were found in this category. These differences disappear for the no street lighting category as each age group registered approximately 20% to 24% of their drivers in this condition.

In summary, there was a great deal of difference between the number of drivers being crash-involved when street lighting is on and off for the older age groups, but little difference for the young driver group. That is, while older drivers were more likely to have an crash when street lights were off (day), young drivers were as likely to have an crash when the lights were off (day) as on (night).

Frequencies for the 0-16 age group tended to distribute evenly over the three street lighting categories.

2.8.3 Driver's view of road

Each age group had approximately 94%-95% of crashes on road sections with an 'open' view and 5%-6% on 'obscured' road sections.

2.8.4 Surface condition of road

This variable incorporates three road surface conditions: 'wet', 'dry' and 'snow or ice'. Approximately 76-80% of drivers had crashes on dry roads, 20-25% on wet roads and less than 1% on snow covered or icy roads. These distributions were true for each age group, although young drivers were slightly more likely to have crashes on wet roads and less likely to have crashes on dry roads than the older age groups. For example, in 1990

25.1% of the 17-25 group drivers had crashes on wet roads compared with only 20% for the 56-98 age group. The figures were 74.7% and 79.8% respectively for dry roads.

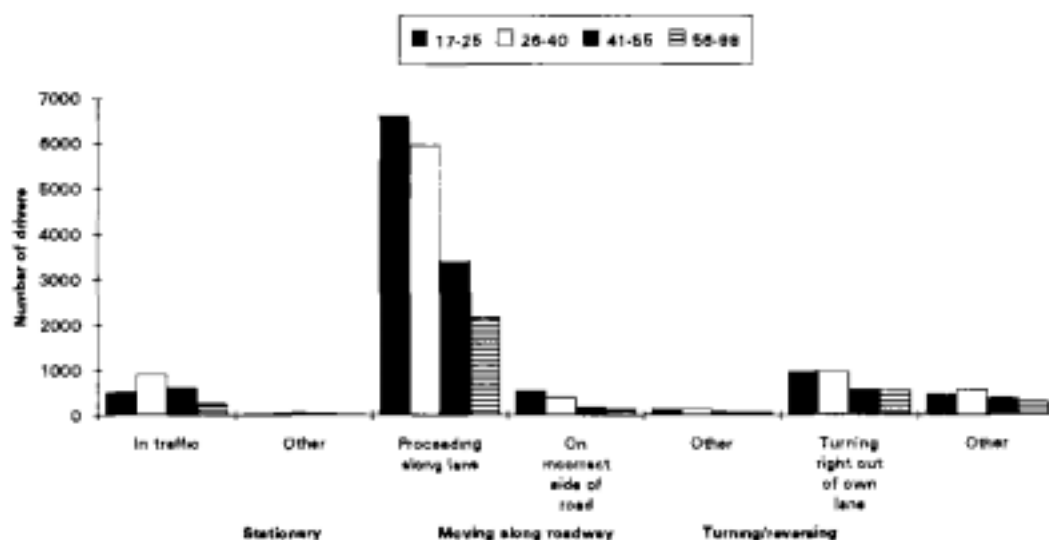
2.9 WHAT OTHER FACTORS SURROUNDED THE CRASH?

2.9.1 Manoeuvre of this vehicle

The results indicated that (see Figure 6 for 1990 results):

- The manoeuvre being undertaken in the majority of crashes was one of proceeding along the appropriate lane. While the proportion for the whole sample in most years was approximately 67%, it was always the case that a greater proportion of young drivers had crashes in this category compared to the older groups. In 1990, for example, the proportions were: 71.5% of the 17-25, 66.4% of the 26-40, 65.0% of the 41-55 and 62.3% of the 56-98 year old drivers.
- The eldest age group appeared to have more difficulty than other groups with making right hand turns from the correct lane. This manoeuvre accounted for 15.6% of the 56-98 year old drivers in 1990, compared to 10.5 - 10.6% for the other age groups.
- It was consistently found that the youngest and oldest drivers were less likely to have crashes when their car was stationary in traffic (5.6% and 7.4% respectively in 1990) compared to the middle range age groups (10.1% for the 26-40 and 11.6% for the 41-55 age groups in 1990).

Figure 6: NSW Casualty File (1990) - Manoeuvre of vehicle by age group



2.9.2 Road User Movement

The major sub-categories listed for this variable have been retained for presentation, but some collapsing of the values within these categories has occurred. Where values within a category showed all cells with frequencies less than 100, these were summed into one value called 'other'. Although 1986 was the starting point for making these decisions, the value was still retained for later years even if each cell frequency fell below 100 (for the sake of consistency).

The five major road user movements (quoting 1990 figures) were:

- rear end collision of vehicles travelling in the same lane (14.7%)
- collision at an intersection of vehicles travelling straight through from adjacent directions (cross traffic - 13.8%)
- collision where one vehicle is turning right while the other is travelling straight through from the opposing direction (right thru - 11.2%)
- head-on collision of vehicles travelling in opposing directions, but not overtaking (8.8%)
- collision at intersections where one vehicle is turning right while a vehicle on the right is travelling straight through (6.6%).

There were, however, age differences for only two of these. Although the young driver group had shown a majority of drivers being involved in rear end crashes (12.9%), this proportion was lower than for the older groups, particularly the 26-40 year old group (15.4% - 26-40, 17.9% - 41-55 and 13.6% - 56-98). A similar situation arose with intersection cross traffic collisions, but here the 56-98 age group showed the highest proportion of all age groups (18.5% compared with 11.6% of young drivers and 13.4% of the 26-40 drivers).

2.9.3 First impact type in crash

The impact types with the highest frequencies within each age group were vehicle/vehicle crashes (right angle, nose-tail, other angle). Each one of these impact types accounted for approximately 20% of the drivers within each age group. To a lesser extent, but still showing substantial driver frequencies were head-on crashes (vehicle/vehicle), and vehicles colliding with objects and pedestrians (vehicle/other). Each of these accounted for approximately 9-10% of drivers within each age group. Roughly 3% of drivers within each age category were involved in rollovers; the remaining impact types accounting for less than 1% of within group drivers. Results for 1990 are presented in Figure 8.

Despite the general overview given above, there were some very obvious differences between the age groups. These are listed below:

Right angle crashes - it appears that these crashes become more problematic for drivers as they get older. The 1990 figures, for example, show that 20.5% of the 17-25 year old

drivers were involved in right angle crashes, but this increased through each age group until it reached 30.8% for the 56-98 group.

Nose-tail crashes - although the differences between age groups were not as distinct for this category, they are nonetheless consistent for each year sampled - the 26-40 and 41-55 groups showed a higher percentage of drivers for their age group in this impact type when compared to the other groups. Again examining the 1990 figures and excluding the 0-16s, 17% of the 17-25 year olds' crashes were nose-tail crashes, 18% for the 56-98s, 20.5% for the 26-40s and 23.0% for the 41-55s.

Vehicle/object crashes - The most common impact type for the 0-16 age group was where the vehicle collided with an object. In 1990, 41% of the 0-16 group drivers were involved in this impact type. This drastically reduced to 18.5% for the 17-25 group, but was still higher than the remaining groups (11.3% for the 26-40s, 8.3% for the 41-55s and 9.3% for the 56-98s).

Rollovers - While this crash type accounted for only 2.8% of the drivers in the 26-40, 41-55 and 56-98 age groups in 1990, it accounted for 4.6% of young drivers and 6.6% for the 0-16 age group.

[The other problematic crash types for the 0-16 group were right angle crashes (15.6% in 1990 - this was below the percentage for other groups) and other angle crashes (18.0% in 1990 - this was reasonably equivalent to the other groups)].

2.9.4 Type of object impacted

The category of 'no object' for this variable is somewhat confusing. The natural assumption would be that nothing was hit by the vehicle, yet the frequencies in this category were high enough (60-90%) to suggest that multiple vehicle collisions were included. (This gains substance by comparing total numbers to those for the first impact variable). Although this category formed the major portion of the 0-16 year old (55% in 1990), and 17-25 year old (79.5% in 1990) age groups, this was always much less than other age groups. For example, 87.4% of the 26-40 age group, 90.1% of the 41-55 age group and 88.5% of the 56-98 age group drivers fell into this category.

Less than 1% of drivers within each age group had collisions with non-fixed objects and animals. The differences found in the other categories are listed below:

Guardrail/fence - The proportion of drivers for the 0-16 year age group increased in 1990 from what was generally around 4% to 7.4% of all drivers in this age group. This is compared to approximately 2% for the other age groups. However, not too much can be made of these figures as the 1990 total for the 0-16 age group was only 9 cases.

Utility pole/traffic signal pole - a greater proportion of young driver compared to older driver crashes involved hitting poles. In 1990, for example, 9.0% of 0-16 year old and 6.2% of 17-25 year old drivers fell into this category. This decreased to 3.3% for the 26-40 age group, 2.3% for the 41-55 age group and 2.5% for the 56-98 age group.

Embankments, cuttings, rocky outcrops, etc - Although the differences are unlikely to be significant, older drivers were less likely to have crashes in this category than younger drivers. The proportions for 1990 are: 4.1% - 0-16, 2.8% - 17-25, 1.9% 26-40, 1.6% - 41-55, 2.0% - 56-98.

Trees or bushes - Young drivers were more likely to be involved in this type of collision than other age groups. In 1990, 13.1% of the 0-16 group drivers had crashes of this type. This reduced to 4.9% for the 17-25 group, and reduced further for the older groups (2.7% - 26-40, 1.8% - 41-55, 2.5% - 56-98).

Other fixed objects - the pattern of results as outlined above applies to this category also. The findings for 1990 were: 10.7% 0-16, 3.3% 17-25, 2.2% 26-40, 2.1% 41-55, and 2.1% 56-98).

In summary, by far the majority of drivers were involved in crashes where an object was not hit (but presumably another vehicle was). Examining individual types of objects hit does not provide a great deal of information with which to discriminate age group differences (that is, the percentage rates are low). However, if those variables indicating that an object has been hit are summed (this excludes the 'no object' category), there is clear evidence of a young driver problem. The contributions of each age group are listed below:

0-16	17-25	26-40	41-55	56-98	Total
55	1900	1134	516	400	4005
(1.4%)	(47%)	(28.3%)	(12.9%)	(10%)	

2.9.5 Factors or errors made by this driver

This variable is difficult to report because of the 38 factors listed within the variable. Hence, when the frequencies were examined as percentages of the total number of crashes per year, or as percentages of total crashes within an age group, any differences were not apparent because of low percentages. Yet the raw data frequencies show some very real problem areas. The problem also arises because the 'no relevant factors' category forms the major portion of this variable. In 1990, for example, this category accounted for 70% of crashes (41.0% - 0-16, 65.1% - 17-25, 74.4% - 26-40, 75.6% - 41-55, 66.7% - 56-98). One solution would be to collapse relevant items, but this would result in some of the distinctions being lost. What has been done, therefore, is to omit the 'no relevant factors' and to examine age group differences for cases only where a factor has been attributed. Thus the discussion that follows refers only to approximately 30% of all cases (8028 crashes in 1990).

Three problems have also arisen with the data output. Firstly, a few frequencies each year were attributed to jackknifing. Because this is impossible in a car, these cases were omitted from the relevant tables and added to missing cases. Secondly, the manual lists value 11 as 'this car skidding/sliding', yet the print-outs list this value as 'pulling out from...'. For this discussion, skidding/sliding has been used. Thirdly, high BAC levels was not listed as a major factor. While this information can be accessed through the BAC variable itself, its exclusion here does not enable its direct comparison with other factors.

Coders were instructed to give priority to the factor of failing to stop after an crash, which means that the initiating factor in the crash was not recorded. Fortunately, not many cases fell into the 'failure to stop' category each year - in 1990 this category accounted for only 2.12% (n=174) of the reduced subset of cases. The factors which did form the majority of cases were: disobeying of traffic control (32.3% in 1990, n=2589) and loss of control according to police description (28.5% in 1990, n=2286). These were followed by distraction or vision obscured by something outside the vehicle (6.0% in 1990, n=484), swerving to avoid another vehicle (5.5% in 1990, n=438) and skidding/sliding (4.8% in 1990, n=386).

'Loss of control' was the major factor in the 17-25 age group (36.6% in 1990), followed by disobeying of traffic control (23.1% in 1990). This finding became reversed for all the older age groups, with the differences becoming greater with greater age. In 1990, for example, the proportions were 31.1% (disobeying traffic control) and 27.9% (loss of control) for the 26-40 group, 40.3% and 20.5% for the 41-55 group and 52.1% and 14.5% for the 56-98 group. The concern here though, is that 'loss of control' does not contribute a great deal of information as one would presume that some other factor needed to precede the loss of control.

Other points of interest for this variable are:

- Crashes due to equipment fault or failure were nearly always due to tyre blow out or thrown tread, but the contribution of this factor within each age group had reduced marginally from 1986 to 1990. For example, in 1986 3-4% of crashes within each age group were due to this factor but only 2-3% in 1990. (348 crashes were due to this factor in 1986; 193 in 1990.)
- Distraction within a vehicle forms only a small part of the total number of drivers for any age group and was only a fractionally greater problem for the 17-25 group when compared to their older counterparts. In 1990, 1.7% (n=54) of the 17-25 drivers had crashes due to this factor compared with 0.8% (n=9) for the 56-98 group. It is important to note that distraction due to a passenger (a separate factor from distraction within the vehicle) accounted for no or less than 1% of drivers within each age group.
- Swerving was most likely to have resulted from attempts to avoid another vehicle or an animal. Approximately 6% of the 1990 drivers within the 17-25, 26-40 and 41-55 groups had crashes due to swerving to avoid another vehicle (cf 3% for the 56-98 group). The proportions for swerving to avoid an animal were: 3.4% - 17-25, 2.3% - 26-40, 2.1% - 41-55 and 1.1% - 56-98.
- Excessive speeding was listed as a major factor far less than may have been expected, particularly for the young driver group. In 1990, 1.4% of drivers in this group were involved in crashes because of speed and less than 1% for each other age group.

2.10 LEGAL ACTION

The major sub-categories listed for this variable have been retained for presentation, but some collapsing of the values within these categories has occurred. Where values within a category showed all cells with frequencies less than 100, these were summed into one value called 'other'. Although 1986 was the starting point for making these decisions, the value was still retained for later years even if each cell frequency fell below 100 (for the sake of consistency).

The three major categories for legal action (quoting 1990 figures) were:

- no legal action taken (52.9%)
- negligent driving (21.6%)
- not making a turn with safety (4.7%).

The youngest and oldest drivers were less likely than other age groups to have no legal action taken (the proportions for 1990 were: 17-25 - 45.4%, 56-98 - 47.1% compared with 26-40 - 58.5% and 41-55 - 61.2%) but more likely to be charged with negligent driving (17-25 - 27.7%, 56-98 - 20.4% compared with 26-40 - 18.2% and 41-55 - 17.0%).

Although proportions for other values within this variable were quite low, there are two points worth noting for their consistency. Firstly, the proportions for the 56-98 age group for each of the driving offences were always higher than the proportions for the other groups (by 2-5%). Secondly, there was a tendency for the younger age groups (17-25 and 26-40) to have a higher proportion of exceeding prescribed concentration of alcohol charges than their older counterparts by 1-2%.

2.11 TABLES - NSW CASUALTY CRASH DATA (1986-1990)

Variables and page numbers for the NSW Casualty Crash Data analyses are listed here for the convenience of the reader:

	Page
Crash degree	24
Number of traffic units	25
Number of persons injured	27
Number of persons killed	29
Day of week	31
Hour of day	33
Weekday vs weekend - hour of day	38
Local government area	43
Crash location	44
Speed limit	47
Adjacent land use	49
Alignment of road	51
Road surface	52

	Page
Traffic signal operation	53
Other traffic controls	54
Sex of driver	57
Highest BAC group	58
Driver restraint use	60
Status of licence	61
Years of driving experience	63
State of licence	65
Number of occupants	67
Stated speed of vehicle	69
Year of vehicle manufacture	71
Natural light	73
Street lighting	75
View	76
Road surface conditions	77
Manoeuvres of unit	78
Road user movement	80
First impact type	85
Object impacted	88
Factors/errors of this unit	90
Legal action	95

NSW CASUALTY FILE (1986-1990)*
CRASH DEGREE BY AGE GROUP BY YEAR

N = 161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Fatal	5	347	295	162	140	949
Admitted injury	61	2894	2345	1237	942	7479
Treated injury	109	8676	7790	4060	2684	23319
	175	11917	10430	5459	3766	31747
1987						
	0-16	17-25	26-40	41-55	56-98	Total
Fatal	4	330	278	131	117	860
Admitted injury	54	2791	2354	1291	971	7461
Treated injury	91	8378	8064	4309	2975	23817
	149	11499	10696	5731	4063	32138
1988						
	0-16	17-25	26-40	41-55	56-98	Total
Fatal	4	329	289	149	152	923
Admitted injury	53	2636	2352	1232	979	7252
Treated injury	100	8120	7752	4327	2849	23148
	157	11085	10393	5708	3980	31323
1989						
	0-16	17-25	26-40	41-55	56-98	Total
Fatal	8	276	259	130	102	775
Admitted injury	73	2573	2265	1207	1001	7119
Treated injury	73	7725	7493	4265	2822	22378
	154	10574	10017	5602	3925	30272
1990						
	0-16	17-25	26-40	41-55	56-98	Total
Fatal	2	238	218	107	109	674
Admitted injury	44	2389	2148	1192	928	6701
Treated injury	76	6618	6598	3922	2446	19660
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8841

- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

N=161356

NUMBER OF TRAFFIC UNITS INVOLVED BY AGE GROUP BY YEAR

1986						
	0-16	17-25	26-40	41-55	56-98	Total
1	92	2783	1440	579	423	5317
2	73	7340	6989	3776	2684	20862
3	8	1372	1485	807	500	4172
4	2	319	378	202	114	1015
5		81	101	72	36	290
More than 5		22	37	23	9	91
	175	11917	10430	5459	3766	31747

1987						
	0-16	17-25	26-40	41-55	56-98	Total
1	69	2579	1432	632	466	5178
2	65	7067	7176	3941	2895	21144
3	12	1383	1501	862	520	4278
4	3	345	407	218	127	1100
5		98	137	51	38	324
More than 5		27	43	27	17	114
	149	11499	10696	5731	4063	32138

1988						
	0-16	17-25	26-40	41-55	56-98	Total
1	79	2518	1418	631	459	5105
2	63	6819	6857	3889	2837	20465
3	12	1313	1574	873	527	4299
4	3	317	399	219	115	1053
5		89	114	71	27	301
More than 5		29	31	25	15	100
	157	11085	10393	5708	3980	31323

NSW CASUALTY FILE (1986-1990)*

N=161356

NUMBER OF TRAFFIC UNITS INVOLVED BY AGE GROUP BY YEAR

1989						
	0-16	17-25	26-40	41-55	56-98	Total
1	88	2424	1352	553	493	4910
2	56	6464	6593	3779	2747	19639
3	7	1257	1511	907	495	4177
4	3	306	387	248	129	1073
5		74	100	58	36	268
More than 5		49	74	57	25	205
	154	10574	10017	5602	3925	30272

1990						
	0-16	17-25	26-40	41-55	56-98	Total
1	59	2106	1207	547	410	4329
2	54	5549	5861	3472	2403	17339
3	8	1184	1377	877	480	3926
4		299	358	223	129	1009
5	1	84	102	73	41	301
More than 5		23	59	29	20	131
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

N=161356

NUMBER OF PERSONS INJURED BY AGE GROUP BY YEAR

1986						
	0-16	17-25	26-40	41-55	56-98	Total
0	1	134	134	60	48	377
1	111	7946	7072	3744	2504	21377
2	44	2554	2014	1088	841	6541
3	7	739	656	315	230	1947
4	8	346	322	151	98	925
5 or more	4	198	232	101	45	580
	175	11917	10430	5459	3766	31747

1987						
	0-16	17-25	26-40	41-55	56-98	Total
0	2	116	125	53	42	338
1	89	7647	7354	3974	2805	21869
2	37	2504	2069	1123	867	6600
3	16	698	613	331	194	1852
4	1	311	290	144	98	844
5 or more	4	223	245	106	57	635
	149	11499	10696	5731	4063	32138

1988						
	0-16	17-25	26-40	41-55	56-98	Total
0		137	124	57	54	372
1	101	7604	7220	3983	2710	21618
2	32	2305	1981	1109	837	6264
3	15	611	573	330	217	1746
4	6	259	257	120	87	729
5 or more	3	169	238	109	75	594
	157	11085	10393	5708	3980	31323

NSW CASUALTY FILE (1986-1990)*

N=161356

NUMBER OF PERSONS INJURED BY AGE GROUP BY YEAR

1989						
	0-16	17-25	26-40	41-55	56-98	Total
0	2	101	104	56	32	295
1	87	7268	6892	3915	2700	20862
2	39	2096	1925	1085	842	5987
3	18	595	554	303	198	1668
4	7	332	333	146	92	910
5 or more	1	182	209	97	61	550
	154	10574	10017	5602	3925	30272

1990						
	0-16	17-25	26-40	41-55	56-98	Total
0	2	118	96	42	46	304
1	70	6388	6232	3684	2405	18779
2	29	1817	1702	1011	727	5286
3	14	537	516	276	200	1543
4	5	248	254	132	64	703
5 or more	2	137	164	76	41	420
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
NUMBER OF PERSONS KILLED

N = 161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
0	170	11570	10135	5297	3626	30798
1	4	306	251	140	119	820
2	1	33	38	20	15	107
3		6	5	2	4	17
4 or more		2	1		2	5
	175	11917	10430	5459	3766	31747

1987						
	0-16	17-25	26-40	41-55	56-98	Total
0	145	11169	10418	5600	3946	31278
1	4	291	243	120	103	761
2		29	29	9	12	79
3		9	5	1	2	17
4 or more		1	1	1		3
	149	11499	10696	5731	4063	32138

1988						
	0-16	17-25	26-40	41-55	56-98	Total
0	153	10756	10104	5559	3828	30400
1	4	289	243	128	136	800
2		30	37	13	14	94
3		7	7	5	2	21
4 or more		3	2	3		8
	157	11085	10393	5708	3980	31323

1989						
	0-16	17-25	26-40	41-55	56-98	Total
0	146	10298	9758	5472	3823	29497
1	6	232	212	108	90	648
2	1	30	30	12	11	84
3	1	11	11	5		28
4 or more		3	6	5	1	15
	154	10574	10017	5602	3925	30272

NSW CASUALTY FILE (1986-1990)*
NUMBER OF PERSONS KILLED

N = 161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
0	120	9007	8746	5114	3374	26361
1	1	199	188	92	88	568
2	1	32	23	13	19	88
3		3	7	2	2	14
4 or more		4				4
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
DAY BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Monday	10	1407	1299	781	509	4006
Tuesday	22	1394	1396	740	528	4080
Wednesday	18	1568	1496	790	581	4453
Thursday	17	1519	1536	792	594	4458
Friday	32	1995	1767	980	617	5391
Saturday	34	2192	1612	722	525	5085
Sunday	42	1842	1324	654	412	4274
	175	11917	10430	5459	3766	31747

1987						
	0-16	17-25	26-40	41-55	56-98	Total
Monday	20	1364	1414	787	517	4102
Tuesday	15	1362	1460	828	622	4287
Wednesday	19	1308	1453	779	569	4128
Thursday	18	1519	1615	827	626	4605
Friday	27	1927	1733	981	688	5356
Saturday	26	2169	1620	850	543	5208
Sunday	24	1850	1401	679	498	4452
	149	11499	10696	5731	4063	32138

1988						
	0-16	17-25	26-40	41-55	56-98	Total
Monday	16	1231	1352	774	525	3898
Tuesday	16	1292	1369	800	574	4051
Wednesday	15	1318	1405	770	627	4135
Thursday	22	1542	1467	867	630	4528
Friday	19	1784	1778	963	614	5158
Saturday	37	2140	1694	833	543	5247
Sunday	32	1778	1328	701	467	4306
	157	11085	10393	5708	3980	31323

NSW CASUALTY FILE (1986-1990)*
DAY BY AGE GROUP BY YEAR

N=161356

1989						
	0-16	17-25	26-40	41-55	56-98	Total
Monday	7	1211	1297	799	535	3849
Tuesday	14	1199	1327	743	540	3823
Wednesday	19	1298	1377	815	569	4078
Thursday	17	1356	1418	815	586	4192
Friday	31	1739	1673	911	686	5040
Saturday	37	1998	1587	835	526	4983
Sunday	29	1773	1338	684	483	4307
	154	10574	10017	5602	3925	30272

1990						
	0-16	17-25	26-40	41-55	56-98	Total
Monday	13	1067	1176	668	500	3424
Tuesday	13	1079	1222	732	467	3513
Wednesday	10	1149	1191	744	489	3583
Thursday	11	1254	1303	831	590	3989
Friday	21	1561	1552	878	570	4582
Saturday	21	1678	1443	789	491	4422
Sunday	33	1457	1077	579	376	3522
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
HOUR BY AGE GROUP BY YEAR

N=161356

	1986					Total
	0-16	17-25	26-40	41-55	56-98	
0	5	320	204	41	16	586
1	4	305	136	35	10	490
2	4	245	135	28	9	421
3	2	231	90	20	5	348
4	5	119	66	26	9	225
5	3	150	112	61	22	348
6	3	354	293	217	82	949
7	3	484	404	199	116	1206
8	4	520	601	352	186	1663
9	6	333	490	277	259	1365
10	4	434	546	306	329	1619
11	4	539	568	341	301	1753
12	11	620	528	321	318	1798
13	7	560	514	305	290	1676
14	10	584	586	317	269	1766
15	4	782	890	504	358	2538
16	14	964	938	545	401	2862
17	11	1005	817	491	277	2601
18	20	862	666	331	222	2101
19	16	702	560	224	119	1621
20	13	520	379	161	49	1122
21	8	441	358	157	41	1005
22	4	400	280	104	43	831
23	10	443	269	96	35	853
	175	11917	10430	5459	3766	31747

NSW CASUALTY FILE (1986-1990)*
 HOUR BY AGE GROUP BY YEAR

N=161356

	1987					Total
	0-16	17-25	26-40	41-55	56-98	
0	7	322	175	66	12	582
1	6	336	153	45	18	558
2	3	256	100	30	7	396
3	9	191	90	15	6	311
4	2	125	88	29	9	253
5	2	150	121	55	36	364
6	1	293	334	189	80	897
7	3	389	466	262	135	1255
8	5	514	686	376	200	1781
9	3	368	495	291	265	1422
10	8	415	513	320	329	1585
11	6	524	589	367	353	1839
12	8	595	592	305	331	1831
13	5	546	558	370	267	1746
14	3	548	596	325	324	1796
15	11	761	925	501	411	2609
16	12	913	908	524	396	2753
17	9	976	830	490	307	2612
18	8	798	736	381	218	2141
19	11	702	518	259	132	1622
20	7	507	402	176	106	1198
21	6	489	289	153	40	977
22	4	382	287	100	55	828
23	10	399	245	102	26	782
	149	11499	10696	5731	4063	32138

NSW CASUALTY FILE (1986-1990)*
HOURLY BY AGE GROUP BY YEAR

N=161356

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
0	2	296	198	50	21	567
1	5	286	193	53	10	547
2	3	243	111	30	8	395
3	3	204	107	21	11	346
4	2	131	68	25	8	234
5	1	104	118	59	23	305
6	4	279	325	186	75	869
7	4	438	415	274	126	1257
8	4	516	611	414	235	1780
9	3	347	515	305	301	1471
10	6	423	534	345	332	1640
11	7	475	548	339	344	1713
12	8	551	504	305	257	1625
13	12	478	525	331	270	1616
14	4	512	553	348	303	1720
15	15	775	854	473	366	2483
16	15	865	884	516	376	2656
17	7	957	895	455	325	2639
18	11	786	696	386	214	2093
19	8	656	538	267	136	1605
20	3	520	368	192	80	1163
21	13	494	310	137	53	1007
22	8	366	264	108	52	818
23	9	383	239	89	54	774
	157	11085	10393	5708	3980	31323

NSW CASUALTY FILE (1986-1990)*
 HOUR BY AGE GROUP BY YEAR

N=161356

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
0	7	274	200	58	15	554
1	6	268	142	53	21	490
2	1	243	109	23	3	379
3	4	212	103	25	11	355
4	2	157	90	32	14	295
5	2	144	109	62	26	343
6	3	292	294	180	67	836
7	5	409	417	270	114	1215
8	6	502	591	377	230	1706
9	6	355	495	328	297	1481
10	3	380	463	308	337	1491
11	7	460	515	315	312	1609
12	7	520	502	328	267	1624
13	6	434	460	292	295	1487
14	5	551	561	362	308	1787
15	12	720	815	459	403	2409
16	13	813	881	507	342	2556
17	9	889	844	447	293	2482
18	11	765	687	345	209	2017
19	8	604	529	302	137	1580
20	13	465	379	176	83	1116
21	10	380	295	135	67	887
22	5	369	274	113	40	801
23	3	368	262	105	34	772
	154	10574	10017	5602	3925	30272

NSW CASUALTY FILE (1986-1990)*
HOURLY BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
0	4	257	165	53	25	504
1	3	238	118	35	4	398
2	5	191	95	24	7	322
3	1	168	93	20	8	290
4	7	111	64	33	15	230
5	1	115	97	53	17	283
6	0	264	229	135	55	683
7	5	347	398	275	117	1142
8	7	431	548	348	171	1505
9	3	317	468	308	271	1367
10	1	362	464	335	304	1466
11	1	394	442	318	285	1440
12	7	420	461	300	274	1462
13	6	451	432	282	225	1396
14	7	423	522	310	266	1528
15	9	668	775	433	346	2231
16	10	730	783	448	310	2281
17	9	818	776	437	286	2326
18	7	647	575	384	188	1801
19	9	557	464	256	124	1410
20	1	435	307	163	71	977
21	6	323	255	103	54	741
22	6	289	222	102	39	658
23	7	289	211	66	21	594
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in casualty crashes

NSW CASUALTY FILE (1986-1990)*
 HOUR BY DAY BY AGE GROUP BY YEAR

N=161356

1986													
WEEKDAY							WEEKEND						
	0-16	17-25	26-40	41-55	56-98	Total		0-16	17-25	26-40	41-55	56-98	Total
0	2	155	106	19	10	292	0	3	165	98	22	6	294
1	0	101	57	17	4	179	1	4	204	79	18	6	311
2	1	81	58	10	6	156	2	3	164	77	18	3	265
3	1	72	32	9	1	115	3	1	159	58	11	4	233
4	1	45	23	17	3	89	4	4	74	43	9	8	136
5	2	76	80	46	15	219	5	1	74	32	15	7	129
6	3	281	253	186	65	788	6	0	73	40	31	17	161
7	3	401	351	178	101	1034	7	0	83	53	21	15	172
8	3	440	525	302	155	1425	8	1	80	76	50	31	238
9	5	237	370	215	200	1027	9	1	96	120	62	59	338
10	2	286	373	218	246	1125	10	2	148	173	88	83	494
11	0	312	358	213	216	1099	11	4	227	210	128	85	654
12	6	355	328	214	220	1123	12	5	265	200	107	98	675
13	1	332	341	214	222	1110	13	6	228	173	91	68	566
14	6	367	415	225	205	1218	14	4	217	171	92	64	548
15	3	561	716	401	276	1957	15	1	221	174	103	82	581
16	9	706	726	433	320	2194	16	5	258	212	112	81	668
17	5	741	625	362	187	1930	17	6	264	192	129	80	671
18	13	629	482	256	165	1545	18	7	233	184	75	57	556
19	11	488	390	164	87	1140	19	5	214	170	60	32	481
20	9	349	254	114	33	759	20	4	171	125	47	16	363
21	4	319	249	121	28	721	21	4	122	109	36	13	284
22	4	265	193	78	33	573	22	0	135	87	26	10	258
23	5	284	189	71	21	570	23	5	159	80	25	14	283
	99	7883	7494	4063	2829	22388		76	4034	2936	1376	937	9359

NSW CASUALTY FILE (1986-1990)*
 HOUR BY DAY BY AGE GROUP BY YEAR

N=161356

1987													
WEEKDAY							WEEKEND						
	0-16	17-25	26-40	41-55	56-98	Total		0-16	17-25	26-40	41-55	56-98	Total
0	4	131	79	28	5	247	0	3	191	96	38	7	335
1	6	124	67	25	7	229	1	0	212	86	20	11	329
2	3	96	36	10	5	150	2	0	160	64	20	2	246
3	4	54	36	6	4	104	3	5	137	54	9	2	207
4	1	36	50	19	5	111	4	1	89	38	10	4	142
5	1	74	75	38	26	214	5	1	75	46	17	10	150
6	0	232	281	164	67	744	6	1	61	53	25	13	153
7	0	328	405	233	115	1081	7	3	61	61	29	20	174
8	3	444	616	321	162	1546	8	2	70	70	55	38	235
9	3	247	364	206	198	1018	9	0	121	131	85	67	404
10	5	267	326	214	233	1045	10	3	148	187	106	96	540
11	2	287	366	246	256	1157	11	4	237	223	121	97	682
12	6	328	385	190	227	1136	12	2	267	207	115	104	695
13	1	353	388	260	185	1187	13	4	193	170	110	82	559
14	1	326	419	229	252	1227	14	2	222	177	96	72	569
15	5	550	744	393	327	2019	15	6	211	181	108	84	590
16	10	653	714	410	328	2115	16	2	260	194	114	68	638
17	8	714	602	373	224	1921	17	1	262	228	117	83	691
18	7	547	532	284	156	1526	18	1	251	204	97	62	615
19	7	479	355	187	91	1119	19	4	223	163	72	41	503
20	7	341	267	120	70	805	20	0	166	135	56	36	393
21	3	338	204	103	30	678	21	3	151	85	50	10	299
22	4	276	203	75	33	591	22	0	106	84	25	22	237
23	8	255	161	68	16	508	23	2	144	84	34	10	274
99	7480	7675	4202	3022	22478		50	4019	3021	1529	1041	9860	

NSW CASUALTY FILE (1985-1990)*
 HOUR BY DAY BY AGE GROUP BY YEAR

N=161356

1988													
WEEKDAY							WEEKEND						
	0-16	17-25	26-40	41-55	56-98	Total		0-16	17-25	26-40	41-55	56-98	Total
0	1	122	82	22	10	237	0	1	174	116	28	11	330
1	2	101	73	22	5	203	1	3	185	120	31	5	344
2	1	79	45	14	4	143	2	2	164	66	16	4	252
3	1	68	40	8	7	124	3	2	136	67	13	4	222
4	1	48	36	15	5	105	4	1	83	32	10	3	129
5	0	50	84	46	14	194	5	1	54	34	13	9	111
6	3	214	252	148	61	678	6	1	65	73	38	14	191
7	2	363	369	239	109	1082	7	2	75	46	35	17	175
8	3	436	514	361	196	1510	8	1	80	97	53	39	270
9	1	237	394	221	234	1087	9	2	110	121	84	67	384
10	1	262	390	225	243	1091	10	5	161	174	120	89	549
11	3	259	338	210	245	1055	11	4	216	210	129	99	658
12	5	311	309	189	181	995	12	3	240	195	116	76	630
13	10	278	352	227	197	1064	13	2	200	173	104	73	552
14	2	282	372	240	240	1136	14	2	230	181	108	63	584
15	6	549	681	371	289	1896	15	9	226	173	102	77	587
16	10	616	678	403	293	2000	16	5	249	206	113	83	656
17	4	707	664	340	238	1953	17	3	250	231	115	87	686
18	8	529	503	275	157	1472	18	3	257	193	111	57	621
19	4	458	402	207	93	1164	19	4	198	136	60	43	441
20	1	355	253	146	53	808	20	2	165	115	46	27	355
21	9	355	202	97	33	696	21	4	139	108	40	20	311
22	7	235	206	83	37	568	22	1	131	78	25	15	250
23	3	253	162	65	26	509	23	6	130	77	24	28	265
	88	7167	7371	4174	2970	21770		69	3918	3022	1534	1010	9553

NSW CASUALTY FILE (1986-1990)*
 HOUR BY DAY BY AGE GROUP BY YEAR

N=161356

1989													
WEEKDAY							WEEKEND						
	0-16	17-25	26-40	41-55	56-98	Total		0-16	17-25	26-40	41-55	56-98	Total
0	3	99	77	28	6	213	0	4	175	123	30	9	341
1	3	87	51	15	10	166	1	3	181	91	38	11	324
2	1	76	32	9	0	118	2	0	167	77	14	3	261
3	0	63	45	13	6	127	3	4	149	58	12	5	228
4	2	60	41	19	5	117	4	0	107	49	13	9	178
5	2	74	74	47	20	217	5	0	70	35	15	6	125
6	2	217	239	151	57	666	6	1	75	55	29	10	170
7	3	337	372	227	100	1039	7	2	72	45	43	14	176
8	5	420	503	321	196	1445	8	1	82	88	56	34	261
9	4	249	382	230	224	1089	9	2	106	113	98	73	392
10	2	233	309	204	244	992	10	1	147	154	104	93	499
11	5	262	317	201	220	1005	11	2	198	198	114	92	604
12	2	288	325	212	179	1006	12	5	232	177	116	88	618
13	1	252	300	200	217	970	13	5	182	160	92	78	517
14	3	356	360	248	231	1198	14	2	195	201	114	77	589
15	6	494	634	352	315	1801	15	6	226	181	107	88	608
16	7	573	682	411	266	1939	16	6	240	199	96	76	617
17	4	667	647	362	235	1915	17	5	222	197	85	58	567
18	5	551	483	268	145	1452	18	6	214	204	77	64	565
19	4	417	372	207	90	1090	19	4	187	157	95	47	490
20	10	308	262	124	59	763	20	3	157	117	52	24	353
21	8	258	209	93	46	614	21	2	122	86	42	21	273
22	3	238	195	75	28	539	22	2	131	79	38	12	262
23	3	234	181	66	17	501	23	0	134	81	39	17	271
	88	6803	7092	4083	2916	20982		66	3771	2925	1518	1009	9290

NSW CASUALTY FILE (1986-1990)*
 HOUR BY DAY BY AGE GROUP BY YEAR

N=161356

1990													
WEEKDAY							WEEKEND						
	0-16	17-25	26-40	41-55	56-98	Total		0-16	17-25	26-40	41-55	56-98	Total
0	1	85	88	33	9	216	0	3	172	77	20	16	288
1	1	89	53	14	2	159	1	2	149	65	21	2	239
2	3	56	36	13	3	111	2	2	135	59	11	4	211
3	1	59	41	12	6	119	3	0	109	52	8	2	171
4	2	43	31	15	6	97	4	5	68	33	18	9	133
5	1	64	68	44	12	189	5	0	51	29	9	5	94
6	0	209	202	116	47	574	6	0	55	27	19	8	109
7	3	280	312	235	97	927	7	2	67	86	40	20	215
8	5	368	484	307	149	1313	8	2	63	64	41	22	192
9	2	227	368	231	217	1045	9	1	90	100	77	54	322
10	0	223	313	227	225	988	10	1	139	151	108	79	478
11	1	230	269	210	203	913	11	0	164	173	108	82	527
12	4	247	281	176	195	903	12	3	173	180	124	79	559
13	3	259	287	197	173	919	13	3	192	145	85	52	477
14	3	255	358	211	199	1026	14	4	168	164	99	67	502
15	4	486	614	341	277	1722	15	5	182	161	92	69	509
16	6	521	611	349	231	1718	16	4	209	172	99	79	563
17	7	624	593	345	212	1781	17	2	194	183	92	74	545
18	4	473	408	285	131	1301	18	3	174	167	99	57	500
19	7	390	336	181	94	1008	19	2	167	128	75	30	402
20	1	317	216	119	48	701	20	0	118	91	44	23	276
21	4	232	175	78	37	526	21	2	91	80	25	17	215
22	3	196	149	64	26	438	22	3	93	73	38	13	220
23	2	177	151	50	17	397	23	5	112	60	16	4	197
	68	6110	6444	3853	2616	19091		54	3135	2520	1368	867	7944

Missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
LOCAL GOVERNMENT AREA BY AGE GROUP BY YEAR N=161356

		1986				
		0-16	17-25	26-40	41-55	56-98
		Total				
Metro		82	6925	6646	3394	1944
Rural		93	4992	3784	2065	1822
		175	11917	10430	5459	3766

		1987				
		0-16	17-25	26-40	41-55	56-98
		Total				
Metro		64	6778	6914	3638	2139
Rural		85	4721	3782	2093	1924
		149	11499	10696	5731	4063

		1988				
		0-16	17-25	26-40	41-55	56-98
		Total				
Metro		74	6528	6509	3518	2032
Rural		83	4557	3884	2190	1948
		157	11085	10393	5708	3980

		1989				
		0-16	17-25	26-40	41-55	56-98
		Total				
Metro		67	6085	6183	3452	1956
Rural		87	4489	3834	2150	1969
		154	10574	10017	5602	3925

		1990				
		0-16	17-25	26-40	41-55	56-98
		Total				
Metro		61	5333	5503	3228	1741
Rural		61	3912	3461	1993	1742
		122	9245	8964	5221	3483

Number of missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)•
CRASH LOCATION BY AGE GROUP BY YEAR

N = 161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Intersection:						
cross intersection	23	2687	2621	1457	1168	7956
Y-junction	0	92	81	49	36	258
T-junction	26	2737	2558	1339	926	7586
multiple intersection	0	84	75	45	35	239
roundabout	0	88	56	29	24	197
Non-Intersection:						
L-junction	1	6	4	3	1	15
one-way street	0	2	5	1	0	8
two-way undivided street	116	4981	3888	1918	1275	12178
divided road	9	1121	1030	545	258	2963
single carriageway	0	3	1	1	0	5
dual carriageway	0	113	109	72	40	334
other	0	0	0	0	3	3
	175	11914	10428	5459	3766	31742
1987						
	0-16	17-25	26-40	41-55	56-98	Total
Intersection:						
cross intersection	19	2673	2782	1565	1303	8342
Y-junction	2	79	64	39	32	216
T-junction	27	2675	2686	1435	999	7822
multiple intersection	0	98	77	41	40	256
roundabout	1	80	84	31	26	222
Non-Intersection:						
L-junction	1	8	5	0	1	15
one-way street	1	7	6	4	1	19
two-way undivided street	93	4613	3836	1976	1292	11810
divided road	5	1135	1026	576	329	3071
single carriageway	0	3	3	1	2	9
dual carriageway	0	123	121	60	37	341
other	0	5	6	3	1	15
	149	11499	10696	5731	4063	32138

NSW CASUALTY FILE (1986-1990)*
CRASH LOCATION BY AGE GROUP BY YEAR

N = 161356

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
Intersection:						
cross intersection	23	2620	2718	1611	1260	8232
Y-junction	2	78	67	46	24	217
T-junction	24	2563	2445	1373	949	7354
multiple intersection	2	82	91	54	43	272
roundabout	2	75	53	43	31	204
Non-intersection:						
L-junction	0	12	8	3	2	25
one-way street	0	7	2	3	2	14
two-way undivided street	98	4468	3758	1926	1357	11607
divided road	5	1079	1104	569	281	3038
single carriageway	0	0	2	2	1	5
dual carriageway	1	93	141	75	30	340
other	0	8	4	3	0	15
	157	11085	10393	5708	3980	31323

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
Intersection:						
cross intersection	22	2514	2645	1527	1246	7954
Y-junction	1	67	56	34	29	187
T-junction	24	2369	2310	1404	955	7062
multiple intersection	0	77	81	59	36	253
roundabout	1	111	96	47	42	297
Non-intersection:						
L-junction	0	12	10	5	3	30
one-way street	0	4	6	2	1	13
two-way undivided street	97	4229	3583	1847	1295	11051
divided road	9	1028	1044	578	268	2927
single carriageway	0	12	19	13	3	47
dual carriageway	0	141	159	84	45	429
other	0	10	8	2	2	22
	154	10574	10017	5602	3925	30272

NSW CASUALTY FILE (1986-1990)*
CRASH LOCATION BY AGE GROUP BY YEAR

N = 161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Intersection:						
cross intersection	19	2156	2356	1489	1073	7093
Y-junction	0	51	49	38	27	165
T-junction	24	2104	2164	1207	837	6336
multiple intersection	0	64	67	55	30	216
roundabout	3	117	94	48	34	296
Non-intersection:						
L-junction	1	9	5	4	0	19
one-way street	0	10	6	5	3	24
two-way undivided street	67	3680	3131	1722	1140	9740
divided road	7	889	904	561	287	2648
single carriageway	1	21	17	2	5	46
dual carriageway	0	136	164	88	46	434
other	0	8	6	2	1	17
	122	9245	8963	5221	3483	27034

Missing cases for 1986-1990 is 8847

-
- * Frequencies comprise drivers of cars and car derivatives involved in casualty crashes

NSW CASUALTY FILE (1986-1990)*
SPEED LIMIT (KM/H) BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
20			1	2		3
40		7	3	1		11
60	137	9139	8225	4249	2913	24663
80	6	755	638	348	194	1941
100	25	1703	1251	703	538	4220
110		43	59	43	28	173
	168	11647	10177	5346	3673	31011
1987						
	0-16	17-25	26-40	41-55	56-98	Total
20		1	1			2
40		3	6		2	11
60	110	8921	8454	4465	3163	25113
80	8	649	685	355	232	1929
100	27	1575	1237	749	541	4129
110		63	50	30	27	170
	145	11212	10433	5599	3965	31354
1988						
	0-16	17-25	26-40	41-55	56-98	Total
20		1	2		1	4
40		8	2	1	1	12
60	106	8555	8069	4399	3035	24164
80	9	744	700	380	241	2074
100	36	1451	1300	744	584	4115
110		48	83	59	19	209
	151	10807	10156	5583	3881	30578

NSW CASUALTY FILE (1986-1990)*
SPEED LIMIT (KM/H) BY AGE GROUP BY YEAR

N = 161356

1989						
	0-16	17-25	26-40	41-55	56-98	Total
20		1	2	1		4
30			1			1
40		6	11	10	3	30
50			1			1
60	90	8003	7598	4267	2966	22924
70		8	5	5	3	21
80	11	800	748	427	240	2226
90		4	3	2	6	15
100	46	1398	1268	676	581	3969
110		101	107	55	43	306
	147	10321	9744	5443	3842	29497

1990						
	0-16	17-25	26-40	41-55	56-98	Total
20		1	2			3
30		1	2	1		4
40	1	12	6	6	2	27
50			1	1	1	3
60	85	6944	6726	3911	2610	20276
70		37	37	21	7	102
80	6	710	685	464	242	2107
90		10	19	2	5	36
100	25	1206	1129	624	473	3457
110	1	104	131	66	54	356
	118	9025	8738	5096	3394	26371

Missing cases for 1986-1990 is 12545

- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
ADJACENT LAND USE BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Residential	4	459	390	194	156	1203
Industrial	2	191	201	109	71	574
Retail	1	204	229	106	82	622
Rural	7	673	544	283	227	1734
	14	1527	1364	692	536	4133

1987						
	0-16	17-25	26-40	41-55	56-98	Total
Residential	4	278	233	144	106	765
Industrial	1	49	46	29	14	139
Retail	0	130	135	78	62	405
Rural	7	480	390	244	180	1301
	12	937	804	495	362	2610

1988						
	0-16	17-25	26-40	41-55	56-98	Total
Residential	1	216	223	121	91	652
Industrial	0	43	54	28	17	142
Retail	3	137	133	56	45	374
Rural	3	283	259	135	107	787
	7	679	669	340	260	1955

1989						
	0-16	17-25	26-40	41-55	56-98	Total
Residential	1	154	126	75	66	422
Industrial	0	14	18	12	8	52
Retail	0	67	98	67	47	279
Rural	6	201	178	92	85	562
	7	436	420	246	206	1315

NSW CASUALTY FILE (1986-1990)*
ADJACENT LAND USE BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Residential	0	97	114	66	41	318
Industrial	0	4	13	6	5	28
Retail	0	76	88	44	37	245
Rural	3	235	194	118	74	624
	3	412	409	234	157	1215

Missing cases for 1986-1990 is 150128

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
ROAD ALIGNMENT BY AGE GROUP BY YEAR

N=161356

		1986					
		0-16	17-25	26-40	41-55	56-98	Total
Straight		119	9288	8578	4520	3176	25681
Curved		56	2614	1846	937	586	6039
		175	11902	10424	5457	3762	31720

		1987					
		0-16	17-25	26-40	41-55	56-98	Total
Straight		103	9088	8970	4752	3490	26403
Curved		46	2392	1713	975	570	5696
		149	11480	10683	5727	4060	32099

		1988					
		0-16	17-25	26-40	41-55	56-98	Total
Straight		105	8679	8530	4719	3335	25368
Curved		52	2389	1852	982	642	5917
		157	11068	10382	5701	3977	31285

		1989					
		0-16	17-25	26-40	41-55	56-98	Total
Straight		112	8297	8237	4655	3298	24599
Curved		42	2265	1768	934	623	5632
		154	10562	10005	5589	3921	30231

		1990					
		0-16	17-25	26-40	41-55	56-98	Total
Straight Curved		81	7263	7352	4382	2931	22009
		41	1978	1607	836	552	5014
		122	9241	8959	5218	3483	27023

Missing cases for 1986-1990 is 8998

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
ROAD SURFACE TYPE BY AGE BY YEAR

N=161356

		1986				
		0-16	17-25	26-40	41-55	56-98
		Total				
Sealed		148	11437	10153	5331	3670
Unsealed		26	468	271	123	95
		174	11905	10424	5454	3765
						31722
		1987				
		0-16	17-25	26-40	41-55	56-98
		Total				
Sealed		133	11064	10409	5603	3971
Unsealed		16	417	274	125	90
		149	11481	10683	5728	4061
						32102
		1988				
		0-16	17-25	26-40	41-55	56-98
		Total				
Sealed		141	10698	10141	5582	3901
Unsealed		15	376	243	121	78
		156	11074	10384	5703	3979
						31296
		1989				
		0-16	17-25	26-40	41-55	56-98
		Total				
Sealed		130	10213	9748	5463	3827
Unsealed		24	352	265	129	92
		154	10565	10013	5592	3919
						30243
		1990				
		0-16	17-25	26-40	41-55	56-98
		Total				
Sealed		110	8907	8724	5076	3412
Unsealed		12	331	233	140	70
		122	9238	8957	5216	3482
						27015

Missing cases for 1986-1990 is 8978

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

TRAFFIC SIGNAL OPERATION BY AGE BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
On	12	1373	1370	783	485	4023
Off	2	72	73	44	26	217
Nil	161	10471	8986	4631	3253	27502
	175	11916	10429	5458	3764	31742
1987						
	0-16	17-25	26-40	41-55	56-98	Total
On	9	1502	1505	832	556	4404
Off	0	59	59	50	31	199
Nil	140	9936	9129	4849	3476	27530
	149	11497	10693	5731	4063	32133
1988						
	0-16	17-25	26-40	41-55	56-98	Total
On	12	1424	1479	869	539	4323
Off	1	50	53	32	22	158
Nil	144	9610	8859	4806	3419	26838
	157	11084	10391	5707	3980	31319
1989						
	0-16	17-25	26-40	41-55	56-98	Total
On	12	1364	1406	870	507	4159
Off	0	52	73	28	24	177
Nil	142	9156	8534	4703	3393	25928
	154	10572	10013	5601	3924	30264
1990						
	0-16	17-25	26-40	41-55	56-98	Total
On	11	1211	1374	762	465	3823
Off	0	68	65	30	32	195
Nil	111	7964	7523	4429	2985	23012
	122	9243	8962	5221	3482	27030

Missing cases for 1986-1990 is 8868

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
OTHER TRAFFIC CONTROLS BY AGE BY YEAR

N=161356

	1986					Total
	0-16	17-25	26-40	41-55	56-98	
Nil	157	9850	8355	4326	2724	25412
Pedestrian crossing	2	204	197	107	90	600
Stop sign	4	676	737	395	343	2155
Give way sign	12	1141	1099	607	592	3451
Police		8	3	5	2	18
Turn left any time with care		6	5	1	1	13
No right turn		12	8	6	2	28
No left turn			2			2
No U turn		1	1			2
No entry or wrong way		3	5	1		9
Trucks must engage low gear			1	1		2
Rail crossing with flashing signals		1	1			2
Rail crossing with stop sign		2	3	2	2	9
Rail crossing with no signals or stop sign		2	1			3
Road/railway worker			4	3	1	8
Other traffic control		10	6	3	6	25
	175	11916	10428	5457	3763	31739

	1987					Total
	0-16	17-25	26-40	41-55	56-98	
Nil	137	9467	8556	4474	2907	25541
Pedestrian crossing		247	235	137	121	740
Stop sign	5	632	710	441	348	2136
Give way sign	7	1122	1169	657	677	3632
Police		6	1	5	1	13
Turn left any time with care						0
No right turn		9	8	5	5	27
No left turn						0
No U turn		1	2			3
No entry or wrong way			1	1		2
Trucks must engage low gear						0
Rail crossing with flashing signals		1		2		3
Rail crossing with stop sign		5		1	2	8
Rail crossing with no signals or stop sign		1	1	1		3
Road/railway worker		1	1	4		6
Other traffic control		6	8	3	2	19
	149	11498	10692	5731	4063	32133

NSW CASUALTY FILE (1986-1990)*
OTHER TRAFFIC CONTROLS BY AGE BY YEAR

N=161356

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
Nil	135	9004	8323	4426	2870	24758
Pedestrian crossing	3	255	204	132	107	701
Stop sign	5	626	728	456	352	2167
Give way sign	14	1159	1107	675	637	3592
Police		12	11	4	3	30
Turn left any time with care		1	1			2
No right turn		12	2	5	1	20
No left turn						0
No U turn						0
No entry or wrong way		1	1	1		3
Trucks must engage low gear		1				1
Rail crossing with flashing signals		1			2	3
Rail crossing with stop sign		1	3		1	5
Rail crossing with no signals or stop sign		1				1
Road/railway worker		1	4	3	5	13
Other traffic control		9	8	6	2	25
	157	11084	10392	5708	3980	31321

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
Nil	133	8529	7949	4361	2747	23719
Pedestrian crossing	3	249	204	116	113	685
Stop sign	6	591	687	415	363	2062
Give way sign	9	1165	1135	679	679	3667
Police	1	17	13	15	8	54
Turn left any time with care					1	1
No right turn		11	11	5	3	30
No left turn						0
No U turn	1					1
No entry or wrong way		3	1	2	1	7
Trucks must engage low gear						0
Rail crossing with flashing signals		1	2	2		5
Rail crossing with stop sign	1	2	2		3	8
Rail crossing with no signals or stop sign			2	1	1	4
Road/railway worker		4	6	6	3	19
Other traffic control		1	2		1	4
	154	10573	10014	5602	3923	30266

NSW CASUALTY FILE (1986-1990)*
OTHER TRAFFIC CONTROLS BY AGE BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Nil	105	7486	7063	4015	2503	21172
Pedestrian crossing	1	258	250	120	99	728
Stop sign	5	513	584	421	254	1777
Give way sign	10	957	1015	651	611	3244
Police		8	13	2	2	25
Turn left any time with care						0
No right turn		5	18	4	3	30
No left turn						0
No U turn		3	2	2		7
No entry or wrong way		2	5			7
Trucks must engage low gear						0
Rail crossing with flashing signals	1	2		2	2	7
Rail crossing with stop sign		3	4	1	1	9
Rail crossing with no signals or stop sign			2	1	2	5
Road/railway worker		5	7		6	18
Other traffic control		3	1	1		5
	122	9245	8964	5220	3483	27034

Missing cases for 1986-1990 is 8863

* Frequencies comprise drivers of cars and car derivatives involved in casualty crashes

NSW CASUALTY FILE (1986-1990)*
SEX OF DRIVER BY AGE GROUP BY YEAR

N=161356

		1986					
		0-16	17-25	26-40	41-55	56-98	Total
Male		136	8329	6734	3713	2733	21645
Female		39	3587	3693	1745	1033	10097
		175	11916	10427	5458	3766	31742

		1987					
		0-16	17-25	26-40	41-55	56-98	Total
Male		110	7914	6877	3782	2928	21611
Female		38	3582	3816	1946	1134	10516
		148	11496	10693	5728	4062	32127

		1988					
		0-16	17-25	26-40	41-55	56-98	Total
Male		113	7612	6695	3743	2918	21081
Female		43	3466	3693	1964	1062	10228
		156	11078	10388	5707	3980	31309

		1989					
		0-16	17-25	26-40	41-55	56-98	Total
Male		110	7127	6300	3532	2774	19843
Female		44	3442	3709	2065	1148	10408
		154	10569	10009	5597	3922	30251

		1990					
		0-16	17-25	26-40	41-55	56-98	Total
Male		91	6103	5588	3264	2466	17512
Female		31	3139	3372	1955	1016	9513
		122	9242	8960	5219	3482	27025

Missing cases for 1986-1990 is 8902

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
HIGHEST BAC GROUP BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Nil	103	7669	6654	3717	2762	20905
.020-.049 (<i>learner's permit & provisional licence holders</i>)	1	31	6	4		42
.001-.049	11	580	419	208	142	1360
.050-.079	8	191	109	42	30	380
.080-.149	10	576	348	115	55	1104
More than .149	6	655	703	270	101	1735
	139	9702	8239	4356	3090	25526

1987						
	0-16	17-25	26-40	41-55	56-98	Total
Nil	96	7633	7083	4016	3050	21878
.020-.049 (<i>learner's permit & provisional licence holders</i>)	1	27	7	3		38
.001-.049	6	431	383	153	123	1096
.050-.079	6	199	114	39	25	383
.080-.149	9	623	396	140	80	1248
More than .149	9	706	675	273	103	1766
	127	9619	8658	4624	3381	26409

1988						
	0-16	17-25	26-40	41-55	56-98	Total
Nil	111	7812	7227	4278	3137	22565
.020-.049 (<i>learner's permit & provisional licence holders</i>)		26	7	2	2	37
.001-.049	4	360	293	152	115	924
.050-.079	6	200	123	48	27	404
.080-.149	7	596	394	148	86	1231
More than .149	3	626	735	254	109	1727
	131	9620	8779	4882	3476	26888

NSW CASUALTY FILE (1986-1990)*
HIGHEST BAC GROUP BY AGE GROUP BY YEAR

N=161356

	1989					
	0-16	17-25	26-40	41-55	56-98	Total
Nil	98	7461	7003	4100	3090	21752
.020-.049 (<i>learner's permit & provisional licence holders</i>)		30	7	3		40
.001-.049	11	350	262	146	122	891
.050-.079	4	170	105	54	20	353
.080-.149	9	585	395	143	73	1205
More than .149	2	586	662	266	101	1617
	124	9182	8434	4712	3406	25858

	1990					
	0-16	17-25	26-40	41-55	56-98	Total
Nil	83	6657	6472	3876	2761	19849
.020-.049 (<i>learner's permit & provisional licence holders</i>)	2	43	15	3	1	64
.001-.049	0	173	146	71	55	445
.050-.079	4	115	95	43	25	282
.080-.149	5	432	328	111	58	934
More than .149	6	499	528	232	64	1329
	100	7919	7584	4336	2964	22903

Missing cases for 1986-1990 is 33772

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
RESTRAINT USE BY DRIVER BY AGE GROUP BY YEAR
N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Worn	142	11390	9898	5195	3616	30241
Not worn	27	238	275	134	71	745
No restraint fitted	1	43	32	20	21	117
	170	11671	10205	5349	3708	31103
1987						
	0-16	17-25	26-40	41-55	56-98	Total
Worn	131	10982	10150	5461	3894	30618
Not worn	12	209	258	135	80	694
No restraint fitted	3	33	25	17	14	92
	146	11224	10433	5613	3988	31404
1988						
	0-16	17-25	26-40	41-55	56-98	Total
Worn	131	10612	9869	5456	3823	29891
Not worn	16	195	251	128	69	659
No restraint fitted	3	21	21	5	13	63
	150	10828	10141	5589	3905	30613
1989						
	0-16	17-25	26-40	41-55	56-98	Total
Worn	121	10055	9508	5319	3792	28795
Not worn	23	215	237	131	51	657
No restraint fitted	1	23	12	10	8	54
	145	10293	9757	5460	3851	29506
1990						
	0-16	17-25	26-40	41-55	56-98	Total
Worn	104	8786	8452	4958	3333	25633
Not worn	9	176	230	108	73	596
No restraint fitted	1	17	20	10	6	54
	114	8979	8702	5076	3412	26283

Missing cases for 1986-1990 is 12447

- * Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
STATUS OF LICENCE BY AGE GROUP BY YEAR

N=161356

	1986					Total
	0-16	17-25	26-40	41-55	56-98	
Learner permit	49	146	33	4	1	233
Provisional	18	2290	220	31	12	2571
Standard	5	8615	9458	5172	3611	26861
Non-licensed	99	482	284	65	18	948
Other/police		100	117	46	31	294
	171	11633	10112	5318	3673	30907

	1987					Total
	0-16	17-25	26-40	41-55	56-98	
Learner permit	54	132	18	7	2	213
Provisional	17	2276	228	30	8	2559
Standard	2	8276	9794	5451	3888	27411
Non-licensed	70	380	232	52	18	752
Other/police		53	43	23	16	135
	143	11117	10315	5563	3932	31070

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
Learner permit	50	157	29	5	1	242
Provisional	26	2283	242	41	9	2601
Standard	1	7934	9569	5434	3840	26778
Non-licensed	78	393	246	51	28	796
Other/police		68	65	26	12	171
	155	10835	10151	5557	3890	30588

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
Learner permit	50	114	27	2	2	195
Provisional	16	2287	233	36	12	2584
Standard	2	7565	9295	5385	3829	26076
Non-licensed	80	377	240	67	13	777
Other/police		83	91	46	19	239
	148	10426	9886	5536	3875	29871

NSW CASUALTY FILE (1986-1990)*
STATUS OF LICENCE BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Learner permit	40	91	26	9	3	169
Provisional	18	1907	248	38	10	2221
Standard	1	6608	8168	5011	3371	23159
Non-licensed	56	371	275	51	18	771
Other/police		87	97	28	40	252
	115	9064	8814	5137	3442	26572

Missing cases for 1986-1990 is 12348

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

N=161356

YEARS DRIVING EXPERIENCE BY AGE GROUP BY YEAR

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Less than 1	93	1876	160	19	4	2152
1	3	940	104	12	2	1061
2	1	2071	235	30	7	2344
3	1	1543	171	44	12	1771
4	1	1260	182	41	7	1491
5		1154	334	62	12	1562
More than 5		2105	8467	4954	3500	19026
	99	10949	9653	5162	3544	29407

1987						
	0-16	17-25	26-40	41-55	56-98	Total
Less than 1	100	1864	168	18	7	2157
1	4	817	79	14	1	915
2	1	2064	224	44	11	2344
3		1560	177	30	10	1777
4		1192	169	31	6	1398
5		1137	293	57	13	1500
More than 5		2033	8769	5172	3733	19707
	105	10667	9879	5366	3781	29798

1988						
	0-16	17-25	26-40	41-55	56-98	Total
Less than 1	86	1898	171	29	4	2188
1	6	882	96	18	3	1005
2		1826	199	36	10	2071
3		1420	175	33	7	1635
4		1180	182	27	5	1394
5		1044	273	36	8	1361
More than 5		1945	8343	5058	3636	18982
	92	10195	9439	5237	3673	28636

NSW CASUALTY FILE (1986-1990)*

N=161356

YEARS DRIVING EXPERIENCE BY AGE GROUP BY YEAR

1989						
	0-16	17-25	26-40	41-55	56-98	Total
Less than 1	81	1850	170	19	6	2126
1	5	1113	112	24	8	1262
2		1605	190	43	3	1841
3	1	1319	174	36	16	1546
4	1	1042	159	34	10	1246
5		1066	283	48	5	1402
More than 5		1802	8067	4959	3604	18432
	88	9797	9155	5163	3652	27855

1990						
	0-16	17-25	26-40	41-55	56-98	Total
Less than 1	73	1457	159	22	4	1715
1	6	961	107	14	3	1091
2	1	1491	159	32	4	1687
3		1259	177	32	10	1478
4		953	152	22	13	1140
5		881	232	38	4	1155
More than 5		1502	7090	4653	3199	16444
	80	8504	8076	4813	3237	24710

Missing cases for 1986-1990 is 20950

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
STATE OF LICENCE ISSUE BY AGE GROUP BY YEAR

N=161356

	1986					Total
	0-16	17-25	26-40	41-55	56-98	
New South Wales	63	10751	9583	5181	3528	29106
Queensland		161	142	50	51	404
Victoria		140	128	61	78	407
ACT	1	119	79	42	30	271
South Australia		37	46	11	11	105
Western Australia		25	12	2	4	43
Northern Territory		1	5	6		12
Tasmania		8	2		2	12
Overseas	1	34	27	12	2	76
	65	11276	10024	5365	3706	30436

	1987					Total
	0-16	17-25	26-40	41-55	56-98	
New South Wales	72	10471	9901	5416	3842	29702
Queensland		157	132	57	58	404
Victoria		133	129	71	76	409
ACT		107	83	46	16	252
South Australia	1	34	34	18	8	95
Western Australia		12	12	3	3	30
Northern Territory		4	11			15
Tasmania		8	4	3	1	16
Overseas		29	26	14	11	80
	73	10955	10332	5628	4015	31003

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
New South Wales	77	10100	9548	5354	3731	28810
Queensland		159	142	77	43	421
Victoria		158	186	81	105	530
ACT		94	88	53	25	260
South Australia		36	37	16	17	106
Western Australia		16	19	10	1	46
Northern Territory		5	4			9
Tasmania		8	6	3	3	20
Overseas		37	43	15	7	102
	77	10613	10073	5609	3932	30304

NSW CASUALTY FILE (1986-1990)*
STATE OF LICENCE ISSUE BY AGE GROUP BY YEAR

N=161356

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
New South Wales	68	9658	9278	5265	3698	27967
Queensland	1	142	154	68	63	428
Victoria		159	131	84	73	447
ACT		92	69	38	23	222
South Australia		32	30	15	19	96
Western Australia		15	14	5	6	40
Northern Territory		3	2	3	1	9
Tasmania		3	4	2		9
Overseas		38	50	27	7	122
	69	10142	9732	5507	3890	29340

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
New South Wales	61	8369	8213	4917	3264	24824
Queensland		165	148	71	64	448
Victoria		128	137	78	63	406
ACT		81	71	39	16	207
South Australia		22	29	17	17	85
Western Australia		19	22	6	2	49
Northern Territory		1	3	2		6
Tasmania		9	7	2	1	19
Overseas		33	41	12	15	101
	61	8827	8671	5144	3442	26145

Missing cases for 1986-1990 is 14128

- * Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

NUMBER OF OCCUPANTS BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
1	56	6242	5589	3114	2145	17146
2	75	3384	2464	1405	1244	8572
3	20	1214	1153	478	202	3067
4	13	640	699	250	99	1701
5	10	262	287	118	38	715
More than 5	1	87	138	51	8	285
	175	11829	10330	5416	3736	31486

1987						
	0-16	17-25	26-40	41-55	56-98	Total
1	40	6016	5875	3253	2312	17496
2	67	3225	2464	1488	1339	8583
3	27	1204	1115	504	236	3086
4	10	624	711	278	120	1743
5	3	258	314	106	29	710
More than 5	1	82	121	45	8	257
	148	11409	10600	5674	4044	31875

1988						
	0-16	17-25	26-40	41-55	56-98	Total
1	51	5866	5577	3304	2270	17068
2	56	3155	2468	1382	1300	8361
3	20	1111	1146	495	242	3014
4	21	565	679	292	122	1679
5	5	229	291	135	18	678
More than 5	1	65	124	45	8	243
	154	10991	10285	5653	3960	31043

1989						
	0-16	17-25	26-40	41-55	56-98	Total
1	32	5572	5425	3247	2242	16518
2	55	3035	2409	1398	1286	8183
3	34	1007	1024	484	224	2773
4	19	554	641	235	106	1555
5	8	203	286	132	28	657
More than 5	4	74	112	39	7	236
	152	10445	9897	5535	3893	29922

NSW CASUALTY FILE (1986-1990)*

NUMBER OF OCCUPANTS BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
1	26	5007	4989	3061	1992	15075
2	44	2542	2074	1300	1155	7115
3	36	925	911	459	212	2543
4	10	446	545	235	66	1302
5	3	174	261	76	20	534
More than 5	2	56	88	34	3	183
	121	9150	8868	5165	3448	26752

Missing cases for 1986-1990 is 10278

-
- * Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

N=161356

STATED SPEED OF VEHICLE (KM/H) BY AGE GROUP BY YEAR

1986						
	0-16	17-25	26-40	41-55	56-98	Total
0 - 20	23	2978	3446	2176	1625	10248
21 - 40	26	1765	1762	959	689	5201
41 - 60	50	4184	3234	1366	794	9628
61 - 80	21	1131	702	354	228	2436
81 - 100	10	710	454	229	127	1530
Over 100	4	62	32	6	6	110
Excessive	4	31	5	4		44
	138	10861	9635	5094	3469	29197

1987						
	0-16	17-25	26-40	41-55	56-98	Total
0 - 20	27	2819	3688	2178	1789	10501
21 - 40	16	1664	1734	1003	736	5153
41 - 60	50	4166	3206	1499	836	9757
61 - 80	20	1045	683	370	253	2371
81 - 100	7	641	446	215	121	1430
Over 100	3	67	43	8	4	125
Excessive	5	16	8	3		32
	128	10418	9808	5276	3739	29369

1988						
	0-16	17-25	26-40	41-55	56-98	Total
0 - 20	19	2702	3456	2140	1679	9996
21 - 40	27	1585	1645	954	702	4913
41 - 60	42	3979	3176	1534	859	9590
61 - 80	23	1040	683	368	238	2352
81 - 100	12	632	496	252	161	1553
Over 100	8	68	48	13	4	141
Excessive	1	44	27	3		75
	132	10050	9531	5264	3643	28620

NSW CASUALTY FILE (1986-1990)*

N = 161356

STATED SPEED OF VEHICLE (KM/H) BY AGE GROUP BY YEAR

1989						
	0-16	17-25	26-40	41-55	56-98	Total
0 - 20	25	2513	3281	2163	1590	9572
21 - 40	28	1509	1531	871	712	4651
41 - 60	35	3715	3034	1520	851	9155
61 - 80	26	1048	702	360	250	2386
81 - 100	7	596	490	255	183	1531
Over 100	8	85	43	11	11	158
Excessive	3	38	16	8	4	69
	132	9504	9097	5188	3601	27522

1990						
	0-16	17-25	26-40	41-55	56-98	Total
0 - 20	23	2266	2936	2007	1464	8696
21 - 40	21	1328	1386	809	595	4139
41 - 60	31	3215	2711	1415	751	8123
61 - 80	14	916	631	358	227	2146
81 - 100	4	540	454	219	130	1347
Over 100	5	81	39	15	6	146
Excessive	1	36	22	7	3	69
	99	8382	8179	4830	3176	24666

Missing cases for 1986-1990 is 21982

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

YEAR OF VEHICLE MANUFACTURE BY AGE GROUP BY YEAR

1986						
	0-16	17-25	26-40	41-55	56-98	Total
1986-1990	2	251	315	188	105	861
1981-1985	46	3187	3648	2188	1380	10449
1976-1980	43	3659	3118	1493	1017	9330
1971-1975	46	2948	2064	973	680	6711
1970 and earlier	26	1152	717	311	347	2553
	163	11197	9862	5153	3529	29904

1987						
	0-16	17-25	26-40	41-55	56-98	Total
1986-1990	10	656	1078	657	356	2757
1981-1985	23	2876	3580	2034	1410	9923
1976-1980	38	3615	2935	1504	1076	9168
1971-1975	47	2739	1805	912	649	6152
1970 and earlier	21	909	619	294	309	2152
	139	10795	10017	5401	3800	30152

1988						
	0-16	17-25	26-40	41-55	56-98	Total
1986-1990	14	1126	1620	1003	578	4341
1981-1985	38	2877	3303	2008	1348	9574
1976-1980	48	3306	2674	1388	982	8398
1971-1975	36	2316	1593	751	565	5261
1970 and earlier	9	776	481	207	265	1738
	145	10401	9671	5357	3738	29312

1989						
	0-16	17-25	26-40	41-55	56-98	Total
1986-1990	12	1447	2189	1338	768	5754
1981-1985	40	2698	3036	1813	1219	8806
1976-1980	39	2977	2376	1247	928	7567
1971-1975	36	2031	1319	591	504	4481
1970 and earlier	8	627	387	212	219	1453
	135	9780	9307	5201	3638	28061

YEAR OF VEHICLE MANUFACTURE BY AGE GROUP BY YEAR

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
1986-1990	23	1724	2512	1656	909	6824
1981-1985	24	2442	2567	1507	1089	7629
1976-1980	24	2467	1947	1060	686	6184
1971-1975	28	1505	931	452	362	3278
1970 and earlier	7	431	287	127	161	1013
	106	8569	8244	4802	3207	24928

Missing cases for 1986-1990 is 18999

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
NATURAL LIGHTING BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Dawn	1	189	145	99	56	490
Daylight	88	7030	6939	4008	3115	21180
Dusk	7	523	410	190	133	1263
Darkness	78	4157	2920	1147	455	8757
	174	11899	10414	5444	3759	31690
1987						
	0-16	17-25	26-40	41-55	56-98	Total
Dawn	2	175	204	96	54	531
Daylight	73	6546	7225	4177	3273	21294
Dusk	7	503	451	230	170	1361
Darkness	67	4246	2799	1221	560	8893
	149	11470	10679	5724	4057	32079
1988						
	0-16	17-25	26-40	41-55	56-98	Total
Dawn	3	197	187	106	54	547
Daylight	85	6267	6860	4091	3216	20519
Dusk	3	551	466	256	172	1448
Darkness	65	4048	2860	1252	535	8760
	156	11063	10373	5705	3977	31274
1989						
	0-16	17-25	26-40	41-55	56-98	Total
Dawn	1	214	197	136	53	601
Daylight	84	5995	6528	4018	3153	19778
Dusk	7	504	425	232	143	1311
Darkness	62	3830	2842	1202	568	8504
	154	10543	9992	5588	3917	30194

NSW CASUALTY FILE (1986-1990)*
NATURAL LIGHTING BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Dawn	2	174	160	88	51	475
Daylight	68	5284	6040	3802	2816	18010
Dusk	3	500	402	245	136	1286
Darkness	48	3269	2341	1072	477	7207
	121	9227	8943	5207	3480	26978

Missing cases for 1986-1990 is 9141

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
STREET LIGHTING BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
On	68	3548	2597	1033	441	7687
Off	56	5655	5732	3279	2502	17224
Nil	51	2691	2076	1126	817	6761
	175	11894	10405	5438	3760	31672
1987						
	0-16	17-25	26-40	41-55	56-98	Total
On	53	3631	2530	1149	581	7944
Off	45	5350	6042	3357	2623	17417
Nil	51	2469	2098	1205	847	6670
	149	11450	10670	5711	4051	32031
1988						
	0-16	17-25	26-40	41-55	56-98	Total
On	44	3433	2576	1137	524	7714
Off	53	5082	5631	3304	2489	16559
Nil	60	2538	2163	1252	956	6969
	157	11053	10370	5693	3969	31242
1989						
	0-16	17-25	26-40	41-55	56-98	Total
On	41	3296	2510	1099	543	7489
Off	51	4833	5266	3260	2436	15846
Nil	62	2408	2214	1231	930	6845
	154	10537	9990	5590	3909	30180
1990						
	0-16	17-25	26-40	41-55	56-98	Total
On	34	2869	2092	1008	478	6481
Off	48	4226	4823	3067	2175	14339
Nil	39	2123	2018	1130	823	6133
	121	9218	8933	5205	3476	26953

Missing cases for 1986-1990 is 9278

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
VIEW BY AGE GROUP BY YEAR

N=161356

		1986					
		0-16	17-25	26-40	41-55	56-98	Total
Open		163	11259	9834	5144	3568	29968
Obscured		11	622	571	293	187	1684
		174	11881	10405	5437	3755	31652

		1987					
		0-16	17-25	26-40	41-55	56-98	Total
Open		142	10904	10110	5404	3859	30419
Obscured		7	529	542	303	187	1568
		149	11433	10652	5707	4046	31987

		1988					
		0-16	17-25	26-40	41-55	56-98	Total
Open		147	10501	9798	5357	3776	29579
Obscured		9	535	553	320	192	1609
		156	11036	10351	5677	3968	31188

		1989					
		0-16	17-25	26-40	41-55	56-98	Total
Open		149	10009	9435	5259	3719	28571
Obscured		5	525	537	321	190	1578
		154	10534	9972	5580	3909	30149

		1990					
		0-16	17-25	26-40	41-55	56-98	Total
Open		119	8668	8372	4881	3280	25320
Obscured		2	539	554	319	188	1602
		121	9207	8926	5200	3468	26922

Missing cases for 1986-1990 is 9458

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

N=161356

ROAD SURFACE CONDITION BY AGE GROUP BY YEAR

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Wet	25	2189	1984	1049	622	5869
Dry	148	9659	8379	4375	3123	25684
Snow/ice	0	15	19	10	4	48
	173	11863	10382	5434	3749	31601
1987						
	0-16	17-25	26-40	41-55	56-98	Total
Wet	24	2450	2226	1227	732	6659
Dry	125	8985	8415	4474	3310	25309
Snow/ice	0	8	7	8	4	27
	149	11443	10648	5709	4046	31995
1988						
	0-16	17-25	26-40	41-55	56-98	Total
Wet	26	2621	2448	1316	756	7167
Dry	129	8415	7900	4361	3205	24010
Snow/ice	0	8	8	6	1	23
	155	11044	10356	5683	3962	31200
1989						
	0-16	17-25	26-40	41-55	56-98	Total
Wet	30	2528	2278	1253	801	6890
Dry	123	7993	7694	4312	3107	23229
Snow/ice	0	12	11	6	2	31
	153	10533	9983	5571	3910	30150
1990						
	0-16	17-25	26-40	41-55	56-98	Total
Wet	25	2320	2119	1209	696	6369
Dry	96	6887	6803	3989	2774	20549
Snow/ice	0	8	13	4	6	31
	121	9215	8935	5202	3476	26949

Missing cases for 1986-1990 is 9461

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
MANOEUVRES OF UNIT BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Stationary:						
in traffic	3	650	1027	643	262	2585
other	0	42	61	25	14	142
Moving along roadway:						
proceeding along lane	136	8407	7044	3494	2314	21395
on incorrect side of road	9	711	461	205	141	1527
other	3	213	181	84	84	565
Turning/reversing:						
turning right out of own lane	9	1239	1054	637	654	3593
other	15	655	602	371	297	1940
	175	11917	10430	5459	3766	31747
1987						
	0-16	17-25	26-40	41-55	56-98	Total
Stationary:						
in traffic	5	636	1095	638	307	2681
other	1	31	59	32	14	137
Moving along roadway:						
proceeding along lane	104	7992	6945	3633	2469	21143
on incorrect side of road	22	977	628	290	192	2109
other	0	166	164	80	74	484
Turning/reversing:						
turning right out of own lane	11	1165	1145	694	705	3720
other	6	532	660	364	302	1864
	149	11499	10696	5731	4063	32138
1988						
	0-16	17-25	26-40	41-55	56-98	Total
Stationary:						
in traffic	2	582	1048	620	305	2557
other	0	32	68	39	10	149
Moving along roadway:						
proceeding along lane	114	7699	6916	3688	2423	20840
on incorrect side of road	18	882	553	265	206	1924
other	3	178	150	71	74	476
Turning/reversing:						
turning right out of own lane	12	1164	1036	671	657	3540
other	8	548	622	354	305	1837
	157	11085	10393	5708	3980	31323

NSW CASUALTY FILE (1986-1990)*
MANOEUVRES OF UNIT BY AGE GROUP BY YEAR

N=161356

1989						
	0-16	17-25	26-40	41-55	56-98	Total
Stationary:						
in traffic	3	576	961	653	261	2454
other	2	31	54	35	17	139
Moving along roadway:						
proceeding along lane	105	7431	6683	3524	2457	20200
on incorrect side of road	19	738	508	252	181	1698
other	2	166	155	77	73	473
Turning/reversing:						
turning right out of own lane	13	1106	1024	673	650	3466
other	10	526	632	388	286	1842
	154	10574	10017	5602	3925	30272
1990						
	0-16	17-25	26-40	41-55	56-98	Total
Stationary:						
in traffic	2	514	905	603	257	2281
other	1	28	62	47	28	166
Moving along roadway:						
proceeding along lane	87	6613	5956	3394	2168	18218
on incorrect side of road	9	531	392	185	146	1263
other	4	130	137	69	60	400
Turning/reversing:						
turning right out of own lane	11	974	941	558	543	3027
other	8	455	571	365	281	1680
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8841

* Frequencies comprise drivers of cars and car derivatives involved in casualty crashes

NSW CASUALTY FILE (1986-1990)*
ROAD USER MOVEMENT BY AGE GROUP BY YEAR

N=161356

	1986					Total
	0-16	17-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
near side	1	461	450	193	161	1266
emerging		154	169	74	44	441
far side	2	314	267	129	64	776
other	5	126	84	46	37	288
Vehicles from adjacent directions						0
(intersections only)						0
cross traffic	14	1468	1511	866	757	4616
right near	4	693	616	316	293	1922
other	3	194	209	102	92	600
Vehicles from opposing directions						
head on (not overtaking)	12	965	1062	543	290	2872
right thru	7	1175	1075	632	454	3343
other		13	14	8	2	37
Vehicles from same direction						0
- same lane						0
rear end	13	1623	1751	990	494	4871
right rear	3	356	371	195	115	1040
left rear		71	71	45	18	205
- parallel lanes						0
lane change right (not overtaking)	2	90	104	47	23	266
other	2	238	234	159	81	714
Manoeuvring						0
u-turn		258	187	130	112	687
emerging from driveway	1	147	148	101	66	463
other	4	147	138	86	63	438
Overtaking						
overtake turning	1	129	96	39	40	305
other	1	89	76	45	31	242
On path						
parked	4	152	124	42	43	365
other	1	118	117	55	25	316
Off path, on straight						
off carriageway to left (rollover)		108	56	37	24	225
left off carriageway into object/parked vehicle	31	752	427	156	127	1493
right off carriageway into object/parked vehicle	18	411	205	71	58	763
other	5	172	121	33	30	361
Off path, on curve or turning						
off carriageway to left on right bend	8	118	57	20	19	220
off carriageway, left on right bend into object/parked vehicle	15	459	239	74	59	846
off carriageway, right on right bend into object/parked vehicle	11	216	105	54	24	410
off carriageway, right on left bend into object/parked vehicle	4	201	85	35	31	356
off carriageway, left on left bend into object/parked vehicle	2	199	102	49	31	383
other	3	252	109	69	45	478
Passengers/miscellaneous		44	45	17	13	119
	175	11913	10425	5459	3766	31737

NSW CASUALTY FILE (1986-1990)*
ROAD USER MOVEMENT BY AGE GROUP BY YEAR

N=161356

	1987					Total
	0-16	17-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
near side	5	489	480	256	165	1395
emerging	1	138	174	85	50	448
far side	1	256	276	128	80	741
other	3	117	111	69	36	326
Vehicles from adjacent directions (Intersections only)						
cross traffic	9	1365	1510	882	810	4576
right near	9	677	713	410	334	2143
other	1	179	182	107	84	553
Vehicles from opposing directions						
head on (not overtaking)	10	997	1004	590	280	2881
right thru	5	1247	1198	628	517	3595
other		3	4	3	1	11
Vehicles from same direction						
- same lane						
rear and	14	1534	1791	967	562	4868
right rear		426	396	210	135	1167
left rear		50	85	46	26	207
- parallel lanes						
lane change right (not overtaking)		85	96	52	27	260
other	3	227	254	167	94	745
Manoeuvring						
u-turn	4	235	201	103	111	654
emerging from driveway		167	183	106	71	507
other	3	151	159	66	63	442
Overtaking						
overtake turning		96	89	45	34	264
other	1	64	42	32	19	158
On path						
parked	4	133	91	28	33	289
other	2	100	123	74	28	327
Off path, on straight						
off carriageway to left (rollover)	5	81	64	26	19	195
left off carriageway into object/parked vehicle	16	743	464	197	161	1581
right off carriageway into object/parked vehicle	15	415	227	91	64	812
other	6	151	92	41	32	322
Off path, on curve or turning						
off carriageway to left on right bend	3	79	62	13	17	174
off carriageway, left on right bend into object/parked vehicle	10	502	230	116	75	933
off carriageway, right on right bend into object/parked vehicle	6	216	100	50	29	401
off carriageway, right on left bend into object/parked vehicle	6	183	78	40	30	337
off carriageway, left on left bend into object/parked vehicle	2	173	91	50	35	351
other	5	163	101	47	29	345
Passengers/miscellaneous		54	42	14	12	122
	149	11496	10893	5729	4063	32130

NSW CASUALTY FILE (1986-1990)*
ROAD USER MOVEMENT BY AGE GROUP BY YEAR

N=161356

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
near side	6	445	420	257	159	1287
emerging	1	125	141	92	46	405
far side	1	270	314	137	75	797
other	2	110	111	39	32	294
Vehicles from adjacent directions (intersections only)						
cross traffic	10	1311	1467	922	777	4487
right near	5	668	614	376	287	1950
other	1	143	142	92	71	449
Vehicles from opposing directions						
head on (not overtaking)	10	931	1069	587	318	2915
right thru	9	1202	1059	606	500	3376
other		3	6	7	2	18
Vehicles from same direction						
- same lane						
rear end	12	1402	1699	938	539	4590
right rear	2	370	412	243	144	1171
left rear		63	78	38	31	210
- parallel lanes						
lane change right (not overtaking)		116	91	55	32	294
other	2	234	270	151	106	763
Manoeuvring						
u-turn	4	206	202	98	102	612
emerging from driveway	3	178	190	94	80	545
other	1	139	123	76	65	404
Overtaking						
overtake turning	1	113	91	56	25	286
other	2	93	85	58	35	273
On path						
parked		139	89	30	24	282
other	1	113	122	75	26	337
Off path, on straight						
off carriageway to left (rollover)	4	79	50	30	26	189
left off carriageway into object/parked vehicle	21	734	491	187	157	1590
right off carriageway into object/parked vehicle	17	407	226	85	61	796
other	4	134	78	40	41	297
Off path, on curve or turning						
off carriageway to left on right bend	4	80	45	30	12	171
off carriageway, left on right bend into object/parked vehicle	10	484	260	106	70	930
off carriageway, right on right bend into object/parked vehicle	5	188	93	47	27	360
off carriageway, right on left bend into object/parked vehicle	6	188	100	34	35	374
off carriageway, left on left bend into object/parked vehicle	5	162	109	44	31	351
other	7	203	110	58	31	409
Passengers/miscellaneous	1	39	35	20	12	108
	157	11082	10393	5706	3980	31320

NSW CASUALTY FILE (1986-1990)*
ROAD USER MOVEMENT BY AGE GROUP BY YEAR

N=161356

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
near side	2	437	435	216	140	1230
emerging	1	109	139	71	36	356
far side	1	259	259	136	81	736
other	2	119	96	53	36	306
Vehicles from adjacent directions (Intersections only)						
cross traffic	10	1244	1412	835	760	4261
right near	5	642	619	398	311	1975
other	4	155	174	117	91	541
Vehicles from opposing directions						
head on (not overtaking)	12	909	1012	575	308	2816
right thru	9	1118	1062	646	476	3311
other		7	4	2		13
Vehicles from same direction						
- same lane						
rear end	5	1336	1591	1004	502	4438
right rear		391	438	255	151	1235
left rear		65	60	33	18	176
- parallel lanes						
lane change right (not overtaking)		93	103	56	33	285
other	2	253	265	141	97	758
Manoeuvring						
u-turn	4	192	180	107	103	586
emerging from driveway	1	142	155	87	78	463
other	3	126	155	83	68	435
Overtaking						
overtake turning		95	95	53	29	272
other	2	76	77	30	22	207
On path						
parked	1	141	90	42	36	310
other		108	119	54	34	315
Off path, on straight						
off carriageway to left (rollover)	3	94	54	35	27	213
left off carriageway into object/parked vehicle	23	666	437	189	142	1427
right off carriageway into object/parked vehicle	21	362	197	66	82	728
other	4	152	77	41	38	312
Off path, on curve or turning						
off carriageway to left on right bend	4	78	48	29	16	175
off carriageway, left on right bend into object/parked vehicle	14	503	253	83	80	933
off carriageway, right on right bend into object/parked vehicle	5	173	99	33	26	336
off carriageway, right on left bend into object/parked vehicle	7	179	107	37	33	363
off carriageway, left on left bend into object/parked vehicle	1	166	64	50	27	308
other	5	147	108	48	31	339
Passengers/miscellaneous	3	37	33	27	13	113
	154	10574	10017	5602	3925	30272

NSW CASUALTY FILE (1986-1990)*
ROAD USER MOVEMENT BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-96	
Pedestrian on foot or in toy/pram						
near side	5	415	400	179	133	1132
emerging		91	123	68	45	327
far side		270	253	136	74	733
other	1	93	90	59	26	269
Vehicles from adjacent directions (Intersections only)						
cross traffic	11	1071	1205	810	643	3740
right near	5	547	585	384	271	1792
other	2	147	169	119	78	515
Vehicles from opposing directions						
head on (not overtaking)	8	774	859	485	263	2389
right thru	4	1010	1027	548	425	3014
other		11	4	3		18
Vehicles from same direction						
- same lane						
rear end	3	1189	1376	933	475	3976
right rear	2	322	366	230	124	1044
left rear		53	80	39	21	193
- parallel lanes						
lane change right (not overtaking)	1	69	75	35	27	207
other	3	191	226	131	72	623
Manoeuvring						
u-turn	3	196	157	92	85	533
emerging from driveway	1	133	133	91	80	438
other	3	96	123	69	56	347
Overtaking						
overtake turning	1	61	72	41	18	193
other	1	69	71	41	32	214
On path						
parked	1	69	86	31	30	217
other		97	119	81	50	347
Off path, on straight						
off carriageway to left (rollover)	1	91	55	27	16	190
left off carriageway into object/parked vehicle	16	602	364	167	127	1296
right off carriageway into object/parked vehicle	10	318	189	80	75	672
other	5	127	81	48	19	280
Off path, on curve or turning						
off carriageway to left on right bend	1	84	50	33	25	193
off carriageway, left on right bend into object/parked vehicle	13	418	248	83	60	822
off carriageway, right on right bend into object/parked vehicle	8	149	92	35	27	311
off carriageway, right on left bend into object/parked vehicle	4	164	95	32	33	328
off carriageway, left on left bend into object/parked vehicle	3	138	87	36	24	288
other	3	144	76	38	41	302
Passengers/miscellaneous	3	36	28	17	8	92
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8862

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
FIRST IMPACT TYPE BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Vehicle/vehicle:						
head-on	12	1005	1103	568	308	2996
right angle	22	2502	2484	1385	1208	7601
nose-tail	16	2063	2203	1233	634	6149
other angle	24	2414	2142	1205	866	6651
Vehicle/other:						
object	80	2151	1124	433	313	4101
pedestrian	8	1054	970	442	306	2780
animal	0	41	31	20	9	101
train/aeroplane	0	8	6	2	3	19
rollover	13	639	330	157	112	1251
Person/object	0	22	19	8	6	55
	175	11899	10412	5453	3765	31704
1987						
	0-16	17-25	26-40	41-55	56-98	Total
Vehicle/vehicle:						
head-on	11	1032	1022	607	293	2965
right angle	19	2388	2568	1505	1299	7779
nose-tail	14	2015	2278	1229	726	6262
other angle	24	2392	2265	1182	921	6784
Vehicle/other:						
object	55	2141	1160	520	390	4266
pedestrian	10	1000	1041	528	331	2910
animal	1	30	30	21	6	88
train/aeroplane	0	7	5	2	1	15
rollover	15	455	304	128	91	993
Person/object	0	36	20	6	4	66
	149	11496	10693	5728	4062	32128

NSW CASUALTY FILE (1986-1990)*
FIRST IMPACT TYPE BY AGE GROUP BY YEAR

N=161356

1988						
	0-16	17-25	26-40	41-55	56-98	Total
Vehicle/vehicle:						
head-on	11	981	1111	621	333	3057
right angle	19	2300	2413	1484	1215	7431
nose-tail	14	1848	2205	1225	719	6011
other angle	22	2387	2152	1168	904	6633
Vehicle/other:						
object	60	2068	1195	502	376	4201
pedestrian	10	950	986	525	312	2783
animal	0	43	28	15	4	90
train/aeroplane	0	2	7	2	3	14
rollover	20	483	277	158	110	1048
Person/object	1	20	18	8	3	50
	157	11082	10392	5708	3979	31318
1989						
	0-16	17-25	26-40	41-55	56-98	Total
Vehicle/vehicle:						
head-on	12	946	1060	594	315	2927
right angle	20	2183	2360	1437	1240	7240
nose-tail	5	1803	2096	1295	677	5876
other angle	22	2194	2127	1202	882	6427
Vehicle/other:						
object	70	2002	1109	414	387	3982
pedestrian	6	924	929	476	293	2628
animal	0	47	30	16	12	105
train/aeroplane	1	5	4	2	2	14
rollover	17	450	287	153	111	1018
Person/object	1	18	15	13	6	53
	154	10572	10017	5602	3925	30270

NSW CASUALTY FILE (1986-1990)*
FIRST IMPACT TYPE BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Vehicle/vehicle:						
head-on	8	808	898	509	276	2499
right angle	19	1898	2092	1404	1072	6485
nose-tail	6	1572	1833	1205	626	5242
other angle	22	1912	1961	1056	792	5743
Vehicle/other:						
object	50	1708	1010	433	323	3524
pedestrian	6	869	866	442	278	2461
animal	0	27	33	16	10	86
train/aeroplane	1	1	4	2	3	11
rollover	8	423	252	147	99	929
Person/object	2	27	15	7	4	55
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8901

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
TYPE OF OBJECT IMPACTED BY AGE GROUP BY YEAR
N=161356

	1986					Total
	0-16	17-25	26-40	41-55	56-98	
Guardrail/fence	7	342	157	83	71	660
Utility pole/traffic signal pole	29	743	398	137	96	1403
Embankments/cuttings, rocky outcrops, etc	10	419	220	107	92	848
Trees or bushes	24	498	265	96	67	950
Other fixed objects	13	408	219	104	78	822
Non-fixed objects	1	17	29	9	2	58
Animals	0	42	31	20	9	102
No object	91	9448	9111	4903	3351	26904
	175	11917	10430	5459	3766	31747

	1987					Total
	0-16	17-25	26-40	41-55	56-98	
Guardrail/fence	3	281	185	83	67	619
Utility pole/traffic signal pole	12	717	360	143	95	1327
Embankments/cuttings, rocky outcrops, etc	6	385	233	127	76	827
Trees or bushes	26	501	241	116	94	978
Other fixed objects	11	398	208	99	92	808
Non-fixed objects	0	25	33	6	6	70
Animals	1	31	30	23	6	91
No object	90	9161	9406	5134	3627	27418
	149	11499	10696	5731	4063	32138

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
Guardrail/fence	6	312	177	78	60	633
Utility pole/traffic signal pole	15	702	413	142	93	1365
Embankments/cuttings, rocky outcrops, etc	11	322	214	109	73	729
Trees or bushes	19	491	255	100	90	955
Other fixed objects	12	391	228	130	101	862
Non-fixed objects	0	28	19	16	16	79
Animals	0	44	25	14	4	87
No object	94	8794	9062	5119	3543	26612
	157	11084	10393	5708	3980	31322

NSW CASUALTY FILE (1986-1990)*
TYPE OF OBJECT IMPACTED BY AGE GROUP BY YEAR
N=161356

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
Guardrail/fence	6	282	195	85	60	628
Utility pole/traffic signal pole	17	678	372	108	111	1286
Embankments/cuttings, rocky outcrops, etc	10	340	189	85	87	711
Trees or bushes	26	494	245	91	90	946
Other fixed objects	15	353	248	99	112	827
Non-fixed objects	0	23	15	13	4	55
Animals	1	45	28	15	10	99
No object	79	8359	8725	5106	3451	25720
	154	10574	10017	5602	3925	30272

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Guardrail/fence	9	255	175	82	68	589
Utility pole/traffic signal pole	11	577	294	120	86	1088
Embankments/cuttings, rocky outcrops, etc	5	258	170	82	69	584
Trees or bushes	16	450	243	96	86	891
Other fixed objects	13	308	194	110	74	699
Non-fixed objects	1	27	27	12	7	74
Animals	0	25	31	14	10	80
No object	67	7345	7830	4705	3083	23030
	122	9245	8964	5221	3483	27035

Missing cases for 1986-1990 is 8842

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*

FACTORS/ERRORS OF UNIT BY AGE GROUP BY YEAR

N=161356

	1986					Total
	0-16	17-25	26-40	41-55	56-98	
Driver with physical infirmity/chronic illness			2	4		6
Driver with sudden illness		27	20	8	46	101
Driver asleep/drowsy/fatigued		130	58	30	28	246
Driver distracted/vision obscured by:						0
passenger	1	8	4	2	3	18
something inside vehicle	1	33	18	7	5	64
something outside vehicle	2	135	121	60	32	350
Emergency vehicle within earshot	1	7	4	2	0	14
This car skidding/sliding	6	210	111	64	41	432
Driver error in manipulation of controls	1	8	4	7	7	27
Driver swerving to avoid:						0
another vehicle		320	228	78	43	669
object		11	6	3	1	21
animal	1	159	80	37	12	289
any other reason	2	38	25	13	7	85
Driver overtaking:						0
on left		9	8	5	4	26
on right		93	47	24	22	186
Driver turning right from wrong lane		11	7	3	12	33
Driver turning left from wrong lane		6	11	4	7	28
This car disobeyed traffic control	11	936	855	554	732	3088
This car dangerously parked				1		1
This car braking hard	1	38	18	18	8	83
This car excessively speeding	4	43	21	6		74
Driver/passenger jumping/falling from vehicle		18	13	6	2	39
Parked/stationary vehicle:						0
slipping		1	1		2	4
open door impacted		20	35	13	6	74
Equipment failures or faults:						0
brakes	1	21	17	4	2	45
steering		17	9	5	5	36
tyres (blow out or thrown tread)	2	177	88	47	34	348
smooth tyre tread		9		1		10
wheel, axle or suspension	1	9	6	2	2	20
towing or coupling fault/separation			5	2	3	10
headlamp		4	1			5
rearlamp or clearance lamp						
insecure or projecting load		1	1			2
vehicle overloaded						
other vehicle failure or fault		23	10	8	3	44
Police describe "loss of control"	61	1304	605	228	162	2360
Did not stop after accident	8	99	61	28	5	201
No relevant factors	71	7992	7927	4185	2530	22705
	175	11917	10427	5459	3766	31744

NSW CASUALTY FILE (1986-1990)*

FACTORS/ERRORS OF UNIT BY AGE GROUP BY YEAR

N=161356

	1987					
	0-16	17-25	26-40	41-55	56-98	Total
Driver with physical infirmity/chronic illness		3	1	2	3	9
Driver with sudden illness		26	29	23	31	109
Driver asleep/drowsy/fatigued	2	127	60	29	22	240
Driver distracted/vision obscured by:						0
passenger		4	7		1	12
something inside vehicle		32	19	4	11	66
something outside vehicle		149	154	63	38	404
Emergency vehicle within earshot		8	2	1	1	12
This car skidding/sliding	2	175	100	50	43	370
Driver error in manipulation of controls	1	8	4	2	7	22
Driver swerving to avoid:						0
another vehicle	3	256	190	90	44	583
object	1	3	5	4	1	14
animal	1	134	71	27	11	244
any other reason	1	16	5	6	2	30
Driver overtaking:						0
on left		16	14	3	1	34
on right	1	83	39	21	17	161
Driver turning right from wrong lane		11	12	6	6	35
Driver turning left from wrong lane		5	10	4	4	23
This car disobeyed traffic control	8	888	852	563	722	3033
This car dangerously parked						0
This car braking hard		19	20	14	3	56
This car excessively speeding	6	45	15	2	2	70
Driver/passenger jumping/falling from vehicle		27	12	3	3	45
Parked/stationary vehicle:						0
slipping		2	1	1	1	5
open door impacted	1	7	41	24	8	81
Equipment failures or faults:						0
brakes		12	8		6	26
steering		9	9	3		21
tyres (blow out or thrown tread)	2	110	84	48	45	289
smooth tyre tread		6	4	1	1	12
wheel, axle or suspension		5	1		2	8
towing or coupling fault/separation		3	3	4	1	11
headlamp		4				4
rearlamp or clearance lamp		3				
insecure or projecting load		1		1		2
vehicle overloaded						
other vehicle failure or fault		14	9	8	6	37
Police describe "loss of control"	32	1287	644	291	169	2423
Did not stop after accident	2	93	61	19	19	194
No relevant factors	86	7905	8208	4413	2831	23443
	149	11496	10694	5730	4062	32131

NSW CASUALTY FILE (1986-1990)*

FACTORS/ERRORS OF UNIT BY AGE GROUP BY YEAR

N=161356

	1988					Total
	0-16	17-25	26-40	41-55	56-98	
Driver with physical infirmity/chronic illness		2	3	2	5	12
Driver with sudden illness		20	27	20	42	109
Driver asleep/drowsy/fatigued	3	107	64	26	36	236
Driver distracted/vision obscured by:						0
passenger		1	4	2		7
something inside vehicle	1	34	24	6	6	71
something outside vehicle	2	173	196	113	55	539
Emergency vehicle within earshot	1	5	3	3	2	14
This car skidding/sliding	3	180	102	61	32	378
Driver error in manipulation of controls	1	12	9	4	6	32
Driver swerving to avoid:						0
another vehicle	2	251	138	74	36	501
object		6	6	2	2	16
animal	1	149	65	24	8	247
any other reason		15	13	2	3	33
Driver overtaking:						0
on left		13	6	2	1	22
on right	2	106	63	30	23	224
Driver turning right from wrong lane		5	11	6	7	29
Driver turning left from wrong lane		8	4	2	8	22
This car disobeyed traffic control	9	903	771	587	699	2969
This car dangerously parked	0	0	0	0	0	0
This car braking hard		17	24	18	7	66
This car excessively speeding	1	49	21			71
Driver/passenger jumping/falling from vehicle	1	16	13	7	2	39
Parked/stationary vehicle:						0
slipping		1	2			3
open door impacted		11	42	23	6	82
Equipment failures or faults:						0
brakes		15	7	5	1	28
steering		15	4	4	3	26
tyres (blow out or thrown tread)		92	59	39	25	215
smooth tyre tread		9		2		11
wheel, axle or suspension	1	10	6	2	2	21
towing or coupling fault/separation		4	5	2		11
headlamp		2			1	3
rearlamp or clearance lamp					1	1
insecure or projecting load		1			1	2
vehicle overloaded			1			1
other vehicle failure or fault		9	9		2	20
Police describe "loss of control"	52	1292	669	283	195	2491
Did not stop after accident	3	95	46	6	9	159
No relevant factors	74	7457	7974	4349	2754	22608
	157	11085	10391	5706	3980	31319

NSW CASUALTY FILE (1986-1990)*
FACTORS/ERRORS OF UNIT BY AGE GROUP BY YEAR

N=161356

	1989					Total
	0-16	17-25	26-40	41-55	56-98	
Driver with physical infirmity/chronic illness			5	1		6
Driver with sudden illness		17	21	20	42	100
Driver asleep/drowsy/fatigued	2	107	51	24	28	212
Driver distracted/vision obscured by:						0
passenger		7	2			9
something inside vehicle		52	26	9	10	97
something outside vehicle	4	180	193	109	50	536
Emergency vehicle within earshot	3	13	13	4		33
This car skidding/sliding	3	173	105	62	46	389
Driver error in manipulation of controls		5	5		5	15
Driver swerving to avoid:						0
another vehicle	1	211	149	70	48	479
object		9	3	2		14
animal		101	62	23	17	203
any other reason		16	25	4	4	49
Driver overtaking:						0
on left		22	5	6	3	36
on right		92	59	25	23	199
Driver turning right from wrong lane		6	12	7	6	31
Driver turning left from wrong lane		3	2	2	3	10
This car disobeyed traffic control	10	851	810	507	701	2879
This car dangerously parked						0
This car braking hard	1	48	46	12	13	120
This car excessively speeding	1	32	23	3	2	61
Driver/passenger jumping/falling from vehicle	1	16	11	12	1	41
Parked/stationary vehicle:						0
slipping	1	1	1		1	4
open door impacted		14	36	20	7	77
Equipment failures or faults:						0
brakes		13	9	4	3	29
steering	1	9	3	3	1	17
tyres (blow out or thrown tread)		79	65	38	25	207
smooth tyre tread		3	2			5
wheel, axle or suspension		7	4	2	2	15
towing or coupling fault/separation		3	1			4
headlamp		3	3	1	1	8
rearlamp or clearance lamp			1			
insecure or projecting load			3			3
vehicle overloaded						
other vehicle failure or fault		9	1		4	14
Police describe "loss of control"	52	1233	647	266	200	2398
Did not stop after accident	5	70	52	15	8	150
No relevant factors	69	7168	7559	4350	2669	21815
	154	10573	10015	5601	3923	30266

NSW CASUALTY FILE (1986-1990)*

FACTORS/ERRORS OF UNIT BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Driver with physical infirmity/chronic illness			3	2	2	7
Driver with sudden illness		26	37	16	53	132
Driver asleep/drowsy/fatigued		121	58	29	31	239
Driver distracted/vision obscured by:						0
passenger		4	6			10
something inside vehicle	1	54	25	11	9	100
something outside vehicle	1	161	163	91	68	484
Emergency vehicle within earshot	3	15	8	1	5	32
This car skidding/sliding	5	176	115	52	38	386
Driver error in manipulation of controls	0	13	6	3	2	24
Driver swerving to avoid:						0
another vehicle	4	187	137	78	32	438
object		4	6	3	3	16
animal	1	108	54	27	13	203
any other reason	2	11	13	11	8	45
Driver overtaking:						0
on left		12	8	8	2	30
on right		61	46	22	18	147
Driver turning right from wrong lane		9	5	7	5	26
Driver turning left from wrong lane		5	6	4	3	18
This car disobeyed traffic control	12	746	714	513	604	2589
This car dangerously parked						0
This car braking hard	1	43	41	23	17	125
This car excessively speeding	2	45	17	2	2	68
Driver/passenger jumping/falling from vehicle	1	26	15	7	2	51
Parked/stationary vehicle:						0
slipping			2			2
open door impacted	1	15	29	23	17	85
Equipment failures or faults:						0
brakes		11	13	4	6	34
steering		10	2	2	2	16
tyres (blow out or thrown tread)		72	60	34	27	193
smooth tyre tread		4	2	2		8
wheel, axle or suspension		7	9	2	2	20
towing or coupling fault/separation			1		1	2
headlamp		2	2		1	5
rearlamp or clearance lamp		1				
insecure or projecting load		1				1
vehicle overloaded						
other vehicle failure or fault		6	5	11	9	31
Police describe "loss of control"	36	1180	641	261	168	2286
Did not stop after accident	2	92	47	24	9	174
No relevant factors	50	6016	6668	3947	2323	19004
	122	9244	8964	5220	3482	27032

Missing cases (including cases coded as "jackknifing") is 8864

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1990)*
LEGAL ACTION BY AGE GROUP BY YEAR

N=161356

1986						
	0-16	17-25	26-40	41-55	56-98	Total
Driving offence:						
negligent driving	57	3138	1897	908	701	6701
disobey traffic lights	2	180	155	78	97	512
drive contrary to stop sign	1	255	243	159	226	884
drive contrary to give way sign	6	351	341	254	350	1302
not make turn with safety	3	467	378	275	256	1379
not give way - terminating street	1	148	114	55	74	392
other	5	398	341	199	233	1176
Licence offences	5	51	25	8	4	93
Registration and number plate offences		5	7	2		14
Heavy vehicles		1	2	1		4
Equipment		11	4	2	1	18
Miscellaneous		22	41	18	5	86
Indictment codes:						
culpable driving	5	197	75	32	13	
PCA - lower range	2	126	63	11	15	217
PCA - middle range	7	374	189	55	18	643
PCA - higher range	3	404	440	134	60	1041
other	44	301	138	43	15	541
No legal action	34	5484	5972	3224	1697	16411
	175	11913	10425	5458	3765	31736

1987						
	0-16	17-25	26-40	41-55	56-98	Total
Driving offence:						
negligent driving	53	2959	1913	959	764	6648
disobey traffic lights		192	150	89	95	526
drive contrary to stop sign	2	214	230	177	217	840
drive contrary to give way sign	2	348	359	252	367	1338
not make turn with safety	2	466	437	273	310	1488
not give way - terminating street	2	124	128	70	84	408
other	4	395	328	196	217	1140
Licence offences	4	33	25	7	2	71
Registration and number plate offences		4	1	1		6
Heavy vehicles				1		1
Equipment		7	1	3		11
Miscellaneous	1	17	47	22	9	96
Indictment codes:						
culpable driving	7	190	108	41	27	373
PCA - lower range	3	125	61	12	10	211
PCA - middle range	6	422	228	54	27	737
PCA - higher range	6	444	399	144	63	1056
other	25	277	132	43	26	503
No legal action	32	5279	6137	3385	1845	16678
	149	11496	10694	5729	4063	32131

NSW CASUALTY FILE (1986-1990)*
LEGAL ACTION BY AGE GROUP BY YEAR

N=161356

1988						
	0-16	17-25	26-40	41-55	56-98	Total
Driving offences:						
negligent driving	65	2943	1906	933	780	6627
disobey traffic lights		178	144	101	68	491
drive contrary to stop sign	1	223	240	178	229	871
drive contrary to give way sign	3	368	285	239	326	1221
not make turn with safety	6	454	397	256	299	1412
not give way - terminating street	1	117	97	73	67	355
other	4	366	310	170	209	1059
Licence offences	2	31	21	6	4	64
Registration and number plate offences		7	7	1		15
Heavy vehicles					3	3
Equipment		15	10	4	1	30
Miscellaneous		24	43	27	7	101
Indictment codes:						0
culpable driving	6	143	87	27	23	286
PCA - lower range	4	127	61	24	11	227
PCA - middle range	6	397	226	58	33	720
PCA - higher range	1	396	448	148	57	1048
other	29	257	126	30	16	458
No legal action	29	4982	5942	3411	1818	16182
	157	11028	10348	5686	3951	31170

1989						
	0-16	17-25	26-40	41-55	56-98	Total
Driving offences:						
negligent driving	65	2863	1856	910	802	6496
disobey traffic lights		154	135	93	85	467
drive contrary to stop sign	1	221	245	150	211	828
drive contrary to give way sign	3	337	288	203	337	1168
not make turn with safety	6	443	397	258	275	1379
not give way - terminating street		105	87	85	77	354
other	1	329	281	188	195	994
Licence offences	13	57	22	16	7	115
Registration and number plate offences	1	8	6	3	1	19
Heavy vehicles		1	3		1	5
Equipment		7	4	1	2	14
Miscellaneous		25	43	21	7	96
Indictment codes:						
culpable driving	6	120	64	17	12	219
PCA - lower range	3	99	51	21	9	183
PCA - middle range	5	387	207	72	32	703
PCA - higher range	3	371	429	149	46	998
other	14	195	115	28	8	360
No legal action	32	4821	5764	3379	1811	15807
	153	10543	9997	5594	3918	30205

NSW CASUALTY FILE (1986-1990)*
LEGAL ACTION BY AGE GROUP BY YEAR

N=161356

	1990					Total
	0-16	17-25	26-40	41-55	56-98	
Driving offence:						
negligent driving	53	2556	1532	884	706	5831
disobey traffic lights	1	132	146	82	85	446
drive contrary to stop sign	1	205	200	154	149	709
drive contrary to give way sign	5	259	248	208	309	1029
not make turn with safety		417	381	234	241	1273
not give way - terminating street	1	105	95	55	63	319
other	4	288	225	135	155	817
Licence offences	7	37	36	6	1	87
Registration and number plate offences		6	3	2		11
Heavy vehicles		1	1			2
Equipment		5	3	1	2	11
Miscellaneous		20	25	24	15	84
Indictment codes:						0
culpable driving	6	116	59	22	16	219
PCA - lower range	3	72	54	16	15	160
PCA - middle range	3	304	177	48	21	553
PCA - higher range	3	318	319	120	39	799
other	9	196	111	30	10	356
No legal action	25	4184	5232	3192	1632	14265
	121	9221	8947	5213	3469	26971

Missing cases for 1986-1990 is 9143

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

3 NSW CASUALTY FILE (1986-1989) - DAY/NIGHT COMPARISONS

Bivariate analyses which examined the similarities and differences between drivers of various age groups involved in reported casualty crashes in NSW for the years 1986 to 1990 were reported in an earlier chapter of this report. There are numerous ways in which the data can be analyzed and an important consideration is any age group differences arising as a result of the time of day, given the increased risk of night-time driving relative to driving during the day. The current chapter re-examines the casualty crash data with the following modifications:

- 'day' was operationally defined as the period between 6.00 am and 5.59 pm while 'night' was defined as the period between 6.00 pm and 5.59 am
- the analyses were conducted on the combined years of 1986 to 1989. These years were selected as they were common to the NSW, Victorian and South Australian databases and enable the reader to make some direct comparisons between the three states.

Drivers in the 17-25 age group are referred to as 'young drivers'. All 'not known' cases (eg not known age group, not known day of week, etc) were collapsed with other missing cases. Missing and unknown cases make up approximately 5% of the total sample for most variables. The results have been presented in the form of tables and pie charts which can be found in Section 3.2.

3.1 INTERPRETATION OF PIE CHARTS

The day/night comparisons revealed that young drivers were most commonly involved in 30-32% of reported daytime casualty crashes (mode = 31%) and 39-48% of night-time crashes (mode = 46%).

What information can be gleaned from these graphs? As an example, the graphs on crash severity illustrates that young drivers make up 30% of drivers involved in fatal daytime crashes and 45% of drivers involved in fatal night-time crashes (see table and pie charts (pp 105-107). The total number of drivers involved in fatality crashes during the day (n=1951) was greater than the total number of drivers involved in fatality crashes at night (n=1556). Young drivers, however, showed an increase in numbers in fatal night-time crashes (day: n=581; night: n=701.) Hence, in absolute terms, there was about a 50% increase in the number of young drivers involved in fatal night-time crashes.

The proportion of drivers involved in fatal crashes, however, form only 3% of all drivers involved in reported casualty crashes.

Similar proportions are observed in young drivers involved in daytime (32%) and night-time (45%) treated injury crashes. The actual number of drivers involved in such night-time crashes (n=26783), however, is far less than the number of drivers involved in similar daytime crashes (n=65879). Care must be taken, therefore, in interpreting proportions resulting from different sample sizes because an apparently large proportional increase may actually address far fewer crashes.

Ratio comparisons between drivers involved in fatal, admitted injury and treated injury crashes occurring during the day with the corresponding night-time crashes is another way of interpreting results. The number of young drivers involved in daytime crashes resulting in a fatality is 581 while young drivers involved in admitted injury crashes number 5599. This gives a ratio of 1:10. Where night-time crashes are concerned, the number of young drivers involved in fatal crashes is 701, while young drivers involved in admitted injury crashes number 5295; giving a ratio of 1:8. This difference between daytime and night-time ratios between fatal and admitted injury crashes clearly indicates that the probability of young drivers being involved in fatal crashes relative to admitted injury crashes at night is greater than during the day. This finding may explain an increase in the representation of young drivers in night-time fatal crashes.

There are a few points to keep in mind when interpretation of these results are made:

- It is necessary to note the sample size or the number of cases present when making comparisons between pie charts. For example, when making day/night comparisons, in most cases, the sample size of drivers involved in night-time crashes is less than those of drivers involved in daytime crashes, despite the higher proportion of young drivers involved in night-time crashes.
- The number of years that make up each age group differ. For example, young drivers (17-25 years) covers nine years while the 26-40 age group covers 15 years. Thus, similar proportions between these age groups indicate an over-involvement of young drivers of almost two per year of age.
- The increase in young driver proportions involved in night-time crashes may be a result of any of the following reasons:
 - young drivers allocate a higher proportion of their total driving to night-time driving, and/or young drivers having a greater propensity to engage in risky driving behaviour at night
 - older drivers allocate a lower proportion of their total driving to night-time driving, and/or older drivers tend to engage in safe driving behaviour at night.

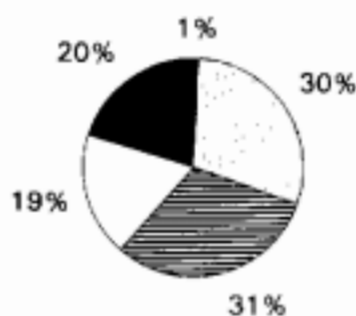
Hence, the over-involvement of one age group may be a result of a relative under-involvement of other age groups.

3.2 PIE CHARTS AND TABLES - NSW CASUALTY CRASH DATA (1986-1989)

Variables and page numbers are listed here for the convenience of the reader:

	Page
Crash degree	101
Number of traffic units	104
Number of persons injured	107
Number of persons killed	110
Day of week	113
Weekday vs weekend	114
Local government area	116
Crash location	118
Speed limit	122
Adjacent land use	124
Alignment of road	127
Road surface	129
Traffic signal operation	131
Other traffic controls	134
Sex of driver	138
Highest BAC group	140
Seatbelt wearing by driver	143
Status of licence	146
Years of driving experience	148
State of licence	150
Number of occupants	152
Stated speed of vehicle	155
Year of vehicle manufacture	158
Natural light	162
Street lighting	165
View	168
Road surface conditions	170
Manoeuvres of unit	173
Road user movement	176
First impact type	181
Object impacted	184
Factors/errors of this unit	186
Legal action	191

Day - fatal (n = 1951)



Night - fatal (n = 1556)



Day - admitted injury (n = 18244)



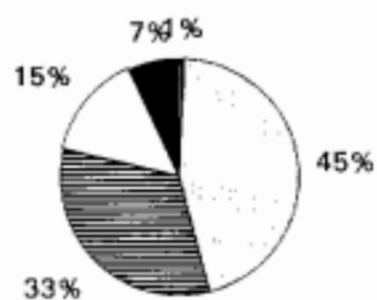
Night - admitted injury (n = 11067)



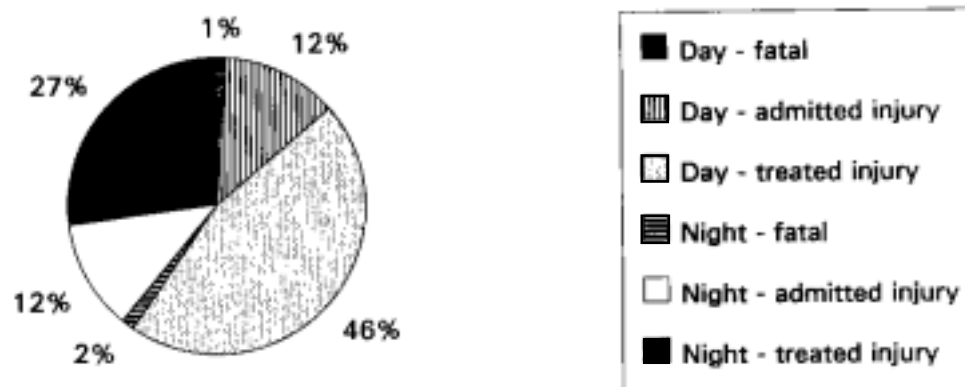
Day - treated injury (n = 65879)



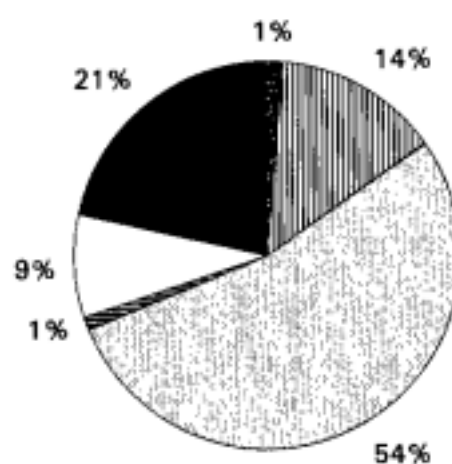
Night - treated injury (n = 26783)



17-25 years (n = 45075)



26-40 years (n = 41536)



NSW CASUALTY FILE (1986-1989) •
CRASH DEGREE BY AGE GROUP

N = 13273

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Fatal	11	581	606	362	391	1951
Admitted Injury	106	5599	5787	3527	3225	18244
Treated Injury	209	20782	22275	13070	9543	65879
Total	326	26962	28668	16959	13159	86074

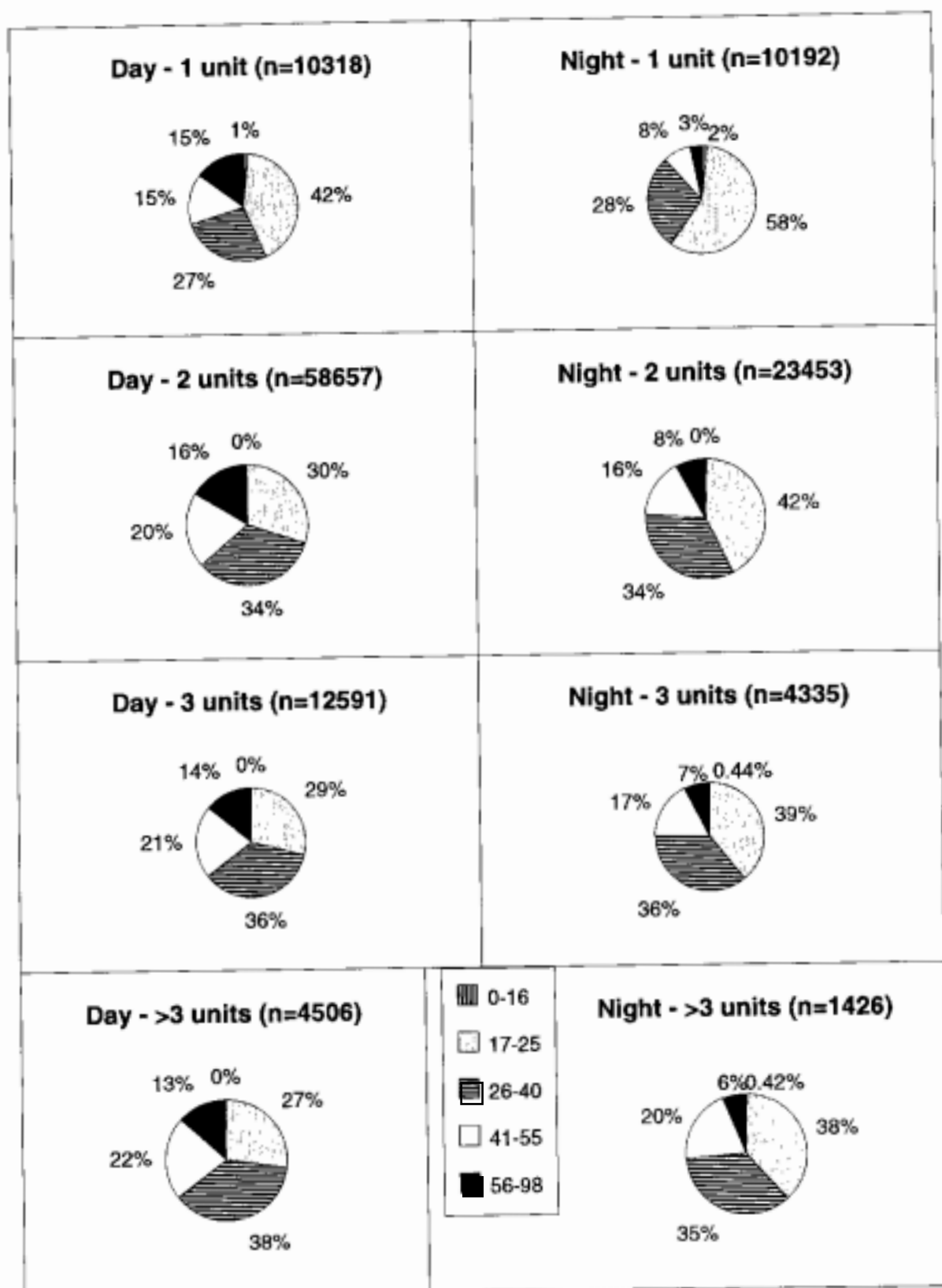
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
Fatal	10	701	515	210	120	1556
Admitted Injury	135	5295	3529	1440	668	11067
Treated Injury	164	12117	8824	3891	1787	26783
Total	309	18113	12868	5541	2575	39406

Missing cases = 7259

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
NUMBER OF TRAFFIC UNITS BY AGE GROUP

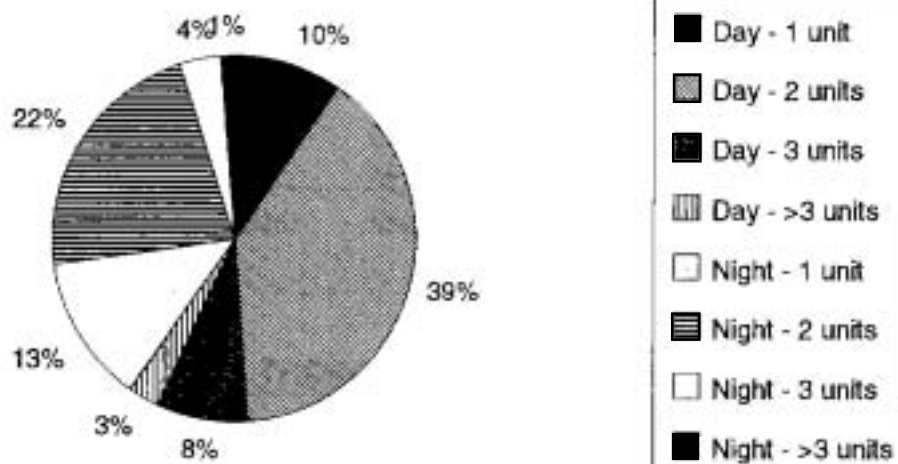
N=132739



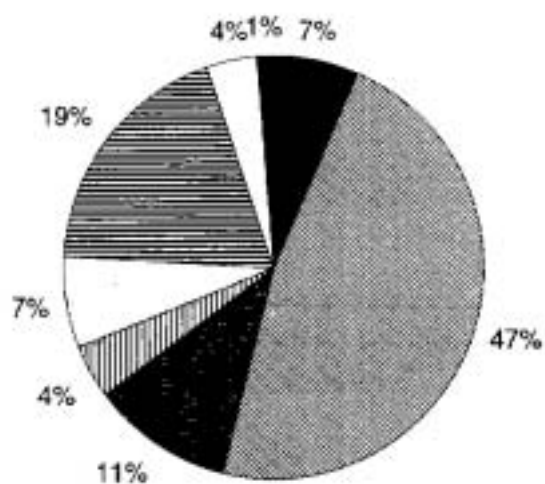
NSW CASUALTY FILE (1986-1989)
NUMBER OF TRAFFIC UNITS BY AGE GROUP

N=132739

17-25 years (n=45075)



26-40 years (n=41535)



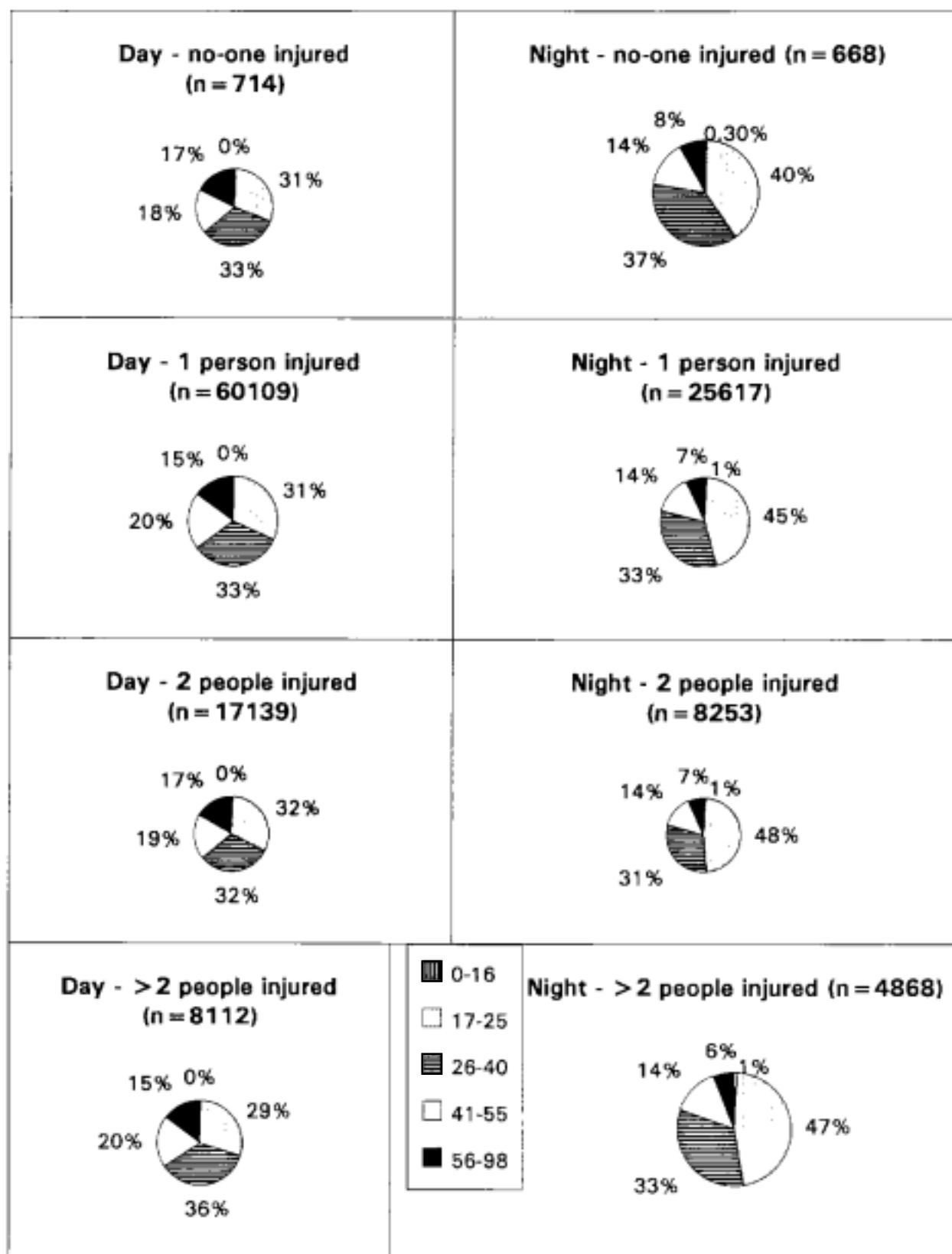
NSW CASUALTY FILE (1986-1989) *
NUMBER OF TRAFFIC UNITS BY AGE GROUP

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
1	148	4351	2762	1550	1507	10318
2	153	17751	19704	11725	9324	58657
3	20	3646	4500	2698	1727	12591
4	5	899	1203	684	427	3218
5		227	356	196	117	896
More than 5		88	143	106	57	394
Total	326	26962	28668	16959	13159	86074

NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
1	180	5953	2880	845	334	10192
2	104	9939	7911	3660	1839	23453
3	19	1679	1571	751	315	4335
4	6	388	368	203	58	1023
5		115	96	56	20	287
More than 5		39	42	26	9	116
Total	309	18113	12868	5541	2575	39406

Missing cases = 7259

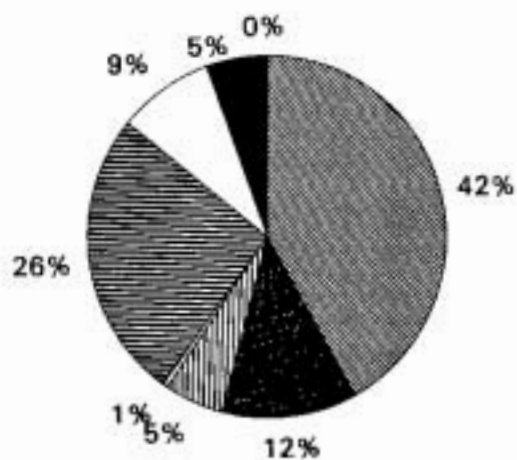
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



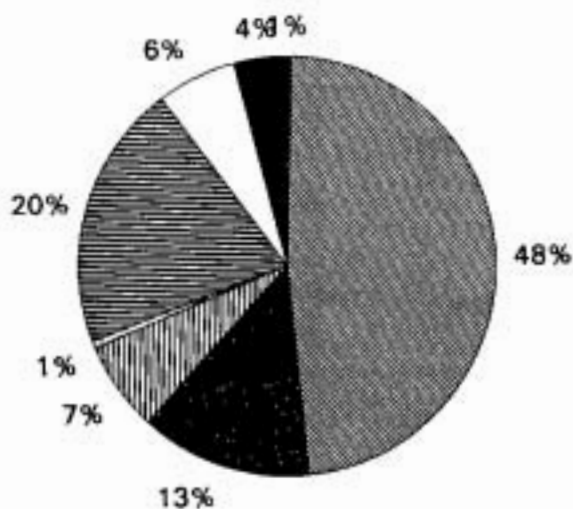
NSW CASUALTY FILE (1986-1989)
NUMBER OF PERSONS INJURED BY AGE GROUP OF DRIVER

N = 132739

17-25 years (n = 45075)



26-40 years (n = 41536)



NSW CASUALTY FILE (1986-1989) *

NUMBER OF PERSONS INJURED BY AGE GROUP OF DRIVER

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
0	3	219	237	132	123	714
1	211	18869	20052	11967	9010	60109
2	76	5482	5463	3272	2846	17139
3	22	1376	1555	925	686	4564
4	10	650	757	393	304	2114
More than 4	4	366	604	270	190	1434
Total	326	26962	28668	16959	13159	86074

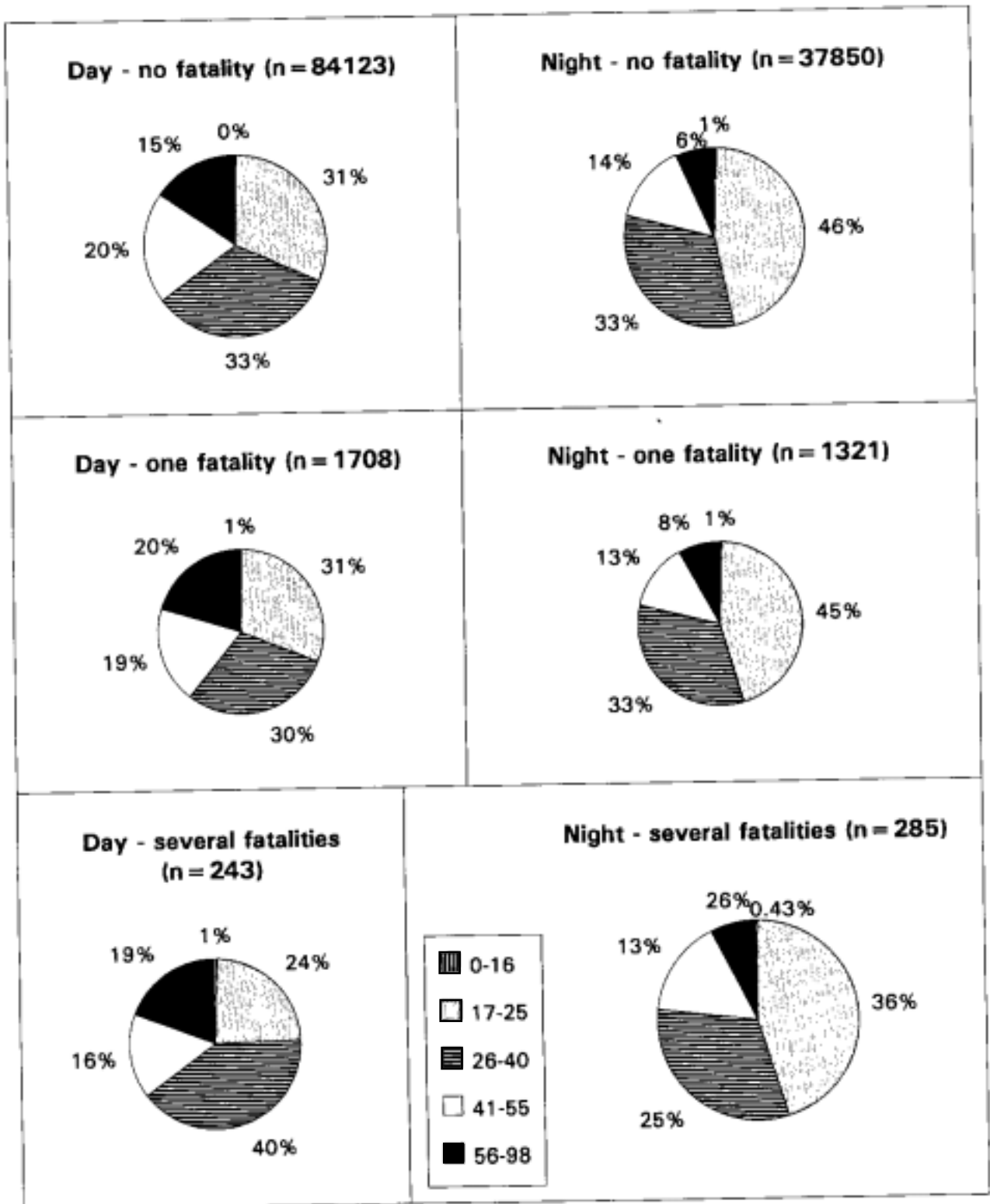
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
0	2	269	250	94	53	668
1	177	11596	8486	3649	1709	25617
2	76	3977	2526	1133	541	8253
3	34	1267	841	354	153	2649
4	12	598	445	168	71	1294
More than 4	8	406	320	143	48	925
Total	309	18113	12868	5541	2575	39406

Missing cases = 7259

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
NUMBER OF PERSONS KILLED BY AGE GROUP OF DRIVER

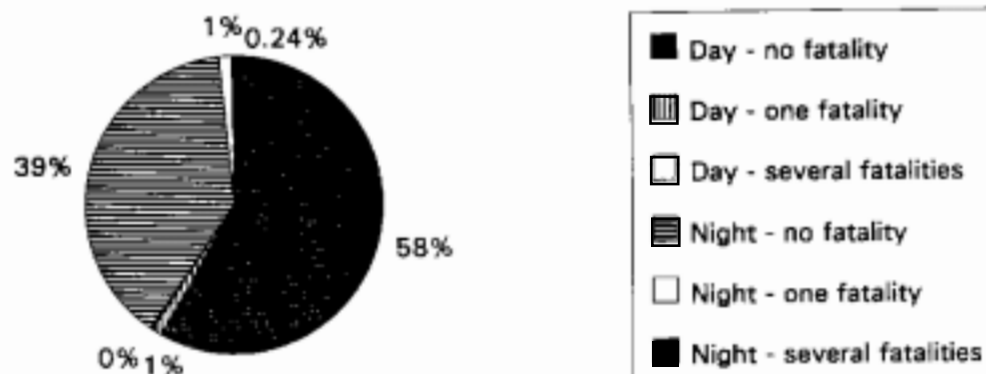
N = 132739



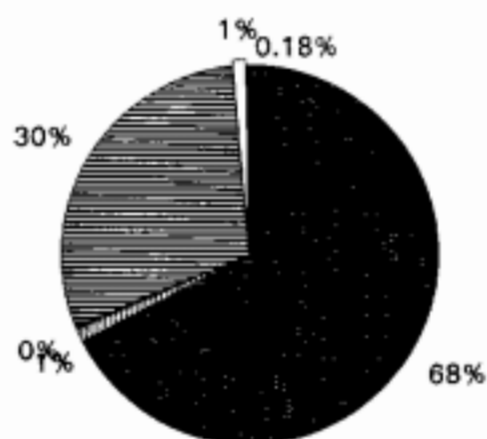
NSW CASUALTY FILE (1986-1989)
 NUMBER OF PERSONS KILLED BY AGE GROUP OF DRIVER

N = 132739

17-25 years (n=45075)



26-40 years (n=41536)



NSW CASUALTY FILE (1986-1989) *

NUMBER OF PERSONS KILLED BY AGE GROUP OF DRIVER

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
0	315	26381	28062	16597	12768	84123
1	9	523	508	323	345	1708
2	1	43	72	26	39	181
3	1	10	17	7	4	39
More than 3		5	9	6	3	23
Total	326	26962	28668	16959	13159	86074

NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
0	299	17412	12353	5331	2455	37850
1	9	595	441	173	103	1321
2	1	79	62	28	13	183
3		23	11	6	4	44
More than 3	0	4	1	3		8
Total	309	18113	12868	5541	2575	39406

Missing cases = 7259

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989) *
DAY OF WEEK BY AGE GROUP

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Sunday	68	3858	3253	1892	1484	10555
Monday	31	3562	4099	2493	1807	11992
Tuesday	36	3542	4171	2464	1980	12193
Wednesday	35	3666	4260	2442	2041	12444
Thursday	40	3617	4228	2483	2054	12422
Friday	42	4223	4586	2811	2125	13787
Saturday	74	4494	4071	2374	1668	12681
Total	326	26962	28668	16959	13159	86074

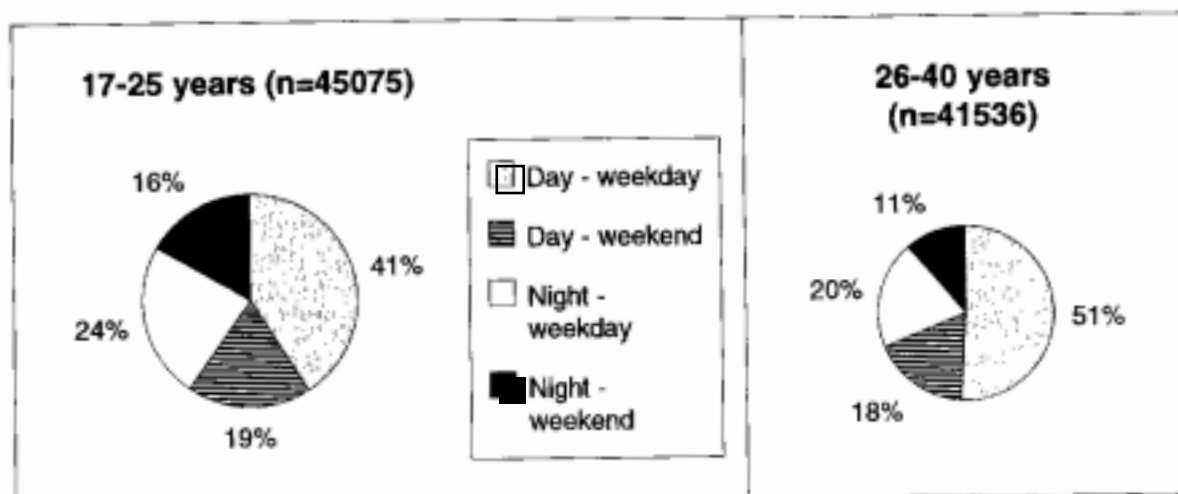
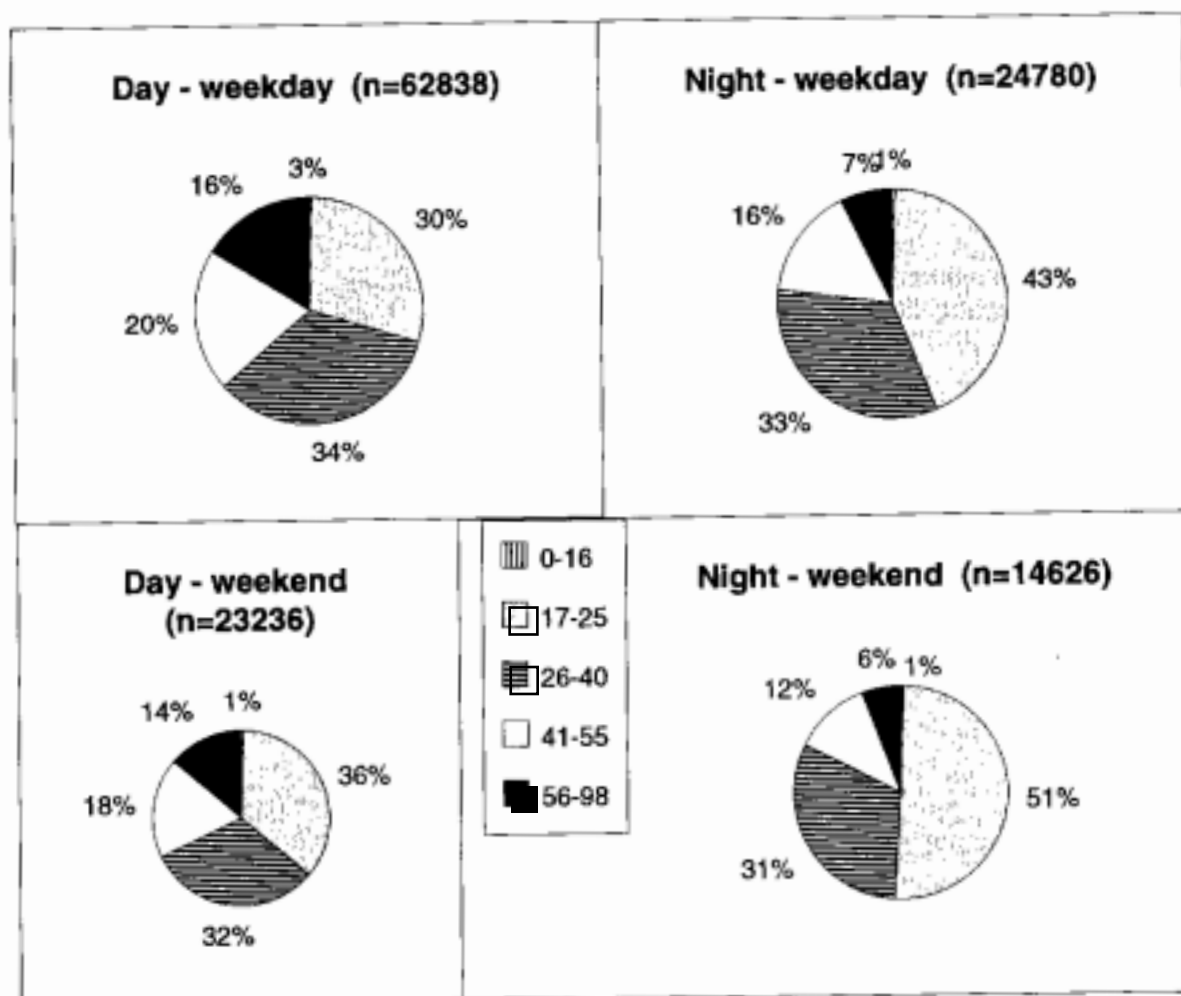
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
Sunday	59	3385	2138	826	376	6784
Monday	22	1651	1263	648	279	3863
Tuesday	31	1705	1381	647	284	4048
Wednesday	36	1826	1471	712	305	4350
Thursday	34	2319	1808	818	382	5361
Friday	67	3222	2365	1024	480	7158
Saturday	60	4005	2442	866	469	7842
Total	309	18113	12868	5541	2575	39406

Missing cases = 7259

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
WEEKDAY VERSUS WEEKEND BY AGE GROUP

N=132739



NSW CASUALTY FILE (1986-1989) *
WEEKDAY VERSUS WEEKEND BY AGE GROUP

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Weekday	184	18610	21344	12693	10007	62838
Weekend	142	8352	7324	4266	3152	23236
Total	326	26962	28668	16959	13159	86074

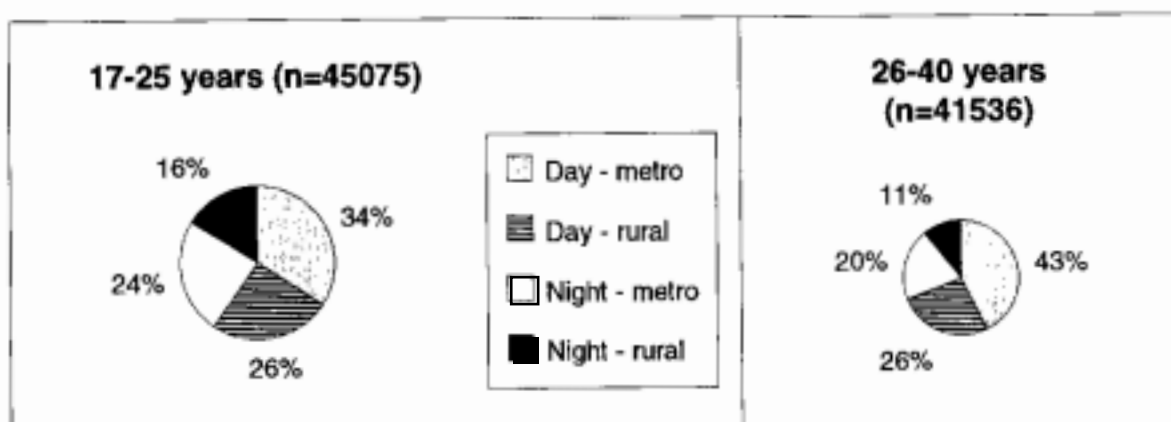
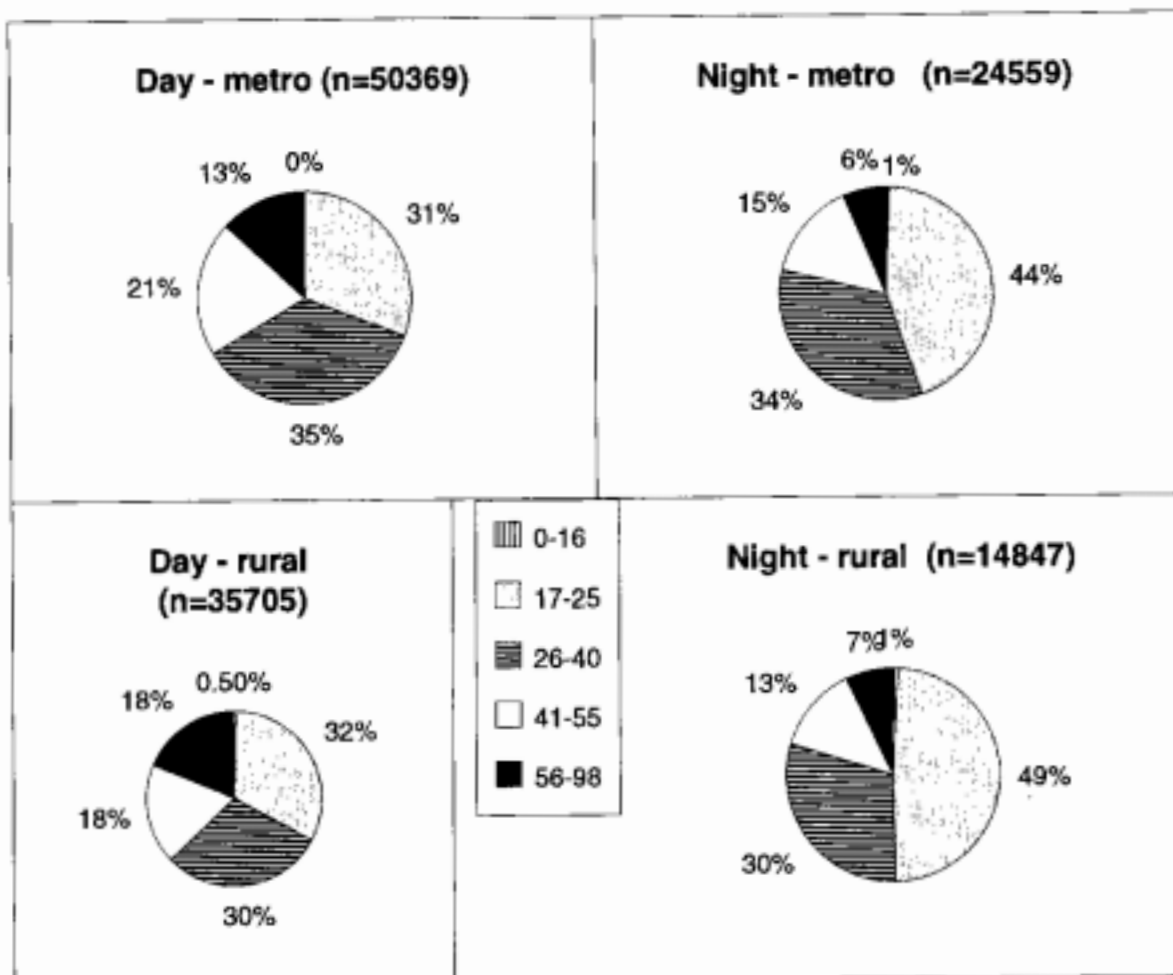
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
Weekday	190	10723	8288	3849	1730	24780
Weekend	119	7390	4580	1692	845	14626
Total	309	18113	12868	5541	2575	39406

Missing cases = 7259

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
LOCAL GOVERNMENT AREA BY AGE GROUP

N=132739



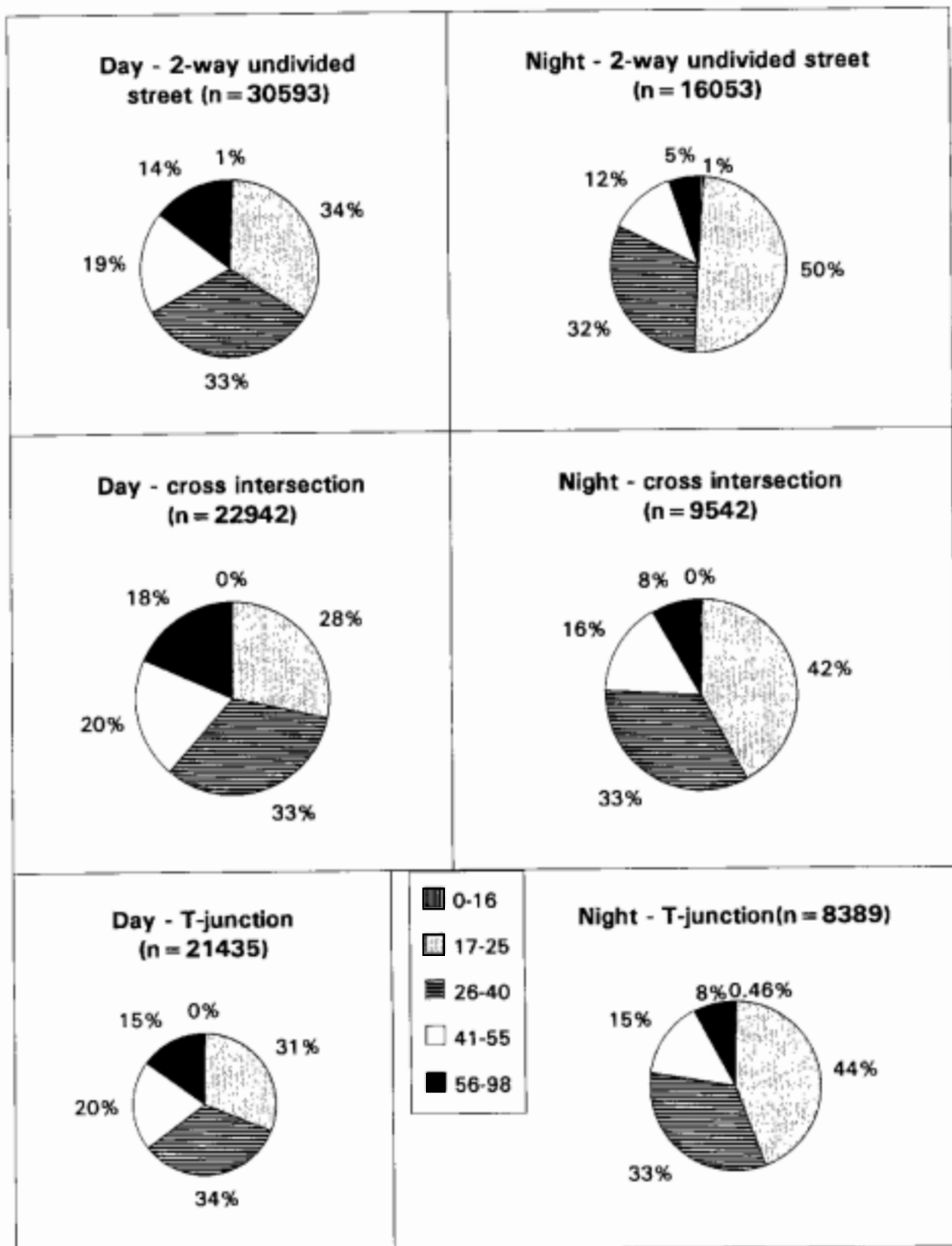
NSW CASUALTY FILE (1986-1989) *
LOCAL GOVERNMENT AREA BY AGE GROUP

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
Metro	133	15450	17857	10369	6560	50369
Rural	193	11512	10811	6590	6599	35705
Total	326	26962	28668	16959	13159	86074

NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
Metro	154	10866	8395	3633	1511	24559
Rural	155	7247	4473	1908	1064	14847
Total	309	18113	12868	5541	2575	39406

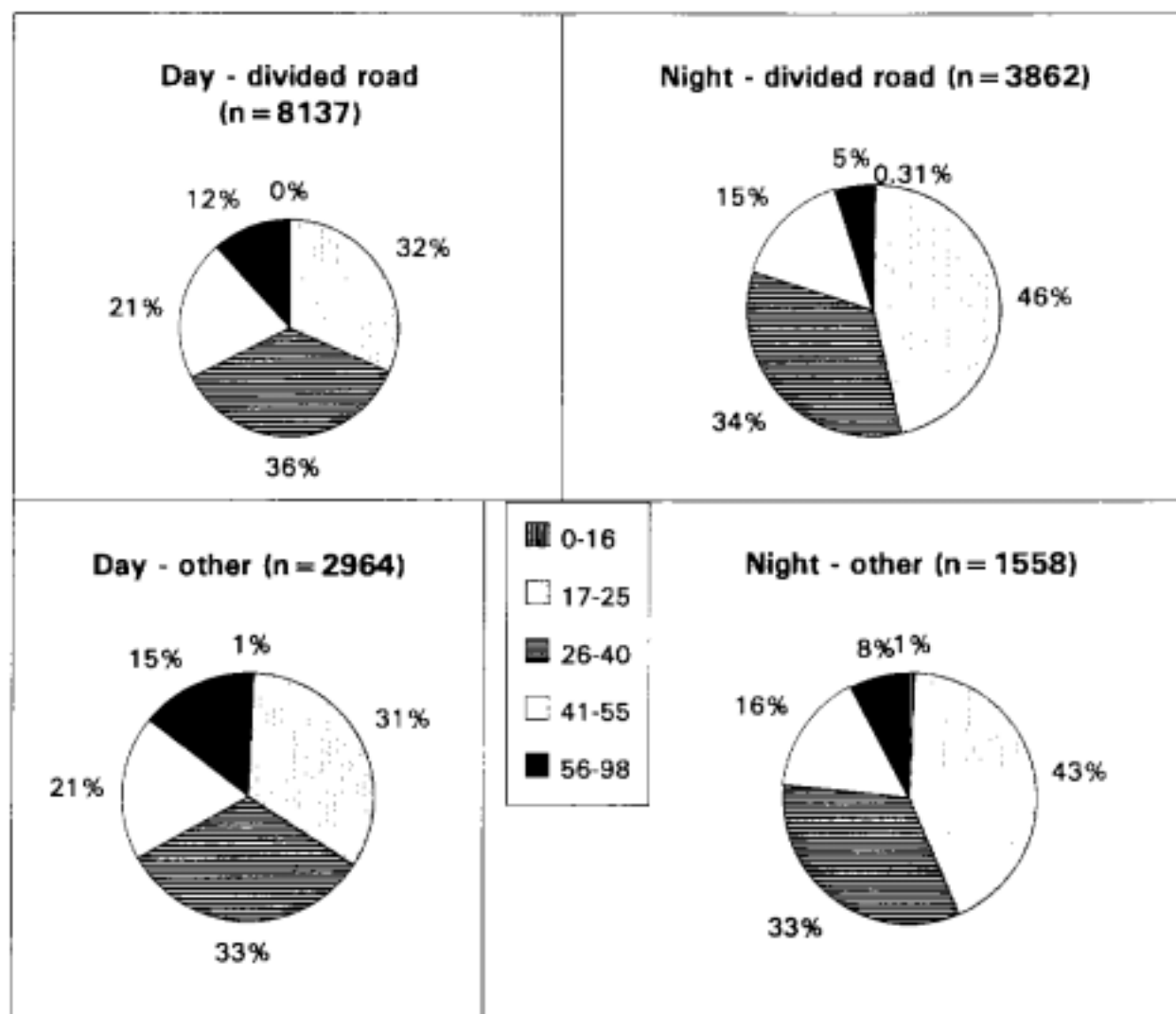
Missing cases = 7259

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

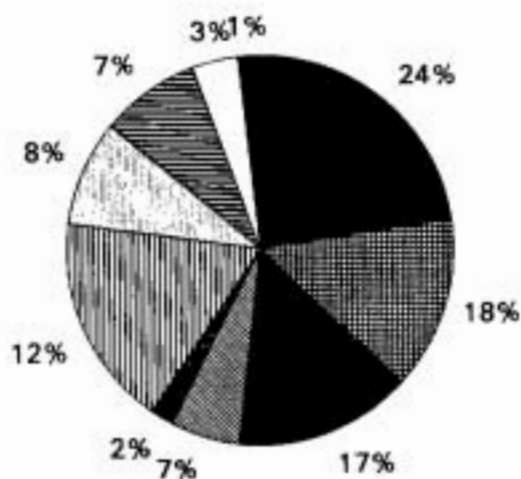


NSW CASUALTY FILE (1986-1989)
CRASH LOCATION BY AGE GROUP

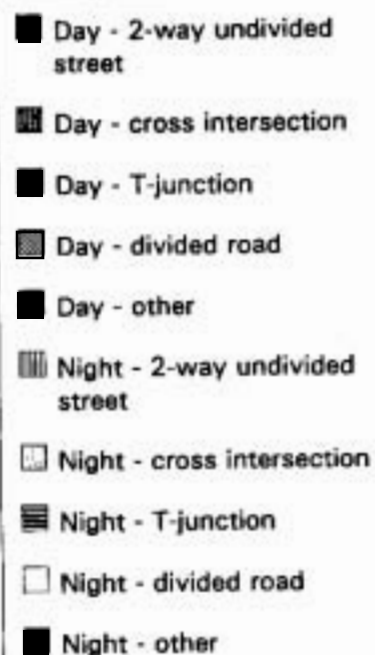
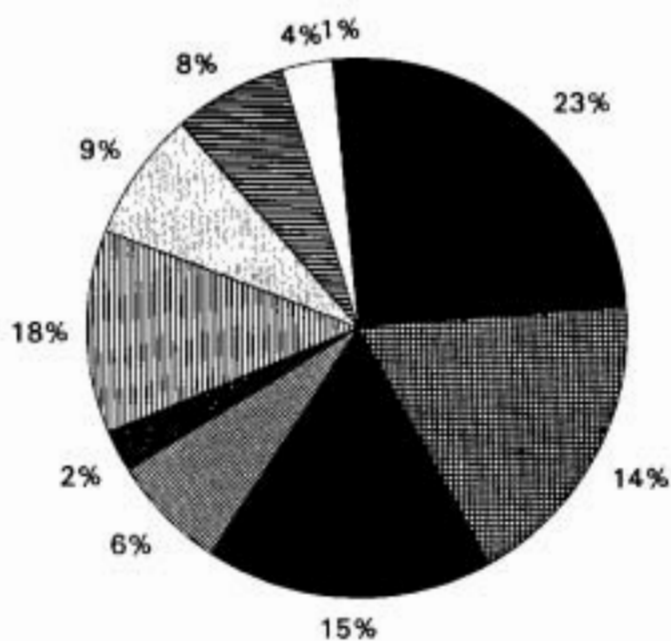
N = 132739



17-25 years (n=45072)



26-40 years (n=41534)



NSW CASUALTY FILE (1986-1989) •
CRASH LOCATION BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Intersection:						
cross Intersection	41	6497	7570	4637	4197	22942
Y-Junction	2	190	184	124	101	601
T-Junction	62	6644	7221	4328	3180	21435
multiple Intersection	1	183	196	141	110	631
roundabout	1	209	217	115	101	643
L-Junction		14	13	4	5	36
Non-intersection:						
one-way Street	1	12	13	6	2	34
2-way undivided street	202	10331	9985	5695	4380	30593
divided Road	16	2580	2904	1691	946	8137
single carriageway/freeway		9	18	13	6	46
dual carriageway/freeway		276	334	199	126	935
other		15	12	6	5	38
Total	326	26960	28667	16959	13159	86071

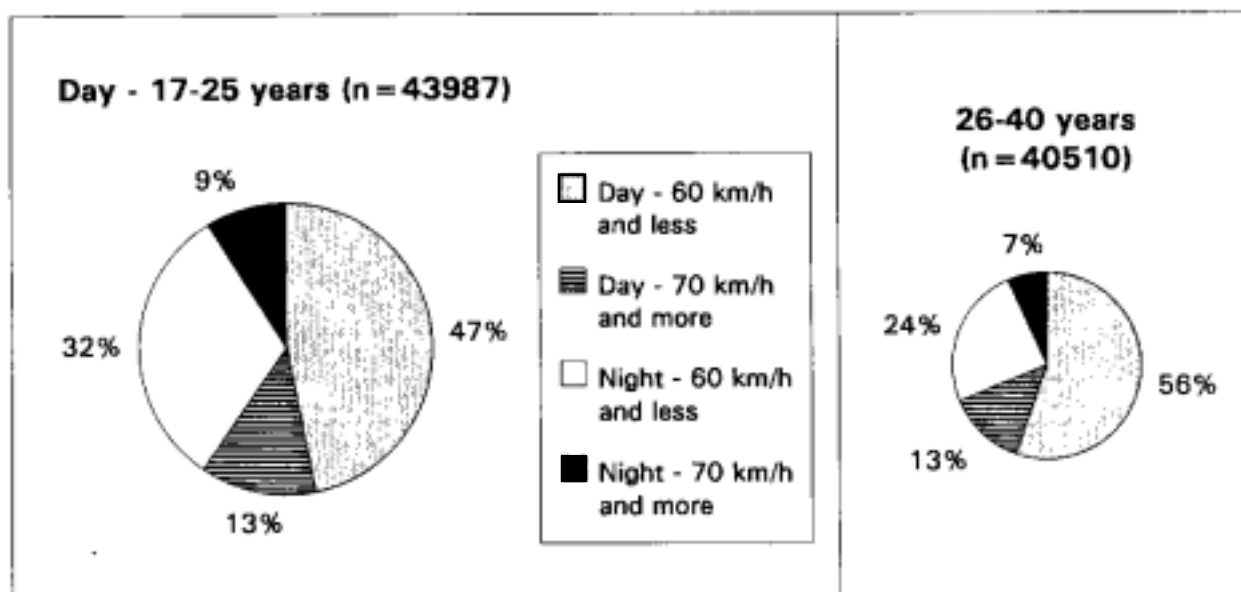
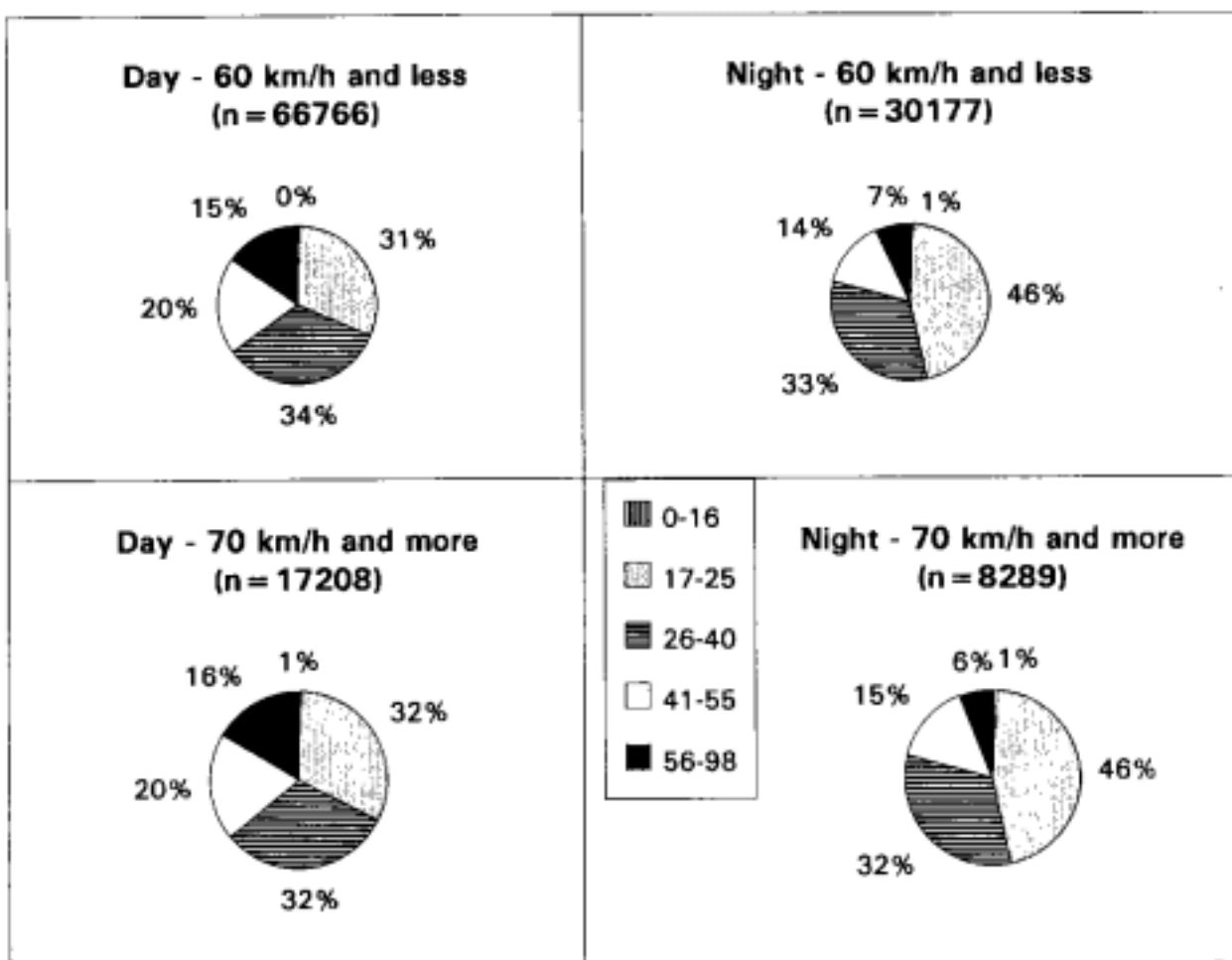
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Intersection:						
cross Intersection	46	3997	3196	1523	780	9542
Y-Junction	3	126	84	44	20	277
T-Junction	39	3700	2778	1223	649	8389
multiple Intersection	1	158	128	58	44	389
roundabout	3	145	72	35	22	277
L-Junction	2	24	14	7	2	49
Non-intersection:						
one-way Street		8	6	4	2	20
2-way undivided street	202	7960	5080	1972	839	16053
divided Road	12	1783	1300	577	190	3862
single carriageway/freeway		9	7	4		20
dual carriageway/freeway	1	194	196	92	26	509
other		8	6	2	1	17
other	309	18112	12867	5541	2575	39404

Missing cases = 7264

• Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
SPEED LIMIT (KM/H) BY AGE GROUP

N = 132739



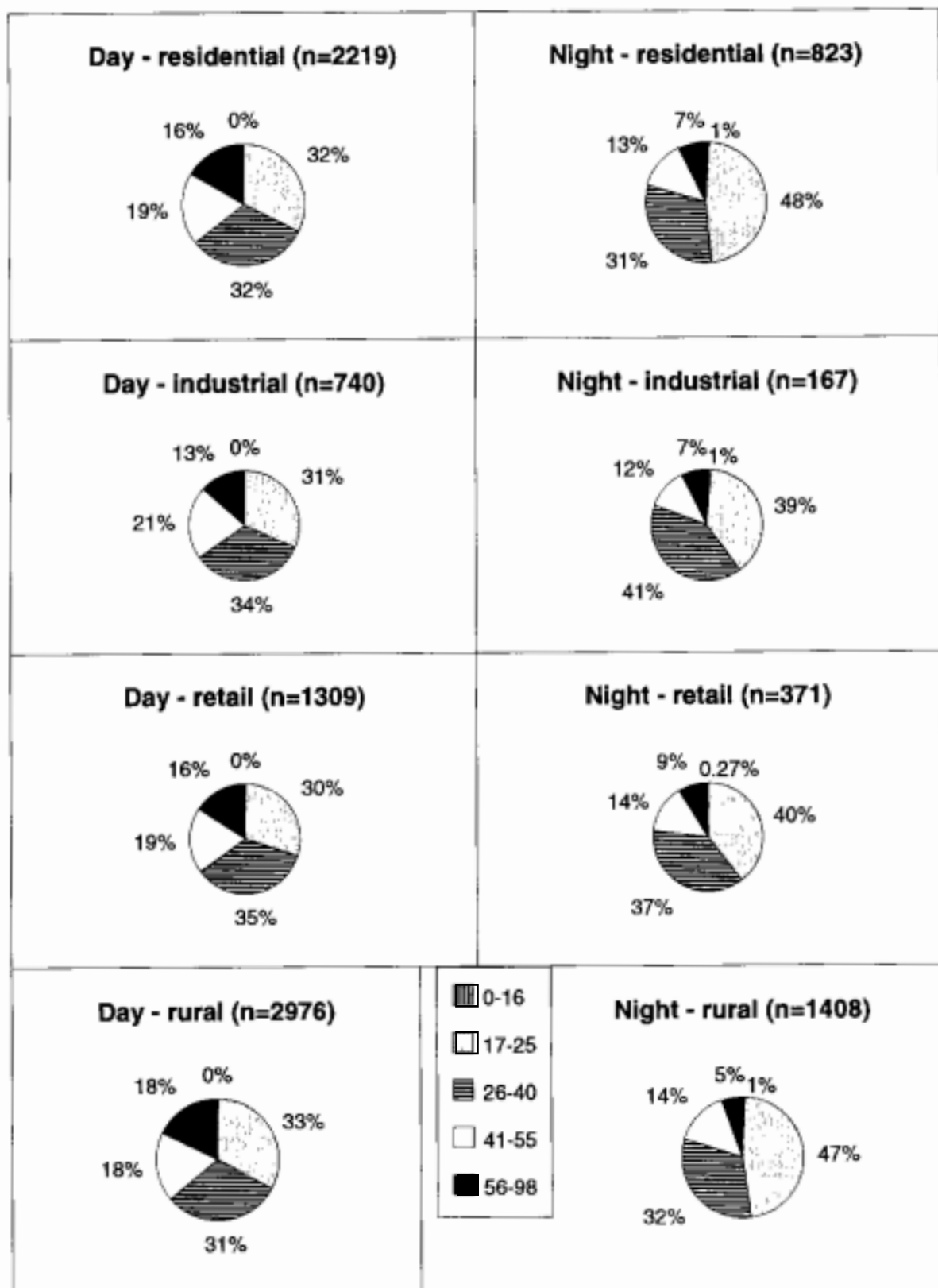
NSW CASUALTY FILE (1986-1989) *
SPEED LIMIT (KM/H) BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
20		2	3	3	1	9
30			1			1
40		11	16	11	6	44
50						0
60	217	20758	22501	13193	10043	66712
70		3	3	5	2	13
80	14	1800	1902	1121	741	5578
90		4	2	1	6	13
100	80	3569	3349	2106	1939	11043
110		150	185	123	103	561
Total	311	26297	27962	16563	12841	83974

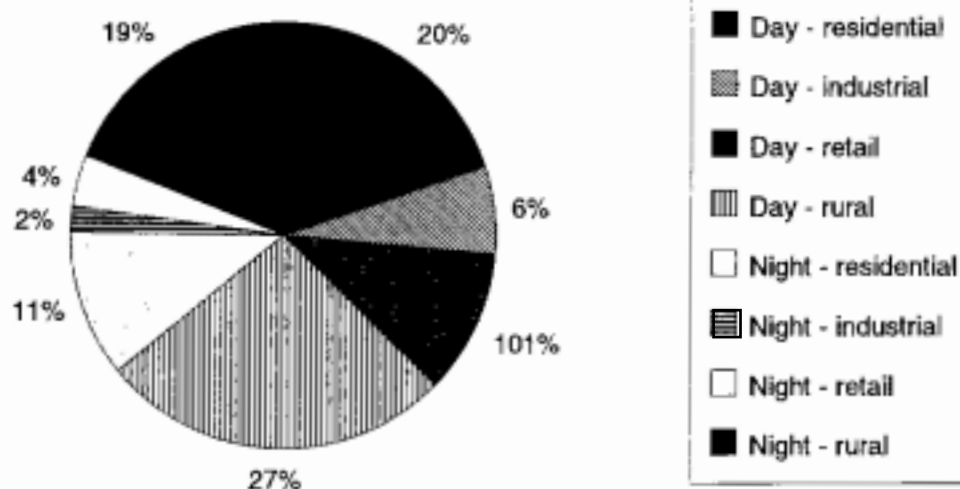
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
20		1	3			4
30						0
40		13	6	1		20
50			1			1
60	226	13860	9845	4187	2034	30152
70		5	2		1	8
80	20	1148	869	389	166	2592
90			1	1		2
100	54	2558	1707	766	305	5390
110		105	114	64	14	297
Total	300	17690	12548	5408	2520	38466

Missing cases = 10299

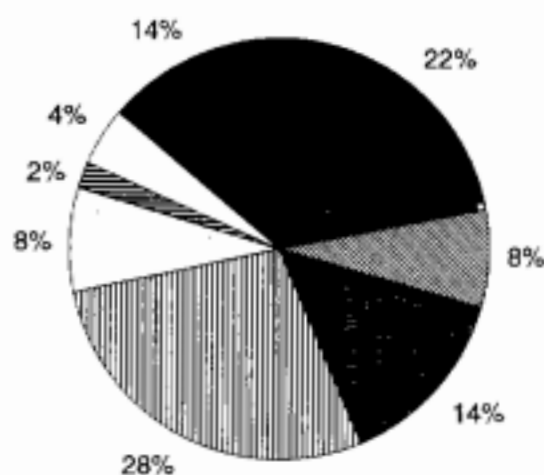
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



17-25 years (n=3579)



26-40 years (n=3257)



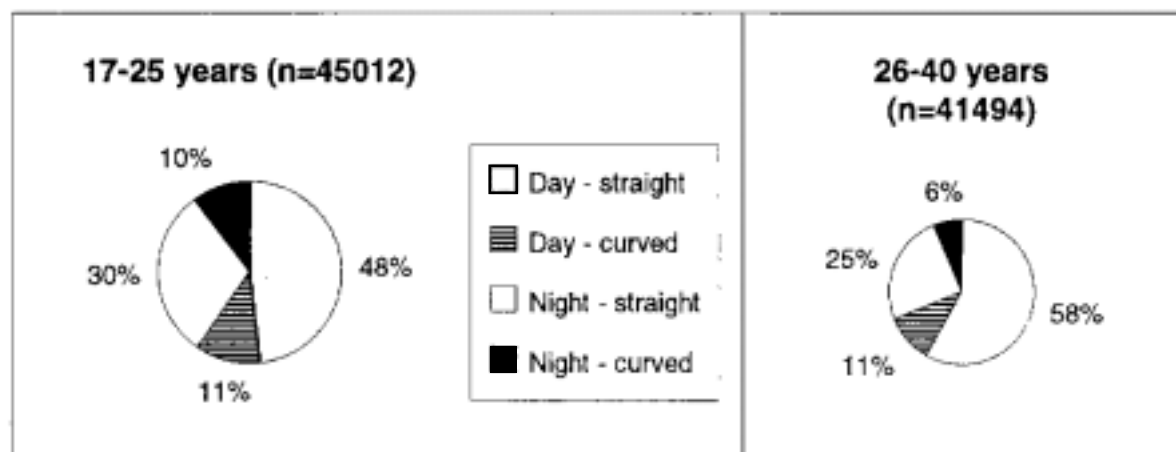
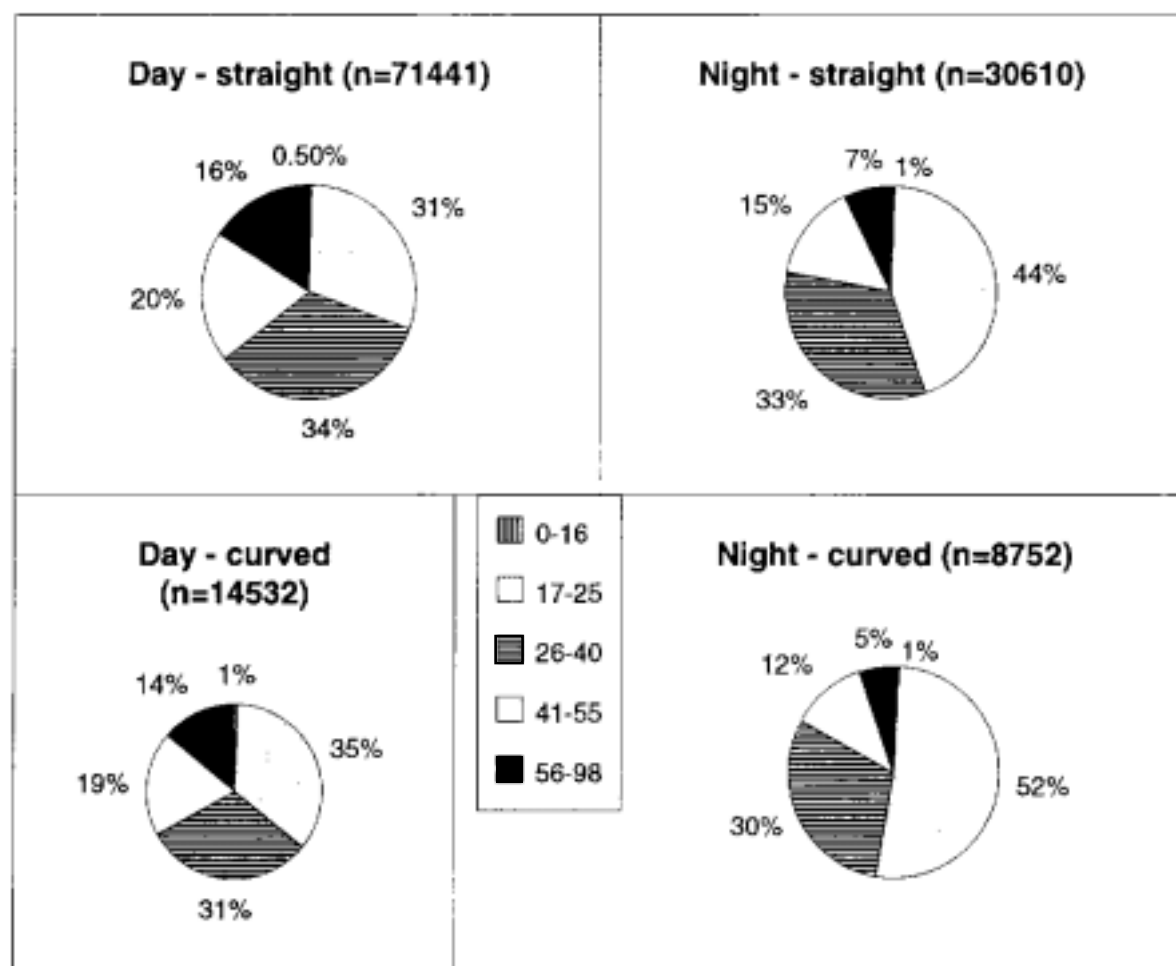
NSW CASUALTY FILE (1986-1989) *
ADJACENT LAND USE BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Residential	3	713	715	427	361	2219
Industrial	1	232	251	158	98	740
Retail	3	391	457	254	204	1309
Rural	14	969	920	550	523	2976
Total	21	2305	2343	1389	1186	7244

	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Residential	7	394	257	107	58	823
Industrial	2	65	68	20	12	167
Retail	1	147	138	53	32	371
Rural	9	668	451	204	76	1408
Total	19	1274	914	384	178	2769

Missing cases = 122,726

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



NSW CASUALTY FILE (1986-1989) •
ALIGNMENT OF ROAD BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Straight	227	21799	24104	14146	11165	71441
Curved	99	5127	4533	2791	1982	14532
Total	326	26926	28637	16937	13147	85973

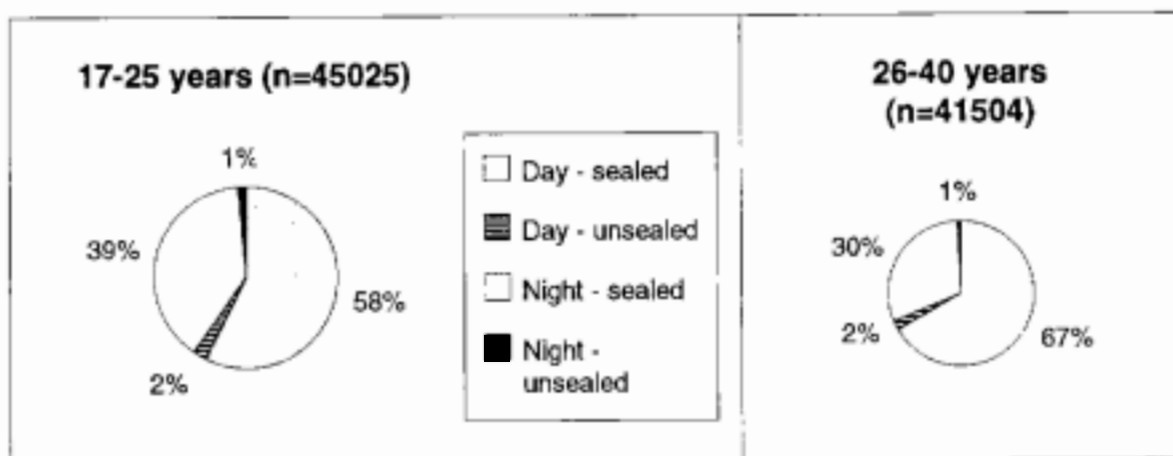
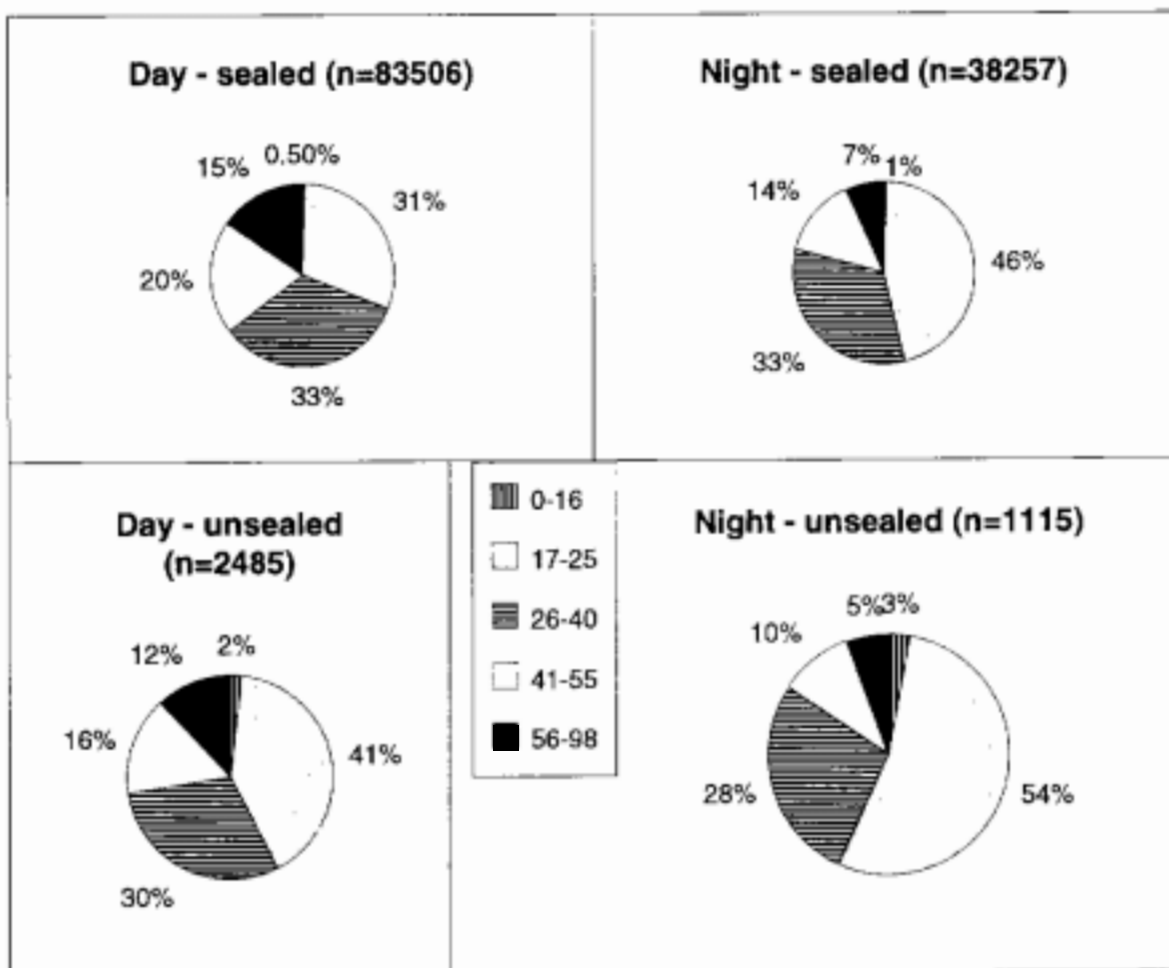
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Straight	212	13553	10211	4500	2134	30610
Curved	97	4533	2646	1037	439	8752
Total	309	18086	12857	5537	2573	39362

Missing cases = 7404

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
ROAD SURFACE BY AGE GROUP

N=132739



NSW CASUALTY FILE (1986-1989) *
ROAD SURFACE BY AGE GROUP

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
Sealed	278	25919	27899	16554	12856	83506
Unsealed	47	1010	746	386	296	2485
Total	325	26929	28645	16940	13152	85991

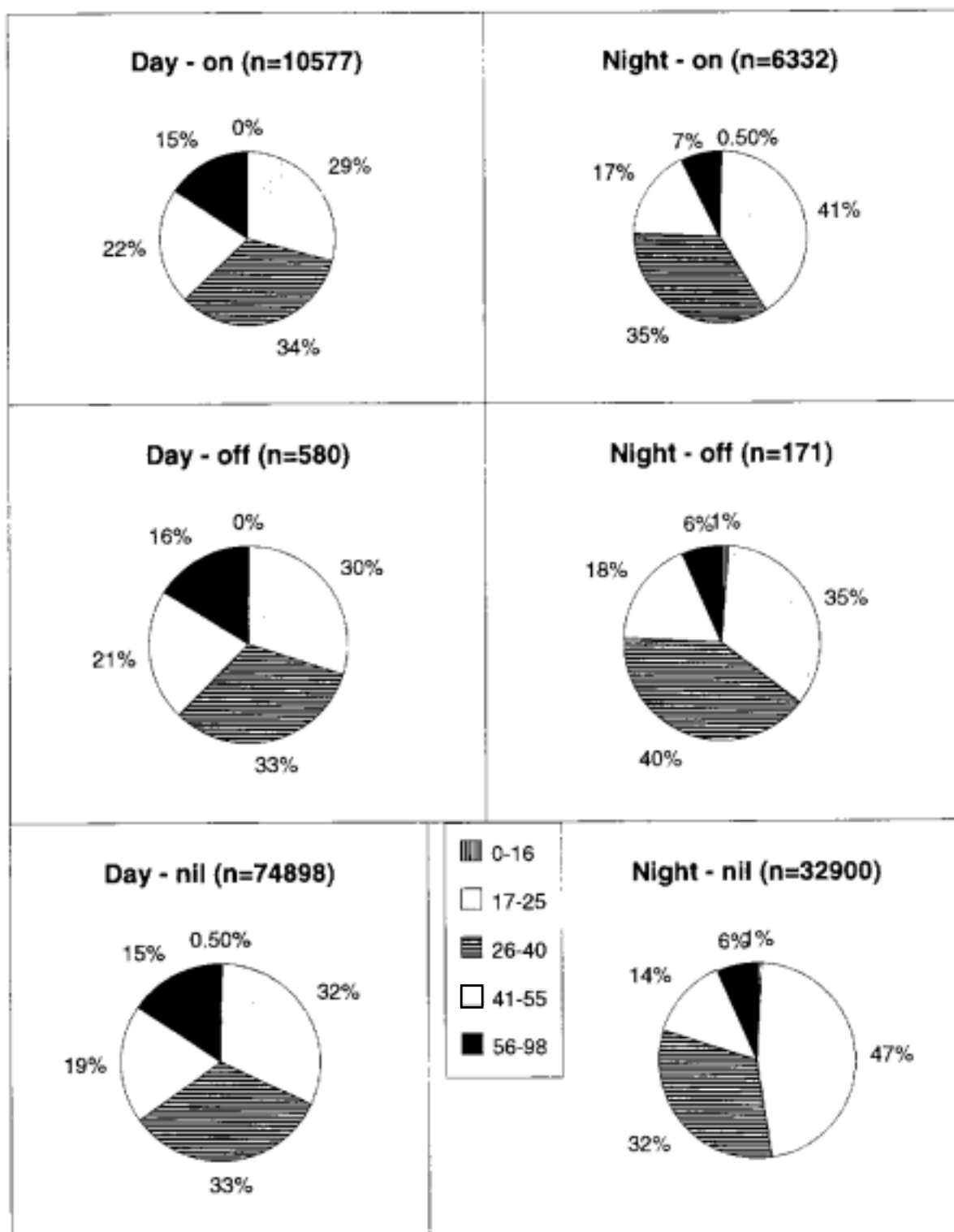
NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
Sealed	274	17493	12552	5425	2513	38257
Unsealed	34	603	307	112	59	1115
Total	308	18096	12859	5537	2572	39372

Missing cases = 7376

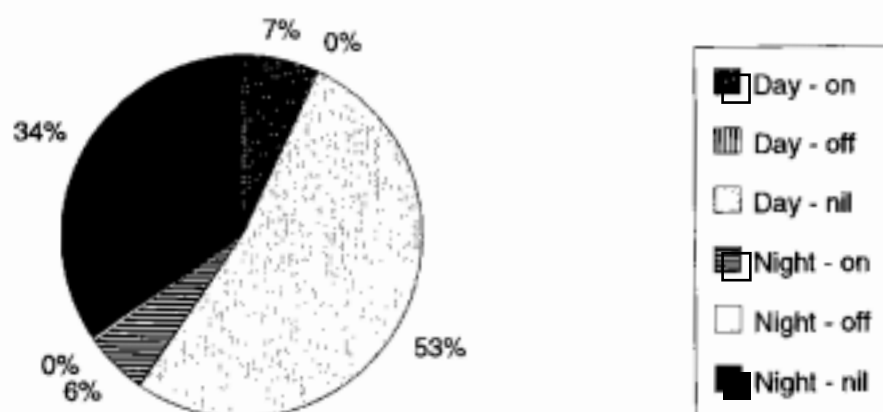
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
TRAFFIC SIGNAL OPERATION BY AGE GROUP

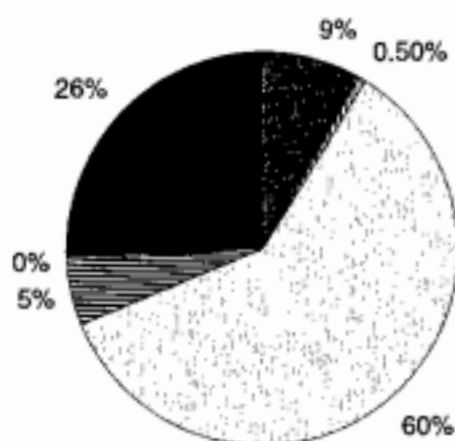
N=132739



17-25 years (n=45069)



26-40 years (n=41526)



NSW CASUALTY FILE (1986-1989) •
TRAFFIC SIGNAL OPERATION BY AGE GROUP

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
On	21	3076	3557	2306	1617	10577
Off	1	174	189	124	92	580
Nil	304	23707	24913	14527	11447	74898
Total	326	26957	28659	16957	13156	86055

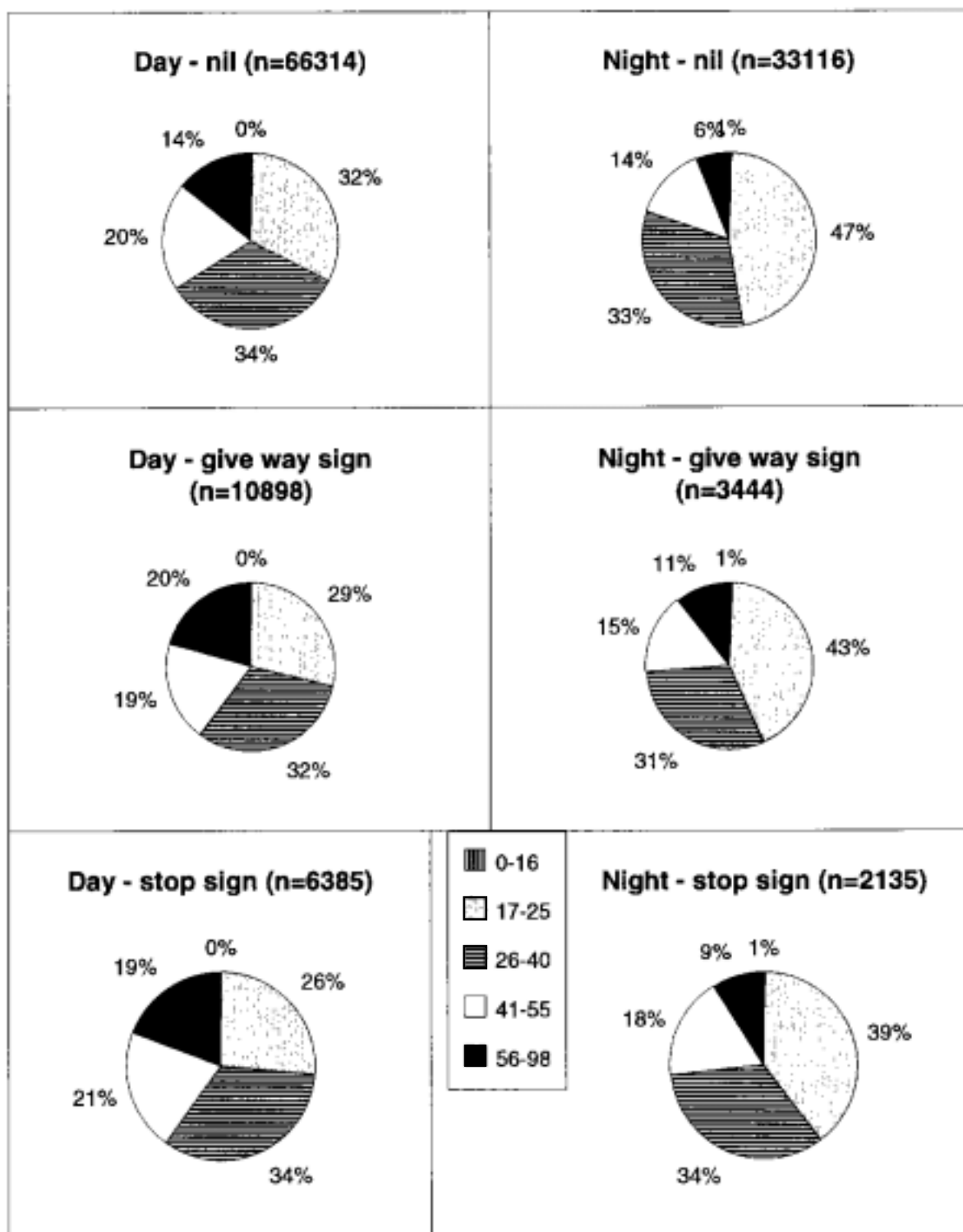
NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
On	24	2587	2203	1048	470	6332
Off	2	59	69	30	11	171
Nil	283	15466	10595	4462	2094	32900
Total	309	18112	12867	5540	2575	39403

Missing cases = 7281

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

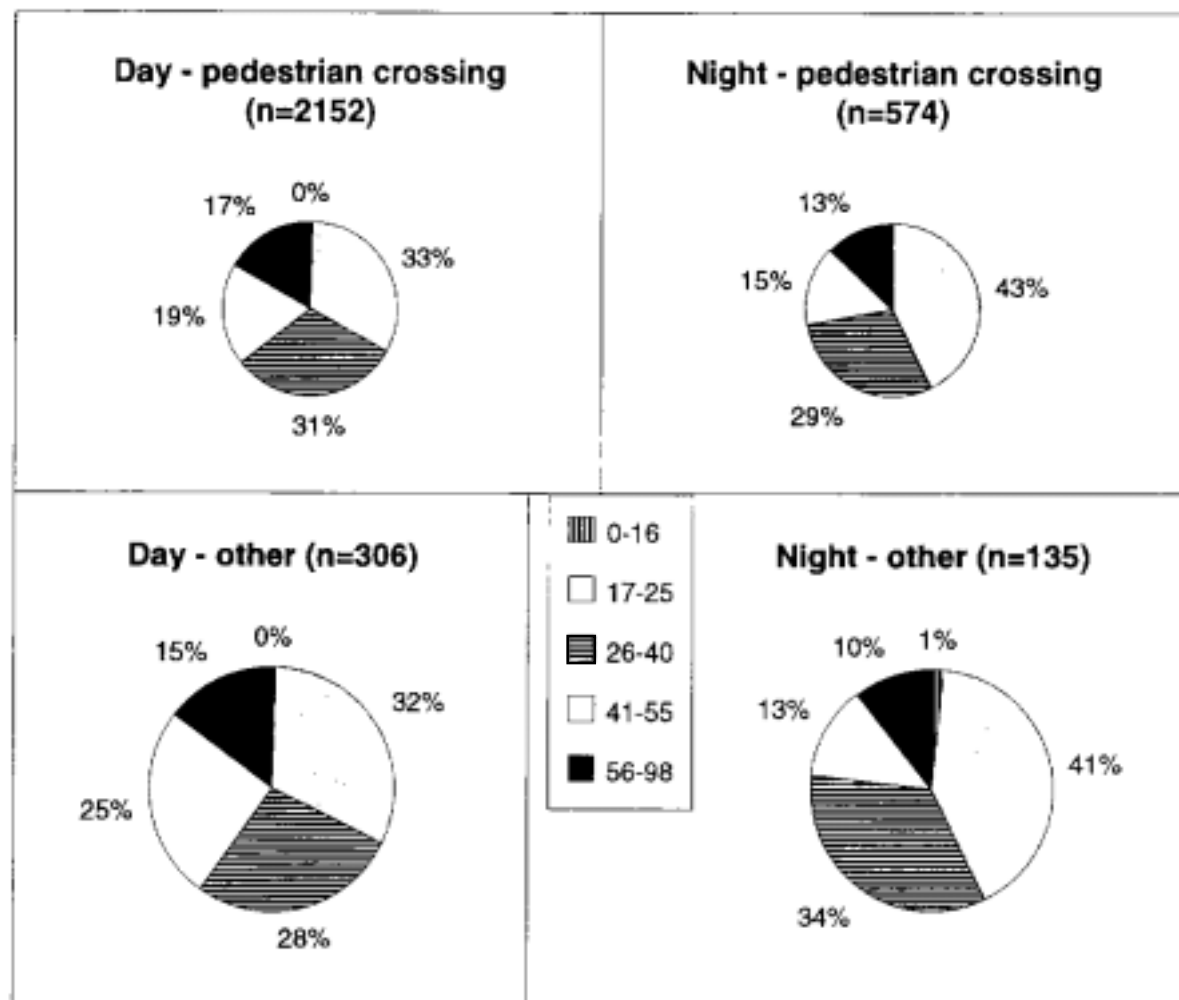
NSW CASUALTY FILE (1986-1989)
OTHER TRAFFIC CONTROLS BY AGE GROUP

N=132739

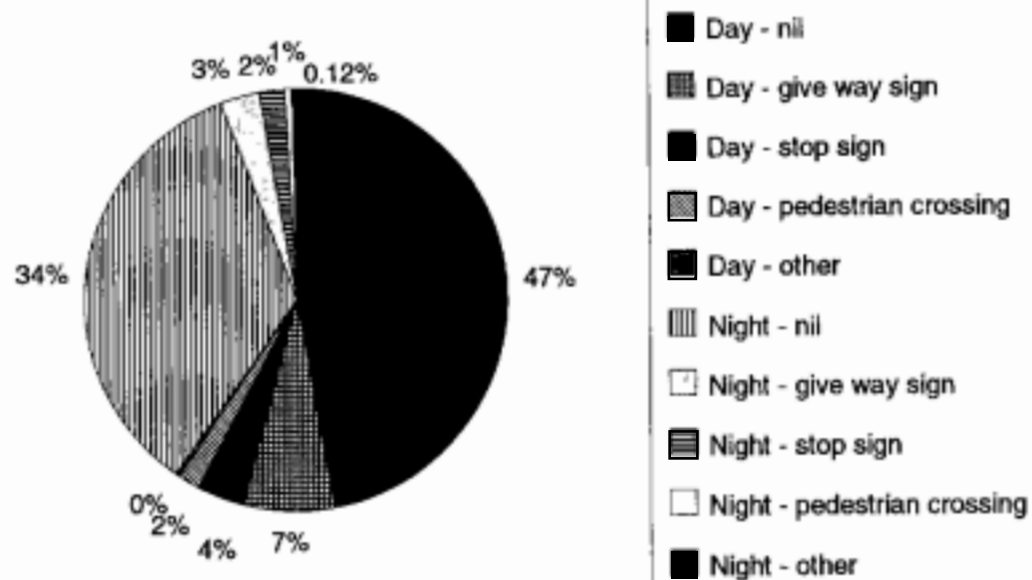


NSW CASUALTY FILE (1986-1989)
OTHER TRAFFIC CONTROLS BY AGE GROUP

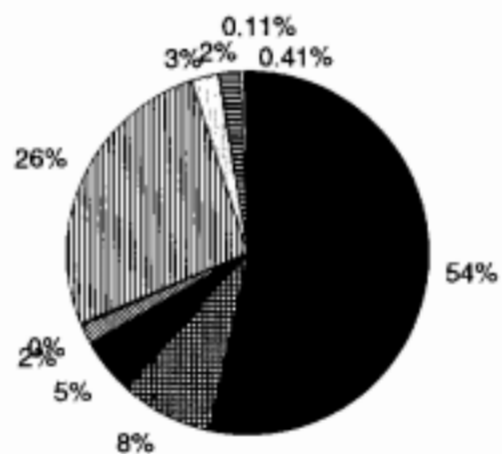
N=132739



17-25 years (n=45071)



26-40 years (n=41526)



NSW CASUALTY FILE (1986-1989) •
OTHER TRAFFIC CONTROLS BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Nil	287	21353	22305	13058	9311	66314
Pedestrian crossing	8	709	671	406	358	2152
Stop sign	9	1686	2143	1328	1219	6385
Give way sign	21	3112	3455	2088	2222	10898
Police		27	16	25	9	77
Turn left any time with care		6	4		2	12
No right turn		21	19	15	9	64
No left turn						0
No U turn		1	2			3
No entry or wrong way		5	2	3	1	11
Trucks must engage low gear			1	1		2
Rail crossing with flashing signals		2	2	3	2	9
Rail crossing with stop sign	1	5	6	2	5	19
Rail crossing with no signals/stop sign		3	1	2		6
Road or railway worker		6	14	16	9	45
Other traffic control		22	18	10	8	58
Total	326	26958	28659	16957	13155	86055

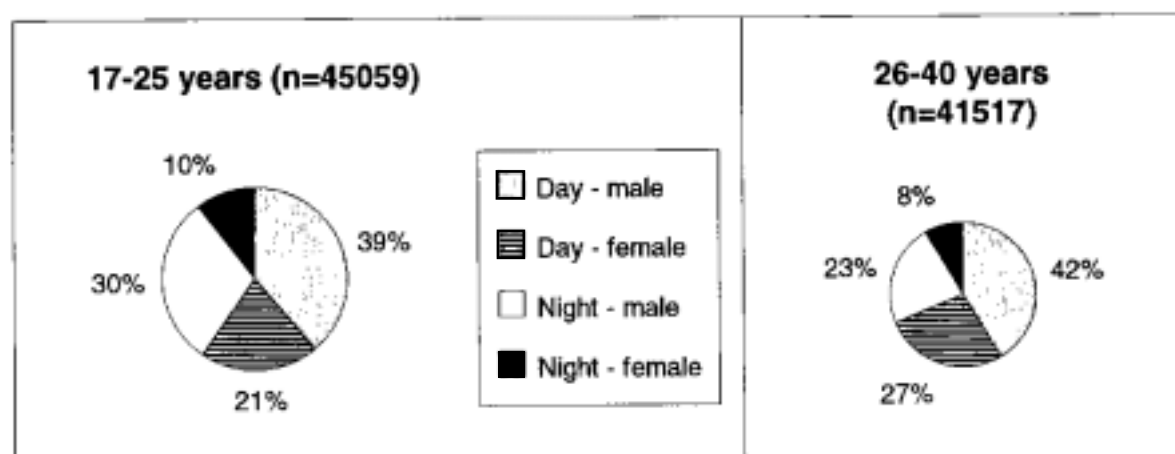
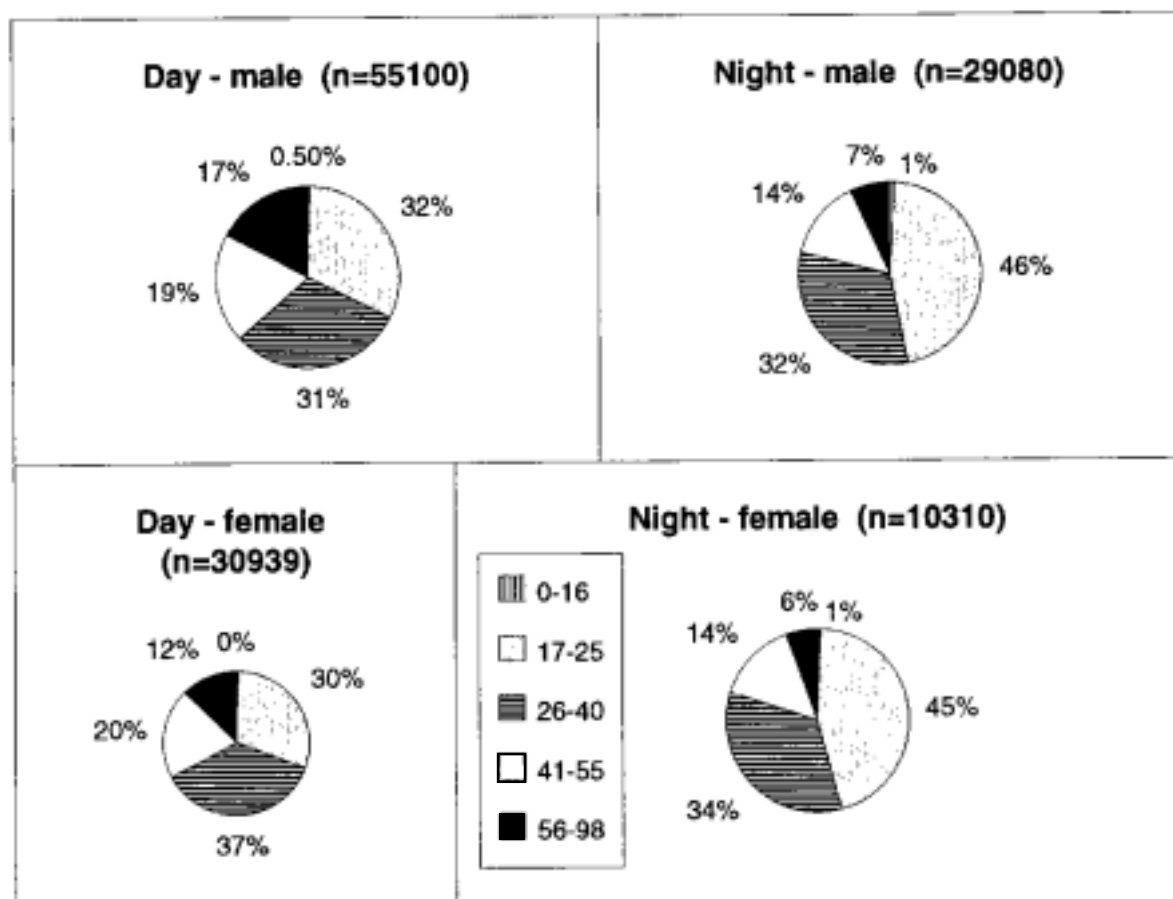
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Nil	275	15497	10878	4529	1937	33116
Pedestrian crossing		246	169	86	73	574
Stop sign	11	839	719	379	187	2135
Give way sign	21	1475	1055	530	363	3444
Police	1	16	12	4	5	38
Turn left any time with care		1	2	1		4
No right turn		23	10	6	2	41
No left turn			2			2
No U turn	1	1	1			3
No entry or wrong way		2	6	2		10
Trucks must engage low gear		1				1
Rail crossing with flashing signals		2	1	1		4
Rail crossing with stop sign		5	2	1	3	11
Rail crossing with no signals/stop sign		1	3		1	5
Road or railway worker			1			1
Other traffic control		4	6	2	3	15
Total	309	18113	12867	5541	2574	39404

Missing cases = 7280

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
SEX OF DRIVER BY AGE GROUP

N=132739



NSW CASUALTY FILE (1986-1989) •
SEX OF DRIVER BY AGE GROUP

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Male	226	17558	17257	10709	9350	55100
Female	98	9393	11398	6245	3805	30939
Total	324	26951	28655	16954	13155	86039

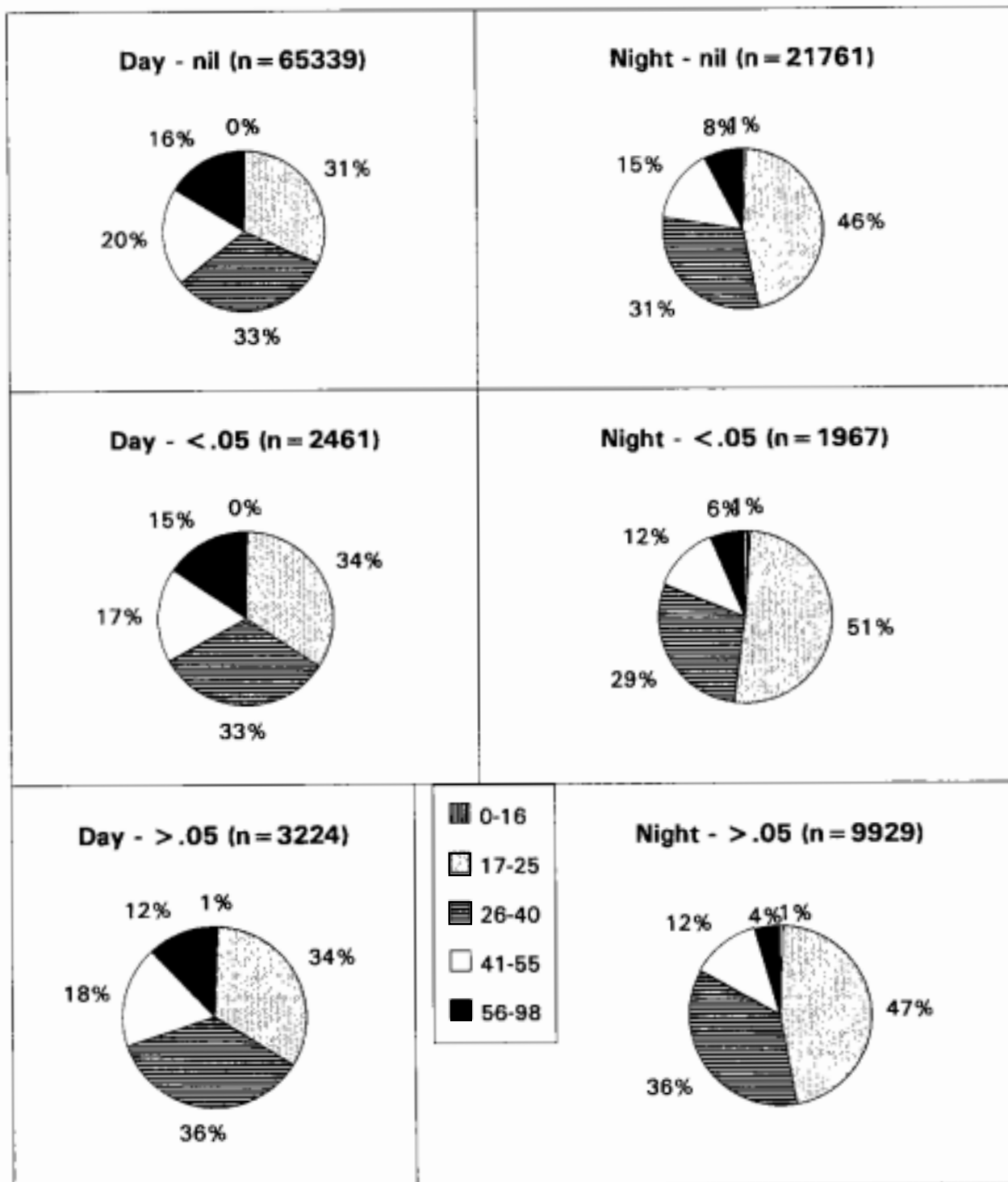
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
Male	243	13424	9349	4061	2003	29080
Female	66	4684	3513	1475	572	10310
Total	309	18108	12862	5536	2575	39390

Missing cases = 7310

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
HIGHEST BAC GROUP IN CRASH BY AGE GROUP

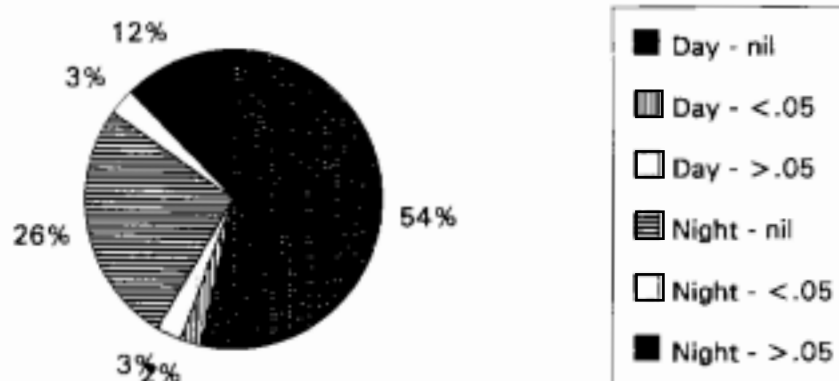
N = 132739



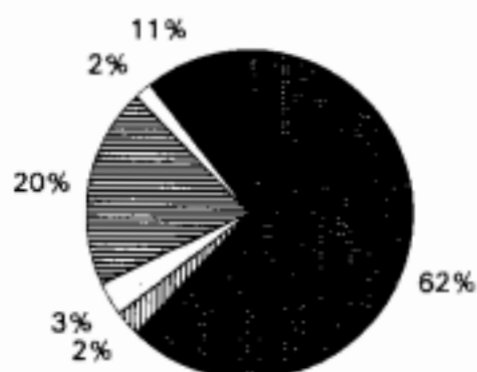
NSW CASUALTY FILE (1986-1989)
HIGHEST BAC GROUP IN CRASH BY AGE GROUP

N = 132739

17-25 years (n = 38123)



26-40 years (n = 34110)



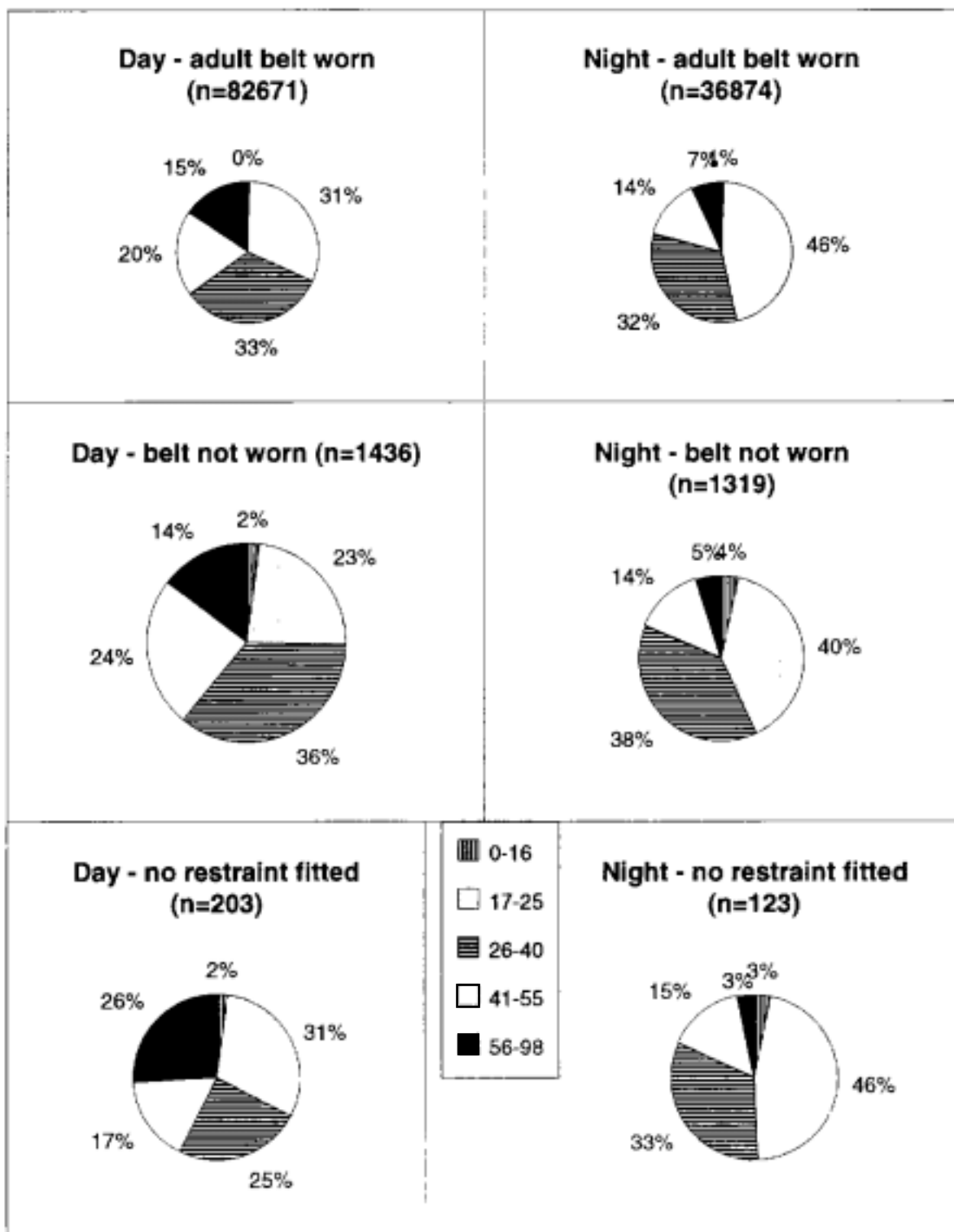
NSW CASUALTY FILE (1986-1989) •
HIGHEST BAC GROUP IN CRASH BY AGE GROUP

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Nil	236	20526	21311	12914	10352	65339
.001-.049	9	799	802	422	378	2410
.020 - .049	1	32	10	6	2	51
<i>(Learner's permit holders and P-plate)</i>						
.050 - .079	3	168	155	82	59	467
.080 - .149	9	478	420	209	138	1254
More than .149	7	436	587	291	182	1503
Total	265	22439	23285	13924	11111	71024

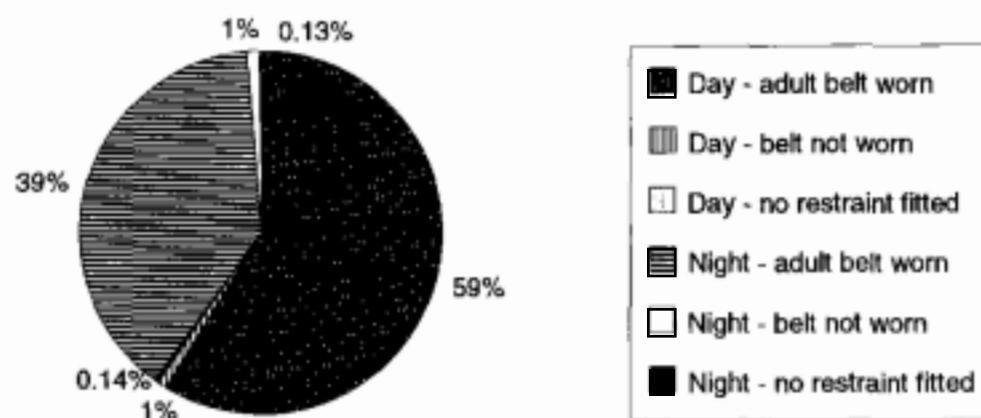
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
Nil	172	10049	6656	3197	1687	21761
.001-.049	23	922	555	237	124	1861
.020 - .049	1	82	17	6		106
<i>(Learner's permit holders and P-plate)</i>						
.050 - .079	21	592	296	101	43	1053
.080 - .149	26	1902	1113	337	156	3534
More than .149	13	2137	2188	772	232	5342
Total	256	15684	10825	4650	2242	33657

Missing cases = 28058

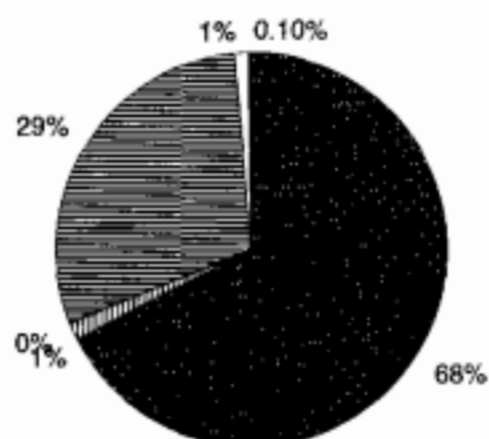
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



17-25 years (n=44016)



26-40 years (n=40536)



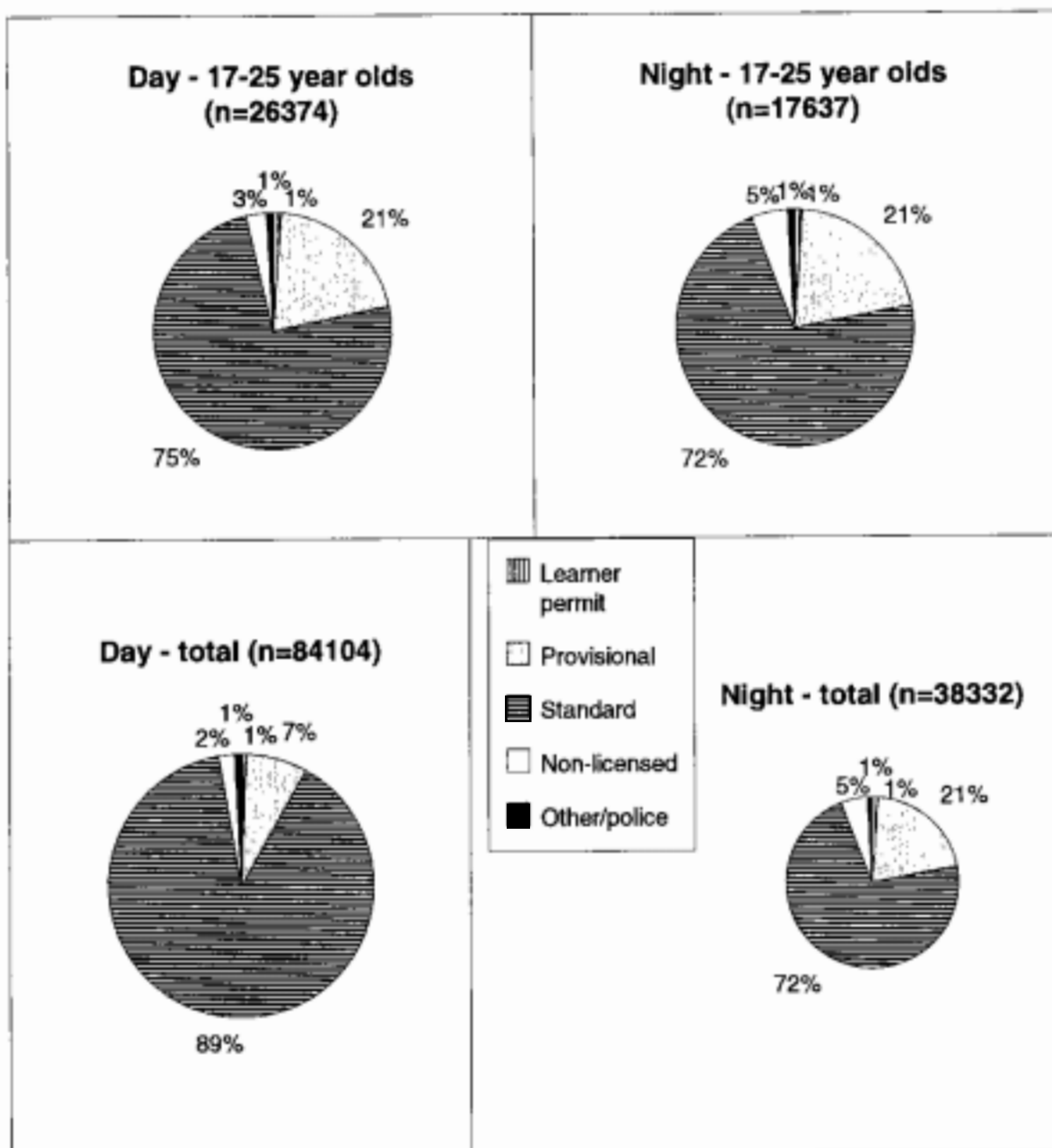
NSW CASUALTY FILE (1986-1989) *
SEATBELT WEARING BY DRIVER BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Adult belt worn	281	26018	27471	16236	12665	82671
Belt fitted but not worn	31	334	514	349	208	1436
No restraint fitted	4	63	50	34	52	203
Total	316	26415	28035	16619	12925	84310

	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Adult belt worn	244	17021	11954	5195	2460	36874
Belt fitted but not worn	47	523	507	179	63	1319
No restraint fitted	4	57	40	18	4	123
Total	295	17601	12501	5392	2527	38316

Missing cases = 10113

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



NSW CASUALTY FILE (1986-1989) •
STATUS OF LICENCE BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Learner permit	114	323	79	12	6	534
Provisional	52	5464	607	102	37	6262
Standard	7	19655	26572	16229	12680	75143
Non-licensed	147	737	477	125	61	1547
Other/police		195	240	111	72	618
Total	320	26374	27975	16579	12856	84104

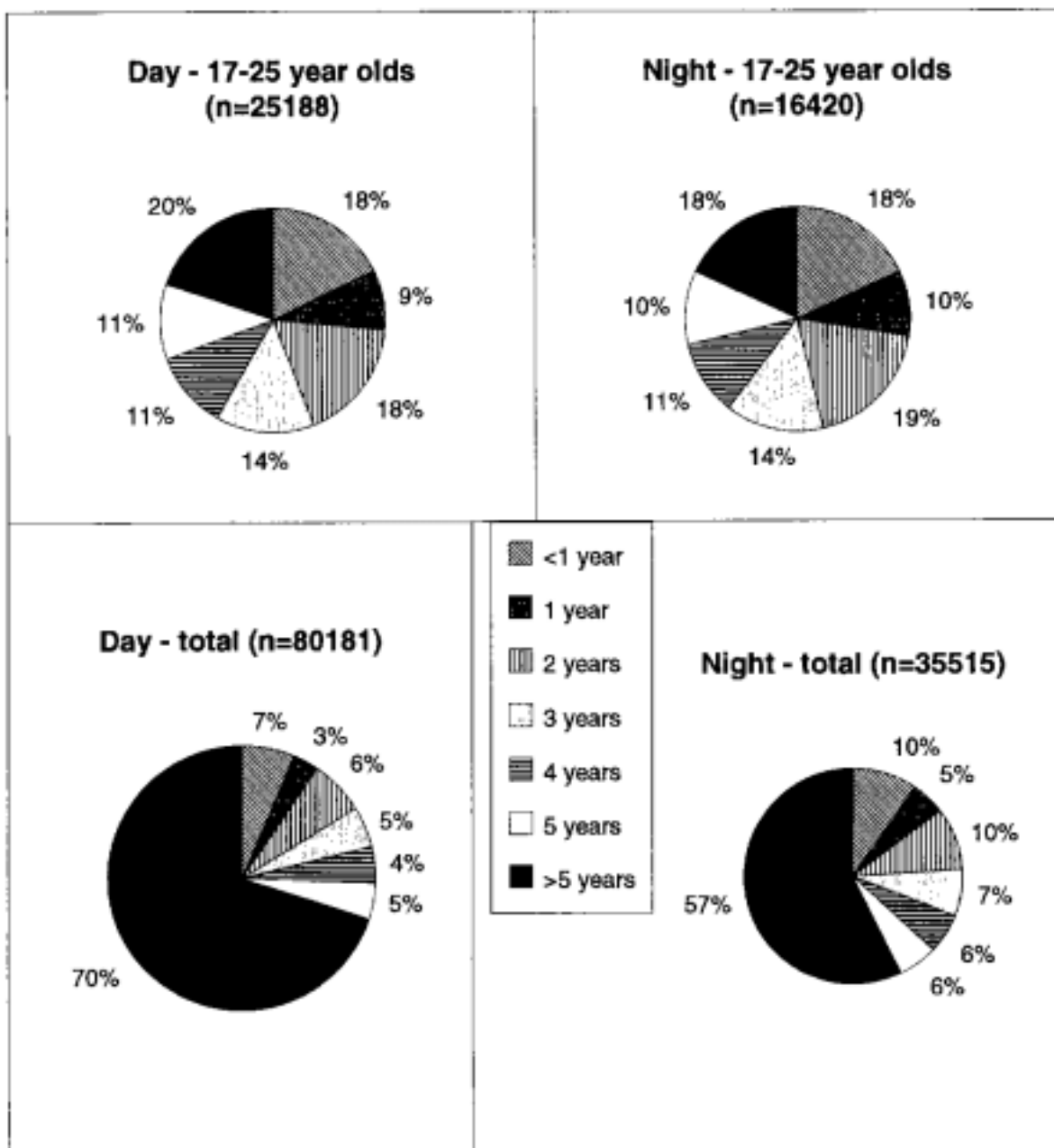
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Learner permit	89	226	28	6		349
Provisional	25	3672	316	36	4	4053
Standard	3	12735	11544	5213	2488	31983
Non-licensed	180	895	525	110	16	1726
Other/police		109	76	30	6	221
Total	297	17637	12489	5395	2514	38332

Missing cases = 10303

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
YEARS OF DRIVING EXPERIENCE BY AGE GROUP

N=132739



NSW CASUALTY FILE (1986-1989) *
YEARS OF DRIVING EXPERIENCE BY AGE GROUP

		DAY				
		0-16	17-25	26-40	41-55	56-98
		Total				
Less than 1		197	4512	443	58	21
1		11	2167	265	45	13
2		2	4471	577	116	24
3		1	3545	463	106	39
4		1	2864	514	100	24
5			2690	813	147	31
More than 5		0	4939	23533	15315	12134
Total		212	25188	26608	15887	12286

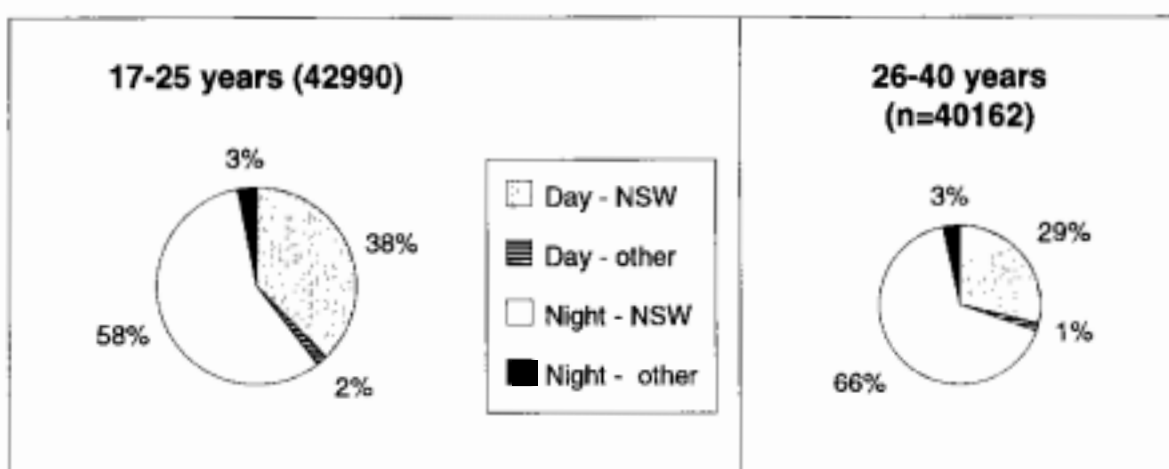
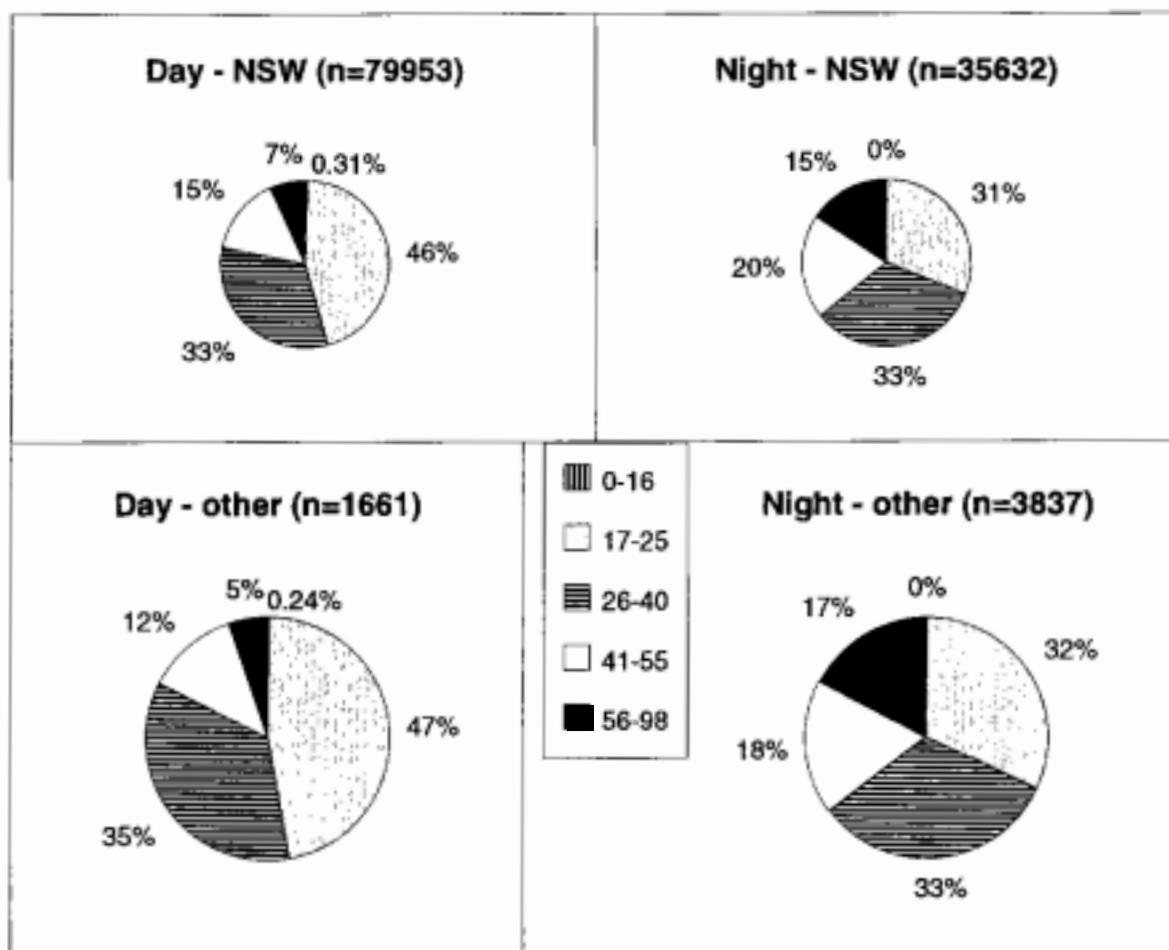
		NIGHT				
		0-16	17-25	26-40	41-55	56-98
		Total				
Less than 1		163	2976	226	27	
1		7	1585	126	23	1
2			3095	271	37	7
3		1	2297	234	37	6
4		1	1810	178	33	4
5			1711	370	56	7
More than 5		0	2946	10113	4828	2339
Total		172	16420	11518	5041	2364

Missing cases = 17043

-
- * Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
STATE OF LICENCE BY AGE GROUP

N=132739



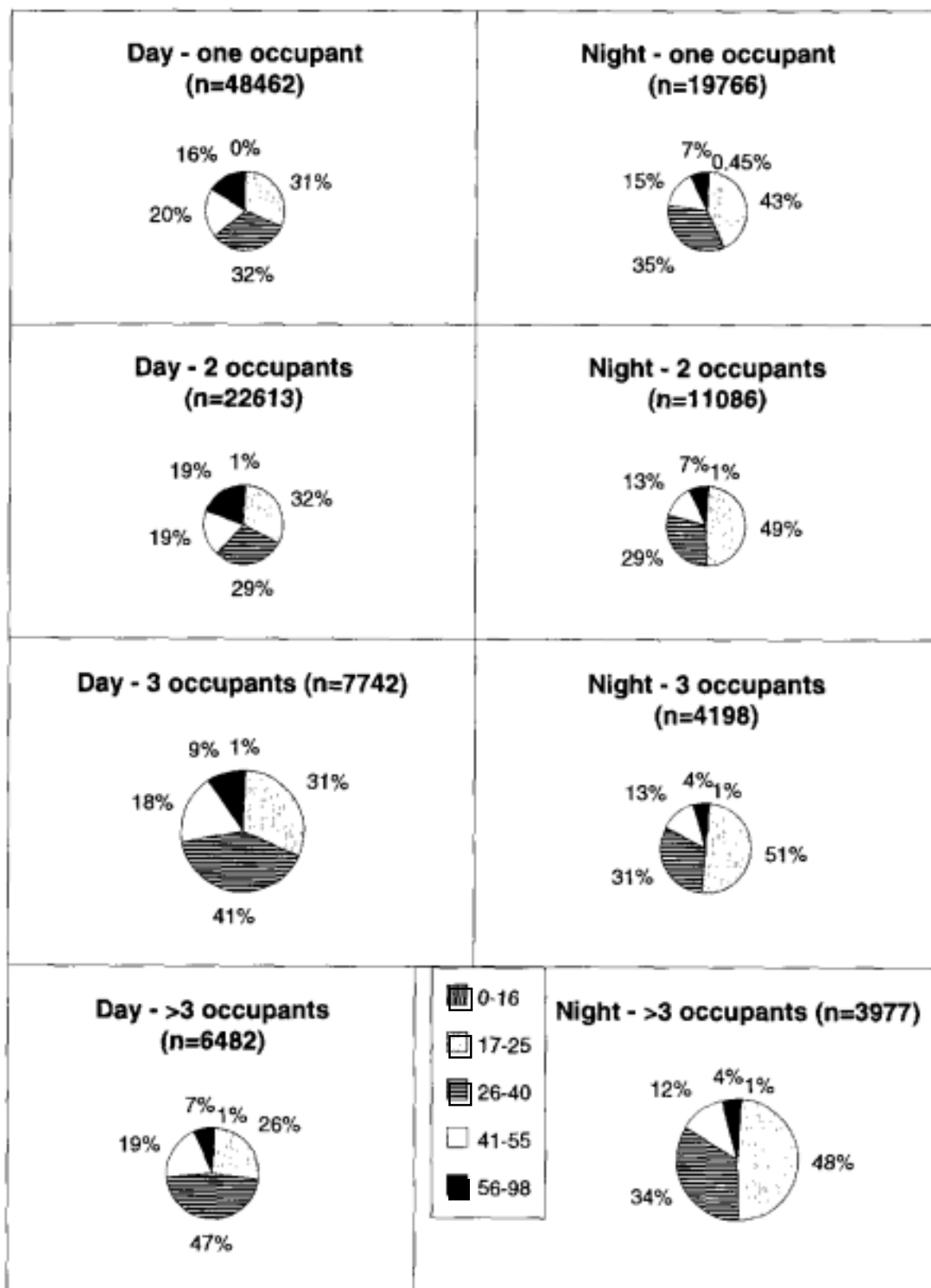
NSW CASUALTY FILE (1986-1989) *
STATE OF LICENCE BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
ACT		230	214	135	84	663
New South Wales	171	24738	26670	16029	12345	79953
Victoria		370	385	226	285	1266
Queensland		382	393	196	193	1164
South Australia	1	86	99	46	54	286
Western Australia		36	39	14	14	103
Tasmania		17	12	6	5	40
Northern Territory		11	18	3		32
Overseas		94	107	57	25	283
Total	172	25964	27937	16712	13005	83790

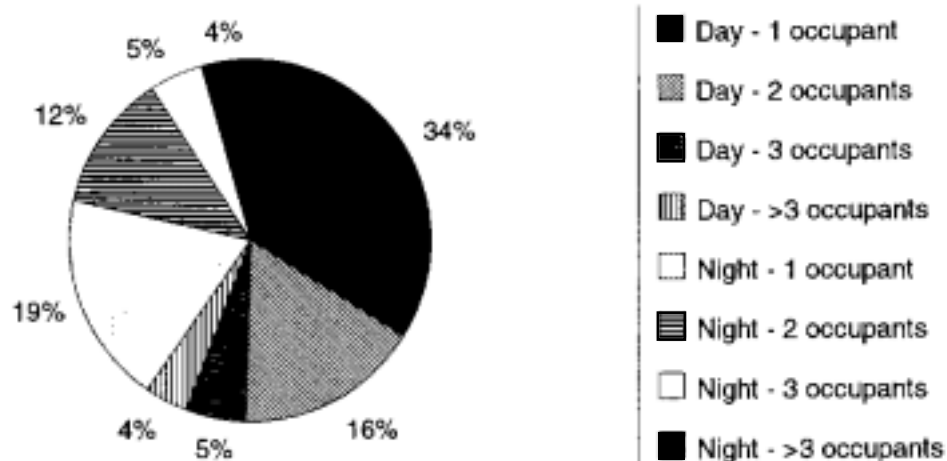
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
ACT	1	182	105	44	10	342
New South Wales	109	16242	11640	5187	2454	35632
Victoria		220	189	71	47	527
Queensland	1	237	177	56	22	493
South Australia		53	48	14	1	116
Western Australia		32	18	6		56
Tasmania		10	4	2	1	17
Northern Territory	1	6	5		1	13
Overseas	1	44	39	11	2	97
Total	113	17026	12225	5391	2538	37293

Missing cases = 11656

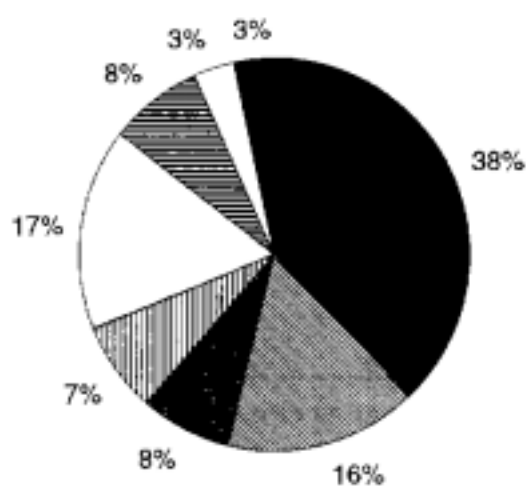
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



17-25 years (n=44674)



26-40 years (n=41112)



NSW CASUALTY FILE (1986-1989) *
NUMBER OF OCCUPANTS BY AGE GROUP **

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
1	91	15254	15639	9930	7548	48462
2	136	7336	6566	4214	4361	22613
3	51	2416	3138	1415	722	7742
4	31	1156	1894	768	339	4188
5	11	443	823	343	80	1700
6	1	86	227	96	22	432
More than 6	2	31	95	33	1	162
Total	323	26722	28382	16799	13073	85299

NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
1	88	8442	6827	2988	1421	19766
2	117	5463	3239	1459	808	11086
3	50	2120	1300	546	182	4198
4	32	1227	836	287	108	2490
5	15	509	355	148	33	1060
6	4	140	117	31	5	297
More than 6	0	51	56	20	3	130
Total	306	17952	12730	5479	2560	39027

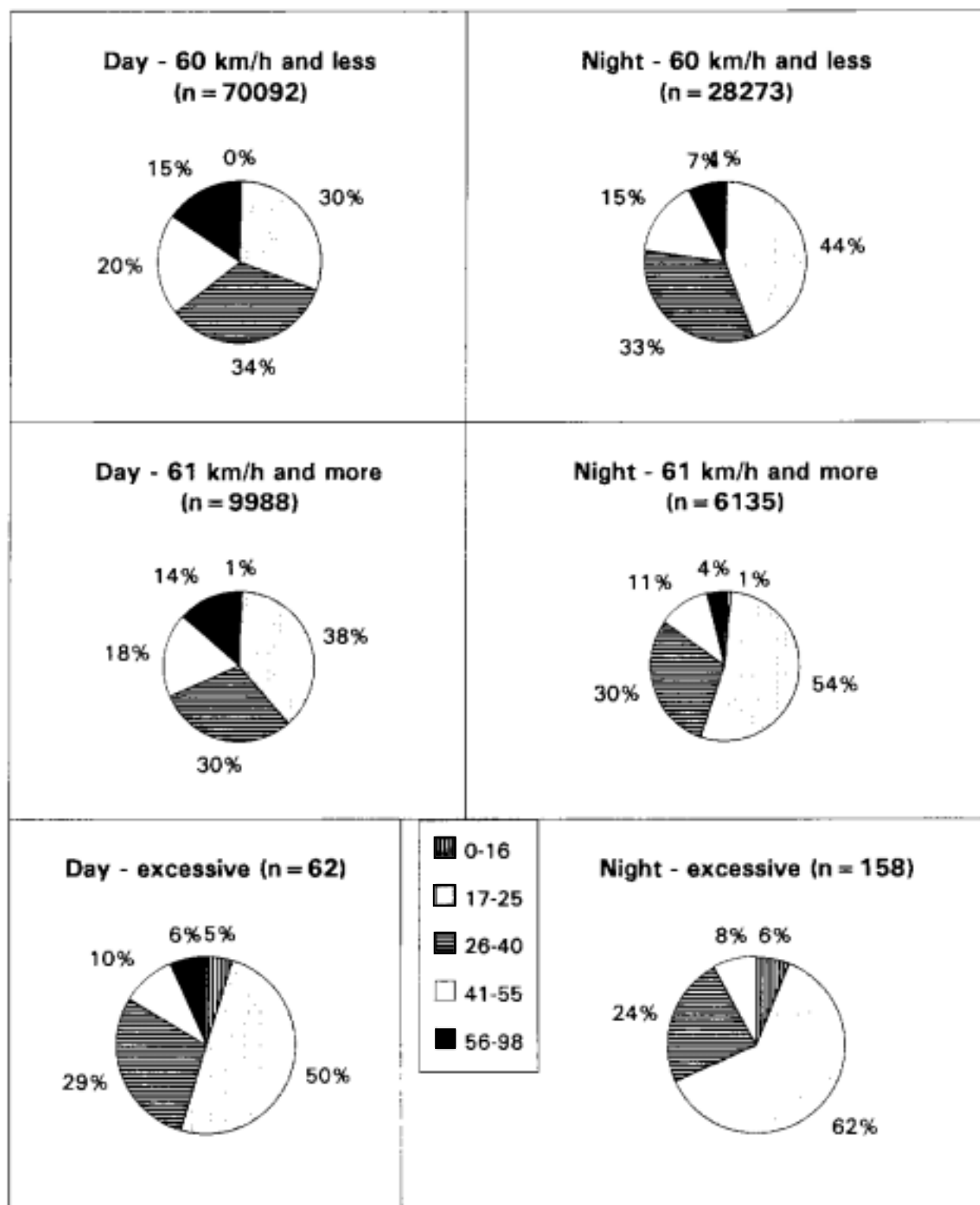
Missing cases = 4118

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

** There were 4295 cases where the vehicle was unoccupied

NSW CASUALTY FILE (1986-1989)
STATED SPEED OF VEHICLE (KM/H) BY AGE GROUP

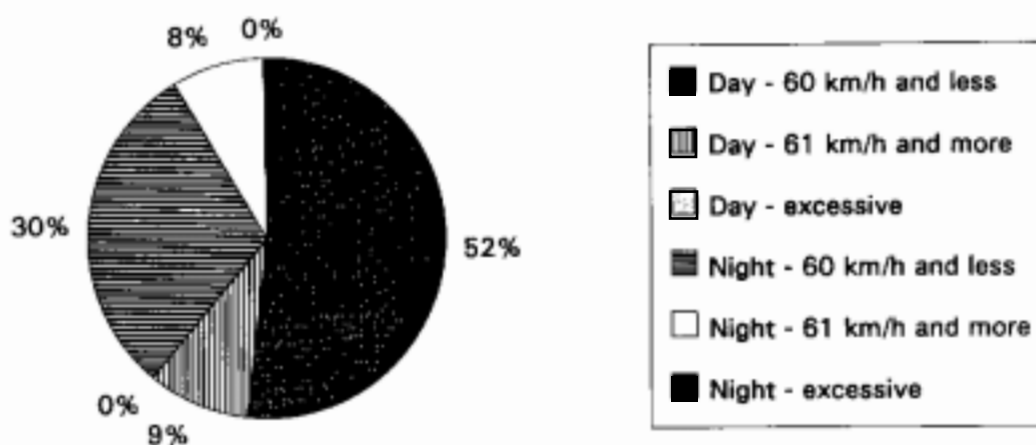
N = 132739



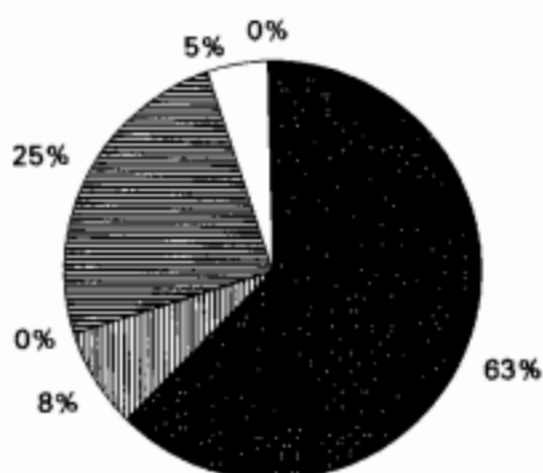
NSW CASUALTY FILE (1986-1989)
STATED SPEED OF VEHICLE (KM/H) BY AGE GROUP

N = 132739

17-25 years (n = 40833)



26-40 years (n = 38071)



NSW CASUALTY FILE (1986-1989) •
STATED SPEED OF VEHICLE (KM/H) BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
0-20	57	7685	10634	6947	5738	31061
21-40	64	4157	4832	2871	2334	14258
41-60	93	9375	8337	4286	2682	24773
61-80	40	2326	1736	1054	828	5984
81-100	14	1350	1195	672	507	3738
More than 100	9	131	79	27	20	266
Excessive	3	31	18	6	4	62
Total	280	25055	26831	15863	12113	80142

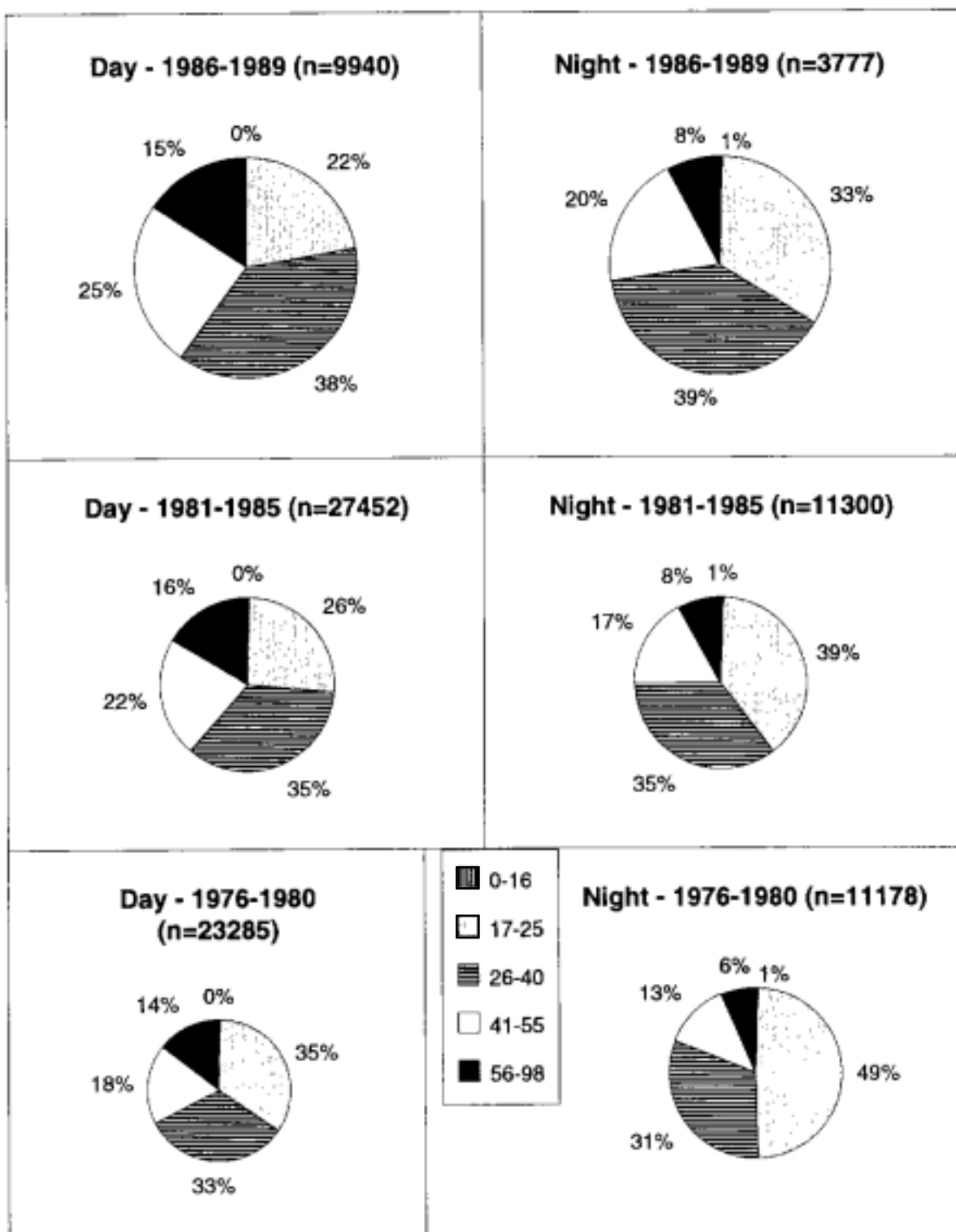
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
0-20	37	3327	3237	1710	945	9256
21-40	33	2366	1840	916	505	5660
41-60	84	6669	4313	1633	658	13357
61-80	50	1938	1034	398	141	3561
81-100	22	1229	691	279	85	2306
More than 100	14	151	87	11	5	268
Excessive	10	98	38	12		158
Total	250	15778	11240	4959	2339	34566

Missing cases = 18031

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

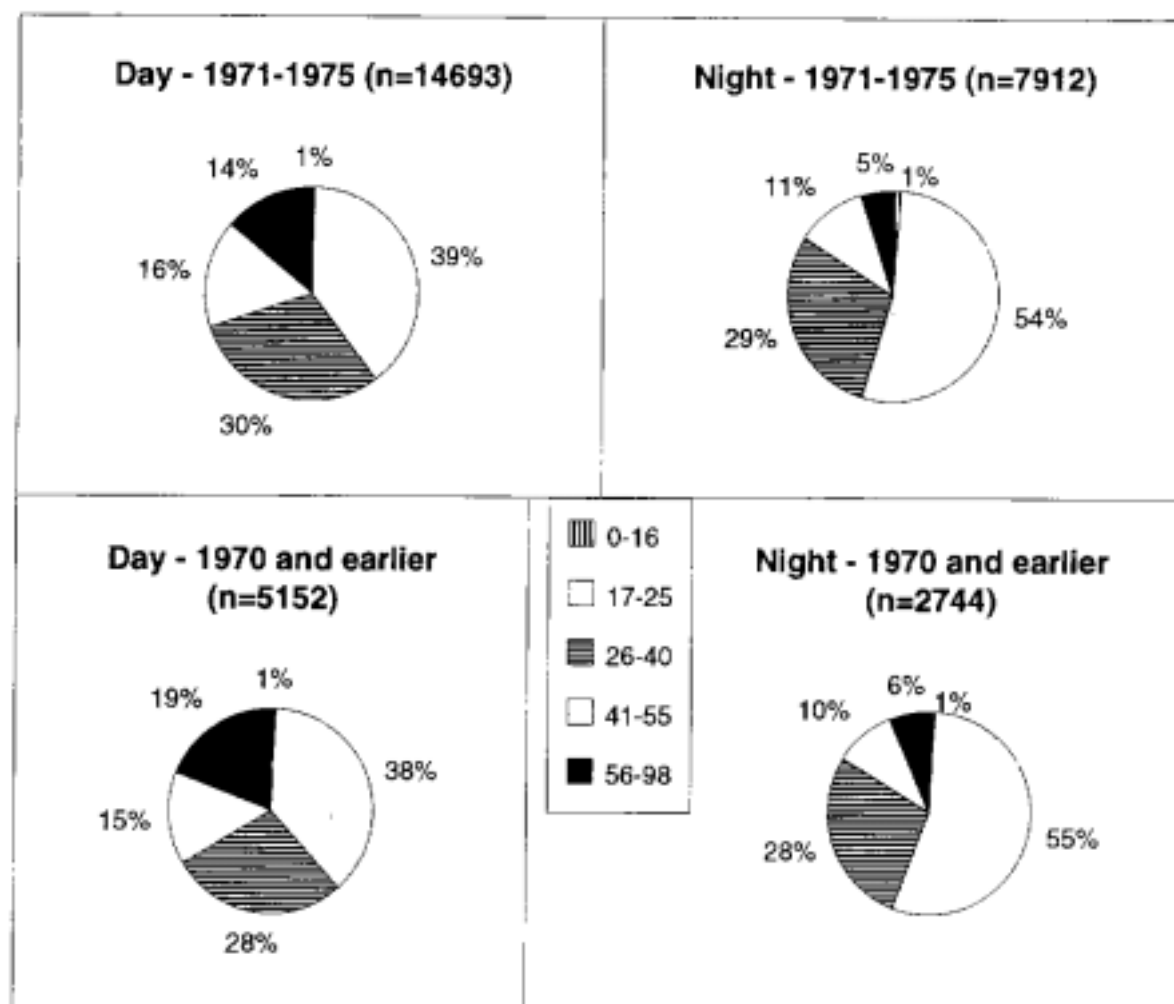
NSW CASUALTY FILE (1986-1989)
YEAR OF VEHICLE MANUFACTURE BY AGE GROUP

N=132739



NSW CASUALTY FILE (1986-1989)
YEAR OF VEHICLE MANUFACTURE BY AGE GROUP

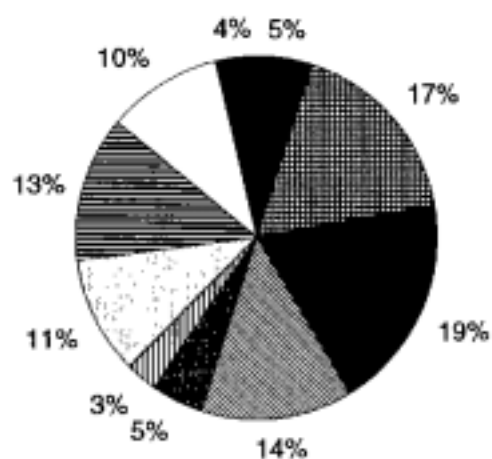
N=132739



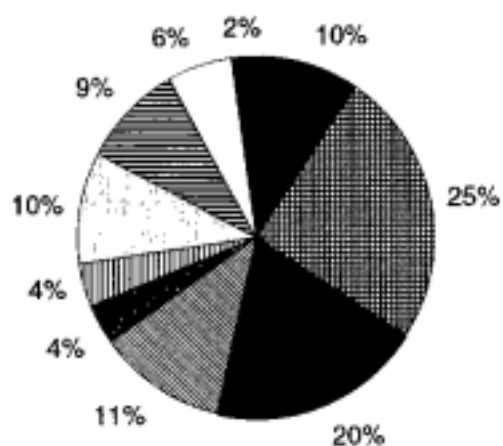
NSW CASUALTY FILE (1986-1989)
YEAR OF VEHICLE MANUFACTURE BY AGE GROUP

N=132739

17-25 years (n=42175)



26-40 years (n=38857)



NSW CASUALTY FILE (1986-1989) *
YEAR OF VEHICLE MANUFACTURE BY AGE GROUP

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
1986-1989	18	2218	3735	2446	1523	9940
1981-1985	83	7189	9587	6135	4458	27452
1976-1980	79	8064	7612	4215	3315	23285
1971-1975	76	5775	4453	2380	2009	14693
1970 and earlier	41	1954	1431	761	965	5152
Total	297	25200	26818	15937	12270	80522

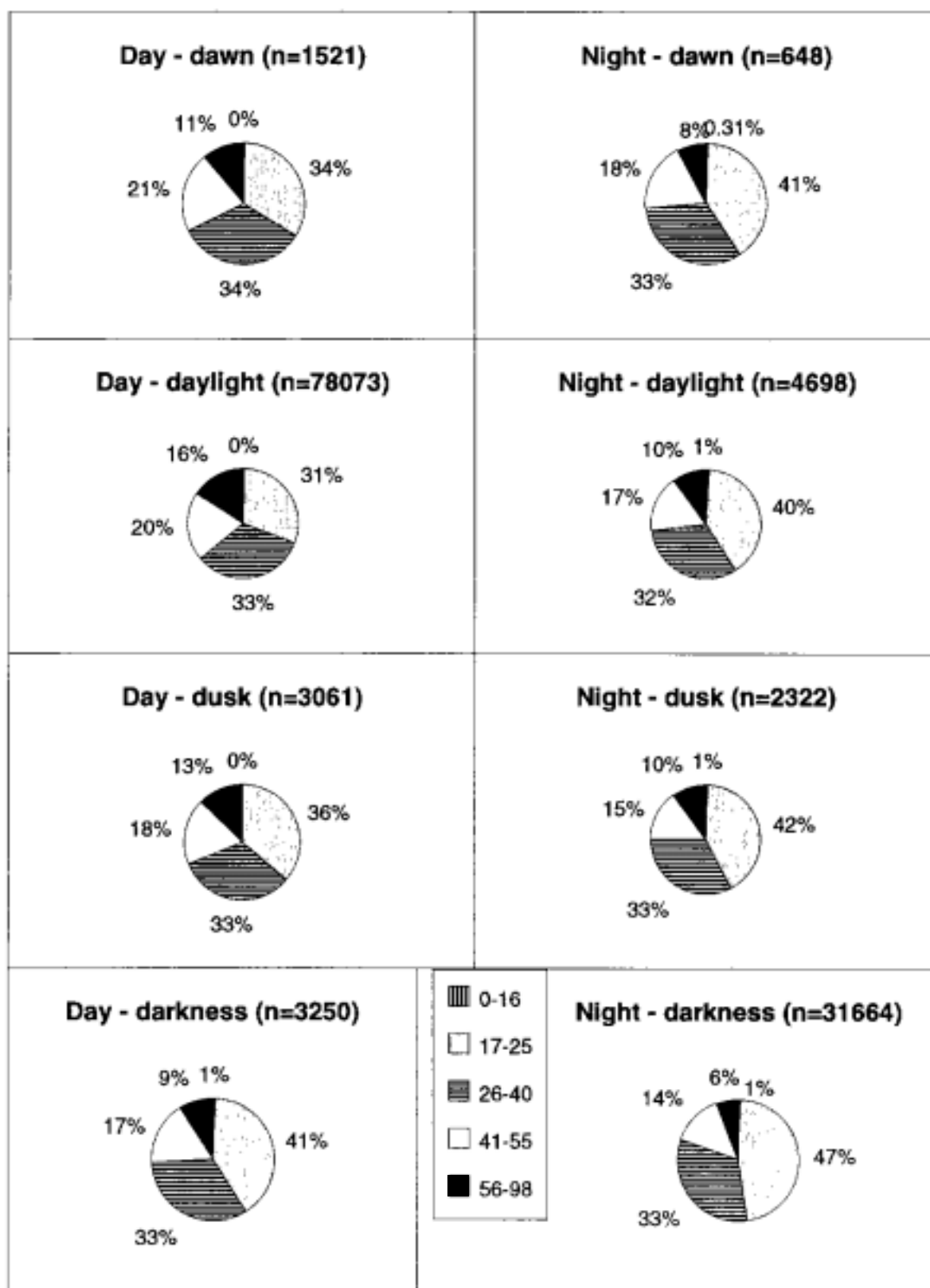
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
1986-1989	20	1264	1467	742	284	3777
1981-1985	64	4449	3980	1908	899	11300
1976-1980	89	5493	3491	1417	688	11178
1971-1975	89	4259	2328	847	389	7912
1970 and earlier	23	1510	773	263	175	2744
Total	285	16975	12039	5177	2435	36911

Missing cases = 15306

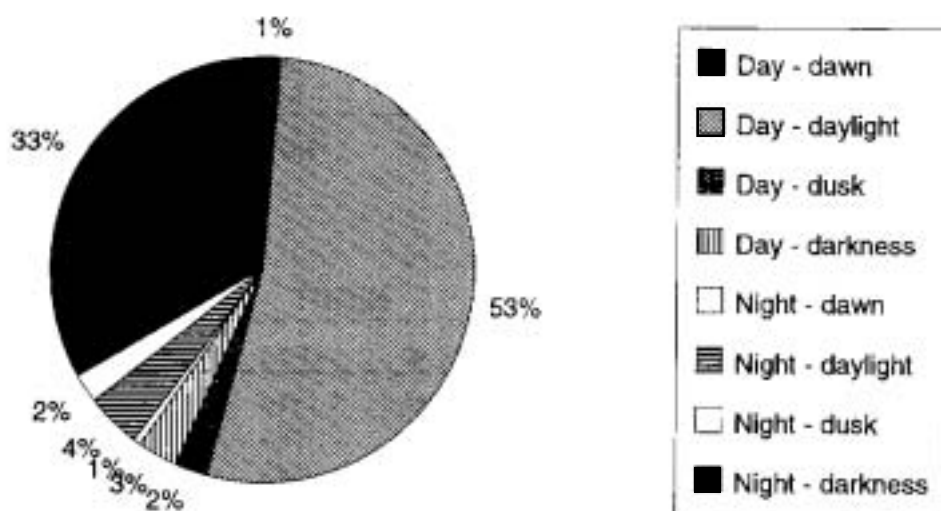
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
NATURAL LIGHT BY AGE GROUP

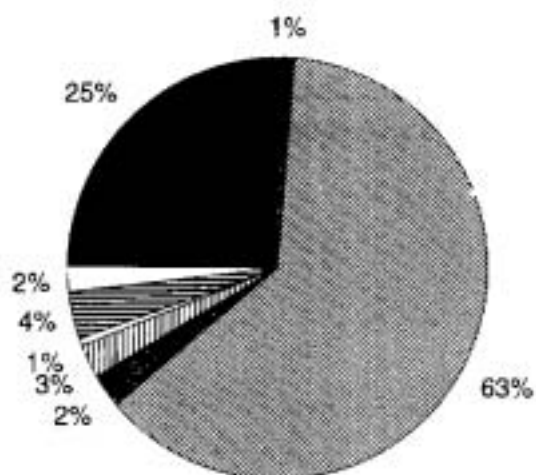
N=132739



17-25 years (n=44975)



26-40 years (n=41458)



NSW CASUALTY FILE (1986-1989) •
NATURAL LIGHT BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Dawn	5	512	518	319	167	1521
Daylight	290	23956	26027	15505	12295	78073
Dusk	6	1111	995	563	386	3061
Darkness	23	1321	1072	541	293	3250
Total	324	26900	28612	16928	13141	85905

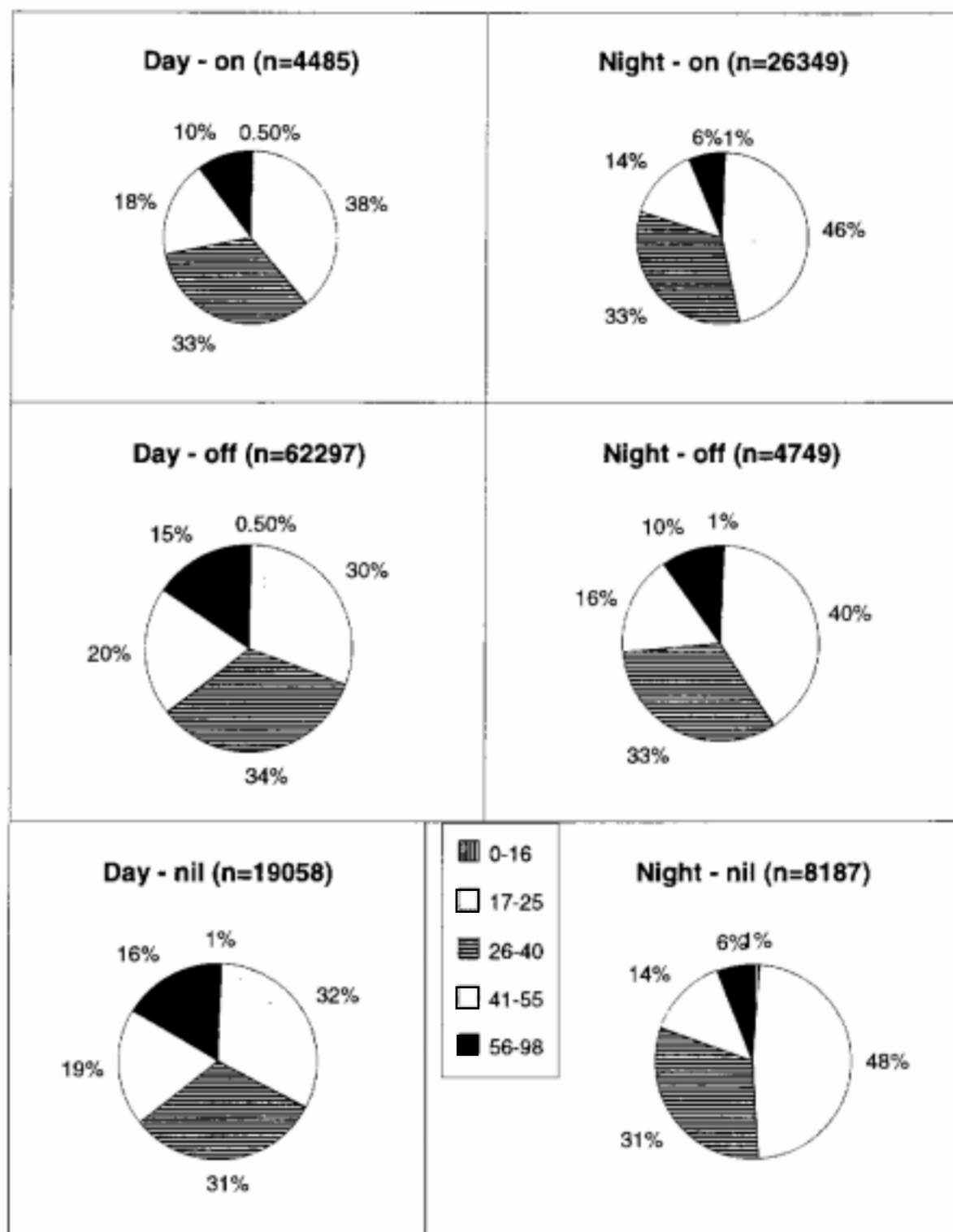
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Dawn	2	263	215	118	50	648
Daylight	40	1882	1525	789	462	4698
Dusk	18	970	757	345	232	2322
Darkness	249	14960	10349	4281	1825	31664
Total	309	18075	12846	5533	2569	39332

Missing cases = 7502

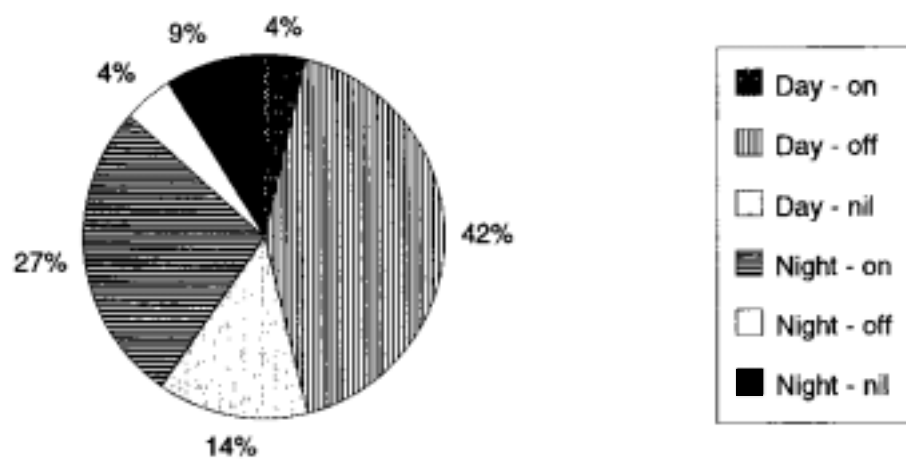
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
STREETLIGHTING BY AGE GROUP

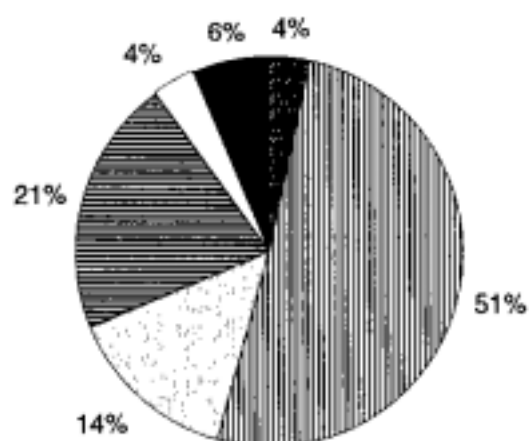
N=132739



17-25 years (n=44934)



26-40 years (n=41435)



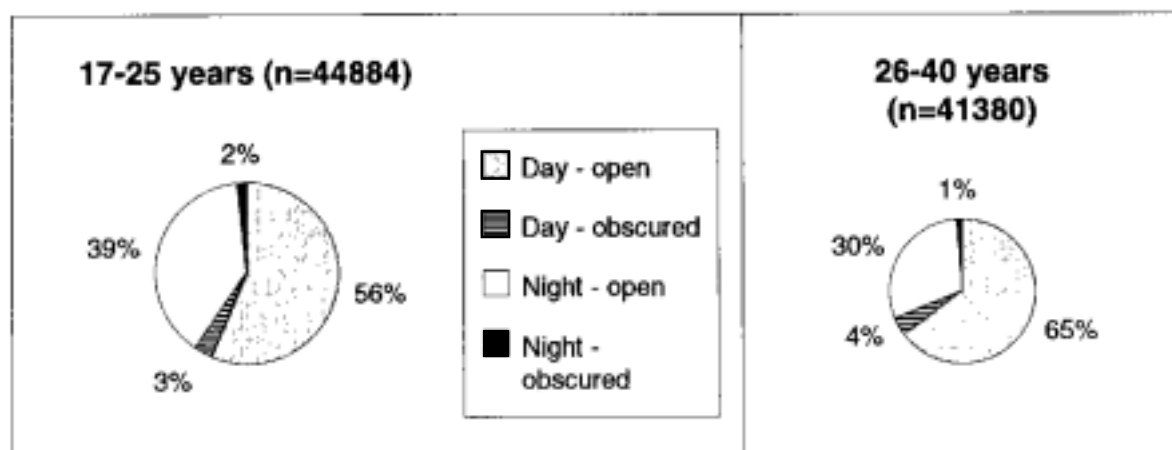
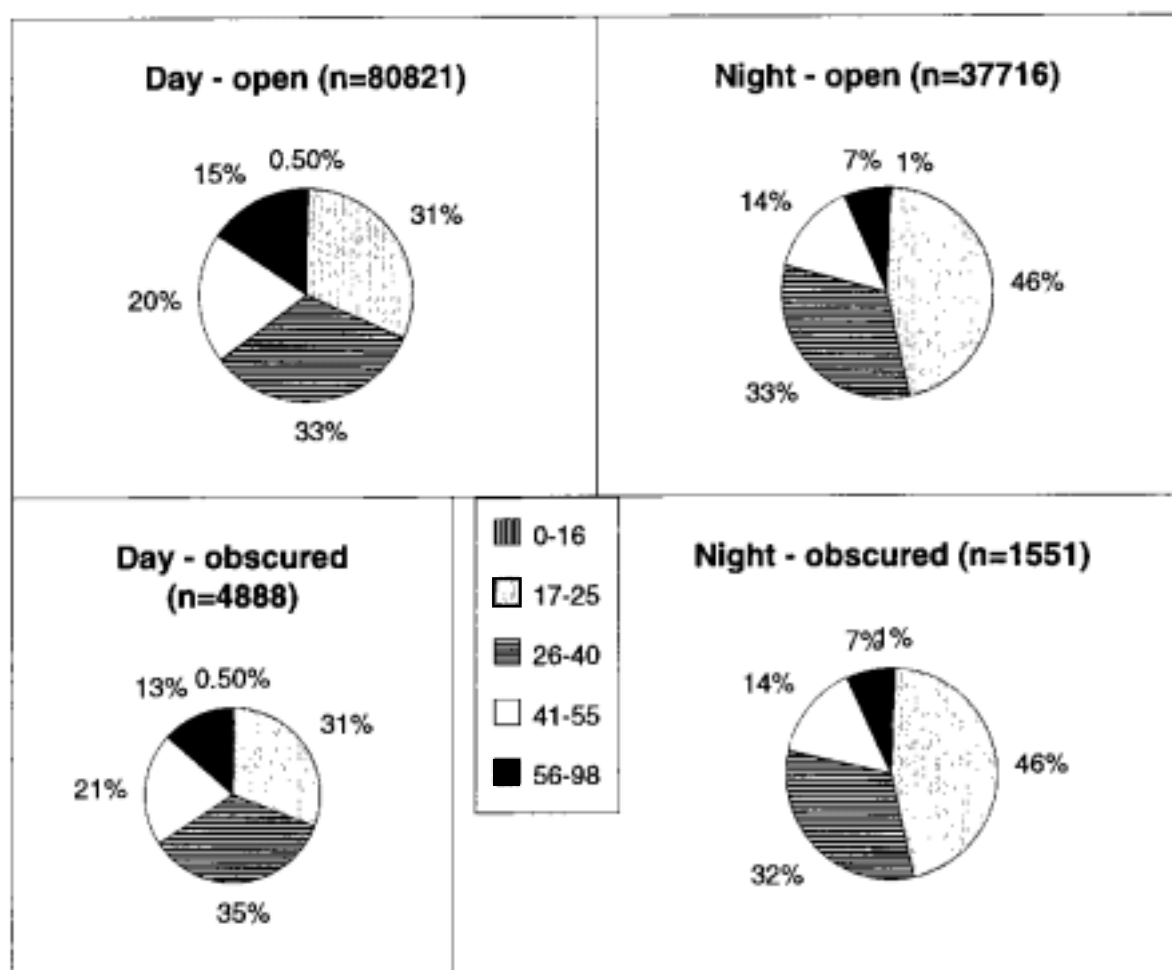
NSW CASUALTY FILE (1986-1989) •
STREETLIGHTING BY AGE GROUP

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
On	22	1725	1487	798	453	4485
Off	176	18997	21119	12425	9580	62297
Nil	128	6162	5994	3685	3089	19058
Total	326	26884	28600	16908	13122	85840

NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
On	184	12183	8726	3620	1636	26349
Off	29	1923	1552	775	470	4749
Nil	96	3944	2557	1129	461	8187
Total	309	18050	12835	5524	2567	39285

Missing cases = 7614

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



NSW CASUALTY FILE (1986-1989) *
VIEW BY AGE GROUP

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Open	303	25347	26842	15862	12467	80821
Obscured	22	1493	1708	1016	649	4888
Total	325	26840	28550	16878	13116	85709

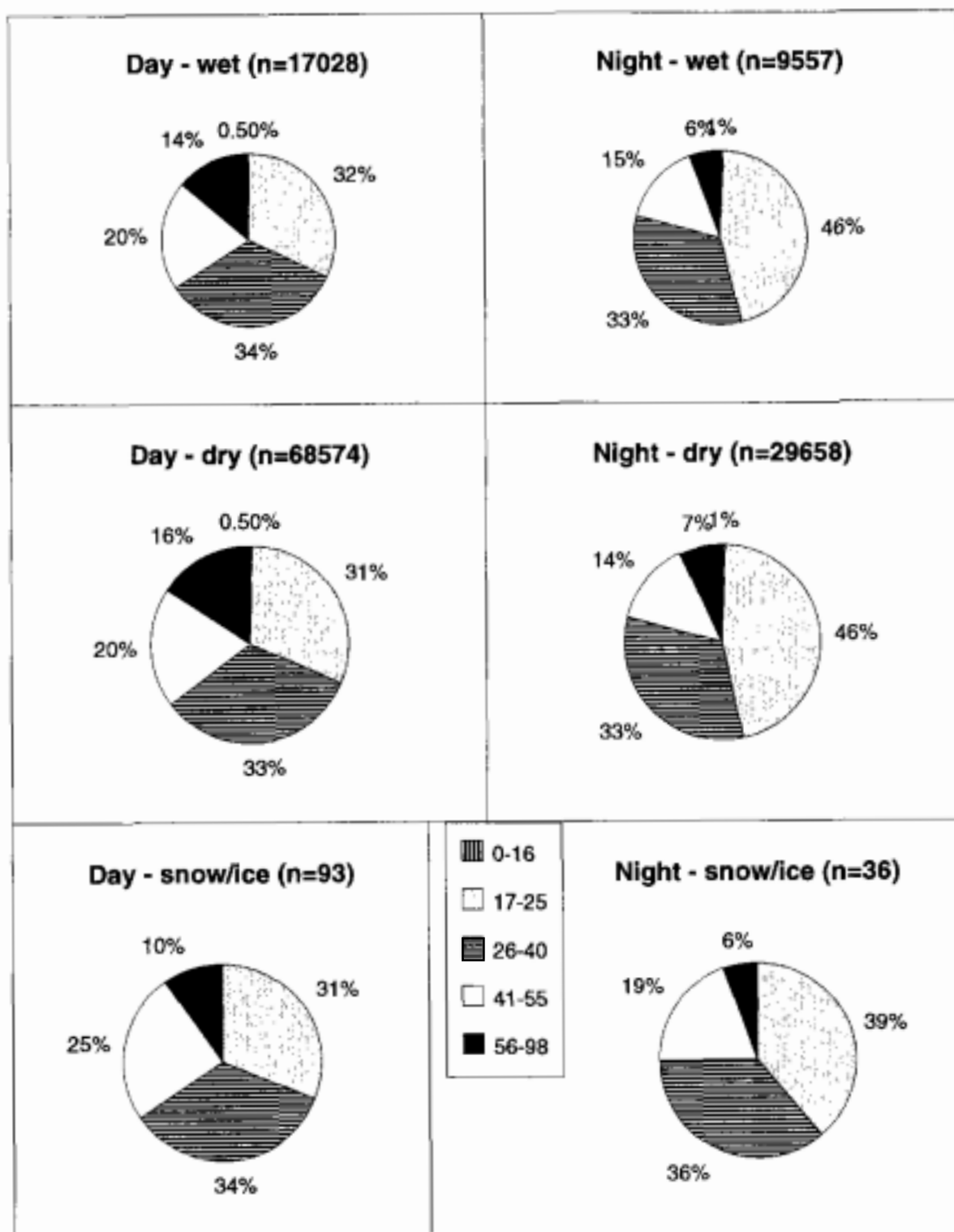
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
Open	298	17326	12335	5302	2455	37716
Obscured	10	718	495	221	107	1551
Total	308	18044	12830	5523	2562	39267

Missing cases = 7763

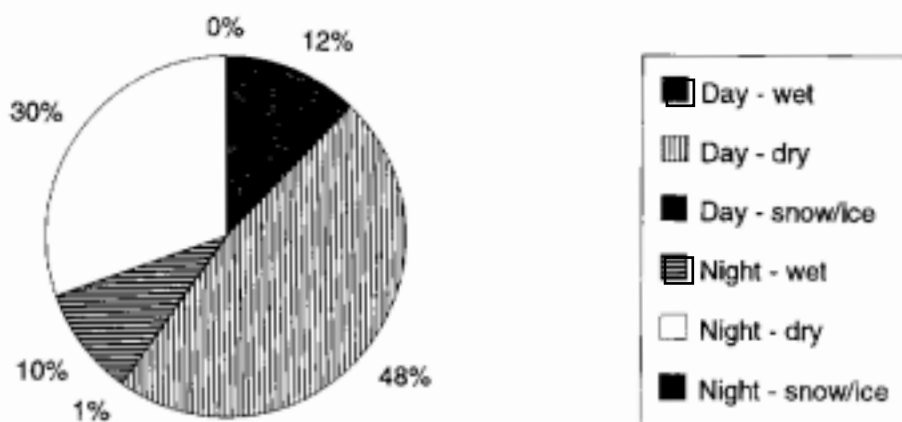
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
ROAD SURFACE CONDITIONS BY AGE GROUP

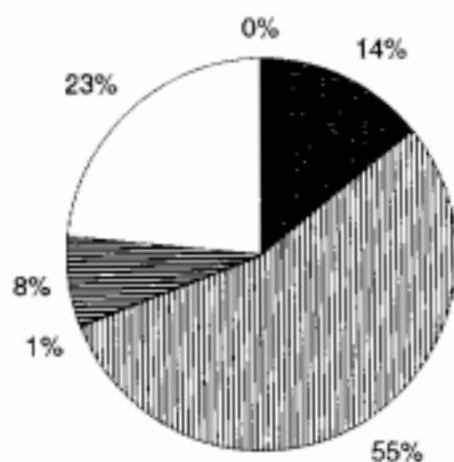
N=132739



17-25 years (n=44883)



26-40 years (n=41369)



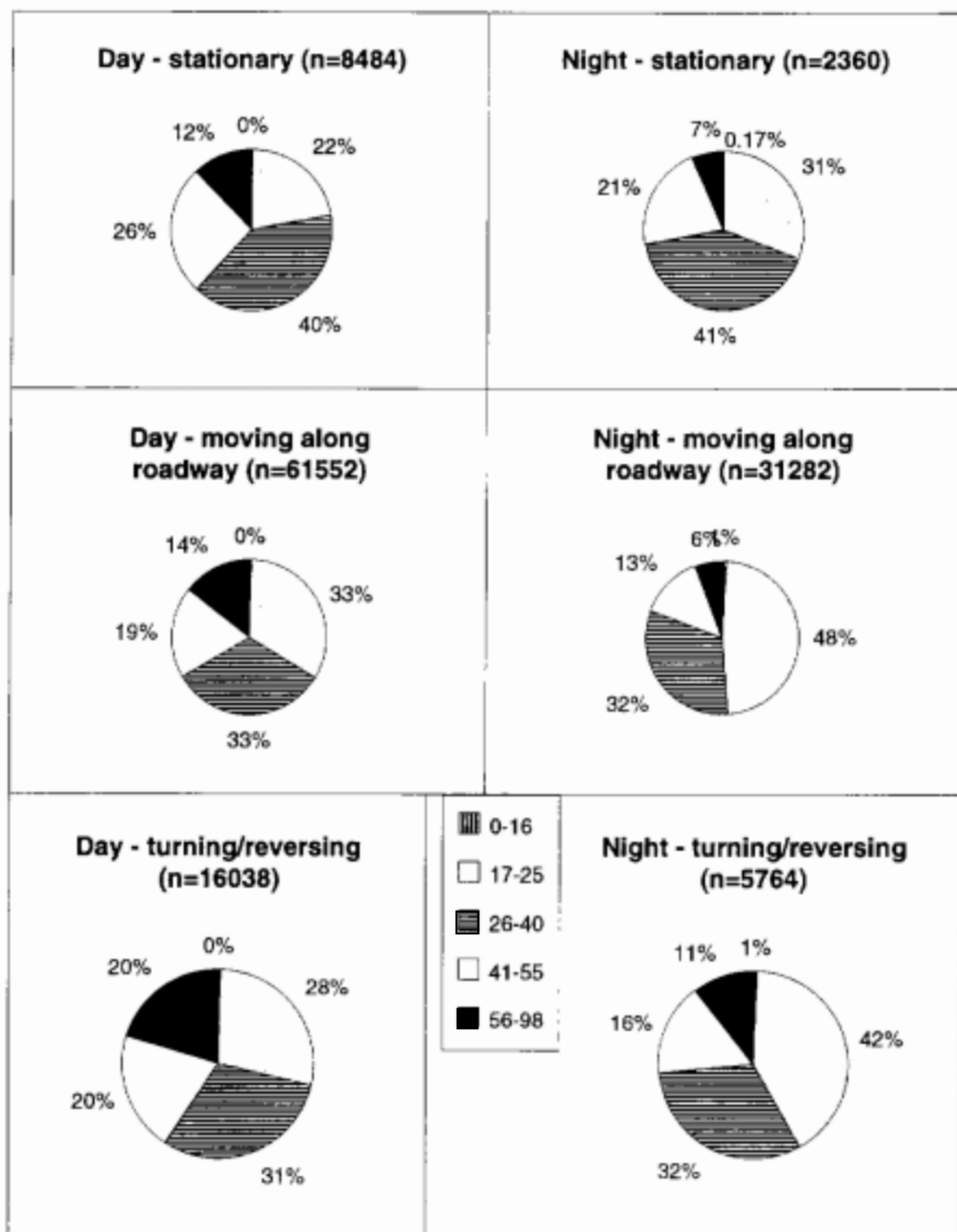
NSW CASUALTY FILE (1986-1989) *
ROAD SURFACE CONDITIONS BY AGE GROUP

	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Wet	44	5416	5781	3432	2355	17028
Dry	279	21401	22736	13417	10741	68574
Snow or Ice		29	32	23	9	93
Total	323	26846	28549	16872	13105	85695

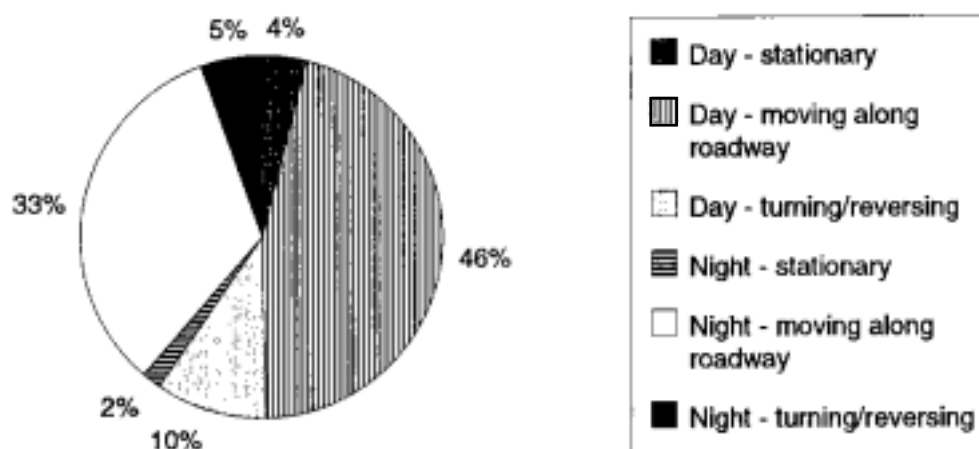
	NIGHT					
	0-16	17-25	26-40	41-55	56-98	Total
Wet	61	4372	3155	1413	556	9557
Dry	246	13651	9652	4105	2004	29658
Snow or Ice		14	13	7	2	36
Total	307	18037	12820	5525	2562	39251

Missing cases = 7793

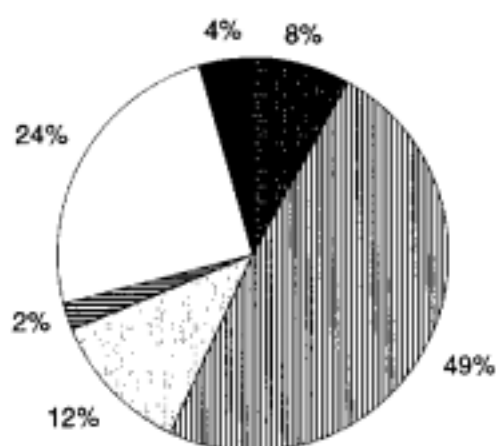
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



17-25 years (n=45075)



26-40 years (n=41536)



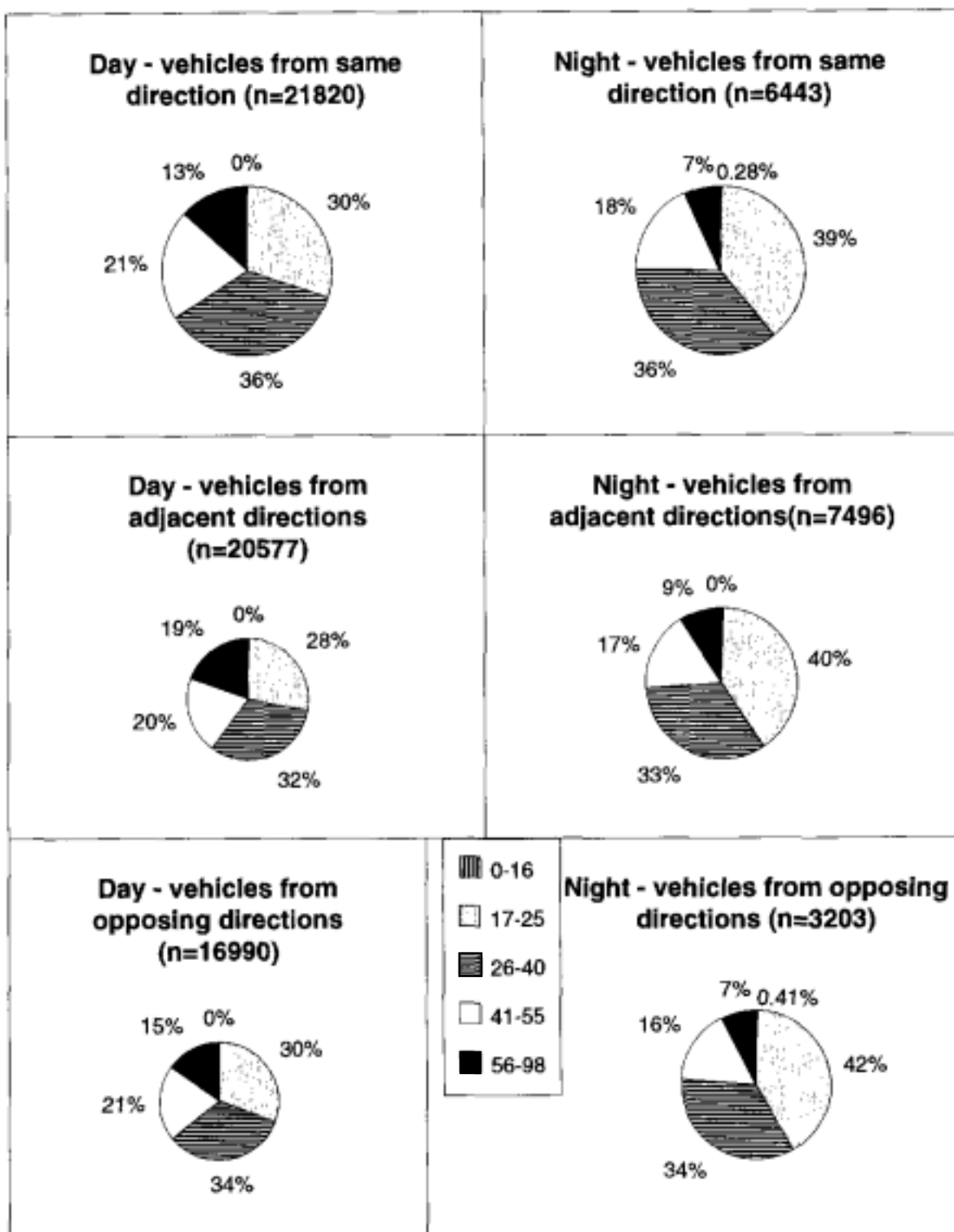
NSW CASUALTY FILE (1986-1989) *
MANOEUVRES OF UNIT BY AGE GROUP

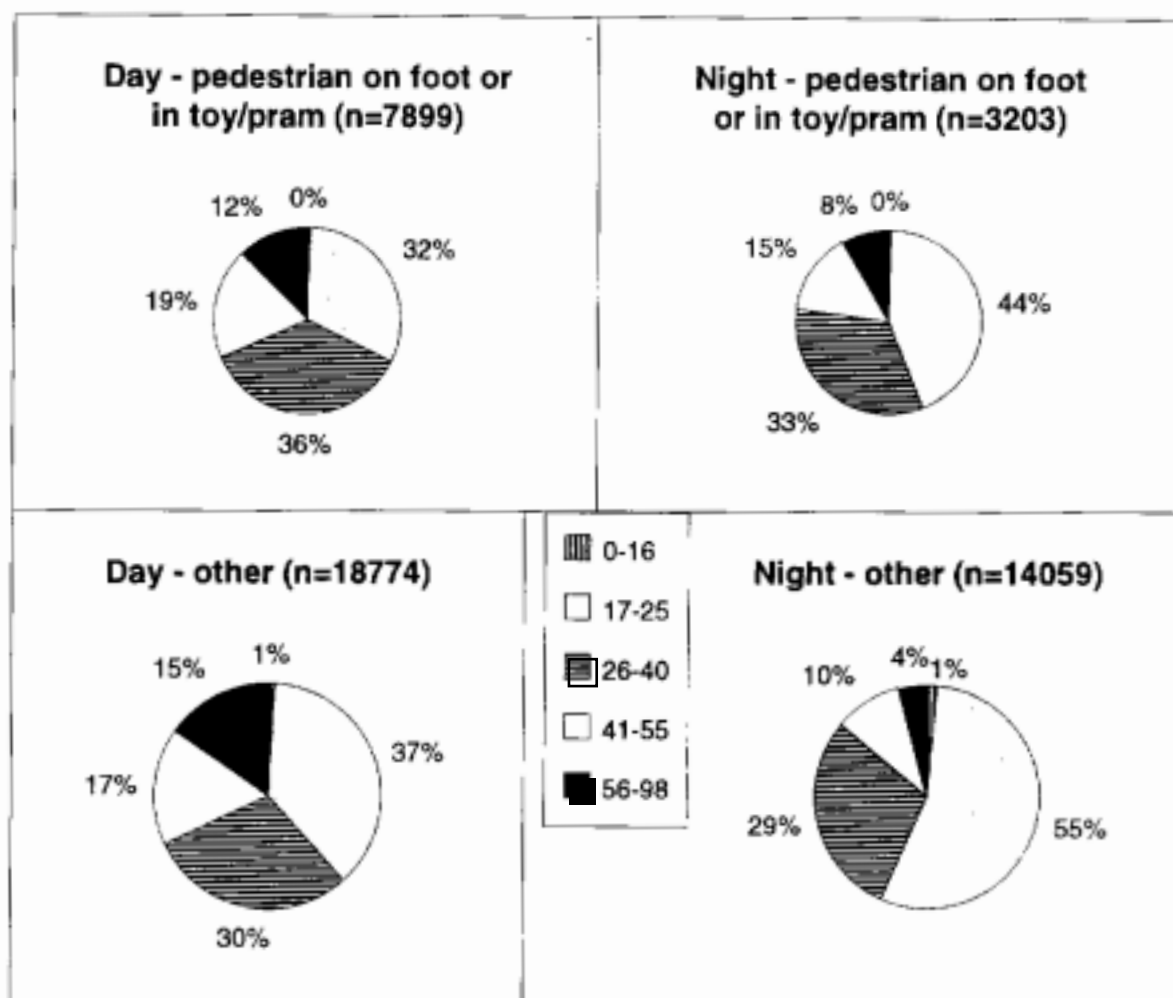
	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Stationary:						
in traffic	9	1775	3229	2090	990	8093
other	3	77	166	102	43	391
Moving along roadway:						
proceeding along lane	231	18286	18518	10569	8010	55614
on incorrect side of road	29	1795	1306	711	595	4436
other	6	488	491	245	272	1502
Turning/reversing:						
turning right out of own lane	28	2972	3011	2043	2215	10269
other	20	1569	1947	1199	1034	5769
Total	326	26962	28668	16959	13159	86074

	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Stationary:						
in traffic	4	669	902	464	145	2184
other	0	59	76	29	12	176
Moving along roadway:						
proceeding along lane	228	13243	9070	3770	1653	27964
on incorrect side of road	39	1513	844	301	125	2822
other	2	235	159	67	33	496
Turning/reversing:						
turning right out of own lane	17	1702	1248	632	451	4050
other	19	692	569	278	156	1714
Total	309	18113	12868	5541	2575	39406

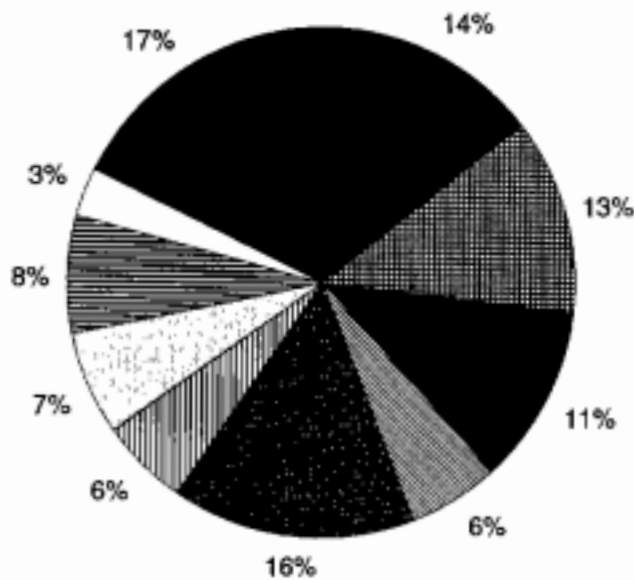
Missing cases = 7259

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



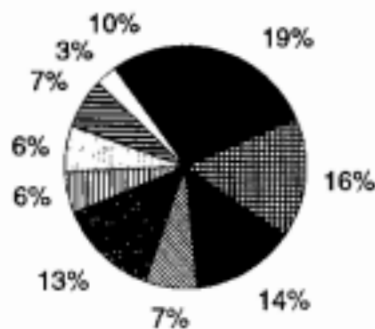


17-25 years (n=45065)



- Day - vehicles from same direction
- ▨ Day - vehicles from adjacent directions
- Day - vehicles from opposing directions
- ▨ Day - pedestrian on foot or in toy/pram
- Day - other
- ▨ Night - vehicles from same direction
- ▨ Night - vehicles from adjacent directions
- ▨ Night - vehicles from opposing directions
- ▨ Night - pedestrian on foot or in toy/pram
- Night - other

26-40 years (n=41528)



NSW CASUALTY FILE (1986-1989) *
ROAD USER MOVEMENT BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
near side	9	1233	1330	704	504	3780
emerging	2	392	526	285	149	1354
far side	3	651	753	380	214	2001
other	10	255	250	134	115	764
Vehicles from adjacent directions (intersection only)						
cross traffic	18	3390	4234	2645	2650	12947
right near	17	1883	1942	1210	1052	6104
other	3	437	501	316	269	1526
Vehicles from opposing directions						
head on (not overtaking)	21	2235	2689	1615	950	7510
right thru	19	2908	3036	1875	1583	9421
other		19	20	15	5	59
Vehicles from same direction						
- same lane						
rear end	32	4249	5198	3106	1807	14392
left rear		188	221	128	77	614
right rear	3	1160	1284	736	482	3665
- parallel lanes						
lane change right (not overtaking)	1	271	308	166	102	848
other	6	649	807	513	326	2301
Manoeuvring						
u-turn	7	625	595	355	384	1986
emerging from driveway	3	458	513	326	255	1555
other	7	421	456	256	229	1369
Overtaking						
overtake turning	1	297	291	160	110	859
other	3	193	200	136	93	625
On path						
parked	4	210	166	63	95	538
other	4	182	286	151	70	693
Off path, on straight						
off carriageway to left (rollover)	9	194	126	92	85	506
left off carriageway into object/parked vehicle	39	1147	869	427	485	2967
right off carriageway into object/parked vehicle	33	620	398	192	216	1459
other	7	268	197	113	120	705
Off path, on curve or turning						
off carriageway to left on right bend	5	172	117	57	52	403
off carriageway, left on right bend into object/parked vehicle	17	821	471	250	229	1788
off carriageway, right on right bend into object/parked vehicle	15	369	180	124	87	775
off carriageway, right on left bend into object/parked vehicle	8	274	157	91	108	638
off carriageway, left on left bend into object/parked vehicle	2	72	52	32	21	179
other	16	636	394	249	184	1479
Passengers/miscellaneous	2	76	96	55	41	270
Total	326	26955	28663	16957	13159	86060

NSW CASUALTY FILE (1986-1989) •
ROAD USER MOVEMENT BY AGE GROUP

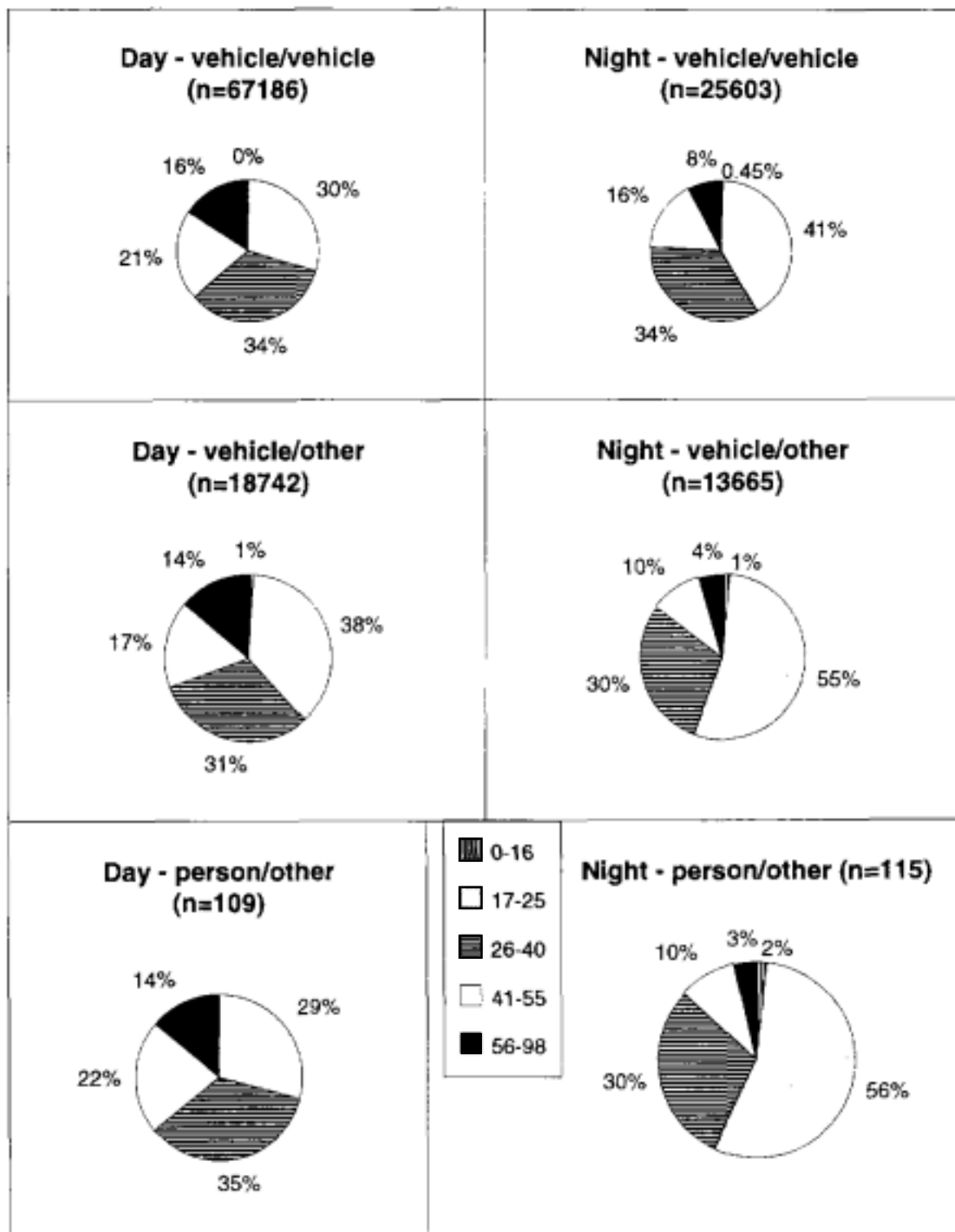
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
near side	5	599	455	218	121	1398
emerging	1	134	97	37	27	296
far side	2	448	363	150	86	1049
other	2	217	152	63	26	460
Vehicles from adjacent directions						0
(intersection only)						0
cross traffic	25	1998	1666	860	444	4993
right near	6	797	620	290	173	1886
other	6	234	206	102	69	617
Vehicles from opposing directions						0
head on (not overtaking)	23	1567	1458	680	246	3974
right thru	11	1834	1358	637	364	4204
other		7	8	5		20
Vehicles from same direction						0
- same lane						0
rear end	12	1646	1634	793	290	4375
left rear		61	73	34	16	184
right rear	2	383	333	167	63	948
- parallel lanes						0
lane change right (not overtaking)	1	113	86	44	13	257
other	3	303	216	105	52	679
Manoeuvring						0
u-turn	5	266	175	83	44	573
emerging from driveway	2	176	143	62	40	423
other	4	142	119	55	30	350
Overtaking						0
overtake turning	1	136	80	33	18	268
other	3	129	80	29	14	255
On path						0
parked	5	355	228	79	41	708
other		257	195	107	43	602
Off path, on straight						0
off carriageway to left (rollover)	3	168	98	36	11	316
left off carriageway into object/parked vehicle	52	1748	950	272	102	3124
right off carriageway into object/parked vehicle	38	975	457	121	49	1640
other	12	341	171	42	21	587
Off path, on curve or turning						0
off carriageway to left on right bend	12	183	95	35	12	337
off carriageway, left on right bend into object/parked vehicle	32	1127	511	129	55	1854
off carriageway, right on right bend into object/parked vehicle	12	424	217	60	19	732
off carriageway, right on left bend into object/parked vehicle	15	487	213	55	22	792
off carriageway, left on left bend into object/parked vehicle	6	371	162	61	24	624
other	6	386	186	73	31	682
Passengers/miscellaneous	2	98	60	23	9	192
Total	309	18110	12865	5540	2575	39399

Missing cases = 7280

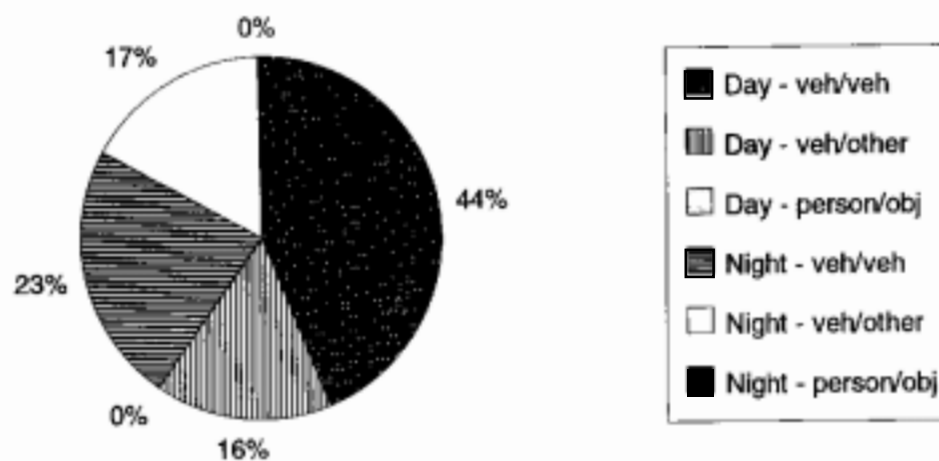
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
FIRST IMPACT TYPE BY AGE GROUP

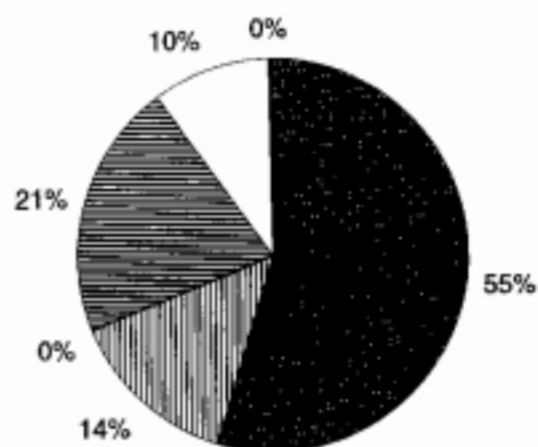
N=132739



17-25 years (n=45049)



26-40 years (n=41514)



NSW CASUALTY FILE (1986-1989) •
FIRST IMPACT TYPE BY AGE GROUP

DAY						
	0-16	17-25	26-40	41-55	56-98	Total
Vehicle/vehicle:						
head-on	23	2332	2797	1689	991	7832
right angle	41	6168	7190	4497	4236	22132
nose-tail	35	5621	6730	3987	2385	18758
other angle	53	5754	6080	3610	2967	18464
Vehicle/other:						
object	114	3439	2225	1196	1205	8179
pedestrian	24	2531	2859	1503	982	7899
animal	1	49	38	21	11	120
train/aeroplane	1	10	12	7	6	36
rollover	34	1011	684	420	359	2508
Person/object		32	38	24	15	109
Total	326	26947	28653	16954	13157	86037

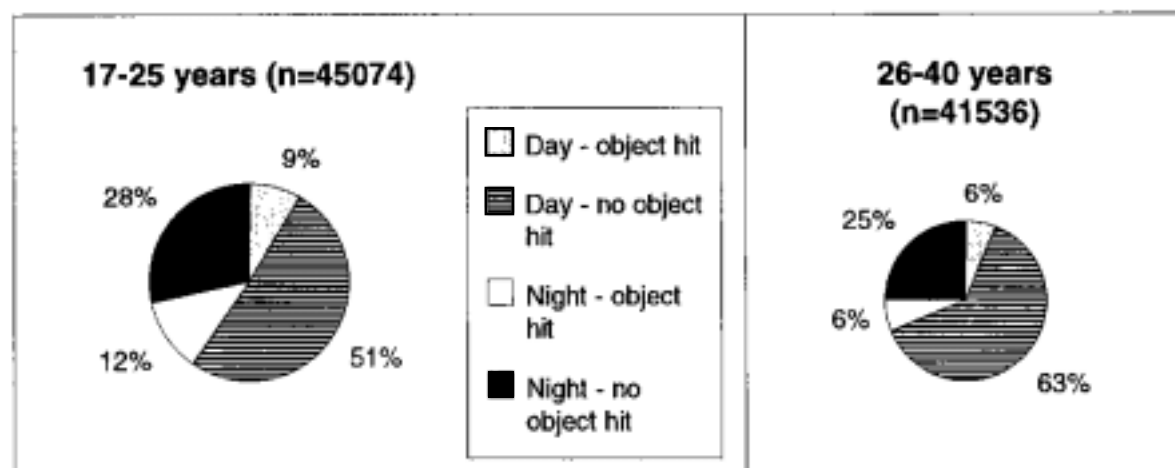
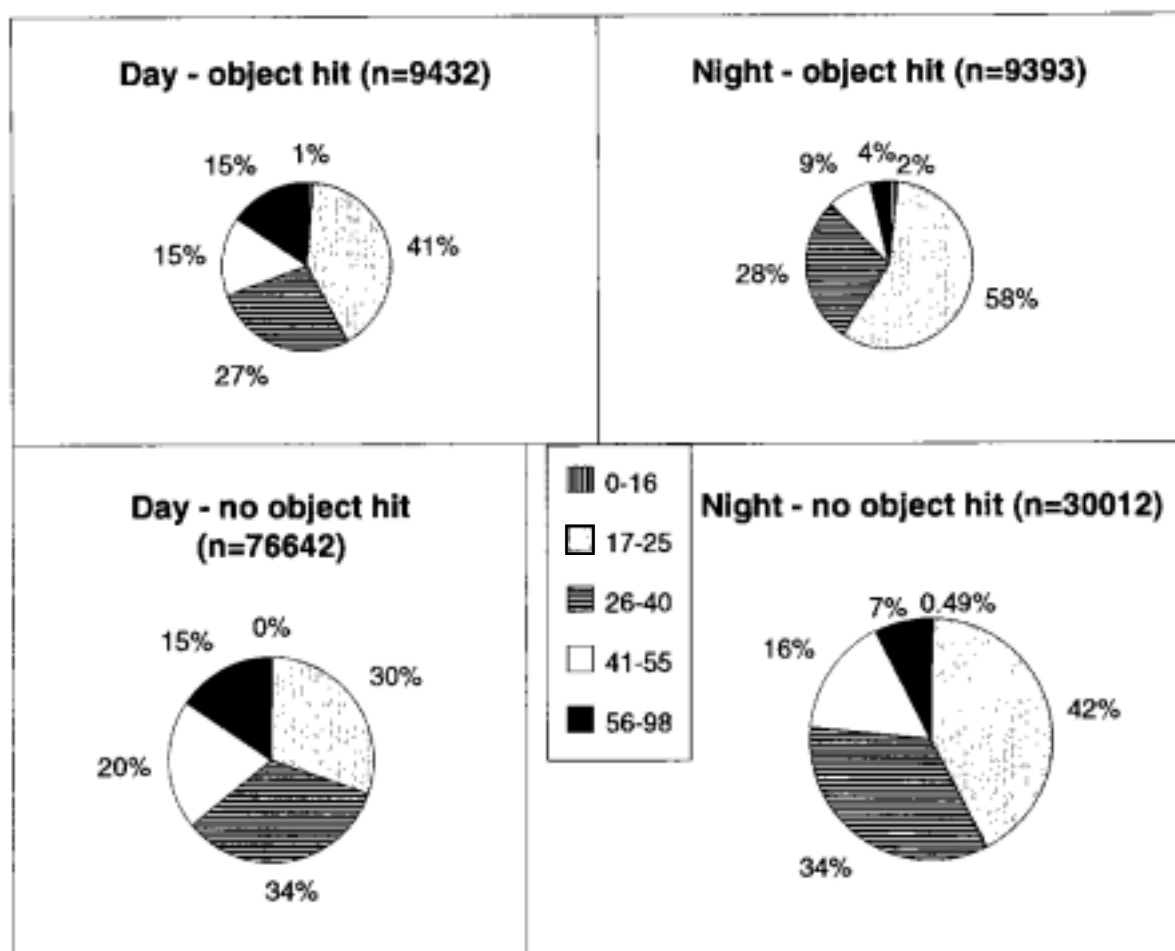
NIGHT						
	0-16	17-25	26-40	41-55	56-98	Total
Vehicle/vehicle:						
head-on	23	1632	1499	701	258	4113
right angle	39	3205	2635	1314	726	7919
nose-tail	14	2108	2052	995	371	5540
other angle	39	3633	2606	1147	606	8031
Vehicle/other:						
object	151	4923	2363	673	261	8371
pedestrian	10	1397	1067	468	260	3202
animal		112	81	51	20	264
train/aeroplane		12	10	1	3	26
rollover	31	1016	514	176	65	1802
Person/object	2	64	34	11	4	115
Total	309	18102	12861	5537	2574	39383

Missing cases = 7319

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

NSW CASUALTY FILE (1986-1989)
OBJECT IMPACTED BY AGE GROUP

N=132739



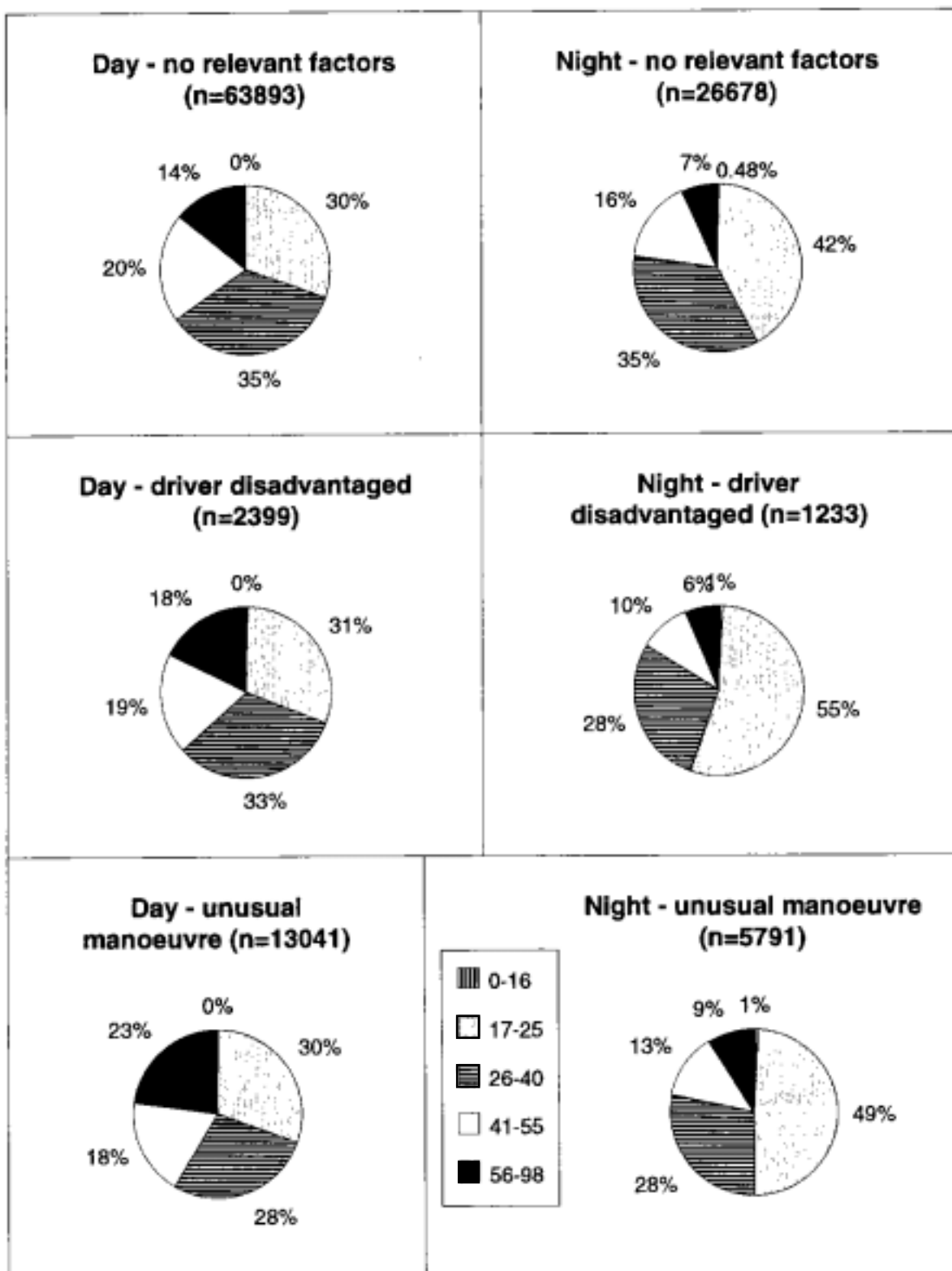
NSW CASUALTY FILE (1986-1989) •
OBJECT IMPACTED BY AGE GROUP

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Guardrail or fence	9	505	373	225	213	1325
Utility pole/traffic signal pole	25	1022	645	325	304	2321
Embankments/cuttings, rock outcrops, etc	19	745	481	296	268	1809
Trees or bushes	42	851	513	257	291	1954
Other fixed objects	22	652	469	281	319	1743
Non-fixed objects	1	49	58	29	26	163
Animals	1	49	36	22	9	117
No object hit	207	23089	26093	15524	11729	76642
Total	326	26962	28668	16959	13159	86074

	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Guardrail or fence	13	712	341	104	45	1215
Utility pole/traffic signal pole	48	1818	898	205	91	3060
Embankments/cuttings, rock outcrops, etc	18	721	375	132	60	1306
Trees or bushes	53	1133	493	146	50	1875
Other fixed objects	29	898	434	151	64	1576
Non-fixed objects	0	44	38	15	2	99
Animals	1	113	78	50	20	262
No object hit	147	12673	10211	4738	2243	30012
Total	309	18112	12868	5541	2575	39405

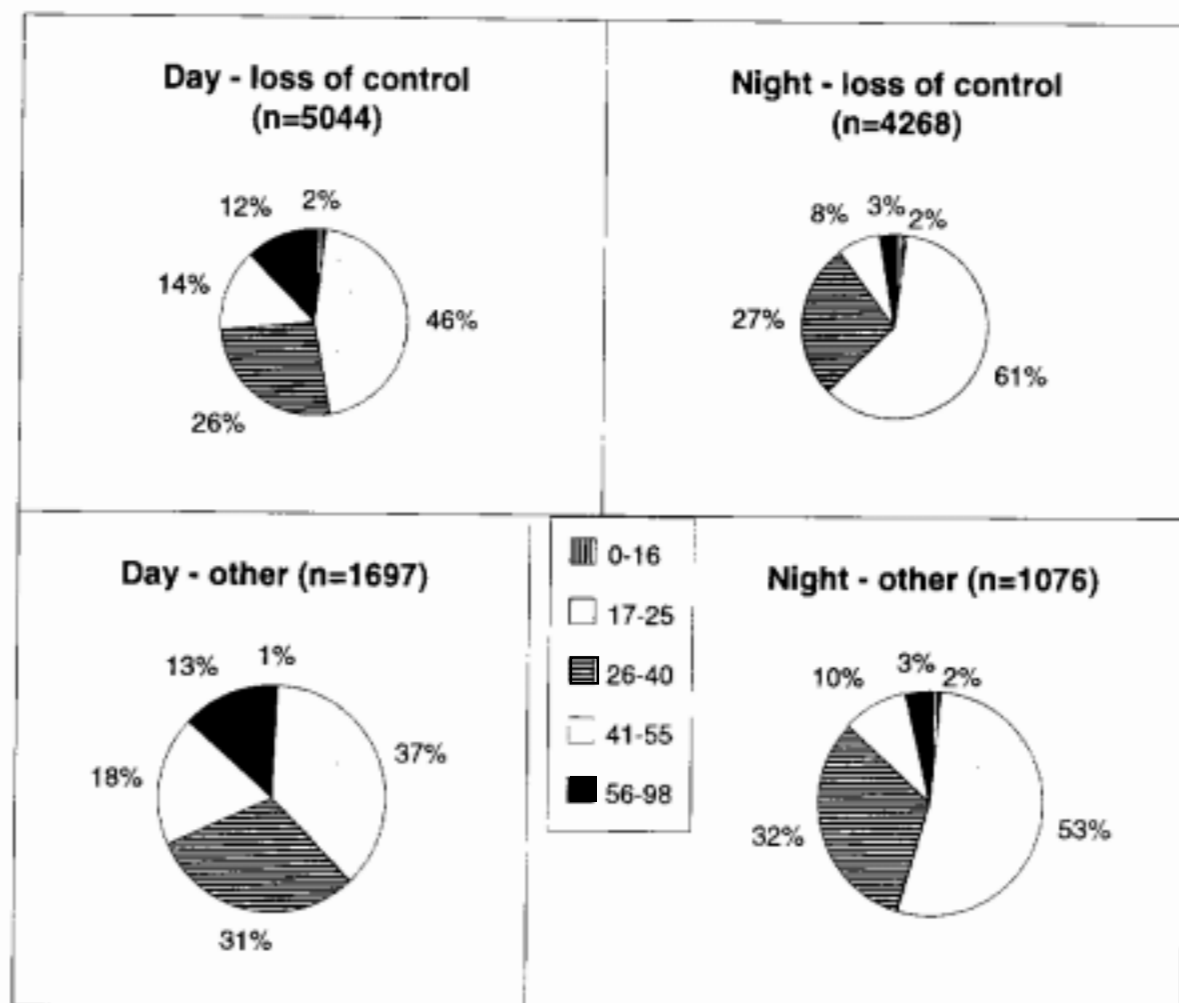
Missing cases = 7260

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

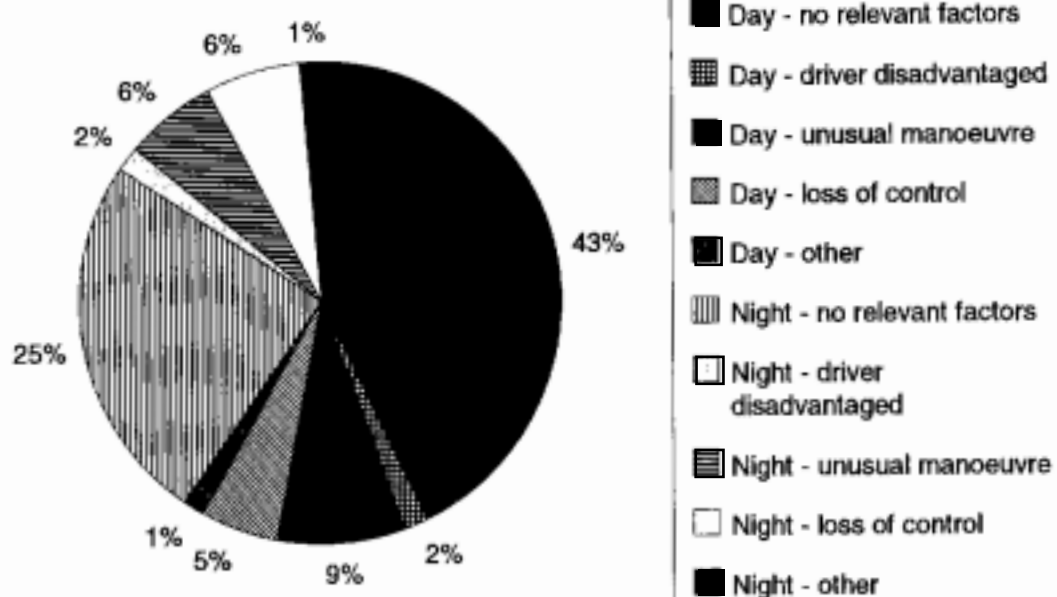


NSW CASUALTY FILE (1986-1989)
FACTORS/ERRORS OF THIS UNIT BY AGE GROUP

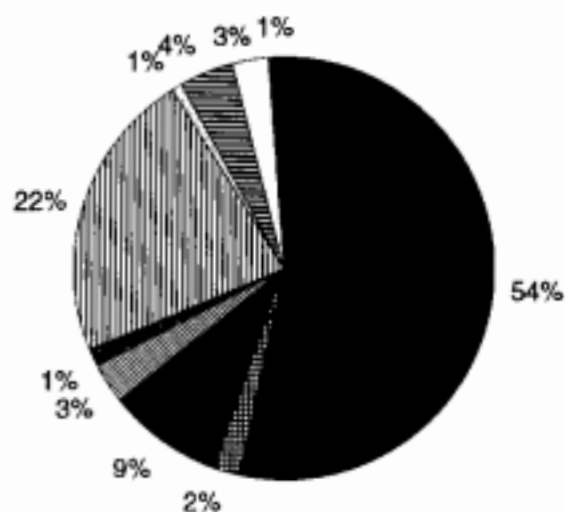
N=132739



17-25 years (n=45075)



26-40 years (n=41536)



NSW CASUALTY FILE (1986-1989) •
FACTORS/ERRORS OF THIS UNIT BY AGE GROUP

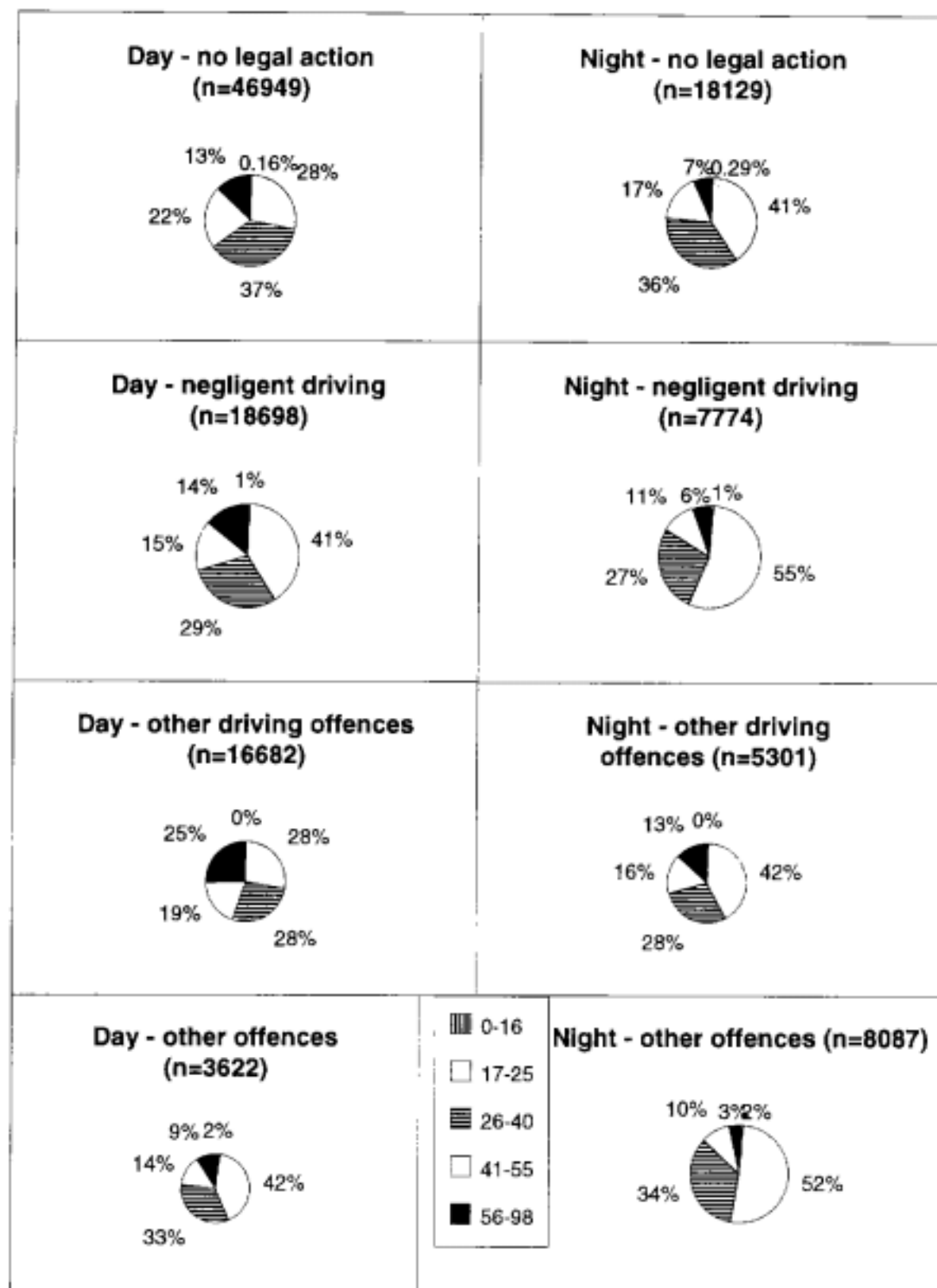
	DAY					
	0-16	17-25	26-40	41-55	56-98	Total
Driver disadvantaged:						
physical infirmity/chronic illness		1	10	8	8	27
sudden illness		62	76	60	143	341
asleep/drowsy/fatigued	2	137	86	73	101	399
distracted/vision obscured by passenger	1	9	9	4	2	25
distracted/vision obscured by something inside vehicle	2	93	52	16	29	192
distracted/vision obscured by something outside vehicle	3	420	534	288	135	1380
emergency vehicle within earshot	2	10	15	5	3	35
Unusual manoeuvre:						
this unit jackknifing		4	8	4	2	18
this unit skidding/sliding	8	429	266	184	140	1027
error in manipulation of controls		18	18	11	21	68
driver swerving to avoid another vehicle	5	545	453	231	136	1370
driver swerving to avoid object	1	15	10	5	3	34
driver swerving to avoid animal	1	183	120	53	31	388
driver swerving for other reason		41	42	16	15	114
driver overtaking on left		46	28	15	9	98
driver overtaking on right	3	249	160	89	70	571
driver turning right from wrong lane		21	30	19	26	96
driver turning left from wrong lane		17	23	11	17	68
this unit disobeying traffic control	14	2261	2393	1718	2462	8848
this unit dangerously parked						
this unit braking hard	2	85	75	50	28	240
this unit excessively speeding	2	61	31	4	3	101
Driver/passenger:						
driver/passenger jumping/falling from vehicle		23	23	18	8	72
Stationary vehicle:						
parked/stationary vehicle slipping	1	2	4	1	2	10
parked/stationary vehicle open door impacted	1	42	134	72	24	273
Equipment:						
brake fault/failure		38	28	11	12	89
steering fault/failure	1	33	18	13	8	73
tyre fault/failure (blow out or thrown tread)	2	294	193	130	115	734
tyre tread smooth		17	4	4	1	26
wheel/axle/suspension failure/fault	1	18	13	4	7	43
towing/coupling fault/separation		9	9	7	4	29
headlamp fault/failure				1		1
rearlamp/clearance lamp fault/failure		1	1		1	3
unit with insecure/projecting load		3	3	1		7
unit overloaded						
other		34	19	13	12	78
Loss of control (police description)	96	2299	1328	713	608	5044
Did not stop after accident	7	116	69	35	32	259
No relevant factors	171	19326	22383	13072	8941	63893
Total	326	26962	28668	16959	13159	86074

NSW CASUALTY FILE (1986-1989) •
FACTORS/ERRORS OF THIS UNIT BY AGE GROUP

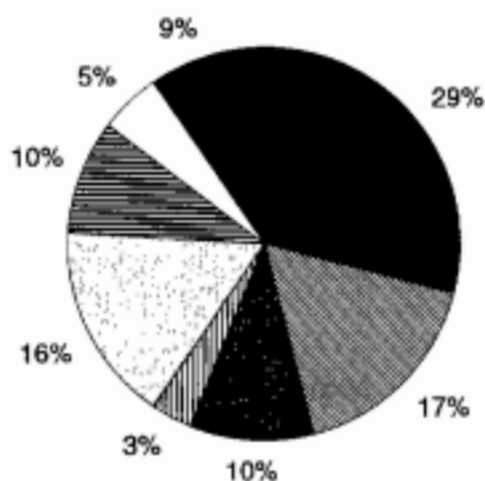
	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Driver disadvantaged:						0
physical infirmity/chronic illness		4	1	1		6
sudden illness		28	21	11	18	78
asleep/drowsy/fatigued	5	334	147	36	13	535
distracted/vision obscured by passenger		11	8		2	21
distracted/vision obscured by something inside vehicle		58	35	10	3	106
distracted/vision obscured by something outside vehicle	5	217	130	57	40	449
emergency vehicle within earshot	3	23	7	5		38
Unusual manoeuvre:						0
this unit jackknifing			1		1	2
this unit skidding/sliding	6	309	152	53	22	542
error in manipulation of controls	3	15	4	2	4	28
driver swerving to avoid another vehicle	1	493	252	81	35	862
driver swerving to avoid object		14	10	6	1	31
driver swerving to avoid animal	2	360	158	58	17	595
driver swerving for other reason	3	44	26	9	1	83
driver overtaking on left		14	5	1		20
driver overtaking on right		125	48	11	15	199
driver turning right from wrong lane		12	12	3	5	32
driver turning left from wrong lane		5	4	1	5	15
this unit disobeying traffic control	24	1317	895	493	392	3121
this unit dangerously parked				1		1
this unit braking hard		37	33	12	3	85
this unit excessively speeding	10	108	49	7	1	175
Driver/passenger:						0
driver/passenger jumping/falling from vehicle	2	54	26	10		92
Stationary vehicle:						0
parked/stationary vehicle slipping		3	1		2	6
parked/stationary vehicle open door impacted		10	20	8	3	41
Equipment:						0
brake fault/failure	1	23	13	2		39
steering fault/failure		17	7	2	1	27
tyre fault/failure (blow out or thrown tread)	2	164	103	42	14	325
tyre tread smooth		10	2			12
wheel/axle/suspension failure/fault	1	13	4	2	1	21
towing/coupling fault/separation		1	5	1		7
headlamp fault/failure		13	4		2	19
rearlamp/clearance lamp fault/failure		2				2
unit with insecure/projecting load			1		1	2
unit overloaded			1			1
other		21	10	3	3	37
Loss of control (police description)	101	2817	1237	355	118	4628
Did not stop after accident	11	241	151	33	9	445
No relevant factors	129	11186	9285	4225	1843	26678
Total	309	18113	12868	5541	2575	39406

Missing cases = 7259

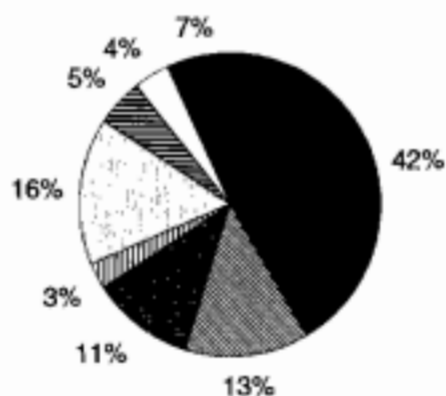
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes



17-25 years (n=44980)



26-40 years (n=41464)



**NSW CASUALTY FILE (1986-1989) •
LEGAL ACTION BY AGE GROUP**

	DAY					Total
	0-16	17-25	26-40	41-55	56-98	
Driving offences:						
negligent driving	140	7591	5467	2883	2617	18698
disobey traffic lights	2	408	381	260	278	1329
drive contrary to stop sign	1	610	727	540	783	2661
drive contrary to give way sign	7	955	1009	773	1199	3943
not make turn with safety	12	1204	1155	813	949	4133
not give way - terminating street	3	374	324	243	257	1201
other	7	1052	1016	599	741	3415
Licence offences	9	114	67	29	13	232
Registration and number plate offences	0	14	11	6	1	32
Heavy vehicles	0	1	4	2	2	9
Equipment	0	26	16	7	2	51
Miscellaneous	1	63	147	76	27	314
Indictment codes:						
culpable driving	9	269	157	66	60	561
PCA - lower range	3	97	69	24	25	218
PCA - middle range	7	287	210	84	38	626
PCA - higher range	5	244	318	149	109	825
other	46	392	202	68	46	754
No legal action	74	13223	17353	10316	5983	46949
Total	326	26924	28633	16938	13130	85951

NSW CASUALTY FILE (1986-1989) *
LEGAL ACTION BY AGE GROUP

	NIGHT					Total
	0-16	17-25	26-40	41-55	56-98	
Driving offences:						
negligent driving	100	4312	2105	827	430	7774
disobey traffic lights		296	203	101	67	667
drive contrary to stop sign	4	303	231	124	100	762
drive contrary to give way sign	7	449	274	175	181	1086
not make turn with safety	5	626	454	249	191	1525
not give way - terminating street	1	120	102	40	45	308
other	7	436	243	154	113	953
Licence offences	15	58	26	8	4	111
Registration and number plate offences	1	10	10	1	0	22
Heavy vehicles	0	1	1	0	2	4
Equipment	0	14	4	3	2	23
Miscellaneous	0	25	27	12	1	65
Indictment codes:						
culpable driving	15	381	177	51	15	639
PCA - lower range	9	380	167	44	20	620
PCA - middle range	17	1293	640	155	72	2177
PCA - higher range	8	1371	1396	426	117	3318
other	66	638	309	76	19	1108
No legal action	53	7343	6462	3083	1188	18129
Total	308	18056	12831	5529	2567	39291

Missing cases = 7497

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

4 VICTORIA CASUALTY CRASH FILE (1984-1989) - BIVARIATE ANALYSES

4.1 INTRODUCTION

Data was obtained from Vic Roads of Victoria of reported crashes for the years 1984 to 1989. Prior to conducting bivariate analyses (age by variable of interest), the data was modified as follows:

- As the focus of primary interest was young *car* drivers, a driver-based file consisting of car and car derivative drivers was created. Included were drivers of cars, station wagons, panel vans, and utilities.
- Most casualty crash files contain a variable which stipulates the severity of the crash ranging from a fatality to property damage, but this system creates problems in making across state comparisons due to differing reporting requirements for the lower severity levels in each state. Hence, only the three most severe crash levels were included in the analyses: fatal crashes, serious injury crashes, and other injury crashes.
- Age of drivers was grouped as follows: 0 to 17, 18 to 25 (18 being the minimum licensing age in Victoria), 26-40 years, 41 to 55 years, and 56 to 98 years. The benefit of this grouping is that there are only four age group categories which facilitates presentation and discussion of results. The term 'young drivers' refers to 18-25 year old drivers only.

A discussion of the results of the bivariate analyses is presented below. It should be noted that percentage rates generally refer to findings within an age group rather than as percentages of total drivers. All tables can be found in Section 4.11.

4.2 DESCRIPTION OF CRASH

4.2.1 Crash severity

Over the sampled years (1984-89), the proportion of drivers involved in fatal crashes have not changed (2-3%). However, those involved in serious injury crashes have gradually reduced from 31.2% in 1984 to 25.6% in 1989. The proportion of drivers involved in other injury crashes was 66-72%.

The highest proportion of drivers involved in fatal crashes were from the 56-98 age group (2.6-3.3%) over the sampled years compared to all other age groups (1.7-2.8%).

The 1989 results show that higher proportions of drivers in the 17-25 and 55-98 age groups were involved in serious injury crashes (27.0% and 28.9% respectively) compared with the 26-40 and 41-55 age groups (25.1% and 24.5% respectively). This trend is also evident in the preceding sampled years.

4.2.2 Number of vehicles involved

The pattern of results over the sampled years (1984-1989) has not changed. In 1989, 63.6% of drivers were in crashes involving two vehicles, 17.6% involving one vehicle, 13.8% involving three vehicles, 3.5% involving four vehicles, and 1.3% involving five or more vehicles.

Where two vehicle crashes were concerned in 1989, the proportion of drivers involved increased with an increase in age group while the reverse pattern was evident where a single vehicle crashes were concerned:

	18-25	26-40	41-55	56-98
Two vehicle crash	61.5%	63.4%	65.5%	69.8%
Single vehicle crash	21.8%	16.9%	13.7%	12.7%

The sample size of the 0-17 age group has been relatively small and inconsistent over the sampled years and hence, the results will not be reported.

4.2.3 Number of persons injured

Serious Injury Crashes - The results were consistent over the sampled years. In 1989, 73% of drivers were not involved in serious injury crashes, 23.3% were involved where there was one serious injury, 3.8% were involved where there were two serious injuries, and 1.8% where three or more serious injuries were involved. A slightly higher proportion of 18-25 and 55-98 age groups were in crashes involving serious injuries (27.8% and 30.1% respectively) compared to the 26-40 and 41-55 age groups (26.0% and 25.2% respectively).

Other Injury Crashes - The results have been consistent over the sampled years. In 1989, 19.2% of drivers were not in crashes involving other injuries, 57.3% were involved where there was one other injury, 16.0% where there were two other injuries, and 7.5% where three or more other injuries were involved. Again, a slightly lower proportion of 18-25 and 55-98 age groups were involved in other injury crashes (79.9% and 78.4% respectively) compared to the 26-40 and 41-55 age groups (81.3% and 81.4% respectively).

Number Not Injured in Crashes - Trends are again, consistent over the sampled years. In 1989, 20.3% of drivers were in crashes involving no injuries, 39.1% where there was one not injured, 21.1% where there were two not injured, 10.1% where there were three not injured, and 4.7% where there were four or more not injured.

4.2.4 Number of persons killed

Over the sampled years (1984-89), a large proportion of drivers were involved in crashes where no one was killed (98%). In 1989, 2.0% of drivers in crashes involving one fatality were from the 18-25 age group, 1.7% from the 26-40, 2.2% from the 41-55, and 2.6% from the 56-98 age groups. Less than 0.5% of drivers from all age groups were in crashes involving two or more fatalities.

4.3 WHEN DID THE CRASHES OCCUR?

4.3.1 Day of Week

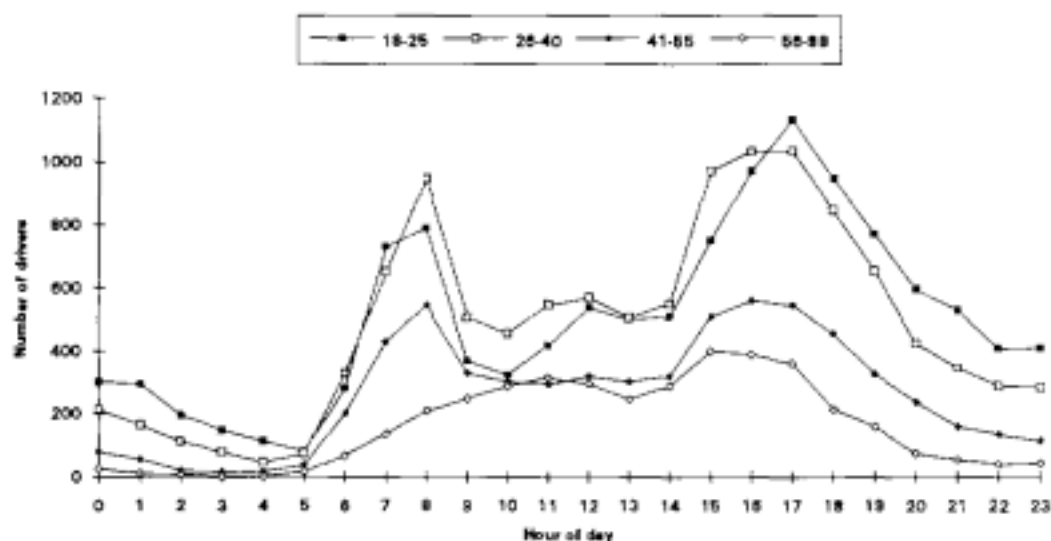
In each of the sampled years, young drivers (18-25 years) incurred half (49-50%) of the crashes for their age group during the Friday to Sunday period. This contrasts with 42-45% for the 26-40 age group, 39-44% for the 41-55 and 56-98 age groups for the same weekend period. While Sunday generally showed the lowest number of crash frequencies for drivers aged between 26-98 than any other day, this was not the case for the 18-25 age group. Although the proportion of all crashes for the 18-25 age group declined on Sundays (by approximately 2% from the figures for Saturdays), the proportion was still always greater than for Monday, Tuesday, Wednesday, and Thursday. In 1989, for example, approximately 13-14% of 18-25 year old drivers were involved in crashes which occurred on Monday, Tuesday, Wednesday, and Thursday, approximately 16% on Friday and Saturday, and 14% on Sunday.

The results for the 0-17 age group followed the trend shown by the 18-25 age group. However, 47-60% of the 0-17 year old drivers were involved in crashes during the Friday to Sunday period.

4.3.2 Hour of Day

Figure 7 shows the frequency of drivers involved in crashes by age group and hour of day for 1989 - a pattern of results which is representative of other years.

Figure 7: Victorian Casualty File (1989) - Hour of day by age group



The main findings are listed below and all figures quoted are for the 1989 crashes:

- Of all the age groups, the 18-25s showed the highest frequency of drivers involved in crashes between 5pm-5am. This time period accounted for 48.1% of all young driver crashes in 1989.
- The 26-40 group showed the highest frequency of drivers (42.6%) involved in crashes between 8am-5pm. Although frequencies were lower, a large proportion of drivers involved in crashes during these hours were from the 41-55 group (55.1%) and 56-98 group (68.6%). These figures compare to 42.6% for the 18-25 group.
- The peak time for crashes for all age groups was between 3-5 pm, that is, more drivers were involved in crashes during this time than at any other period of the day. Another peak time for crashes for all age groups, except the 56-98 year olds, was the morning peak period between 6-8 am.
- No results are reported for the 0-17 age group due to small sample size.

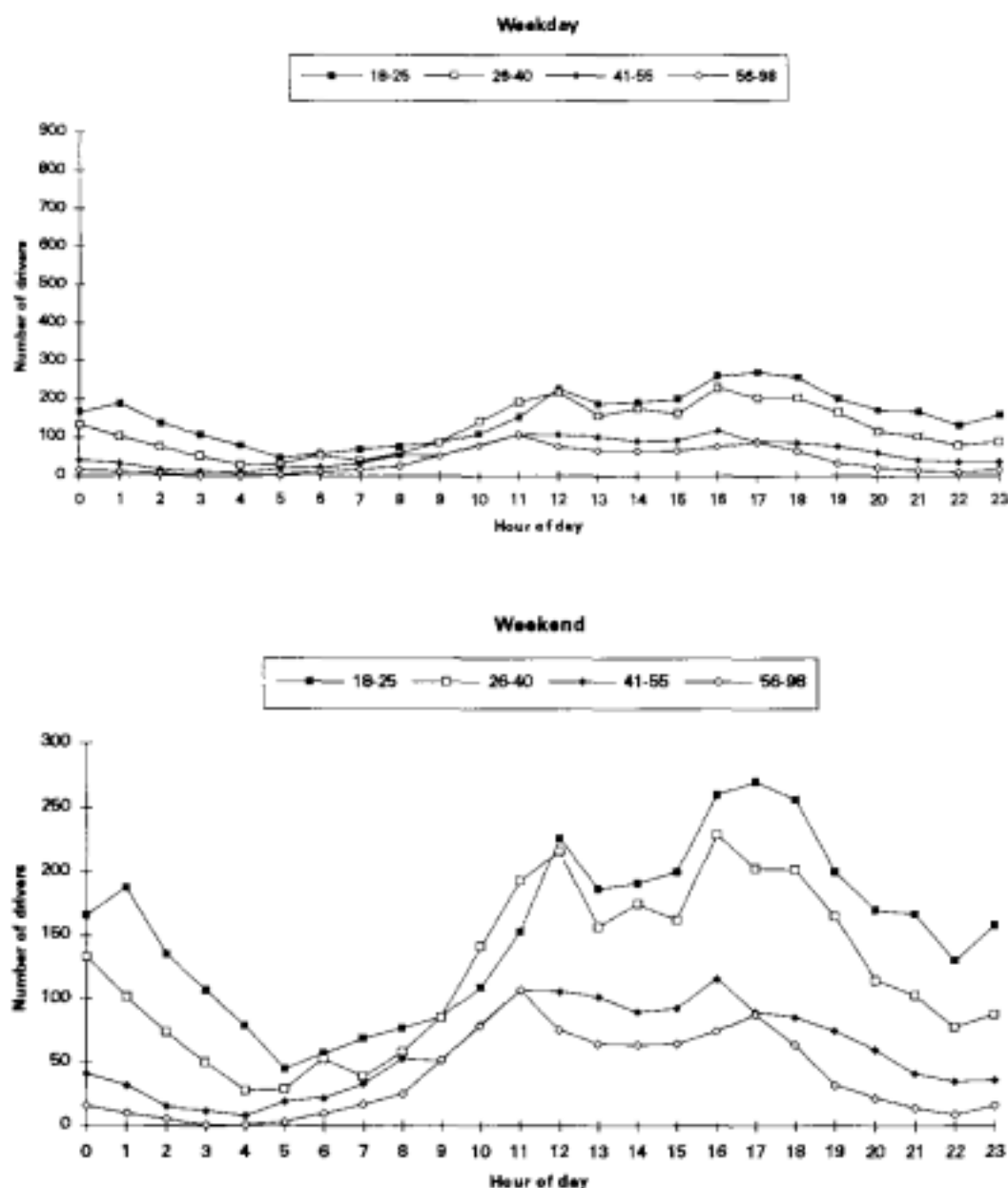
4.3.3 Weekday versus weekend

Days of the week were collapsed into 'weekday' (Monday to Friday) and 'weekend' (Saturday and Sunday). The majority of drivers of all age groups were involved in crashes during weekdays, however, the proportion of young drivers involved in crashes during weekdays is lower than the proportion involved in weekend crashes. For example, the proportion of drivers involved in crashes during weekdays in 1989 were 69.6% for the 18-25s, 75.2% for the 26-40s, 77.8% for the 41-55s, and 76.5% for the 56-98s.

The number of drivers involved in crashes during weekdays and on weekends in 1989 are illustrated in Figure 8. The following results were revealed:

- When the number of drivers involved in crashes is plotted against hour of day, the pattern of results for weekdays differs very much from those of the weekends. The plot for drivers in the 18-25, 26-40, and 41-55 age groups shows a greater dip between the morning and afternoon peak periods for the working week than appears on the chart showing total frequencies.
- Although the pattern of young drivers involved in crashes during weekdays is very similar to those of the 26-40 and 41-55 age groups, a higher proportion of young driver crashes took place between 5pm-12am. This accounted for 40.9% of drivers involved in crashes for the young driver age group. For the same time period, 33.3% of drivers from the 26-40 age group and 31.5% of drivers from the 41-55 age group were involved in crashes.
- The pattern of drivers involved in crashes during weekdays for the 56-98 age group differs from the rest. There are no clear peaks during morning and afternoon peak hours, but a high proportion of drivers (63.1%) were involved in crashes between 9am-5pm.

Figure 8: Victorian Casualty File (1989) - Weekday vs weekend by age group



- The weekend chart shows that more young drivers were involved in crashes during all hours of the day except between 9am-12pm than any other age group. However, the pattern for drivers involved in crashes across all age groups is similar; that is, frequencies of drivers involved in crashes were lowest during the early morning hours (5-7am) and highest during the early evening hours (4-6pm).
- There was a sharp increase in the number of young drivers involved in crashes between 11pm-2am, which was also observed to a smaller extent in the 26-40 age group, but not observed in other age groups.

4.4 WHERE DID THE CRASHES OCCUR?

4.4.1 Metropolitan vs. rural areas

Local government area codes were collapsed into 'metropolitan' and 'rural'. Results showed that rural areas generally incurred 23-26% of drivers involved in crashes whereas 74-78% of drivers were involved in crashes in the metropolitan areas.

An examination of age groups revealed little difference amongst the 18-25, 26-40, and 41-55 age groups where each of these age groups made up between 76-78% of drivers involved in crashes in the metro area. By comparison, the proportion of drivers involved in crashes in the metro area from the 0-17 (59%) and 56-98 (70%) age groups were lower.

4.4.2 Geometry of location (type of road)

The distribution of drivers involved in crashes per road type shows a consistent pattern over the years (1984-1989). For this reason, only the 1989 figures will be reported:

- Drivers were crash-involved mostly on three road types: non-intersection areas of road, cross intersections and T intersections (39.6%, 31.5% and 25.7% respectively of all drivers). Very low frequencies of drivers were involved in crashes that took place in other road types like Y intersections, multiple intersections, dead end roads, road closure, and private properties.
- The 18-25 and 26-40 age groups account for over 60% of all drivers involved in crashes on roads that were not at intersections (34.7% and 33.1% respectively), cross intersections (32.5% and 32.3% respectively), and T intersections (34.1% and 31.8% respectively).

4.4.3 Speed limit

The proportion of drivers involved in crashes at various speed zones remained constant over the sampled years. The majority of roads in Victoria have speed limits of 60, 75, and 100 km/h and therefore, a majority of crashes occurred in these speed zones. In 1989, 72.8% of drivers were involved in crashes in 60 km/h zones, 15.0% in 100 km/h zones, 8.5% in 75 km/h zones, and the rest (3-4%) in various other speed zones, e.g. 40, 50, 80, 90, 110 km/h and others. This pattern of results was also consistently observed within each age group.

4.4.4 First road feature (road alignment at crash site)

For each of the sampled years, 77-93% of drivers were involved in crashes which occurred on straight sections of road as opposed to 7-10% of drivers being involved in crashes which occurred on curved sections of road. The proportion of drivers involved in crashes on straight roads increased with increasing age, whereas, the proportion of drivers involved in crashes on curved roads decreased with increasing age. Hence, young drivers were more likely to be involved in crashes on curved roads.

4.4.5 Traffic controls at crash site

Traffic controls include traffic lights, Stop signs, pedestrian lights, roundabouts, police, and other traffic control devices. The 1989 results show that high proportions of drivers were involved in crashes where there were traffic lights (18.4%), Give Way signs (7.2%), and Stop signs (6.8%), but the majority of drivers were involved in crashes where there were no traffic controls (62.8%). This trend is consistent over the years (1984-1989) and across all age groups.

Of drivers involved in crashes where there were no traffic controls, 34.7% were from the 18-25 age group, compared with 32.7% from the 26-40, 17.3% from 41-55, and 9.9% from the 56-98 age group. This pattern, in very similar proportions, is also evident in drivers involved in crashes where there were traffic lights. Where Stop signs and Give Way signs were concerned, approximately 30% involved young drivers, 32% were drivers from 26-40 age group, 18% were from 41-55, and 16% were from 56-98 groups.

4.5 WHAT WERE THE FACTORS WITHIN THE VEHICLE - DRIVER

4.5.1 Sex of driver

There were 33-37% females and 61-64% male drivers involved in crashes over the sampled years (1984-89). The proportions of drivers by age group were consistent each year.

Of the female drivers involved in crashes in 1989, 35.1% were from the 18-25 age group, 36.0% from the 26-40, 18.1% from the 41-55, and 8.6% from the 56-98 age groups. In the case of male drivers involved in crashes in the same year, 34.4% were from the 18-25 age group, 31.6% from the 26-40, 18.0% from the 41-55, and 12.6% from the 56-98 groups. The above results show that a slightly lower proportion of young female drivers were involved in crashes compared to those in the 26-40 age group. On the other hand, slightly more young male drivers were involved in crashes compared with those in the 26-40 age group.

4.5.2 BAC level of driver

In Victoria, the legal BAC limit for fully licensed drivers is .05 while drivers on a probationary licence have a zero BAC limit.

The trend of results over the sampled years (1984-89) were consistent. In 1989, the proportion of drivers involved in crashes with a BAC below the limit was 18.1%, while 3.2% drivers had legal BAC levels. The BAC level of the majority of drivers (78.6%) involved in crashes were not known or not applicable.

For the same year, of all the drivers involved in crashes with a BAC above the legal limit, 1.3% were from the 0-17 age group, 44.8% from the 18-25, 38.4% from the 26-40, 11.6% from the 41-55, and 3.1% from the 56-98 age groups. A greater proportion of young drivers were involved in crashes with BACs over the limit. There were also a greater proportion of young drivers (38.7%) involved in crashes with legal BAC levels

compared with other age groups (29.7% for the 26-40s, 16.1% for the 41-55s, and 14.1% for the 56-98s).

4.5.3 Seatbelt wearing

Over the sampled years (1984-89), a consistently high proportion (83-88%) of drivers involved in crashes wore seatbelts. Although a low proportion of drivers (1%) involved in crashes did not wear seatbelts, this was consistent over the years across all age groups. The proportion of 0-17 year old drivers involved in crashes and not wearing a seatbelt (1-10%) tended to be higher than those of other age groups (1-2%).

Of all crashes involving drivers not wearing seatbelts in 1989, the 18-25 and 26-40 age groups accounted for over 70% of drivers (35.6% and 34.9%) compared with 16.4% from the 41-55 and 7.4% from the 56-98 age groups. A similarly high number of drivers involved in crashes while wearing seatbelts were also observed for the 18-25 (34.9%) and 26-40 (33.5%) age groups.

There has been a gradual decrease over the years in the proportion of drivers involved in crashes where car restraints were not fitted: from 0.3-0.5% to 0% in 1989.

4.5.4 Status and type of licence held

The proportion of results were consistent over the sampled years (1984-89). In 1989, 46.7% of drivers involved in crashes from the 18-25 age group held probationary licences while 41.0% held standard licences. This balance was not observed in any of the other age groups. Between 86-92% of drivers involved in crashes from the older age groups held standard licences. Only 4.2% of 26-40 held probationary licences, 1.7% of 41-55 and 1.2% of 56-98 year old drivers held probationary licences.

The picture is yet again different for the 0-17 age group as 41% were unlicensed, 21.3% held learner's permits, 16.2% held probationary licences and 7.6% held standard licences. Less than 2% of drivers from each of the older age groups were unlicensed.

Of all the drivers involved in crashes in 1989, who held learner's permits, the majority were from the 18-25 age group (52.6%) while 27.8% were from the 0-17 age group. Of all the drivers holding a probationary licence, 91.9% were from the 18-25 age group. Of drivers who held probationary and conditional licences 77.3% were 18-25 while only 16.8% were from the 26-40 age group. More drivers from the 26-40 (38.9%) age group held standard licences compared with 18-25 (25.2%), 41-55 (21.9%), and 56-98 (13.6%) age groups.

Of all the unlicensed drivers, the 18-25 age group accounted for 39.0% and the 26-40 accounted for 31.8%. Only 15.1% of unlicensed drivers were aged 0-17 while less than 8% were from 41-55 and 56-98 age groups.

4.5.5 State of licence issue

The vast majority of drivers involved in crashes held licences issued in Victoria (90-95%). Interstate licence holders tended to be from NSW (1-2%).

4.5.6 Driver experience in years

Some corruption of the data exists for this variable and therefore will not be discussed.

4.6 WHAT WERE THE VEHICLE FACTORS?

4.6.1 Year of vehicle manufacture

The data for this variable was collapsed into five groups: 1986-90, 1981-85, 1976-80, 1971-75 and vehicles manufactured before 1971.

The data for 1989 showed that 44% of drivers involved in crashes were in cars less than eight years old with a further 26% driving cars that were 9-13 years old.

About a third (30.1%) were made up of young drivers driving cars that were manufactured between 1976-80. Similar proportions of drivers from the older age groups were in 1981-85 cars while 27% were made up of 0-17 in 1971-75 cars when crashes took place. From this, it can be concluded that the younger drivers involved in crashes tended to be driving older model cars while the older drivers tended to be driving more recent model cars.

4.7 WHAT WERE THE ENVIRONMENTAL CONDITIONS?

4.7.1 Light conditions

The majority of drivers were involved in crashes that occurred during the day. This pattern was consistent over the sampled years (1984-89) averaging 66-68%. Twenty to twenty-one percent of drivers were involved in crashes that occurred after dark (lights on) while 5-9% of drivers were involved in crashes that occurred at dusk/dawn.

Of all young drivers involved in crashes during 1989, 60.9% were involved in day-time crashes while 26.4% were involved in after dark (lights on) crashes. The balance between those that occurred during the day and those that occurred after dark shifted as age group increased in the following manner:

	<u>0-17</u>	<u>18-25</u>	<u>26-40</u>	<u>41-55</u>	<u>56-98</u>
Day	52.8%	60.9%	68.8%	73.3%	82.1%
Night (lights on)	27.3%	26.4%	19.0%	17.4%	10.6%

It can be concluded, from the above table, that young drivers were more likely to be involved in crashes after dark and less likely to be involved in crashes during the day than their older counterparts.

The pattern of drivers involved in crashes after dark under various street lighting conditions was similar over the sampled years. In 1989, 20.8% of drivers were involved in crashes that occurred after dark where street lights were on, 5.3% where there were no street lights, 0.4% where street lights were off, and a further 0.7% where the street lighting conditions were not known.

4.7.2 Road surface condition

This variable incorporates five road surface conditions; dry, wet, muddy, snowy, and icy. Over the sampled years (1984-89), 75-78% of drivers were involved in dry road surface crashes, 21-24% in wet road surface crashes and less than 1% in muddy, snowy or icy road surface crashes.

The proportion of drivers involved in crashes on dry or wet road surfaces was consistent across all age groups except for the 56-98 age group drivers who were slightly more likely to be involved in crashes on wet surfaces and a little less likely to be involved in crashes on dry surfaces compared to other age groups.

4.7.3 Weather condition

The pattern of results across age groups were consistent over the sampled years (1984-89). In 1989, approximately 82% of drivers in the 18-25, 26-40 and 41-55 age groups were in crashes that occurred on a clear day while approximately 16% had them on a rainy day. Compared to these groups, a slightly higher proportion of drivers from 0-17 and 56-98 age groups had crashes on a clear day (84-85%) while a slightly lower proportion had crashes on a rainy day (14-15%). Less than 1% of drivers were involved in crashes that took place during other weather conditions such as fog, snow, smoke, dust, and strong winds.

4.8 WHAT OTHER FACTORS SURROUNDED THE CRASH?

4.8.1 Definition for Classifying Crashes

The major sub-categories listed for this variable have been retained for presentation, but some collapsing of the values within these categories has occurred. The major crash classifications (quoting 1989 figures) were:

- rear end collision of vehicles travelling in the same direction (17.6%)
- collision where one vehicle is turning right while the other is travelling straight through from the opposing direction (12.9%)
- collision at an intersection of vehicles travelling straight through from adjacent directions (cross traffic - 11.7%)
- collision at intersections where one vehicle is turning right while a vehicle on the right is travelling straight through (right near - 7.5%).

There were, however, age differences for only two of these. Although the young driver group had showed a majority of drivers being involved in rear end crashes (16%), this proportion was lower than for the older groups (19.1% - 26-40, 19.8% - 41-55 and 14.7% - 56-98). With intersection cross traffic collisions, the 56-98 age group showed the highest proportion of all age groups (17.1% compared with 10.6% of young drivers, 11% of the 26-40 and 11.6% of the 41-55 year old drivers).

4.8.2 Type of crash

In 1989, 81.3% of drivers had crashes involving a collision with another vehicle, 8.9% with a fixed object, and 5.6% struck a pedestrian. Other impact types include striking an animal, striking other objects, overturning, falling from or in a moving vehicle, and no collision.

Over the sampled years (1984-89), the proportion of drivers in each age group that collided with another vehicle increased with each increasing age group: 77.4% from the 18-25, 82.0% from the 26-40, 85.2% from the 41-55, and 86.5% from the 56-98 age groups. The reverse trend was observed for drivers involved in a collision with a fixed object: 12.2% of drivers from the 18-25, 8.4% from 26-40, 6.0% from 41-55, and 5.7% from 56-98 age groups.

Similar proportions of drivers from each age group (5-6%) struck pedestrians.

A breakdown of the type of object hit (e.g. pole, tree, traffic sign, animals, etc) shows a high proportion of missing frequencies (86-99%) and therefore will not be reported.

4.9 TABLES - VICTORIA CASUALTY CRASH DATA (1984-1989)

Variables and page numbers for the Victoria Casualty Crash Data analyses are listed here for the convenience of the reader:

Variables	Page
Crash severity	207
Number of vehicles involved	209
Number of seriously injured	211
Number of other injury	213
Number not injured	215
Number of persons killed	217
Day of week	219
Hour of day	221
Weekday vs weekend	227
Metro vs rural	233
Geometry of location	234
Speed limit	236
First road feature	238
Traffic control	240
Sex of driver	243
BAC of driver	244

Variables	Page
Driver restraint use	245
Licence status	247
Licence type	249
State of licence issue	251
Driver experience in years	253
Year of vehicle manufacture	255
Light conditions	257
Road surface condition	259
Weather condition	261
DCA event	263
Type of crash	269
Object hit	271

VICTORIA CASUALTY CRASH FILE (1984-1989) •
CRASH SEVERITY BY AGE GROUP BY YEAR

N = 184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Fatal	8	245	197	99	85	634
Serious injury	65	2894	2402	1271	960	7592
Other injury	67	5621	5182	2613	1682	15165
Total	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Fatal	9	265	218	70	92	654
Serious injury	71	3144	2582	1243	950	7990
Other injury	107	6195	5614	2741	1724	16381
Total	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Fatal	4	270	247	88	85	694
Serious injury	79	3071	2629	1290	1001	8070
Other injury	114	6467	6041	2929	1945	17496
Total	197	9808	8917	4307	3031	26260

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Fatal	10	266	220	113	90	699
Serious injury	84	3613	3119	1585	1040	9441
Other injury	2841	6615	6150	3267	2010	20883
Total	2935	10494	9489	4965	3140	31023

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Fatal	8	255	245	111	98	717
Serious injury	84	3629	3244	1667	1250	9874
Other injury	505	8010	7721	4157	2475	22868
Total	597	11894	11210	5935	3823	33459

VICTORIA CASUALTY CRASH FILE (1984-1989) *
CRASH SEVERITY BY AGE GROUP BY YEAR

N = 184637

	1989					
	0-17	18-25	26-40	41-55	56-98	Total
Fatal	7	281	232	152	114	786
Serious injury	81	3276	2926	1550	1132	8965
Other injury	128	8594	8507	4630	2665	24524
	216	12151	11665	6332	3911	34275

Total missing cases = 11204

*•Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) •
NUMBER OF VEHICLES INVOLVED BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
1	73	2055	1407	565	397	4497
2	58	5335	5038	2692	1946	15069
3	8	1118	1071	589	299	3085
4	1	212	212	105	62	592
5	0	30	34	21	15	100
6 or more	0	10	19	11	8	48
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
1	92	2180	1451	559	377	4659
2	72	5957	5428	2732	1985	16174
3	17	1212	1256	599	341	3425
4	4	195	196	120	48	563
5	1	50	60	35	12	158
6 or more	1	10	23	9	3	46
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
1	94	2468	1680	663	424	5329
2	83	5966	5774	2923	2166	16912
3	15	1126	1219	578	367	3305
4	4	188	183	109	61	545
5	0	45	40	22	8	115
6 or more	1	15	21	12	5	54
	197	9808	8917	4307	3031	26260

VICTORIA CASUALTY CRASH FILE (1984-1989) *
NUMBER OF VEHICLES INVOLVED BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
1	386	2562	1745	738	403	5834
2	2021	6285	6011	3285	2270	19872
3	396	1241	1288	687	371	3983
4	98	298	296	172	66	930
5	17	60	89	42	19	227
6 or more	17	48	60	41	11	177
	2935	10494	9489	4965	3140	31023

1988						
	0-17	18-25	26-40	41-55	56-98	Total
1	142	2722	1976	795	524	6159
2	359	7182	7084	3959	2681	21265
3	77	1512	1562	871	484	4506
4	12	353	406	225	97	1093
5	7	80	114	58	26	285
6 or more	0	45	68	27	11	151
	597	11894	11210	5935	3823	33459

1989						
	0-17	18-25	26-40	41-55	56-98	Total
1	87	2644	1973	869	496	6069
2	102	7469	7400	4148	2729	21848
3	19	1505	1715	968	524	4731
4	7	379	430	249	122	1187
5	1	85	90	47	23	246
6 or more	0	69	57	51	17	194
	216	12151	11665	6332	3911	34275

Total missing cases = 11204

*Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY CRASH FILE (1984-1989) •
NUMBER OF SERIOUSLY INJURED BY AGE GROUP BY YEAR

N = 184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
0	71	5759	5306	2665	1723	15524
1	48	2284	1971	1029	799	6131
2	13	479	336	196	148	1172
3	5	152	113	61	44	375
4	1	60	27	18	10	116
5 or more	2	26	28	14	3	73
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
0	112	6350	5734	2782	1768	16746
1	52	2504	2090	991	781	6418
2	17	505	413	198	153	1286
3	2	137	90	47	38	314
4	4	70	51	20	16	161
5 or more	0	38	36	16	10	100
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
0	115	6625	6186	2986	2006	17918
1	58	2369	2067	1027	782	6303
2	17	572	460	214	169	1432
3	3	155	130	47	53	388
4	4	57	43	20	13	137
5 or more	0	30	31	13	8	82
	197	9808	8917	4307	3031	26260

1987						
	0-17	18-25	26-40	41-55	56-98	Total
0	2845	6769	6281	3342	2066	21303
1	62	2801	2493	1255	812	7423
2	20	632	495	266	191	1604
3	2	187	140	72	53	454
4	2	63	40	19	13	137
5 or more	4	42	40	11	5	102
	2935	10494	9489	4965	3140	31023

VICTORIA CASUALTY CRASH FILE (1984-1989) •
NUMBER OF SERIOUSLY INJURED BY AGE GROUP BY YEAR

N = 184637

		1988					
		0-17	18-25	26-40	41-55	56-98	Total
0		509	8158	7878	4223	2530	23298
1		56	2773	2526	1325	958	7638
2		23	662	529	241	248	1703
3		7	181	150	101	57	496
4		1	75	69	31	17	193
5 or more		1	45	58	14	13	131
		597	11894	11210	5935	3823	33459

		1989					
		0-17	18-25	26-40	41-55	56-98	Total
0		131	8758	8632	4729	2735	24985
1		61	2618	2389	1303	895	7266
2		16	511	420	199	196	1342
3		4	170	151	58	52	435
4		2	64	55	33	26	180
5 or more		2	30	18	10	7	67
Total		216	12151	11665	6332	3911	34275

Total missing cases = 11204

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY CRASH FILE (1984-1989) •
NUMBER WITH OTHER INJURY BY AGE GROUP BY YEAR

N = 184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
0	47	2336	1953	1053	777	6166
1	62	4382	4114	2039	1356	11953
2	19	1365	1153	591	414	3542
3	5	466	357	192	125	1145
4	5	135	128	63	32	363
5	2	43	48	33	16	142
6 or more	0	33	28	12	7	80
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
0	54	2516	2056	979	764	6369
1	91	4843	4431	2167	1396	12928
2	31	1524	1241	606	425	3827
3	9	496	444	205	137	1291
4	2	170	153	65	33	423
5	0	36	49	16	7	108
6 or more	0	19	40	16	4	79
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
0	56	2493	2123	1032	806	6510
1	91	5023	4767	2278	1529	13688
2	34	1549	1305	675	490	4053
3	12	487	436	212	141	1288
4	2	156	183	75	37	453
5	0	61	60	26	18	165
6 or more	2	39	43	9	10	103
	197	9808	8917	4307	3031	26260

VICTORIA CASUALTY CRASH FILE (1984-1989) •
NUMBER WITH OTHER INJURY BY AGE GROUP BY YEAR

N = 184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
0	62	2904	2517	1272	834	7589
1	2144	5295	4883	2682	1652	16656
2	548	1576	1379	685	461	4649
3	114	447	438	191	121	1311
4	56	182	171	78	50	537
5	6	59	78	35	14	192
6 or more	5	31	23	22	8	89
	2935	10494	9489	4965	3140	31023

1988						
	0-17	18-25	26-40	41-55	56-98	Total
0	62	3007	2686	1353	1069	8177
1	391	6412	6222	3382	1941	18348
2	106	1741	1575	847	592	4861
3	25	473	449	225	157	1329
4	5	168	169	80	38	460
5	6	50	53	33	16	158
6 or more	2	43	56	15	10	126
	597	11894	11210	5935	3823	33459

1989						
	0-17	18-25	26-40	41-55	56-98	Total
0	60	2447	2176	1178	845	6706
1	96	6772	6712	3628	2143	19351
2	39	2018	1847	1019	628	5551
3	15	595	577	319	178	1684
4	4	194	217	123	74	612
5	1	81	89	36	31	238
6 or more	1	44	47	29	12	133
	216	12151	11665	6332	3911	34275

Total missing cases = 11204

• Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
NUMBER NOT INJURED BY AGE GROUP BY YEAR

N = 184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
0	59	1880	1337	597	510	4383
1	32	3524	3355	1774	1181	9866
2	22	1917	1645	877	621	5082
3	14	808	773	403	258	2256
4	8	337	373	162	80	960
5	5	151	159	88	48	451
6	0	70	66	33	10	179
7	0	33	26	22	6	87
8 or more	0	40	47	27	13	127
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
0	65	2110	1480	642	506	4803
1	58	3946	3624	1809	1266	10703
2	32	2016	1780	908	605	5341
3	13	798	788	365	236	2200
4	11	401	385	162	77	1036
5	4	171	190	83	41	489
6	1	96	89	52	19	257
7	1	29	42	13	10	95
8 or more	2	37	36	20	6	101
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
0	84	2454	1814	745	578	5675
1	55	3862	3609	1846	1361	10733
2	35	1868	1836	955	665	5359
3	13	857	858	405	237	2370
4	4	386	399	183	98	1070
5	4	189	222	93	56	564
6	2	103	92	42	20	259
7	0	45	35	17	7	104
8 or more	0	44	52	21	9	126
	197	9808	8917	4307	3031	26260

VICTORIA CASUALTY CRASH FILE (1984-1989) *
NUMBER NOT INJURED BY AGE GROUP BY YEAR

N = 184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
0	406	2466	1872	829	603	6176
1	1123	4004	3731	2154	1346	12358
2	716	2129	1985	1023	696	6549
3	363	976	930	476	272	3017
4	157	489	491	254	117	1508
5	85	233	247	106	68	739
6	60	108	102	63	18	351
7	13	45	55	31	6	150
8 or more	12	44	76	29	14	175
	2935	10494	9489	4965	3140	31023

1988						
	0-17	18-25	26-40	41-55	56-98	Total
0	136	2656	1977	940	709	6418
1	219	4516	4541	2477	1569	13322
2	109	2484	2330	1327	871	7121
3	60	1184	1143	590	342	3319
4	41	536	636	285	185	1683
5	15	258	268	147	74	762
6	6	122	145	99	34	406
7	2	63	79	29	19	192
8 or more	9	75	91	41	20	236
	597	11894	11210	5935	3823	33459

1989						
	0-17	18-25	26-40	41-55	56-98	Total
0	74	2916	2321	1143	799	7253
1	54	4357	4298	2479	1568	12756
2	42	2513	2433	1408	857	7253
3	28	1165	1246	648	367	3454
4	9	600	684	360	176	1829
5	5	326	337	151	69	888
6	2	139	189	63	37	430
7	2	65	76	34	17	194
8 or more	0	70	81	46	21	218
	216	12151	11665	6332	3911	34275

Total missing cases = 11204

• Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) •
 NUMBER KILLED BY AGE GROUP BY YEAR

N = 184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
0	132	8515	7584	3884	2642	22757
1	7	221	173	88	78	567
2	1	14	17	8	6	46
3 or more	0	10	7	3	1	21
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
0	178	9339	8196	3984	2674	24371
1	8	227	193	60	82	570
2	0	27	18	8	8	61
3 or more	1	11	7	2	2	23
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
0	193	9538	8670	4219	2946	25566
1	4	239	230	78	78	629
2	0	25	15	8	6	54
3 or more	0	6	2	2	1	11
	197	9808	8917	4307	3031	26260

1987						
	0-17	18-25	26-40	41-55	56-98	Total
0	2925	10228	9269	4852	3050	30324
1	8	224	191	100	82	605
2	1	32	20	9	8	70
3 or more	1	10	9	4	0	24
	2935	10494	9489	4965	3140	31023

VICTORIA CASUALTY CRASH FILE (1984-1989) *

NUMBER KILLED BY AGE GROUP BY YEAR

N = 184637

1988						
	0-17	18-25	26-40	41-55	56-98	Total
0	589	11639	10965	5824	3725	32742
1	6	220	220	95	87	628
2	2	31	16	12	10	71
3 or more	0	4	9	4	1	18
	597	11894	11210	5935	3823	33459

1989						
	0-17	18-25	26-40	41-55	56-98	Total
0	209	11870	11433	6180	3797	33489
1	6	244	194	139	100	683
2	1	22	25	10	11	69
3 or more	0	15	13	3	3	34
	216	12151	11665	6332	3911	34275

Missing cases = 11204

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DAY OF WEEK BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Monday	18	1121	1075	579	370	3163
Tuesday	11	1070	1063	525	396	3065
Wednesday	16	1084	1081	556	423	3160
Thursday	19	1160	1130	578	411	3298
Friday	20	1583	1407	715	467	4192
Saturday	36	1470	1157	553	352	3568
Sunday	20	1272	868	477	308	2945
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Monday	28	1178	1132	576	405	3319
Tuesday	23	1212	1152	606	397	3390
Wednesday	16	1199	1203	594	407	3419
Thursday	12	1329	1290	612	465	3708
Friday	29	1576	1396	698	382	4081
Saturday	36	1621	1217	533	368	3775
Sunday	43	1489	1024	435	342	3333
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Monday	14	1112	1096	601	396	3219
Tuesday	20	1104	1201	596	419	3340
Wednesday	14	1302	1208	632	447	3603
Thursday	31	1399	1382	617	444	3873
Friday	26	1696	1652	818	581	4773
Saturday	50	1714	1331	526	390	4011
Sunday	42	1481	1047	517	354	3441
	197	9808	8917	4307	3031	26260

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DAY OF WEEK BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Monday	363	1187	1233	681	408	3872
Tuesday	345	1286	1283	711	443	4068
Wednesday	374	1262	1367	720	453	4176
Thursday	469	1502	1468	755	519	4713
Friday	511	1796	1596	846	543	5292
Saturday	503	1894	1432	705	429	4963
Sunday	370	1567	1110	547	345	3939
Total	2935	10494	9489	4965	3140	31023

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Monday	78	1412	1387	801	454	4132
Tuesday	72	1502	1548	865	554	4541
Wednesday	74	1523	1578	845	533	4553
Thursday	66	1599	1739	901	633	4938
Friday	108	2117	2111	1065	713	6114
Saturday	113	2015	1529	875	510	5042
Sunday	86	1726	1318	583	426	4139
	597	11894	11210	5935	3823	33459

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Monday	30	1621	1589	884	589	4713
Tuesday	19	1561	1676	937	556	4749
Wednesday	20	1711	1772	1041	609	5153
Thursday	23	1586	1791	990	615	5005
Friday	32	1975	1949	1076	624	5656
Saturday	46	1972	1595	766	479	4858
Sunday	46	1725	1293	638	439	4141
	216	12151	11665	6332	3911	34275

Total missing cases = 11204

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
 HOUR OF DAY BY AGE GROUP BY YEAR

N=184637

	1984					
	0-17	18-25	26-40	41-55	56-98	Total
0	8	223	123	49	23	426
1	6	279	134	25	8	452
2	6	143	72	18	6	245
3	2	100	47	9	3	161
4	1	65	43	10	3	122
5	4	53	26	12	6	101
6	4	144	148	84	37	417
7	2	393	373	201	71	1040
8	2	459	541	269	119	1390
9	0	201	296	187	148	832
10	3	283	326	185	198	995
11	1	333	368	206	208	1116
12	4	390	412	230	185	1221
13	5	356	377	193	170	1101
14	4	424	446	237	237	1348
15	8	517	590	340	273	1728
16	16	756	776	435	330	2313
17	11	887	696	377	283	2254
18	8	733	566	293	153	1753
19	6	630	481	237	108	1462
20	11	418	284	128	55	896
21	5	318	231	85	40	679
22	13	328	221	107	34	703
23	9	318	199	64	29	619
	139	8751	7776	3981	2727	23374

VICTORIA CASUALTY CRASH FILE (1984-1989) *
 HOUR OF DAY BY AGE GROUP BY YEAR

N=184637

	1985					Total
	0-17	18-25	26-40	41-55	56-98	
0	8	249	164	38	19	478
1	9	225	121	32	8	395
2	9	153	69	18	6	255
3	6	132	46	8	4	196
4	6	78	27	8	4	123
5	5	64	52	17	8	146
6	4	150	149	107	31	441
7	6	444	388	248	80	1166
8	2	477	549	275	121	1424
9	4	259	348	175	180	966
10	4	307	383	199	204	1097
11	7	359	419	207	219	1211
12	6	453	484	273	201	1417
13	8	417	440	205	189	1259
14	4	469	424	228	217	1342
15	10	549	671	298	253	1781
16	13	836	770	419	313	2351
17	12	968	802	405	249	2436
18	10	698	621	282	147	1758
19	10	683	455	212	119	1479
20	9	462	326	129	79	1005
21	9	404	261	109	44	827
22	11	390	244	89	42	776
23	13	375	198	73	28	687
	185	9601	8411	4054	2765	25016

VICTORIA CASUALTY CRASH FILE (1984-1989) •
 HOUR OF DAY BY AGE GROUP BY YEAR

N=184637

	1986					Total
	0-17	18-25	26-40	41-55	56-98	
0	8	277	185	51	22	543
1	10	255	139	37	6	447
2	4	209	85	18	4	320
3	7	132	66	11	2	218
4	3	90	40	8	2	143
5	4	71	36	26	15	152
6	2	180	179	98	41	500
7	4	409	394	218	97	1122
8	4	500	576	303	140	1523
9	4	246	383	184	188	1005
10	6	293	438	224	246	1207
11	9	322	451	235	239	1256
12	4	449	462	240	204	1359
13	7	463	469	230	216	1385
14	8	456	462	236	207	1369
15	11	583	650	341	306	1891
16	18	776	803	439	308	2344
17	15	889	763	399	261	2327
18	8	735	673	293	192	1901
19	12	677	496	239	95	1519
20	13	535	360	138	76	1122
21	9	446	282	122	54	913
22	15	420	262	107	63	867
23	12	358	235	94	42	741
	197	9771	8889	4291	3026	26174

VICTORIA CASUALTY CRASH FILE (1984-1989) •
 HOUR OF DAY BY AGE GROUP BY YEAR

N=184637

	1987					Total
	0-17	18-25	26-40	41-55	56-98	
0	45	271	174	49	20	559
1	39	250	128	30	12	459
2	54	198	92	22	2	368
3	28	152	68	10	4	262
4	14	84	40	10	7	155
5	7	79	47	23	5	161
6	58	203	213	136	46	656
7	131	467	462	255	101	1416
8	175	531	691	354	160	1911
9	115	319	465	245	189	1333
10	107	328	418	228	271	1352
11	163	395	531	308	272	1669
12	154	471	467	284	215	1591
13	139	479	471	262	228	1579
14	138	457	474	260	236	1565
15	231	658	694	404	308	2295
16	273	793	783	495	290	2634
17	268	975	816	490	289	2838
18	215	772	682	354	159	2182
19	150	711	584	276	126	1847
20	128	596	378	157	65	1324
21	122	484	275	135	56	1072
22	95	412	272	106	43	928
23	74	370	236	57	27	764
	2923	10455	9461	4950	3131	30920

VICTORIA CASUALTY CRASH FILE (1984-1989) •
HOUR OF DAY BY AGE GROUP BY YEAR

N=184637

	1988					Total
	0-17	18-25	26-40	41-55	56-98	
0	20	281	161	72	20	554
1	20	267	140	38	11	476
2	11	209	113	27	11	371
3	8	180	93	18	4	303
4	7	105	52	17	4	185
5	12	95	71	30	12	220
6	13	290	319	206	60	888
7	29	645	595	326	133	1728
8	52	687	764	435	176	2114
9	15	356	484	255	191	1301
10	30	328	435	276	234	1303
11	25	451	556	310	324	1666
12	27	524	573	333	324	1781
13	36	468	502	301	274	1581
14	26	495	539	309	308	1677
15	28	687	898	491	350	2454
16	45	967	1001	565	416	2994
17	49	1146	1006	532	352	3085
18	30	970	831	472	210	2513
19	29	792	687	313	167	1988
20	29	573	412	188	65	1267
21	19	494	355	169	60	1097
22	24	475	300	133	58	990
23	10	372	280	103	45	810
	594	11857	11167	5919	3809	33346

VICTORIA CASUALTY CRASH FILE (1984-1989) •
HOUR OF DAY BY AGE GROUP BY YEAR

N=184637

	1989					Total
	0-17	18-25	26-40	41-55	56-98	
0	9	302	213	79	27	630
1	11	294	163	55	12	535
2	7	193	111	19	8	338
3	5	148	79	17	3	252
4	0	112	47	18	3	180
5	3	80	73	37	17	210
6	1	283	330	202	67	883
7	7	730	651	431	135	1954
8	4	788	945	546	208	2491
9	12	371	510	331	249	1473
10	10	324	457	301	288	1380
11	15	419	547	295	315	1591
12	7	539	571	321	296	1734
13	12	501	507	303	246	1569
14	5	511	551	320	289	1676
15	10	751	971	511	401	2644
16	10	971	1034	561	390	2966
17	15	1134	1035	547	363	3094
18	12	947	847	457	215	2478
19	14	771	653	327	159	1924
20	12	597	426	238	75	1348
21	11	531	348	159	54	1103
22	11	408	289	134	40	882
23	10	412	285	115	44	866
	213	12117	11643	6324	3904	34201

Missing cases = 11606

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989)*
HOUR BY DAY BY AGE GROUP BY YEAR

N=184637

1984													
WEEKDAY							WEEKEND						
	0-17	18-25	26-40	41-55	56-98	Total		0-17	18-25	26-40	41-55	56-98	Total
0	4	99	64	30	11	208	0	4	124	59	19	12	218
1	4	96	61	11	2	174	1	1	183	73	14	6	277
2	2	46	18	8	3	77	2	4	97	54	10	3	168
3	1	30	21	6	3	61	3	1	70	26	3		100
4		21	21	7	1	50	4	1	44	22	3	2	72
5		23	15	10	4	52	5	4	30	11	2	2	49
6	3	108	127	72	34	344	6		36	21	12	3	72
7	1	352	349	187	66	965	7	1	31	24	14	5	75
8	2	415	503	238	104	1262	8		44	38	31	15	128
9		146	238	148	107	639	9		55	58	39	41	193
10	2	178	226	131	146	681	10	1	107	100	54	52	314
11	1	210	237	124	146	718	11		123	131	82	62	398
12	4	240	271	145	138	798	12		150	141	85	47	423
13	3	232	282	124	130	771	13	2	124	95	69	40	330
14	2	244	305	155	170	876	14	2	180	141	82	67	472
15	3	365	482	280	230	1360	15	5	152	108	60	43	368
16	7	571	614	367	273	1832	16	9	185	162	68	57	481
17	9	671	548	290	212	1730	17	2	216	148	87	71	524
18	5	555	400	206	105	1271	18	3	178	166	87	48	482
19	5	440	330	158	76	1009	19	1	190	151	79	32	453
20	7	285	185	86	40	603	20	4	133	99	42	15	293
21	3	227	167	57	30	484	21	2	91	64	28	10	195
22	7	250	165	71	20	513	22	6	78	56	36	14	190
23	6	202	125	42	16	391	23	3	116	74	22	13	228
	B1	6014	5754	2953	2067	16889		56	2737	2022	1028	660	6503

VICTORIA CASUALTY CRASH FILE (1984-1989)*
HOURLY BY DAY BY AGE GROUP BY YEAR

N=184637

1985													
WEEKDAY							WEEKEND						
	0-17	18-25	26-40	41-55	56-98	Total		0-17	18-25	26-40	41-55	56-98	Total
0	2	106	79	18	11	216	0	6	143	85	20	8	262
1	3	74	48	12	1	136	1	6	151	75	20	7	259
2	3	55	30	8	2	98	2	6	98	39	10	4	157
3	3	37	20	3	1	64	3	3	95	26	5	3	132
4	2	26	8	6	2	44	4	4	52	19	2	2	79
5	2	28	33	8	6	77	5	3	36	19	9	2	69
6	3	131	125	94	28	381	6	1	19	24	13	3	60
7	5	397	352	232	73	1059	7	1	47	36	16	7	107
8	2	434	502	250	102	1290	8		43	47	25	19	134
9	2	194	276	140	139	751	9	2	65	72	35	41	215
10	2	181	260	138	138	719	10	2	126	123	61	66	378
11	6	204	251	136	145	742	11	1	155	168	71	74	469
12	3	275	338	179	157	952	12	3	178	146	94	44	465
13	5	265	299	143	134	846	13	3	152	141	62	55	413
14	2	282	285	153	160	882	14	2	187	139	75	57	460
15	7	385	518	248	207	1365	15	3	164	153	50	46	416
16	7	626	633	340	248	1854	16	6	210	137	79	65	497
17	9	715	611	309	181	1825	17	3	253	191	96	68	611
18	8	489	440	206	98	1241	18	2	209	181	76	49	517
19	6	487	328	162	84	1067	19	4	196	127	50	35	412
20	3	307	226	89	55	680	20	6	155	100	40	24	325
21	6	277	203	85	28	599	21	3	127	58	24	16	228
22	11	272	173	74	37	567	22		118	71	15	5	209
23	5	245	135	53	18	456	23	8	130	63	20	10	231
	107	6492	6171	3086	2055	17911		78	3109	2240	968	710	7105

VICTORIA CASUALTY CRASH FILE (1984-1989)*
HOURLY BY DAY BY AGE GROUP BY YEAR

N=184637

1986													
WEEKDAY							WEEKEND						
0-17	18-25	26-40	41-55	56-98	Total		0-17	18-25	26-40	41-55	56-98	Total	
0	2	129	95	29	9	264	0	6	148	90	22	13	279
1	4	88	64	10	4	170	1	6	167	75	27	2	277
2	2	64	30	9	1	106	2	2	145	55	9	3	214
3	4	33	23	4	1	65	3	3	99	43	7	1	153
4	1	37	23	7	2	70	4	2	53	17	1		73
5	3	32	19	20	11	85	5	1	39	17	6	4	67
6	2	131	133	79	37	382	6		49	46	19	4	118
7	2	371	350	197	86	1006	7	2	38	44	21	11	116
8	4	449	535	277	122	1387	8		51	41	26	18	136
9	4	189	317	139	146	795	9		57	66	45	42	210
10	3	186	298	151	182	820	10	3	107	140	73	64	387
11	2	191	285	151	164	793	11	6	131	166	84	75	462
12	3	262	311	169	151	896	12		187	151	71	53	462
13	4	261	319	161	169	914	13	3	202	150	69	47	471
14	4	268	312	164	155	903	14	4	188	150	72	52	466
15	6	412	524	281	250	1473	15	5	171	126	60	56	418
16	9	567	638	346	226	1786	16	8	209	165	93	82	557
17	7	702	607	328	202	1846	17	8	187	156	71	59	481
18	4	528	489	221	136	1378	18	3	207	184	72	56	522
19	8	461	348	180	65	1062	19	4	216	148	59	30	457
20	5	350	241	96	49	741	20	8	185	119	42	27	381
21	6	321	202	90	45	664	21	3	125	80	32	9	249
22	9	313	199	77	43	641	22	6	107	63	30	20	226
23	6	237	153	63	26	485	23	6	121	82	31	16	256
104	6582	6515	3249	2282	18732		89	3189	2374	1042	744	7438	

VICTORIA CASUALTY CRASH FILE (1984-1989)*
HOUR BY DAY BY AGE GROUP BY YEAR

N=184637

1987

WEEKDAY							WEEKEND						
	0-17	18-25	26-40	41-55	56-98	Total		0-17	18-25	26-40	41-55	56-98	Total
0	2	121	83	26	7	239	0	6	150	91	23	13	283
1	5	95	51	12	4	167	1	3	155	77	18	8	261
2	3	65	31	10	1	110	2	8	133	61	12	1	215
3		47	27	5	2	81	3	2	105	41	5	2	155
4	1	28	21	6	5	61	4	2	56	19	4	2	83
5		34	20	14	3	71	5	1	45	27	9	2	84
6		159	182	115	39	495	6	1	44	31	21	7	104
7	4	413	431	243	97	1188	7	1	54	31	12	4	102
8	4	478	646	314	139	1581	8		53	45	40	21	159
9	3	229	355	193	149	929	9	2	90	110	52	40	294
10	1	220	289	163	197	850	10	2	108	149	65	74	398
11	4	217	350	192	187	950	11	3	178	181	116	85	563
12	1	282	311	188	153	935	12	2	189	156	96	62	505
13	2	300	297	180	172	951	13	1	179	174	82	56	492
14		283	305	172	169	929	14	6	174	169	88	67	504
15	5	453	557	321	257	1593	15	6	205	137	83	51	482
16	6	551	619	395	235	1806	16	4	242	164	100	55	565
17	6	716	641	361	212	1936	17	12	259	175	129	77	652
18	11	552	512	272	117	1464	18	4	220	170	82	42	518
19	8	473	426	186	89	1182	19	3	238	158	90	37	526
20	8	419	257	113	48	845	20	3	177	121	44	17	362
21	10	334	191	102	40	677	21	3	150	84	33	16	286
22	4	301	198	80	28	611	22	1	111	74	26	15	227
23	6	239	152	38	10	445	23	1	131	84	19	17	252
	94	7009	6932	3701	2360	20096		77	3446	2529	1249	771	8072

VICTORIA CASUALTY CRASH FILE (1984-1989)*
HOUR BY DAY BY AGE GROUP BY YEAR

N=184637

1988

WEEKDAY							WEEKEND						
	0-17	18-25	26-40	41-55	56-98	Total		0-17	18-25	26-40	41-55	56-98	Total
0	7	132	67	34	9	249	0	6	149	94	38	11	298
1	6	92	62	21	5	186	1	7	175	78	17	6	283
2		61	53	8	5	127	2	5	148	60	19	6	238
3	2	51	28	6	2	89	3	4	129	65	12	2	212
4	1	33	28	10	3	75	4	2	72	24	7	1	106
5	3	46	42	22	9	122	5	4	49	29	8	3	93
6	2	224	279	179	57	741	6	3	66	40	27	3	139
7	2	576	548	306	116	1548	7	2	69	47	20	17	165
8	4	617	722	387	153	1883	8	3	70	42	48	23	186
9	2	266	393	199	138	998	9	1	90	91	56	53	291
10	3	239	303	193	165	903	10	2	89	132	83	69	375
11	5	269	369	198	227	1068	11	3	182	187	112	97	581
12	5	315	369	227	231	1147	12	3	209	204	106	93	615
13	5	293	352	209	210	1069	13	6	175	150	92	64	487
14	3	282	346	230	236	1097	14	4	213	193	79	72	561
15	5	464	679	379	281	1808	15	5	223	219	112	69	628
16	10	747	807	457	325	2346	16	4	220	194	108	91	617
17	13	852	802	413	269	2349	17	4	294	204	119	83	704
18	7	712	626	369	151	1865	18	6	258	205	103	59	631
19	8	556	504	217	129	1414	19	3	236	183	96	38	556
20	10	381	281	129	40	841	20	5	192	131	59	25	412
21	7	338	240	120	39	744	21	4	156	115	49	21	345
22	6	328	233	82	45	694	22	8	147	67	51	13	286
23	5	257	202	68	31	563	23	3	115	78	35	14	245
	121	8131	8335	4463	2876	23926		97	3726	2832	1456	933	9044

VICTORIA CASUALTY CRASH FILE (1984-1989)*
HOURLY BY DAY BY AGE GROUP BY YEAR

N=184637

1989													
WEEKDAY							WEEKEND						
	0-17	18-25	26-40	41-55	56-98	Total		0-17	18-25	26-40	41-55	56-98	Total
0	3	136	80	38	11	268	0	4	166	133	41	16	360
1	3	106	61	23	2	195	1	8	188	102	32	10	340
2		58	37	4	3	102	2	7	135	74	15	5	236
3	2	41	29	5	2	79	3	3	107	50	12	1	173
4		33	19	10	2	64	4		79	28	8	1	116
5	1	35	44	18	14	112	5	2	45	29	19	3	98
6	1	226	277	180	57	741	6		57	53	22	10	142
7	6	661	612	398	118	1795	7	1	69	39	33	17	159
8	2	711	887	493	183	2276	8	1	77	58	53	25	214
9	10	285	424	280	197	1196	9	2	86	86	51	52	277
10	4	215	316	221	209	965	10	6	109	141	80	79	415
11	8	266	354	188	208	1024	11	6	153	193	107	107	586
12	5	313	355	215	220	1108	12	1	226	216	106	76	625
13	7	314	350	201	181	1053	13	5	187	157	102	65	516
14	3	320	376	230	225	1154	14	1	191	175	90	64	521
15	3	551	809	418	336	2117	15	6	200	162	93	65	526
16	5	711	805	445	315	2281	16	5	260	229	116	75	685
17	11	864	832	457	275	2439	17	4	270	203	90	88	655
18	7	691	645	371	151	1865	18	5	256	202	86	64	613
19	11	571	488	252	127	1449	19	3	200	165	75	32	475
20	5	427	311	178	53	974	20	7	170	115	60	22	374
21	9	364	245	118	40	776	21	2	167	103	41	14	327
22	5	278	211	99	31	624	22	5	130	78	35	9	257
23	5	254	197	79	28	563	23	5	158	88	36	16	303
	116	8431	8764	4921	2988	25220		89	3686	2879	1403	916	8973

Missing cases for 1984-1990 is 14748

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY CRASH FILE (1984-1989) •
METRO VS. RURAL BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Metro	76	6526	6088	3134	1827	17651
Rural	64	2234	1693	849	900	5740
	140	8760	7781	3983	2727	23391
1985						
	0-17	18-25	26-40	41-55	56-98	Total
Metro	115	7285	6579	3194	1895	19068
Rural	72	2319	1835	860	871	5957
	187	9604	8414	4054	2766	25025
1986						
	0-17	18-25	26-40	41-55	56-98	Total
Metro	118	7085	6742	3277	2056	19278
Rural	79	2723	2175	1030	975	6982
	197	9808	8917	4307	3031	26260
1987						
	0-17	18-25	26-40	41-55	56-98	Total
Metro	2081	7756	7351	3863	2105	23156
Rural	854	2738	2138	1102	1035	7867
	2935	10494	9489	4965	3140	31023
1988						
	0-17	18-25	26-40	41-55	56-98	Total
Metro	434	9097	8762	4665	2588	25546
Rural	163	2797	2448	1270	1235	7913
	597	11894	11210	5935	3823	33459
1989						
	0-17	18-25	26-40	41-55	56-98	Total
Metro	127	9260	8997	4923	2722	26029
Rural	89	2891	2668	1409	1189	8246
	216	12151	11665	6332	3911	34275

Missing cases = 11204

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY CRASH FILE (1984-1989) •
GEOMETRY OF LOCATION BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Cross intersection	31	2682	2425	1365	1056	7559
T intersection	30	2181	2105	1051	683	6050
Y intersection	1	84	77	34	22	218
Multiple intersection	0	209	193	100	68	570
Not at intersection	78	3600	2979	1433	898	8988
Dead end	0	3	1	0	0	4
Road closure	0	1	1	0	0	2
Private property	0	0	0	0	0	0
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Cross intersection	38	2903	2569	1376	1087	7973
T intersection	46	2468	2219	1072	695	6500
Y intersection	1	81	90	27	18	217
Multiple intersection	2	221	203	98	65	589
Not at intersection	99	3928	3331	1480	901	9739
Dead end	1	2	2	0	0	5
Road closure	0	0	0	0	0	0
Private property	0	1	0	0	0	1
	187	9604	8414	4053	2766	25024

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Cross intersection	31	2870	2737	1481	1223	8342
T intersection	38	2315	2228	1102	699	6382
Y intersection	1	58	64	30	25	178
Multiple intersection	1	239	221	98	65	624
Not at intersection	126	4324	3667	1595	1016	10728
Dead end	0	2	0	1	3	6
Road closure	0	0	0	0	0	0
Private property	0	0	0	0	0	0
	197	9808	8917	4307	3031	26260

VICTORIA CASUALTY CRASH FILE (1984-1989) *
GEOMETRY OF LOCATION BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Cross intersection	36	3019	2840	1547	1207	8649
T intersection	35	2364	2233	1161	716	6509
Y intersection	1	97	83	47	34	262
Multiple intersection	1	185	180	91	70	527
Not at intersection	97	4374	3715	1878	996	11060
Dead end	0	6	6	0	1	13
Road closure	0	0	0	0	0	0
Private property	0	3	1	2	2	8
	170	10048	9058	4726	3026	27028

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Cross intersection	51	3084	3060	1605	1331	9131
T intersection	51	2556	2432	1382	823	7244
Y intersection	3	70	60	37	15	185
Multiple intersection	1	144	159	85	51	440
Not at intersection	115	4294	3769	1834	1099	11111
Dead end	0	3	5	1	1	10
Road closure	0	1	0	0	0	1
Private property	0	7	7	5	4	23
	221	10159	9492	4949	3324	28145

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Cross intersection	51	3683	3658	1989	1474	10855
T intersection	51	3155	2942	1680	977	8805
Y intersection	3	137	110	63	42	355
Multiple intersection	1	226	223	130	91	671
Not at intersection	109	4936	4711	2465	1320	13541
Dead end	1	2	2	0	0	5
Road closure	0	0	0	0	0	0
Private property	0	10	15	5	7	37
	216	12149	11661	6332	3911	34269

Total missing cases = 20520

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) •
SPEED LIMIT (KM/H) BY AGE GROUP BY YEAR

N = 184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
40	1	8	3	1	1	14
50	1	30	22	10	9	72
60	90	6572	5955	3117	2016	17750
75	4	631	589	274	197	1695
80	0	15	20	9	8	52
90	1	65	56	32	17	171
100	43	1426	1127	526	478	3600
110	0	0	0	0	0	0
Other speed limit	0	4	4	5	0	13
Camping grounds, off road	0	1	0	0	0	1
	140	8752	7776	3974	2726	23368
1985						
	0-17	18-25	26-40	41-55	56-98	Total
40	1	12	3	2	1	19
50	0	33	26	10	8	77
60	121	7170	6349	3124	2065	18829
75	9	767	679	312	197	1964
80	1	19	9	8	2	39
90	1	75	78	35	21	210
100	53	1488	1239	539	458	3777
110	0	0	0	0	0	0
Other speed limit	0	2	1	2	0	5
Camping grounds, off road	0	0	0	0	0	0
	186	9566	8384	4032	2752	24920
1986						
	0-17	18-25	26-40	41-55	56-98	Total
40	0	7	8	4	0	19
50	1	17	17	4	7	46
60	127	7025	6369	3153	2190	18864
75	10	759	736	369	250	2124
80	0	20	13	6	10	49
90	1	88	86	34	24	233
100	58	1692	1502	634	495	4381
110	0	0	0	0	0	0
Other speed limit	0	4	1	2	0	7
Camping grounds, off road	0	0	0	0	0	0
	197	9612	8732	4206	2976	25723

VICTORIA CASUALTY CRASH FILE (1984-1989) •
SPEED LIMIT (KM/H) BY AGE GROUP BY YEAR

N = 184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
40	5	11	2	4	0	22
50	10	24	8	6	1	49
60	2258	7713	7026	3694	2332	23023
75	214	885	829	476	239	2643
80	5	22	23	7	9	66
90	23	87	77	45	26	258
100	399	1675	1462	704	510	4750
110	19	70	55	28	21	193
Other speed limit	0	0	0	0	0	0
Camping grounds, off road	0	0	0	0	0	0
	2933	10487	9482	4964	3138	31004
1988						
	0-17	18-25	26-40	41-55	56-98	Total
40	1	20	8	4	2	35
50	0	8	4	6	0	18
60	443	8771	8236	4382	2801	24633
75	55	1139	1110	616	325	3245
80	3	34	33	12	16	98
90	3	104	93	35	38	273
100	90	1680	1583	821	587	4761
110	2	127	129	48	48	354
Other speed limit	0	0	0	0	0	0
Camping grounds, off road	0	2	0	0	1	3
	597	11885	11196	5924	3818	33420
1989						
	0-17	18-25	26-40	41-55	56-98	Total
40	2	12	7	3	1	25
50	0	2	0	1	0	3
60	137	8866	8362	4586	2826	24777
75	15	1007	1048	571	315	2956
80	3	109	142	93	47	394
90	3	112	99	49	31	294
100	47	1848	1794	937	629	5255
110	3	121	135	59	34	352
Other speed limit	0	0	0	0	0	0
Camping grounds, off road	0	1	0	1	0	2
	210	12078	11587	6300	3883	34058
Total missing cases = 12144						

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
FIRST ROAD FEATURE BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Straight	115	7777	7032	3672	2501	21097
Curve	25	980	746	310	225	2286
Divided Road	0	3	2	0	1	6
Median opening	0	0	0	0	0	0
Bridge, Culvert	0	0	0	1	0	1
Driveway	0	0	1	0	0	1
Roadworks	0	0	0	0	0	0
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Straight	160	8509	7566	3730	2583	22548
Curve	27	1094	845	323	182	2471
Divided Road	0	1	2	0	1	4
Median opening	0	0	0	0	0	0
Bridge, Culvert	0	0	0	0	0	0
Driveway	0	0	1	1	0	2
Roadworks	0	0	0	0	0	0
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Straight	163	8823	8191	4038	2848	24063
Curve	34	984	724	269	183	2194
Divided Road	0	0	0	0	0	0
Median opening	0	0	0	0	0	0
Bridge, Culvert	0	0	0	0	0	0
Driveway	0	0	1	0	0	1
Roadworks	0	0	0	0	0	0
	197	9807	8916	4307	3031	26258

VICTORIA CASUALTY CRASH FILE (1984-1989) *
FIRST ROAD FEATURE BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Straight	148	9085	8324	4419	2865	24841
Curve	22	933	712	294	151	2112
Divided Road	0	16	17	8	7	48
Median opening	0	1	1	0	1	3
Bridge, Culvert	0	1	1	0	0	2
Driveway	0	31	22	19	8	80
Roadworks	0	0	0	0	0	0
	170	10067	9077	4740	3032	27086

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Straight	184	9199	8678	4578	3104	25743
Curve	36	906	750	336	202	2230
Divided Road	1	31	45	25	13	115
Median opening	0	4	3	1	0	8
Bridge, Culvert	0	4	2	2	2	10
Driveway	0	14	13	8	4	39
Roadworks	0	1	1	0	0	2
	221	10159	9492	4950	3325	28147

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Straight	187	11125	10861	5971	3695	31839
Curve	29	1026	801	361	216	2433
Divided Road	0	0	0	0	0	0
Median opening	0	0	0	0	0	0
Bridge, Culvert	0	0	0	0	0	0
Driveway	0	0	0	0	0	0
Roadworks	0	0	0	0	0	0
	216	12151	11662	6332	3911	34272

Total missing cases = 20458

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
TRAFFIC CONTROL BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
No control	95	4710	3961	1912	1228	11906
Traffic lights	14	1448	1368	742	444	4016
Flashing lights	1	5	6	4	1	17
Out of order	0	18	24	10	10	62
Pedestrian lights	0	37	35	27	13	112
Pedestrian crossing	0	33	24	10	7	74
Railway crossing: gates/booms	0	6	12	1	1	20
Railway crossing: bells/lights	0	6	9	5	3	23
Railway crossing: no control	0	3	4	1	7	15
Roundabout	2	99	80	48	17	246
Stop sign	13	1375	1246	715	536	3885
Giveway sign	15	1004	992	494	450	2955
School flags	0	5	4	3	3	15
School no flags	0	0	3	6	3	12
Police	0	4	3	1	1	9
Other	0	6	10	4	2	22
	140	8759	7781	3983	2726	23389

1985						
	0-17	18-25	26-40	41-55	56-98	Total
No control	130	5167	4373	1973	1167	12810
Traffic lights	18	1736	1513	790	524	4581
Flashing lights	0	8	9	3	4	24
Out of order	0	30	24	15	9	78
Pedestrian lights	0	30	32	20	11	93
Pedestrian crossing	0	38	33	15	8	94
Railway crossing: gates/booms	0	6	7	2	3	18
Railway crossing: bells/lights	0	3	4	1	0	8
Railway crossing: no control	0	4	1	2	3	10
Roundabout	1	130	88	35	28	282
Stop sign	21	1349	1326	679	528	3903
Giveway sign	17	1077	972	506	474	3046
School flags	0	4	7	3	1	15
School no flags	0	3	6	1	2	12
Police	0	7	6	1	0	14
Other	0	12	13	8	4	37
	187	9604	8414	4054	2766	25025

VICTORIA CASUALTY CRASH FILE (1984-1989) •
TRAFFIC CONTROL BY AGE GROUP BY YEAR

N=184637

	1986					
	0-17	18-25	26-40	41-55	56-98	Total
No control	148	5853	4985	2282	1380	14648
Traffic lights	15	1650	1615	768	538	4586
Flashing lights	1	10	12	3	4	30
Out of order	0	8	10	7	3	28
Pedestrian lights	0	27	33	14	9	83
Pedestrian crossing	1	29	37	17	12	96
Railway crossing: gates/booms	0	7	15	3	4	29
Railway crossing: bells/lights	2	7	3	1	3	16
Railway crossing: no control	0	6	3	3	0	12
Roundabout	1	131	100	53	34	319
Stop sign	15	1181	1170	631	543	3540
Giveway sign	14	879	910	517	488	2808
School flags	0	5	6	1	8	20
School no flags	0	1	6	3	3	13
Police	0	4	4	0	1	9
Other	0	9	8	4	1	22
	197	9807	8917	4307	3031	26259

	1987					
	0-17	18-25	26-40	41-55	56-98	Total
No control	1826	6786	6000	3038	1714	19364
Traffic lights	470	1622	1473	773	509	4847
Flashing lights	9	28	29	20	14	100
Out of order	6	30	24	19	9	88
Pedestrian lights	9	41	28	33	14	125
Pedestrian crossing	12	34	37	16	15	114
Railway crossing: gates/booms	1	9	5	3	2	20
Railway crossing: bells/lights	0	3	3	4	4	14
Railway crossing: no control	4	0	3	3	2	12
Roundabout	52	138	103	60	21	374
Stop sign	255	876	847	493	381	2852
Giveway sign	278	823	818	442	415	2776
School flags	1	9	14	3	2	29
School no flags	0	7	7	9	3	26
Police	2	6	6	4	1	19
Other	10	45	54	26	23	158
	2935	10457	9451	4946	3129	30918

VICTORIA CASUALTY CRASH FILE (1984-1989) *
TRAFFIC CONTROL BY AGE GROUP BY YEAR

N=184637

	1988					
	0-17	18-25	26-40	41-55	56-98	Total
No control	376	7737	7010	3596	2081	20800
Traffic lights	106	1920	1865	1001	644	5536
Flashing lights	5	35	31	16	6	93
Out of order	1	31	40	21	7	100
Pedestrian lights	2	32	47	19	16	116
Pedestrian crossing	3	44	54	27	12	140
Railway crossing: gates/booms	0	13	24	11	12	60
Railway crossing: bells/lights	1	7	7	1	4	20
Railway crossing: no control	0	4	4	2	2	12
Roundabout	6	147	134	66	46	399
Stop sign	31	869	926	560	494	2880
Giveway sign	62	902	939	543	469	2915
School flags	0	11	20	4	4	39
School no flags	0	13	11	12	2	38
Police	0	12	6	5	4	27
Other	2	60	45	22	11	140
	595	11837	11163	5906	3814	33315

	1989					
	0-17	18-25	26-40	41-55	56-98	Total
No control	150	7822	7386	3895	2232	21485
Traffic lights	33	2259	2112	1203	697	6304
Flashing lights	0	19	28	9	4	60
Out of order	0	20	31	9	12	72
Pedestrian lights	0	47	28	16	26	117
Pedestrian crossing	0	23	25	16	8	72
Railway crossing: gates/booms	1	15	19	15	10	60
Railway crossing: bells/lights	1	7	6	9	2	25
Railway crossing: no control	0	4	3	6	7	20
Roundabout	4	161	131	68	48	412
Stop sign	16	760	765	444	381	2366
Giveway sign	8	756	866	481	420	2531
School flags	0	12	16	9	2	39
School no flags	0	3	4	3	0	10
Police	0	14	8	3	2	27
Other	0	69	61	44	28	202
	213	11991	11489	6230	3879	33802

Total missing cases = 11929

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

**VICTORIA CASUALTY CRASH FILE (1984-1989) •
SEX OF DRIVER BY AGE GROUP BY YEAR**

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Female	32	3007	3001	1309	747	8096
Male	108	5746	4772	2669	1976	15271
	140	8753	7773	3978	2723	23367
1985						
	0-17	18-25	26-40	41-55	56-98	Total
Female	30	3302	3138	1365	779	8614
Male	157	6293	5267	2685	1983	16385
	187	9595	8405	4050	2762	24999
1986						
	0-17	18-25	26-40	41-55	56-98	Total
Female	40	3487	3435	1517	889	9368
Male	157	6316	5474	2789	2140	16876
	197	9803	8909	4306	3029	26244
1987						
	0-17	18-25	26-40	41-55	56-98	Total
Female	1044	3700	3741	1776	903	11164
Male	1890	6790	5737	3187	2234	19838
	2934	10490	9478	4963	3137	31002
1988						
	0-17	18-25	26-40	41-55	56-98	Total
Female	196	4402	4565	2133	1101	12397
Male	401	7485	6635	3795	2716	21032
	597	11887	11200	5928	3817	33429
1989						
	0-17	18-25	26-40	41-55	56-98	Total
Female	58	4628	4747	2388	1141	12962
Male	157	7511	6907	3931	2765	21271
	215	12139	11654	6319	3906	34233

Total missing cases = 11363

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY CRASH FILE (1984-1989) *
BAC LEVEL OF DRIVER BY AGE GROUP BY YEAR

N=184637

		1984					
		0-17	18-25	26-40	41-55	56-98	Total
Less than .05		34	1770	1260	686	650	4400
Greater than .05		19	500	355	101	51	1026
		53	2270	1615	787	701	5426
		1985					
		0-17	18-25	26-40	41-55	56-98	Total
Less than .05		30	2044	1470	761	666	4971
Greater than .05		16	521	401	122	59	1119
		46	2565	1871	883	725	6090
		1986					
		0-17	18-25	26-40	41-55	56-98	Total
Less than .05		45	1847	1420	677	726	4715
Greater than .05		14	464	330	91	35	934
		59	2311	1750	768	761	5649
		1987					
		0-17	18-25	26-40	41-55	56-98	Total
Less than .05		47	2275	1663	893	788	5666
Greater than .05		29	529	364	113	36	1071
		76	2804	2027	1006	824	6737
		1988					
		0-17	18-25	26-40	41-55	56-98	Total
Less than .05		95	2630	1979	1057	989	6750
Greater than .05		22	554	451	148	49	1224
		117	3184	2430	1205	1038	7974
		1989					
		0-17	18-25	26-40	41-55	56-98	Total
Less than .05		59	2519	1937	1052	917	6484
Greater than .05		15	511	438	132	35	1131
		74	3030	2375	1184	952	7615

Total missing cases = 133942

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) •
DRIVER RESTRAINT USE BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Seatbelt worn	97	7633	6832	3570	2417	20549
Seatbelt not worn	13	127	114	31	36	321
Not fitted	1	53	26	21	23	124
Not appropriate	0	1	1	0	0	2
	111	7814	6973	3622	2476	20996
1985						
	0-17	18-25	26-40	41-55	56-98	Total
Seatbelt worn	136	8365	7393	3585	2405	21884
Seatbelt not worn	18	113	96	39	26	292
Not fitted	2	36	57	17	26	138
Not appropriate	0	1	2	0	0	3
	156	8515	7548	3641	2457	22317
1986						
	0-17	18-25	26-40	41-55	56-98	Total
Seatbelt worn	145	8705	8013	3935	2774	23572
Seatbelt not worn	10	133	98	37	33	311
Not fitted	2	43	38	18	10	111
Not appropriate	0	1	2	0	0	3
	157	8882	8151	3990	2817	23997
1987						
	0-17	18-25	26-40	41-55	56-98	Total
Seatbelt worn	2665	9353	8578	4534	2869	27999
Seatbelt not worn	30	153	127	48	27	385
Not fitted	16	42	38	24	13	133
Not appropriate	17	28	24	17	7	93
	2728	9576	8767	4623	2916	28610

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DRIVER RESTRAINT USE BY AGE GROUP BY YEAR

N=184637

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Seatbelt worn	513	10876	10222	5443	3533	30587
Seatbelt not worn	22	146	121	60	35	384
Not fitted	2	40	36	22	24	124
Not appropriate	3	12	32	17	4	68
	540	11074	10411	5542	3596	31163

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Seatbelt worn	155	10954	10522	5754	3613	30998
Seatbelt not worn	19	150	147	69	31	416
Not fitted	0	0	0	0	0	0
Not appropriate	6	8	11	6	2	33
	180	11112	10680	5829	3646	31447

Total missing cases = 26107

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
LICENCE STATUS BY AGE GROUP BY YEAR

N=184637

		1984					
		0-17	18-25	26-40	41-55	56-98	Total
Valid		140	8760	7781	3983	2727	23391
		140	8760	7781	3983	2727	23391

		1985					
		0-17	18-25	26-40	41-55	56-98	Total
Valid		187	9604	8414	4054	2766	25025
		187	9604	8414	4054	2766	25025

		1986					
		0-17	18-25	26-40	41-55	56-98	Total
Valid		197	9808	8917	4307	3031	26260
		197	9808	8917	4307	3031	26260

	1987					
	0-17	18-25	26-40	41-55	56-98	Total
Cancelled	7	41	25	7	2	82
Disqualified	1	9	9	2	0	21
Surrendered	0	0	0	0	3	3
Valid	2927	10444	9455	4956	3135	30917
	2935	10494	9489	4965	3140	31023

	1988					
	0-17	18-25	26-40	41-55	56-98	Total
Cancelled	2	44	27	7	4	84
Disqualified	0	13	12	3	1	29
Expired	0	2	0	1	0	3
Surrendered	0	0	2	0	3	5
Valid	586	11807	11139	5912	3809	33253
	588	11866	11180	5923	3817	33374

VICTORIA CASUALTY CRASH FILE (1984-1989) *
LICENCE STATUS BY AGE GROUP BY YEAR

N=184637

	1989					
	0-17	18-25	26-40	41-55	56-98	Total
Cancelled	0	42	25	8	3	78
Disqualified	2	43	46	10	3	104
Expired	0	71	51	15	1	138
Suspended	0	10	9	3	0	22
Surrendered	1	4	2	1	2	10
Valid	126	11644	11209	6180	3844	33003
	129	11814	11342	6217	3853	33355

Total missing cases = 12209

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
TYPE OF LICENCE BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Learner's permit	36	78	22	13	1	150
Probationary	18	4241	365	56	25	4705
Probationary/conditional	1	221	38	14	6	280
Standard	11	3369	6508	3525	2507	15920
Standard/conditional	1	94	150	87	42	374
Not applicable	0	0	0	0	0	0
Unlicensed	63	177	177	35	10	462
Inappropriate	0	1	0	0	0	1
	130	8181	7260	3730	2591	21892

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Learner's permit	49	78	23	10	2	162
Probationary	18	4366	362	65	31	4842
Probationary/conditional	0	244	31	9	5	289
Standard	13	3967	7205	3642	2545	17372
Standard/conditional	0	78	119	49	32	278
Not applicable	0	0	0	0	0	0
Unlicensed	94	237	174	45	18	568
Inappropriate	0	1	1	0	0	2
	174	8971	7915	3820	2633	23513

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Learner's permit	42	94	35	16	14	201
Probationary	32	4582	374	73	36	5097
Probationary/conditional	2	205	28	11	8	254
Standard	15	4020	7645	3887	2797	18364
Standard/conditional	0	58	122	56	24	260
Not applicable	0	0	0	0	0	0
Unlicensed	82	201	146	31	11	471
Inappropriate	0	0	0	0	0	0
	173	9160	8350	4074	2890	24647

VICTORIA CASUALTY CRASH FILE (1984-1989) •
TYPE OF LICENCE BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Learner's permit	80	98	29	23	11	241
Probationary	432	4197	360	70	14	5073
Probationary/conditional	18	226	22	6	9	281
Standard	2118	5026	8303	4545	2933	22925
Standard/conditional	20	59	86	34	32	231
Unlicensed	106	199	149	49	9	512
Inappropriate	4	11	4	3	1	23
	2778	9816	8953	4730	3009	29286

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Learner's permit	60	122	53	31	18	284
Probationary	64	3876	276	58	24	4298
Probationary/conditional	3	198	21	12	3	237
Standard	333	6721	10032	5491	3557	26134
Standard/conditional	1	90	130	65	38	324
Not applicable	0	1	0	0	0	1
Unlicensed	93	173	141	32	15	454
Inappropriate	2	6	6	2	0	16
	556	11187	10659	5691	3655	31748

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Learner's permit	65	123	32	7	5	232
Probationary	23	4451	292	54	16	4836
Probationary/conditional	0	92	20	4	3	119
Standard	36	6755	10433	5866	3641	26731
Standard/conditional	1	272	435	245	171	1124
Not applicable	0	4	5	2	0	11
Unlicensed	61	157	128	34	8	388
Inappropriate	0	8	3	2	0	13
	186	11862	11348	6214	3844	33454

Total missing cases = 20097

• Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
STATE OF LICENCE ISSUE BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
ACT	1	8	11	3	2	25
Commonwealth	0	0	0	0	0	0
Northern Territory	0	1	5	1	0	7
NSW	10	151	124	53	39	377
Overseas	2	30	52	17	2	103
Queensland	1	60	44	13	12	130
South Australia	6	61	52	15	21	155
Tasmania	0	19	17	4	2	42
Victoria	51	8082	7162	3792	2607	21694
Western Australia	1	24	22	3	3	53
	72	8436	7489	3901	2688	22586
1985						
	0-17	18-25	26-40	41-55	56-98	Total
ACT	1	18	12	4	3	38
Commonwealth	0	0	0	0	0	0
Northern Territory	0	5	5	0	0	10
NSW	10	165	156	49	38	418
Overseas	2	37	37	11	2	89
Queensland	0	68	57	18	9	152
South Australia	1	63	55	13	15	147
Tasmania	0	23	27	1	0	51
Victoria	72	8853	7781	3879	2658	23243
Western Australia	0	18	24	7	3	52
	86	9250	8154	3982	2728	24200
1986						
	0-17	18-25	26-40	41-55	56-98	Total
ACT	0	8	11	1	3	23
Commonwealth	0	0	0	0	0	0
Northern Territory	0	11	12	1	0	24
NSW	15	166	128	48	36	393
Overseas	1	54	51	19	4	129
Queensland	5	48	44	13	6	116
South Australia	1	49	50	20	18	138
Tasmania	0	16	19	1	2	38
Victoria	80	9054	8279	4121	2923	24457
Western Australia	1	20	26	4	1	52
	103	9426	8620	4228	2993	25370

VICTORIA CASUALTY CRASH FILE (1984-1989) *
STATE OF LICENCE ISSUE BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
ACT	4	13	9	1	1	28
Commonwealth	0	0	0	0	0	0
Northern Territory	1	5	3	3	1	13
NSW	52	144	125	60	37	418
Overseas	10	40	57	23	10	140
Queensland	14	67	58	12	10	161
South Australia	25	68	66	12	20	191
Tasmania	6	23	17	7	1	54
Victoria	2650	9569	8790	4730	3012	28751
Western Australia	4	30	21	5	0	60
	2766	9959	9146	4853	3092	29816
1988						
	0-17	18-25	26-40	41-55	56-98	Total
ACT	1	8	11	7	1	28
Commonwealth	0	0	0	0	1	1
Northern Territory	2	5	6	3	0	16
NSW	22	150	154	46	44	416
Overseas	3	36	60	17	15	131
Queensland	2	54	51	16	7	130
South Australia	5	53	63	31	16	168
Tasmania	2	18	15	5	4	44
Victoria	437	10999	10437	5672	3660	31205
Western Australia	0	34	28	7	2	71
	474	11357	10825	5804	3750	32210
1989						
	0-17	18-25	26-40	41-55	56-98	Total
ACT	0	7	9	3	2	21
Commonwealth	0	4	4	1	1	10
Northern Territory	0	0	7	1	0	8
NSW	11	143	131	59	36	380
Overseas	1	76	81	20	6	184
Queensland	4	64	55	23	6	152
South Australia	5	68	70	18	20	181
Tasmania	0	24	27	6	3	60
Victoria	104	11419	10963	6074	3780	32340
Western Australia	1	13	27	6	3	50
	126	11818	11374	6211	3857	33386

Total missing cases = 17069

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DRIVER EXPERIENCE IN YEARS BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Less than 1	5	1900	214	48	15	2182
1	1	1524	236	63	18	1842
2		1261	243	60	18	1582
3		914	240	52	15	1221
4		829	254	66	18	1167
5	1	645	279	87	20	1032
More than 5	1	757	4417	1005	289	6469
Not applicable	40	236	1368	2441	2231	6316
	48	8066	7251	3822	2624	21811

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Less than 1	49	2340	314	88	44	2835
1	1	1228	200	52	23	1504
2	2	1297	252	62	21	1634
3		1133	225	57	9	1424
4	1	940	273	72	17	1303
5		785	256	58	12	1111
More than 5	2	860	5150	1154	295	7461
Not applicable	12	218	1164	2358	2247	5999
	67	8801	7834	3901	2668	23271

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Less than 1	53	3337	426	110	46	3972
1	3	732	125	28	24	912
2	1	1034	169	59	20	1283
3		1111	259	57	26	1453
4		955	266	78	26	1325
5		701	266	73	25	1065
More than 5		891	5711	1265	383	8250
Not applicable	13	200	1086	2464	2357	6120
	70	8961	8308	4134	2907	24380

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DRIVER EXPERIENCE IN YEARS BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Less than 1	22	543	120	27	8	720
1	6	2430	276	65	18	2795
2	1	2187	322	76	20	2606
3	2	1167	249	76	16	1510
4	1	966	252	60	18	1297
5		867	298	79	22	1266
More than 5	1	1125	6454	1622	446	9648
Not applicable	5	44	745	2707	2437	5938
	38	9329	8716	4712	2985	25780

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Less than 1		15	11	3	3	32
1		985	166	21	10	1182
2	3	2349	346	81	18	2797
3	4	2157	392	91	47	2691
4	2	1169	281	86	28	1566
5	1	925	328	77	30	1361
More than 5	4	1332	7980	2082	583	11981
Not applicable	1	33	552	3144	2875	6605
	15	8965	10056	5585	3594	28215

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Less than 1		5	2	2		9
1		20	15	5	2	42
2		884	166	37	11	1098
3		2017	323	89	22	2451
4	1	1888	429	118	35	2471
5	3	946	287	112	23	1371
More than 5	14	1417	8687	2358	664	13140
Not applicable	7	37	343	3238	3003	6628
	25	7214	10252	5959	3760	27210

Total missing cases = 33970

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY CRASH FILE (1984-1989) •

YEAR OF VEHICLE MANUFACTURE BY AGE GROUP BY YEAR

N=184637

1984

	0-17	18-25	26-40	41-55	56-98	Total
1986-1990	0	1	0	0	0	1
1981-1985	15	1328	1964	1111	738	5156
1976-1980	37	2573	2392	1264	821	7087
1971-1975	40	2860	1959	952	618	6429
1970 and earlier	38	1676	1156	505	441	3816
	130	8438	7471	3832	2618	22489

1985

	0-17	18-25	26-40	41-55	56-98	Total
1986-1990	0	0	1	0	0	1
1981-1985	27	1837	2629	1347	850	6690
1976-1980	45	2749	2363	1144	791	7092
1971-1975	60	2914	1911	897	565	6347
1970 and earlier	46	1415	976	390	374	3201
	178	8915	7880	3778	2580	23331

Data not collected in 1986

1987

	0-17	18-25	26-40	41-55	56-98	Total
1986-1990	262	520	875	499	222	2378
1981-1985	809	2263	3046	1705	1096	8919
1976-1980	801	3300	2480	1375	840	8796
1971-1975	654	2803	1875	892	575	6799
1970 and earlier	409	1608	1213	494	407	4131
	2935	10494	9489	4965	3140	31023

VICTORIA CASUALTY CRASH FILE (1984-1989) *

YEAR OF VEHICLE MANUFACTURE BY AGE GROUP BY YEAR

N=184637

1988						
	0-17	18-25	26-40	41-55	56-98	Total
1986-1990	71	858	1517	889	460	3795
1981-1985	145	2582	3511	1888	1212	9338
1976-1980	152	3611	2730	1447	890	8830
1971-1975	121	2890	1797	952	595	6355
1970 and earlier	108	1953	1655	759	666	5141
	597	11894	11210	5935	3823	33459

1989						
	0-17	18-25	26-40	41-55	56-98	Total
1986-1990	17	1326	2325	1474	706	5848
1981-1985	46	2791	3454	2004	1239	9534
1976-1980	47	3659	2838	1415	958	8917
1971-1975	58	2782	1793	889	582	6104
1970 and earlier	48	1593	1255	550	426	3872
	216	12151	11665	6332	3911	34275

Total missing cases = 40060 (includes 27830 cases for 1986)

* Frequencies comprise drivers of cars and car derivatives involved in reported casue

VICTORIA CASUALTY CRASH FILE (1984-1989) •
LIGHT CONDITIONS BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Day	61	5271	5370	2953	2249	15904
Dusk/Dawn	14	613	496	256	131	1510
Dark:						
street lights on	42	2223	1509	633	281	4688
street lights off	0	22	18	5	3	48
no street lights	23	570	350	115	52	1110
street lights unknown	0	61	38	21	11	131
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Day	83	5628	5676	2872	2195	16454
Dusk/Dawn	10	852	723	398	215	2198
Dark:						
street lights on	60	2453	1600	628	279	5020
street lights off	2	25	24	13	7	71
no street lights	27	561	343	121	59	1111
street lights unknown	5	85	48	22	11	171
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Day	90	5678	6036	3111	2477	17392
Dusk/Dawn	12	720	565	283	142	1722
Dark:						
street lights on	62	2557	1760	710	329	5418
street lights off	1	45	27	13	6	92
no street lights	32	702	467	167	63	1431
street lights unknown	0	95	57	18	12	182
	197	9797	8912	4302	3029	26237

VICTORIA CASUALTY CRASH FILE (1984-1989) *
LIGHT CONDITIONS BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Day	1992	6200	6502	3671	2607	20972
Dusk/Dawn	142	786	637	367	154	2086
Dark:						
street lights on	641	2683	1833	732	303	6192
street lights off	5	65	37	9	10	126
no street lights	142	706	444	175	57	1524
street lights unknown	3	31	15	5	3	57
	2925	10471	9468	4959	3134	30957

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Day	358	7255	7744	4324	3139	22820
Dusk/Dawn	39	650	546	326	129	1690
Dark:						
street lights on	151	3139	2237	1024	463	7014
street lights off	0	65	55	28	6	154
no street lights	43	719	572	215	73	1622
street lights unknown	2	37	28	9	7	83
	593	11865	11182	5926	3817	33383

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Day	114	7395	8027	4642	3212	23390
Dusk/Dawn	12	631	599	285	158	1685
Dark:						
street lights on	59	3213	2318	1099	415	7104
street lights off	1	67	43	27	8	146
no street lights	26	747	595	241	106	1715
street lights unknown	3	72	56	27	9	167
	215	12125	11638	6321	3908	34207

Total missing cases = 11437

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) •
ROAD SURFACE CONDITION BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Dry	111	6794	6011	3080	2213	18209
Wet	27	1939	1747	888	508	5109
Muddy/icy	2	27	23	15	6	73
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Dry	147	7391	6469	3074	2245	19326
Wet	39	2181	1924	963	515	5622
Muddy/icy	1	32	21	17	6	77
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Dry	161	7236	6681	3259	2372	19709
Wet	32	2315	2004	960	599	5910
Muddy/icy	2	58	46	20	14	140
	195	9609	8731	4239	2985	25759

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Dry	2300	8158	7366	3850	2559	24233
Wet	601	2236	2033	1072	558	6500
Muddy/icy/snowy	11	46	45	21	7	130
	2912	10440	9444	4943	3124	30863

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Dry	440	8841	8463	4535	3057	25336
Wet	151	2942	2648	1353	747	7841
Muddy/icy/snowy	0	50	43	17	8	118
	591	11833	11154	5905	3812	33295

VICTORIA CASUALTY CRASH FILE (1984-1989) *
ROAD SURFACE CONDITION BY AGE GROUP BY YEAR

N=184637

	1989					Total
	0-17	18-25	26-40	41-55	56-98	
Dry	160	8989	8616	4663	3049	25477
Wet	53	3047	2922	1598	826	8446
Muddy/icy/snowy	1	58	58	36	10	163
	214	12094	11596	6297	3885	34086

Total missing cases = 12218

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) *
WEATHER CONDITIONS BY AGE GROUP BY YEAR

N=184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Clear	118	7352	6488	3312	2366	19636
Raining	20	1313	1215	644	346	3538
Snowing	0	0	0	0	0	0
Fog	2	69	49	18	11	149
Smoke	0	0	0	0	0	0
Dust	0	9	11	2	1	23
Strong winds	0	13	15	4	2	34
	140	8756	7778	3980	2726	23380

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Clear	159	8117	7106	3395	2414	21191
Raining	25	1425	1257	626	341	3674
Snowing	0	0	0	0	0	0
Fog	3	43	33	24	8	111
Smoke	0	0	0	0	0	0
Dust	0	11	12	7	1	31
Strong winds	0	7	6	2	2	17
	187	9603	8414	4054	2766	25024

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Clear	169	7948	7228	3511	2516	21372
Raining	23	1570	1407	687	440	4127
Snowing	0	0	0	0	0	0
Fog	2	59	60	22	16	159
Smoke	0	0	0	0	0	0
Dust	0	12	7	6	3	28
Strong winds	1	14	16	8	3	42
	195	9603	8718	4234	2978	25728

VICTORIA CASUALTY CRASH FILE (1984-1989) *
WEATHER CONDITIONS BY AGE GROUP BY YEAR

N=184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Clear	2480	8718	7876	4136	2710	25920
Raining	401	1546	1393	743	377	4460
Snowing	6	12	17	5	2	42
Fog	15	86	81	32	20	234
Smoke	0	1	1	2	0	4
Dust	4	11	16	3	1	35
Strong winds	5	49	56	22	14	146
	2911	10423	9440	4943	3124	30841

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Clear	481	9673	9236	4900	3255	27545
Raining	95	1947	1724	901	514	5181
Snowing	4	15	6	5	2	32
Fog	12	121	106	48	17	304
Smoke	0	0	6	2	0	8
Dust	0	15	11	3	3	32
Strong winds	2	48	49	34	17	150
	594	11819	11138	5893	3808	33252

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Clear	182	9923	9569	5171	3309	28154
Raining	32	1979	1862	1028	542	5443
Snowing	0	7	3	5	0	15
Fog	0	138	110	60	21	329
Smoke	0	3	4	1	2	10
Dust	0	4	14	3	2	23
Strong winds	0	16	14	9	8	47
	214	12070	11576	6277	3884	34021

Total missing cases = 12391

*Frequencies comprise drivers of cars and car derivatives involved in reported casualty cr

VICTORIA CASUALTY CRASH FILE (1984-1989) •
DCA EVENT BY AGE GROUP

N=184637

	1984					Total
	0-17	18-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
- near side	2	214	235	105	52	608
- far side		206	176	83	39	504
- other	3	195	207	92	70	567
Vehicles from adjacent directions (Intersection only)						
- cross traffic	13	1250	1159	668	579	3669
- right near	9	550	536	293	227	1615
- other	4	224	200	115	100	643
Vehicles from opposing directions						
- head on (not overtaking)	6	436	431	239	130	1242
- right thru	6	1037	948	501	392	2684
- other	1	27	18	22	7	75
Vehicles from same direction						
- rear end	6	1283	1293	721	347	3650
- left rear	1	180	219	101	59	560
- right rear	4	430	428	208	105	1175
- other	2	146	158	63	36	405
Manoeuvring						
- u-turn	1	295	211	108	132	747
- emerging from driveway/lane	1	129	145	78	38	391
- other	2	162	174	92	48	478
Overtaking						
- head on		31	20	14	8	73
- pulling out	2	113	104	52	24	295
- cutting in	1	35	33	27	12	108
- other	1	42	38	12	10	103
On path						
- parked	6	196	137	58	39	436
- other		126	98	35	13	272
Off path, on straight						
- left off carriageway into object/parked vehicle	21	380	215	77	63	756
- right off carriageway into object/parked vehicle	15	272	160	60	45	552
- other	11	205	127	49	55	447
Off path, on curve or turning						
- off right bend into object/parked vehicle	4	241	119	39	25	428
- off left bend into object/parked vehicle	10	148	93	28	29	308
- other	5	161	76	31	22	295
Passengers/miscellaneous	1	36	18	8	17	80
	138	8750	7776	3979	2723	23366

VICTORIA CASUALTY CRASH FILE (1984-1989) •
DCA EVENT BY AGE GROUP

N=184637

	1985					
	0-17	18-25	26-40	41-55	56-98	Total
Pedestrian on foot or in toy/pram						
- near side	1	223	235	114	77	650
- far side	3	215	172	46	38	474
- other	1	221	219	117	41	599
Vehicles from adjacent directions (intersection only)						
- cross traffic	18	1276	1136	640	602	3672
- right near	8	588	617	314	265	1792
- other	4	270	239	128	85	726
Vehicles from opposing directions						
- head on (not overtaking)	4	576	521	243	113	1457
- right thru	9	1238	1072	542	451	3312
- other		33	24	18	8	83
Vehicles from same direction						
- rear end	13	1404	1431	724	335	3907
- left rear	1	216	240	91	46	594
- right rear	7	454	468	223	115	1267
- other	2	181	145	74	38	440
Manoeuvring						
- u-turn	4	287	248	116	109	764
- emerging from driveway/lane	1	152	141	78	47	419
- other	3	135	137	60	46	381
Overtaking						
- head on	1	40	42	17	10	110
- pulling out		99	115	63	30	307
- cutting in	3	44	46	17	11	121
- other		34	23	14	7	78
On path						
- parked	7	216	158	62	31	474
- other	2	146	106	37	34	325
Off path, on straight						
- left off carriageway into object/parked vehicle	28	386	206	84	55	759
- right off carriageway into object/parked vehicle	21	321	182	53	54	631
- other	19	246	127	59	45	496
Off path, on curve or turning						
- off right bend into object/parked vehicle	7	250	131	37	33	458
- off left bend into object/parked vehicle	12	156	88	25	15	296
- other	4	165	109	37	16	331
Passengers/miscellaneous		28	22	17	7	74
	183	9600	8400	4050	2764	24997

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DCA EVENT BY AGE GROUP

N=184637

	1986					Total
	0-17	18-25	26-40	41-55	56-96	
Pedestrian on foot or in toy/pram						
- near side	3	284	281	138	87	793
- far side		152	191	60	34	437
- other	1	189	169	91	62	512
Vehicles from adjacent directions (intersection only)						
- cross traffic	15	1191	1251	733	715	3905
- right near	7	537	551	266	228	1589
- other	6	262	228	102	117	715
Vehicles from opposing directions						
- head on (not overtaking)	10	586	621	256	171	1644
- right thru	7	1249	1114	542	425	3337
- other		42	33	15	10	100
Vehicles from same direction						
- rear end	17	1422	1560	777	381	4157
- left rear		142	182	108	46	478
- right rear	5	411	416	224	78	1134
- other	3	186	142	73	48	452
Manoeuvring						
- u-turn	6	318	249	137	102	812
- emerging from driveway/lane	4	143	161	91	65	464
- other	5	192	148	89	54	488
Overtaking						
- head on		27	31	6	10	74
- pulling out	2	144	129	65	30	370
- cutting in	2	49	37	23	17	128
- other		38	36	15	16	105
On path						
- parked	8	242	173	48	45	516
- other	1	124	119	54	34	332
Off path, on straight						
- left off carriageway into object/parked vehicle	24	546	275	111	74	1030
- right off carriageway into object/parked vehicle	25	375	229	59	50	738
- other	12	261	191	84	49	597
Off path, on curve or turning						
- off right bend into object/parked vehicle	14	284	140	47	28	513
- off left bend into object/parked vehicle	10	178	90	28	18	324
- other	5	180	118	42	29	374
Passengers/miscellaneous		29	30	18	6	83
	192	9783	8895	4302	3029	26201

VICTORIA CASUALTY CRASH FILE (1984-1989) •
DCA EVENT BY AGE GROUP

N=184637

	1987					Total
	0-17	18-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
- near side	3	223	229	131	49	635
- far side		229	198	88	30	545
- other	2	206	215	101	54	578
Vehicles from adjacent directions (Intersection only)						
- cross traffic	15	1261	1206	713	633	3828
- right near	12	609	589	291	243	1724
- other	5	247	250	144	96	742
Vehicles from opposing directions						
- head on (not overtaking)	16	562	586	286	141	1591
- right thru	9	1203	1092	589	455	3348
- other		16	17	13	5	51
Vehicles from same direction						
- rear end	11	1572	1684	948	435	4650
- left rear	3	177	242	134	60	616
- right rear	3	467	446	259	114	1289
- other	3	451	411	194	116	1175
Manoeuvring						
- u-turn	2	208	184	104	108	606
- emerging from driveway/lane	3	195	186	102	71	557
- other	3	186	147	89	62	487
Overtaking						
- head on		72	57	33	16	178
- pulling out		62	50	31	14	157
- cutting in		11	19	5	3	38
- other	2	43	51	25	9	130
On path						
- parked	5	182	139	50	46	422
- other	2	109	124	64	39	338
Off path, on straight						
- left off carriageway into object/parked vehicle	21	569	301	99	74	1064
- right off carriageway into object/parked vehicle	17	369	227	104	60	777
- other	12	328	213	80	52	685
Off path, on curve or turning						
- off right bend into object/parked vehicle	10	277	156	44	39	526
- off left bend into object/parked vehicle	4	219	113	39	18	393
- other	4	183	107	55	26	375
Passengers/miscellaneous	2	70	75	34	18	199
	169	10306	9294	4849	3086	27704

VICTORIA CASUALTY CRASH FILE (1984-1989) •
DCA EVENT BY AGE GROUP

N=184637

	1988					Total
	0-17	18-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
- near side	2	264	242	127	66	701
- far side	2	198	198	96	48	542
- other	3	237	245	101	62	648
Vehicles from adjacent directions (intersection only)						
- cross traffic	17	1432	1448	890	781	4568
- right near	7	633	648	368	285	1941
- other	5	275	274	152	123	829
Vehicles from opposing directions						
- head on (not overtaking)	10	584	641	324	181	1740
- right thru	10	1365	1172	656	494	3697
- other		26	31	16	9	82
Vehicles from same direction						
- rear end	19	2010	2131	1195	531	5886
- left rear	3	234	321	194	92	844
- right rear	4	572	610	304	156	1646
- other	4	485	483	236	138	1326
Manoeuvring						
- u-turn	2	297	259	131	119	808
- emerging from driveway/fane	6	157	194	114	68	539
- other	4	168	186	93	78	529
Overtaking						
- head on		60	54	32	19	165
- pulling out	2	79	77	39	19	215
- cutting in		24	33	18	7	82
- other	1	59	47	25	9	141
On path						
- parked	6	165	145	64	48	428
- other	1	175	139	77	30	422
Off path, on straight						
- left off carriageway into object/parked vehicle	28	560	362	112	101	1163
- right off carriageway into object/parked vehicle	25	407	248	107	76	863
- other	18	395	250	111	79	853
Off path, on curve or turning						
- off right bend into object/parked vehicle	15	286	176	64	36	577
- off left bend into object/parked vehicle	9	203	129	48	26	415
- other	7	203	155	60	42	467
Passengers/miscellaneous	3	68	71	39	19	200
	213	11600	10969	5793	3742	32317

VICTORIA CASUALTY CRASH FILE (1984-1989) •
DCA EVENT BY AGE GROUP

N=184637

	1989					Total
	0-17	18-25	26-40	41-55	56-98	
Pedestrian on foot or in toy/pram						
- near side	1	268	222	125	81	695
- far side	3	185	217	115	48	568
- other	3	176	203	103	62	547
Vehicles from adjacent directions (intersection only)						
- cross traffic	16	1287	1285	737	669	3994
- right near	9	856	856	480	365	2566
- other	6	347	379	192	159	1083
Vehicles from opposing directions						
- head on (not overtaking)	11	607	702	332	203	1855
- right thru	11	1863	1360	818	561	4413
- other	1	29	25	8	14	77
Vehicles from same direction						
- rear end	25	1948	2231	1255	574	6033
- left rear	1	281	345	218	88	933
- right rear	9	647	692	361	179	1888
- other	11	490	518	303	141	1463
Manoeuvring						
- u-turn	5	342	280	164	136	927
- emerging from driveway/lane	4	224	238	156	79	701
- other	1	166	194	119	67	547
Overtaking						
- head on		44	49	24	10	127
- pulling out		72	72	33	21	198
- cutting in		11	10	5	3	29
- other	1	44	25	23	11	104
On path						
- parked	4	190	163	84	57	498
- other	5	212	202	111	49	579
Off path, on straight						
- left off carriageway into object/parked vehicle	29	596	386	171	96	1278
- right off carriageway into object/parked vehicle	13	401	281	96	60	851
- other	11	338	239	98	70	756
Off path, on curve or turning						
- off right bend into object/parked vehicle	13	295	183	67	34	592
- off left bend into object/parked vehicle	6	195	112	41	24	378
- other	7	172	118	53	33	383
Passengers/miscellaneous	1	62	72	37	17	189
	207	12146	11659	6329	3911	34252

Missing cases = 15800

* Frequencies comprise drivers of cars and car derivatives only

VICTORIA CASUALTY CRASH FILE (1984-1989) •
TYPE OF CRASH BY AGE GROUP BY YEAR

N = 184637

1984						
	0-17	18-25	26-40	41-55	56-98	Total
Collision with vehicle	67	6610	6285	3388	2306	18656
Struck pedestrian	5	616	619	280	161	1681
Struck animal	0	22	21	8	3	54
Fixed object collision	51	1061	607	210	168	2097
Other object collision	0	9	7	5	1	22
Overtaken	12	264	135	52	43	506
Fall from or in moving vehicle	1	22	7	0	6	36
No collision	4	147	90	32	36	309
Other accident	0	9	10	8	3	30
	140	8760	7781	3983	2727	23391

1985						
	0-17	18-25	26-40	41-55	56-98	Total
Collision with vehicle	90	7310	6865	3449	2366	20080
Struck pedestrian	5	659	625	277	156	1722
Struck animal	1	36	21	8	10	76
Fixed object collision	68	1133	620	200	161	2182
Other object collision	0	6	5	1	3	15
Overtaken	18	276	159	61	39	553
Fall from or in moving vehicle	0	15	10	4	1	30
No collision	4	165	97	46	27	339
Other accident	1	4	12	8	3	28
	187	9604	8414	4054	2766	25025

1986						
	0-17	18-25	26-40	41-55	56-98	Total
Collision with vehicle	102	7223	7121	3591	2575	20612
Struck pedestrian	4	625	641	291	183	1744
Struck animal	1	29	37	21	10	98
Fixed object collision	74	1413	754	253	176	2670
Other object collision	0	8	7	4	1	20
Overtaken	11	243	178	70	42	544
Fall from or in moving vehicle	0	20	17	4	1	42
No collision	5	239	146	62	41	493
Other accident	0	8	16	11	2	37
	197	9808	8917	4307	3031	26260

VICTORIA CASUALTY CRASH FILE (1984-1989) •
TYPE OF CRASH BY AGE GROUP BY YEAR

N = 184637

1987						
	0-17	18-25	26-40	41-55	56-98	Total
Collision with vehicle	96	7371	7210	3931	2575	21183
Struck pedestrian	5	672	646	326	138	1787
Struck animal	2	44	42	27	15	130
Fixed object collision	53	1516	932	373	244	3118
Other object collision	4	128	80	24	18	254
Overtaken	6	222	127	58	40	453
Fall from or in moving vehicle	1	25	22	2	4	54
No collision	6	172	112	49	27	366
Other accident	2762	344	318	175	79	3678
	2935	10494	9489	4965	3140	31023

1988						
	0-17	18-25	26-40	41-55	56-98	Total
Collision with vehicle	97	7572	7590	4167	2766	22192
Struck pedestrian	8	698	689	325	177	1897
Struck animal	0	54	61	35	19	169
Fixed object collision	73	1630	1213	521	352	3789
Other object collision	10	243	145	60	36	494
Overtaken	13	219	136	48	45	461
Fall from or in moving vehicle	1	26	19	11	6	63
No collision	4	188	126	65	35	418
Other accident	391	1264	1231	703	387	3976
	597	11894	11210	5935	3823	33459

1989						
	0-17	18-25	26-40	41-55	56-98	Total
Collision with vehicle	128	9399	9568	5398	3383	27876
Struck pedestrian	8	626	641	343	190	1808
Struck animal	1	60	59	37	4	161
Fixed object collision	64	1483	983	381	223	3134
Other object collision	0	62	47	19	14	142
Overtaken	13	342	229	103	57	744
Fall from or in moving vehicle	0	31	31	10	5	77
No collision	2	132	99	39	29	301
Other accident	0	16	8	2	6	32
	216	12151	11685	6332	3911	34275

Total missing cases = 11204

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY CRASH FILE (1984-1989) •
OBJECT HIT BY AGE GROUP BY YEAR

N=184637

	1984					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	17	439	236	109	66	867
Tree	25	416	258	87	75	861
Fence/wall/guardrail	4	224	145	62	53	488
Embankment	4	107	68	33	16	228
Guide post	1	33	14	11	13	72
Traffic sign	1	50	33	9	14	107
Fire hydrant	1	13	7	3	1	25
Building	1	36	23	8	11	79
Other fixed object	0	48	37	16	11	112
Not known	0	0	0	0	0	0
Bridge off path	0	25	20	5	5	55
Barrier	0	0	0	0	0	0
Non-fixed object	0	0	0	0	0	0
Traffic island	0	0	0	0	0	0
Bridge on path	0	5	6	0	1	12
Roadworks	0	3	4	1	1	9
Safety zone	0	4	5	2	1	12
Kerb	0	1	1	0	0	2
Animal	0	22	22	9	4	57
	54	1426	879	355	272	2986

VICTORIA CASUALTY CRASH FILE (1984-1989) *
OBJECT HIT BY AGE GROUP BY YEAR

N=184637

	1985					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	19	471	282	127	70	969
Tree	26	438	261	84	71	880
Fence/wall/guardrail	14	266	168	67	52	567
Embankment	6	116	72	21	23	238
Guide post	1	35	15	8	12	71
Traffic sign	1	65	32	6	9	113
Fire hydrant	1	12	10	5	4	32
Building	7	27	36	11	10	91
Other fixed object	4	57	32	18	12	123
Not known	0	0	0	1	0	1
Bridge off path	0	28	14	4	3	49
Barrier	0	1	0	0	0	1
Non-fixed object	0	0	0	0	0	0
Traffic island	0	0	0	0	0	0
Bridge on path	0	0	5	0	0	5
Roadworks	0	3	1	0	3	7
Safety zone	0	7	6	2	1	16
Kerb	0	0	1	0	0	1
Animal	1	36	21	8	10	76
	80	1562	956	362	280	3240

VICTORIA CASUALTY CRASH FILE (1984-1989) •
OBJECT HIT BY AGE GROUP BY YEAR

N=184637

	1986					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	20	533	277	106	84	1020
Tree	28	562	324	111	90	1115
Fence/wall/guardrail	15	280	180	68	68	611
Embankment	9	154	95	42	15	315
Guide post	2	45	32	5	10	94
Traffic sign	2	57	30	9	8	106
Fire hydrant	0	6	10	3	4	23
Building	3	38	31	16	15	103
Other fixed object	3	53	46	18	19	139
Not known	0	0	1	0	0	1
Bridge off path	2	32	17	7	3	61
Barrier	0	0	0	0	0	0
Non-fixed object	0	0	0	0	0	0
Traffic island	0	0	0	0	0	0
Bridge on path	0	0	2	0	1	3
Roadworks	0	3	2	0	2	7
Safety zone	0	8	10	1	0	19
Kerb	0	0	1	0	0	1
Animal	1	29	37	21	10	98
	85	1800	1095	407	329	3716

VICTORIA CASUALTY CRASH FILE (1984-1989) *
OBJECT HIT BY AGE GROUP BY YEAR

N=184637

	1987					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	1	65	37	19	8	130
Tree	1	27	26	9	3	66
Fence/wall/guardrail	1	28	13	10	2	54
Embankment	0	8	6	1	1	16
Guide post	1	2	2	1	1	7
Traffic sign	0	9	0	2	2	13
Fire hydrant	0	2	0	1	0	3
Building	0	3	0	0	0	3
Other fixed object	0	4	7	3	3	17
Not known	0	0	0	0	0	0
Bridge off path	0	7	2	2	2	13
Barrier	0	1	0	0	0	1
Non-fixed object	0	0	0	0	0	0
Traffic island	1	1	4	1	0	7
Bridge on path	0	0	4	1	1	6
Roadworks	0	2	4	0	2	8
Safety zone	0	4	2	0	0	6
Kerb	0	0	0	0	0	0
Animal	0	29	25	18	6	78
	5	192	132	68	31	428

VICTORIA CASUALTY CRASH FILE (1984-1989) *
OBJECT HIT BY AGE GROUP BY YEAR

N=184637

	1988					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	2	41	23	10	6	82
Tree	2	42	24	13	5	86
Fence/wall/guardrail	3	21	13	6	9	52
Embankment	0	11	2	6	6	25
Guide post	0	4	0	0	1	5
Traffic sign	0	3	2	1	1	7
Fire hydrant	0	0	1	0	0	1
Building	1	3	1	1	1	7
Other fixed object	0	12	3	5	2	22
Not known	0	0	1	0	0	1
Bridge off path	0	5	6	1	1	13
Barrier	0	1	0	0	0	1
Non-fixed object	0	1	1	0	0	2
Traffic island	0	9	3	4	1	17
Bridge on path	1	2	3	1	0	7
Roadworks	0	4	2	0	0	6
Safety zone	0	6	3	1	1	11
Kerb	0	4	1	0	0	5
Animal	0	37	32	17	7	93
	9	206	121	66	41	443

VICTORIA CASUALTY CRASH FILE (1984-1989) *
OBJECT HIT BY AGE GROUP BY YEAR

N=184637

	1989					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	0	37	17	6	5	65
Tree	0	20	6	4	6	36
Fence/wall/guardrail	0	12	8	1	2	23
Embankment	0	6	4	0	1	11
Guide post	0	2	0	0	0	2
Traffic sign	0	2	2	1	0	5
Fire hydrant	0	1	0	0	0	1
Building	1	0	0	1	2	4
Other fixed object	2	23	11	10	4	50
Not known	0	1	0	0	0	1
Bridge off path	0	2	0	1	0	3
Barrier	0	0	0	0	0	0
Non-fixed object	0	0	0	0	0	0
Traffic island	0	11	10	4	5	30
Bridge on path	0	7	7	0	0	14
Roadworks	0	5	7	1	2	15
Safety zone	0	4	8	8	2	22
Kerb	0	2	0	0	0	2
Animal	1	58	58	36	4	157
	4	193	138	73	33	441

Total missing cases = 173383

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

5 VICTORIA CASUALTY FILE (1986-1989) - DAY/NIGHT COMPARISONS

Bivariate analyses which examined the similarities and differences between drivers of various age groups involved in reported casualty crashes in Victoria for the years 1984 to 1989 were reported in an earlier chapter of this report. There are numerous ways in which the data can be analysed and an important consideration is any age group differences arising as a result of the time of day, given the increased risk of night-time driving relative to driving during the day. The current chapter re-examines the casualty crash data with the following modifications:

- 'day' was operationally defined as the period between 6.00 am and 5.59 pm while 'night' was defined as the period between 6.00 pm and 5.59 am.
- the analyses were conducted for the combined years of 1986 to 1989. These years were selected as they were common to both Victoria and NSW databases and to enable the reader to make some direct comparison of results between the two states.

Drivers in the 18-25 age group will be referred to as 'young drivers'. All 'not known' cases (e.g. not known age group, not known day of week, etc.) were collapsed with all other missing cases. Missing cases make up 6% of the total sample. The results have been presented in the form of tables and pie charts which can be found in Section 5.2.

5.1 INTERPRETATION OF PIE CHARTS

A consistent pattern emerges when making day/night comparisons of young drivers by each variable. On average, 30-32% of drivers involved in daytime crashes were young drivers while young drivers involved in night-time crashes represented 43-47% of all drivers involved in night-time crashes.

What information can be gleaned then from these graphs? As an example, the graphs on crash severity illustrates that young drivers make up 30% of drivers involved in fatal daytime crashes and 44% of drivers involved in fatal night-time crashes (see pie charts, p. 273). The total number of drivers involved in fatal crashes during the day ($n=1460$) is similar to that during the night ($n=1435$), although there was a decrease in the number of drivers involved in crashes at night. Young drivers, however, showed an increase in numbers for fatal night-time crashes (day=444, night=628; see table, p. 275). Hence, in absolute terms, there was about a 40% increase in the number of young drivers involved in fatal night-time crashes.

The proportion of drivers involved in fatal crashes, however, only constitute 2% of all drivers involved in crashes.

Similar proportions are observed in young drivers involved in daytime (31%) and night-time (44-47%) crashes resulting in serious or other injuries. The actual number of drivers involved in both these categories of such night-time crashes ($n=17564$), however, is far less than the number of drivers involved in similar daytime crashes ($n=25564$). Therefore, care must be taken in interpreting proportions resulting from different sample sizes because an apparently large proportional increase may actually address far fewer crashes.

Ratio comparisons between drivers involved in fatal and serious injury daytime crashes with those of corresponding night-time crashes is another way of interpreting the results. The number of young drivers involved in daytime fatal crashes is 444 while drivers involved in daytime serious injury crashes is 7015. This gives a ratio of 1:16. Where night-time crashes involving young drivers are concerned, the number of drivers involved in fatal crashes is 628 while the number of drivers involved in serious injury crashes is 6522 and this gives a ratio of 1:10. This difference between daytime and night-time ratios between fatal and serious injury crashes clearly indicates that the probability of young drivers being involved in fatal crashes relative to crashes of lower severity is greater at night than during the day. This finding may explain an increase in the representation of young drivers in night-time fatal crashes.

There are a few important points to keep in mind when interpretation of these results are made:

- It is necessary to note the sample size or the number of cases present when making comparisons between pie charts. For example, when making day/night comparisons, in most cases, the sample size of drivers involved in night-time crashes is less than those of drivers involved in daytime crashes, despite the higher proportion of young drivers involved in night-time crashes.
- The number of years that make up each age group differ. For example, young drivers (18-25 years) covers 8 years while the 26-40 age group covers 15 years. Thus, similar proportions between these age groups indicate an over-involvement of young drivers of almost 2 per year of age.
- The increase in young driver proportions involved in night-time crashes may be a result of any of the following reasons:
 - young drivers allocate a higher proportion of their total driving to night-time driving, and/or young drivers having a greater propensity to engage in risky driving behaviour at night.
 - older drivers allocate a lower proportion of their total driving to night-time driving, and/or older drivers tend to engage in safe driving behaviour at night.

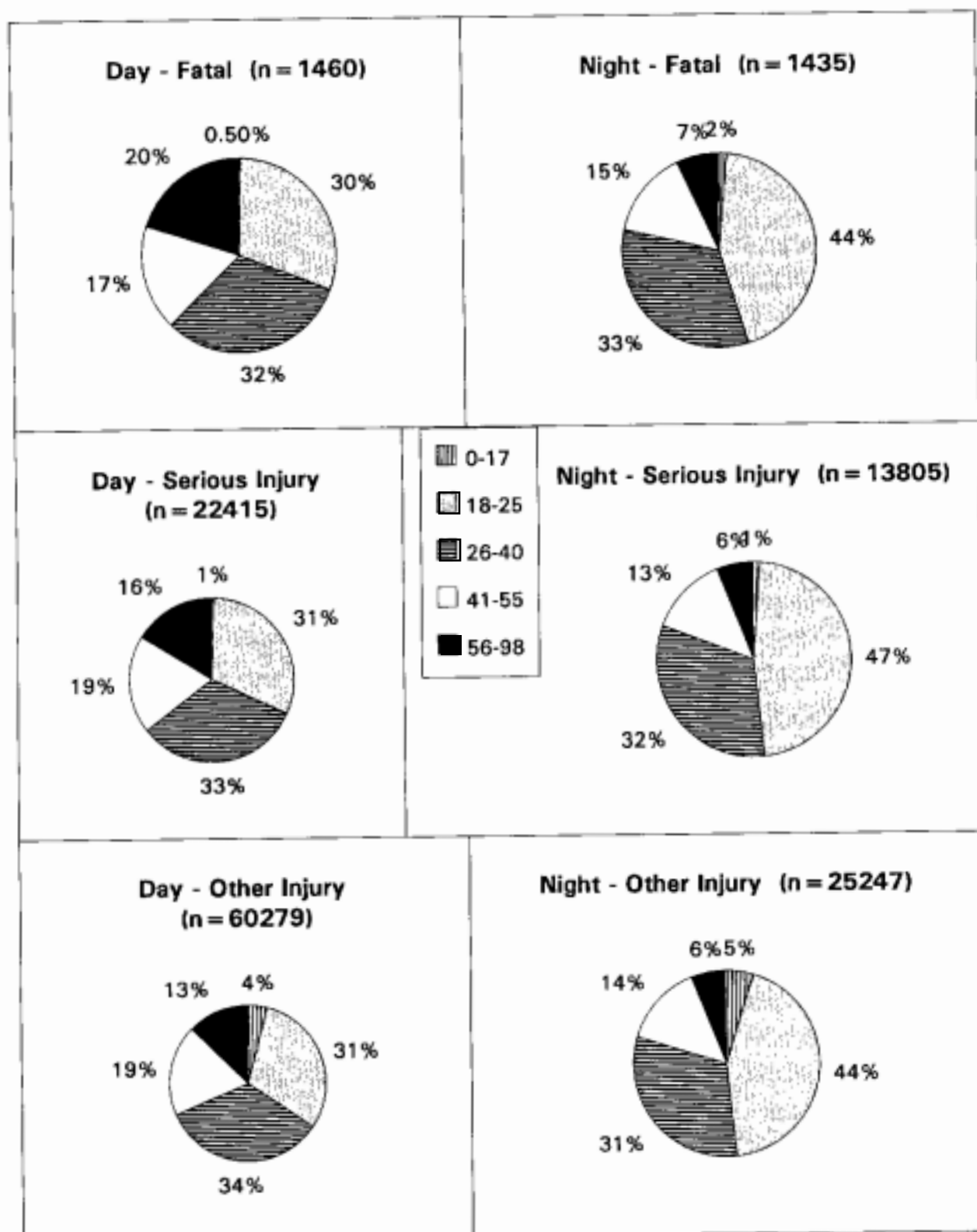
Hence, the over-involvement of one age group may be a result of a relative under-involvement of other age groups.

5.2 **PIE CHARTS AND TABLES - VICTORIA CASUALTY CRASH DATA**

Variables	Page
Crash severity	280
Number of vehicles involved	283
Number of seriously injured	286
Number of other injury	289
Number not injured	292
Number killed	293
Day of week	294
Weekday vs. weekend	295
Metro vs. rural	297
Geometry of location	299
Speed limit	302
First road feature	304
Traffic control	306
Sex of driver	310
BAC	312
Driver restraint use	314
Licence status	316
Licence type	319
State of licence issue	322
Driver experience in years	325
Year of vehicle manufacture	327
Light conditions	331
Road surface condition	334
Weather condition	337
DCA event	339
Type of crash	342
Object hit	345

VICTORIA CASUALTY FILE (1986-1989)
CRASH SEVERITY BY AGE GROUP

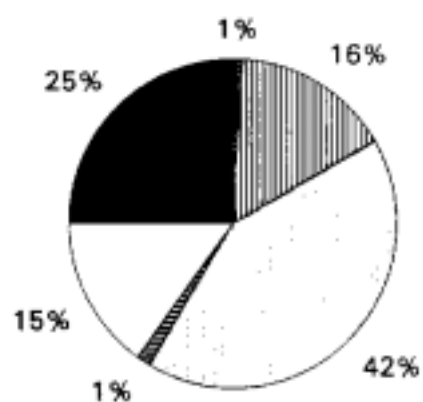
(N = 132381)



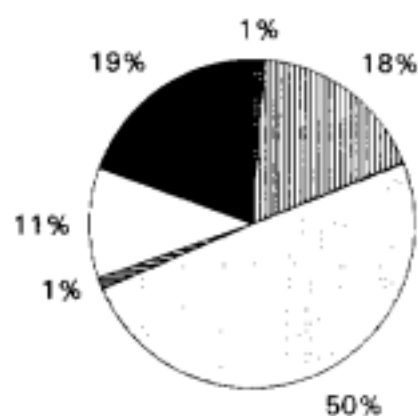
VICTORIA CASUALTY FILE (1986-1989)
CRASH SEVERITY BY AGE GROUP

(N = 132381)

18-25 years (n = 44200)



26-40 years (n = 41160)



VICTORIA CASUALTY FILE (1986-1989) •
CRASH SEVERITY BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Fatal	7	444	463	255	291	1460
Serious injury	146	7015	7394	4275	3585	22415
Other injury	2374	18549	20439	11346	7571	60279
	2527	26008	28296	15876	11447	84154

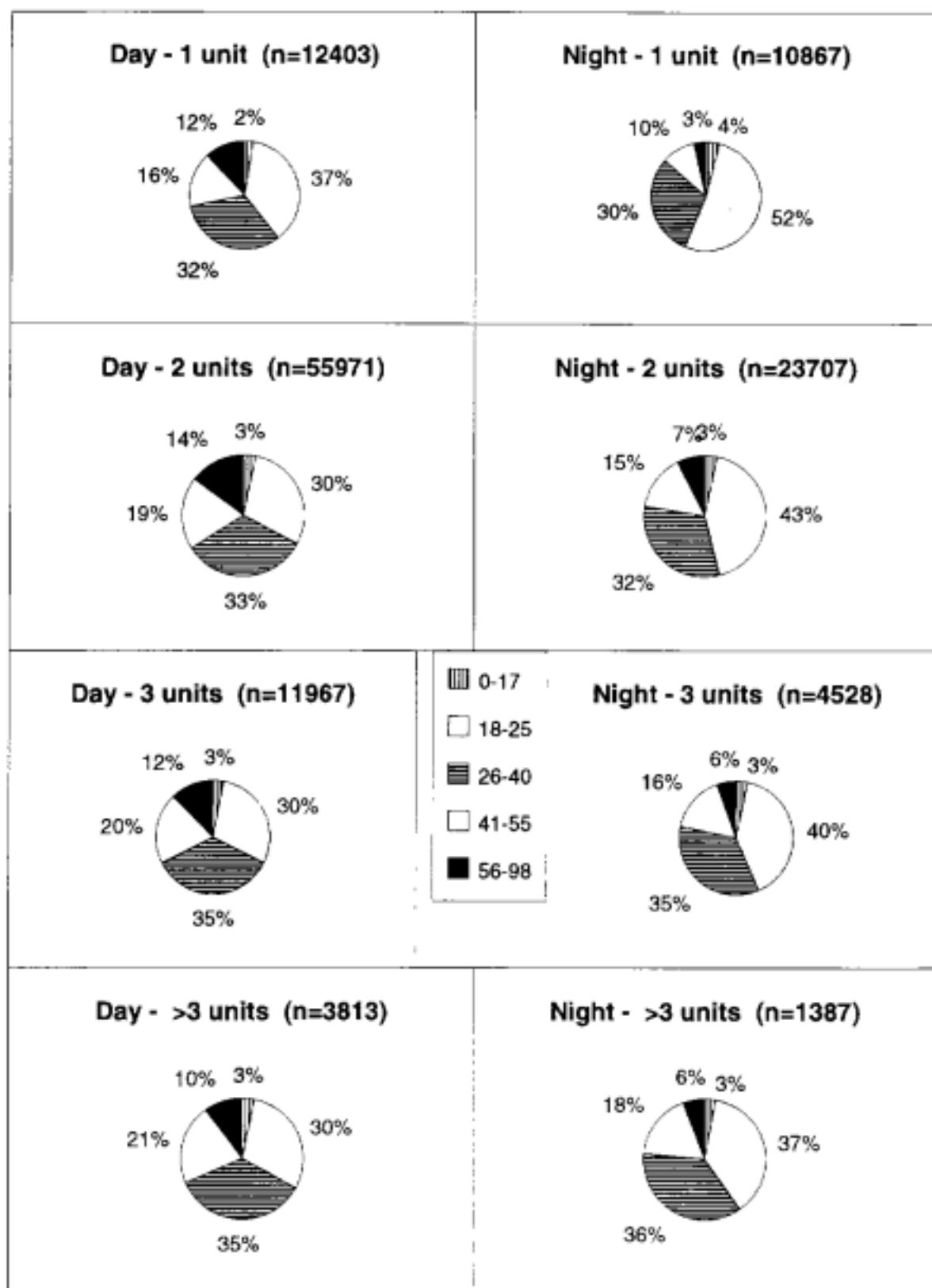
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Fatal	22	628	480	209	96	1435
Serious injury	182	6522	4479	1794	828	13805
Other injury	1196	11042	7905	3605	1499	25247
	1400	18192	12864	5608	2423	40487

Missing cases = 7740

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
NUMBER OF VEHICLES INVOLVED BY AGE GROUP

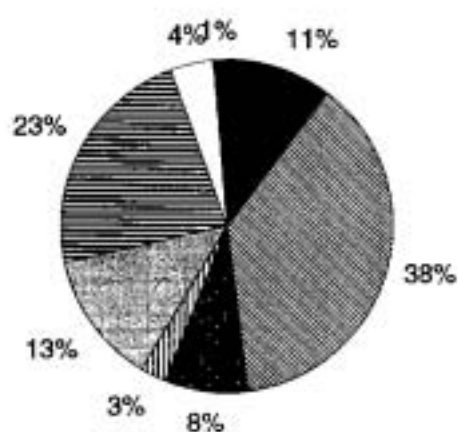
(N=132381)



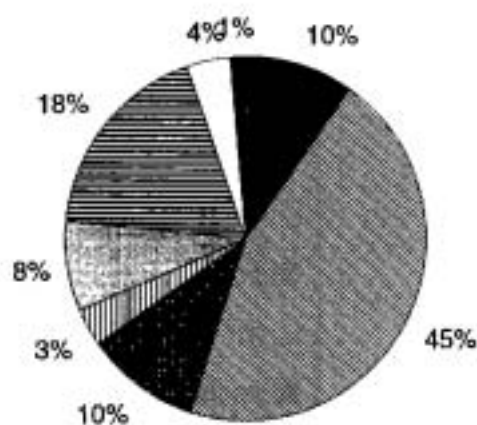
VICTORIA CASUALTY FILE (1986-1989)
NUMBER OF VEHICLES INVOLVED BY AGE GROUP

(N=132381)

18-25 years (n=44200)



26-40 years (n=41160)



VICTORIA CASUALTY FILE (1986-1989) •
NUMBER OF VEHICLES INVOLVED BY AGE GROUP

		DAY					
		0-17	18-25	26-40	41-55	56-98	Total
1		283	4643	4030	1980	1467	12403
2		1766	16674	18717	10709	8105	55971
3		355	3544	4201	2377	1490	11967
4		94	836	947	576	282	2735
5		19	183	254	131	65	652
More than 5		10	128	147	103	38	426
		2527	26008	28296	15876	11447	84154

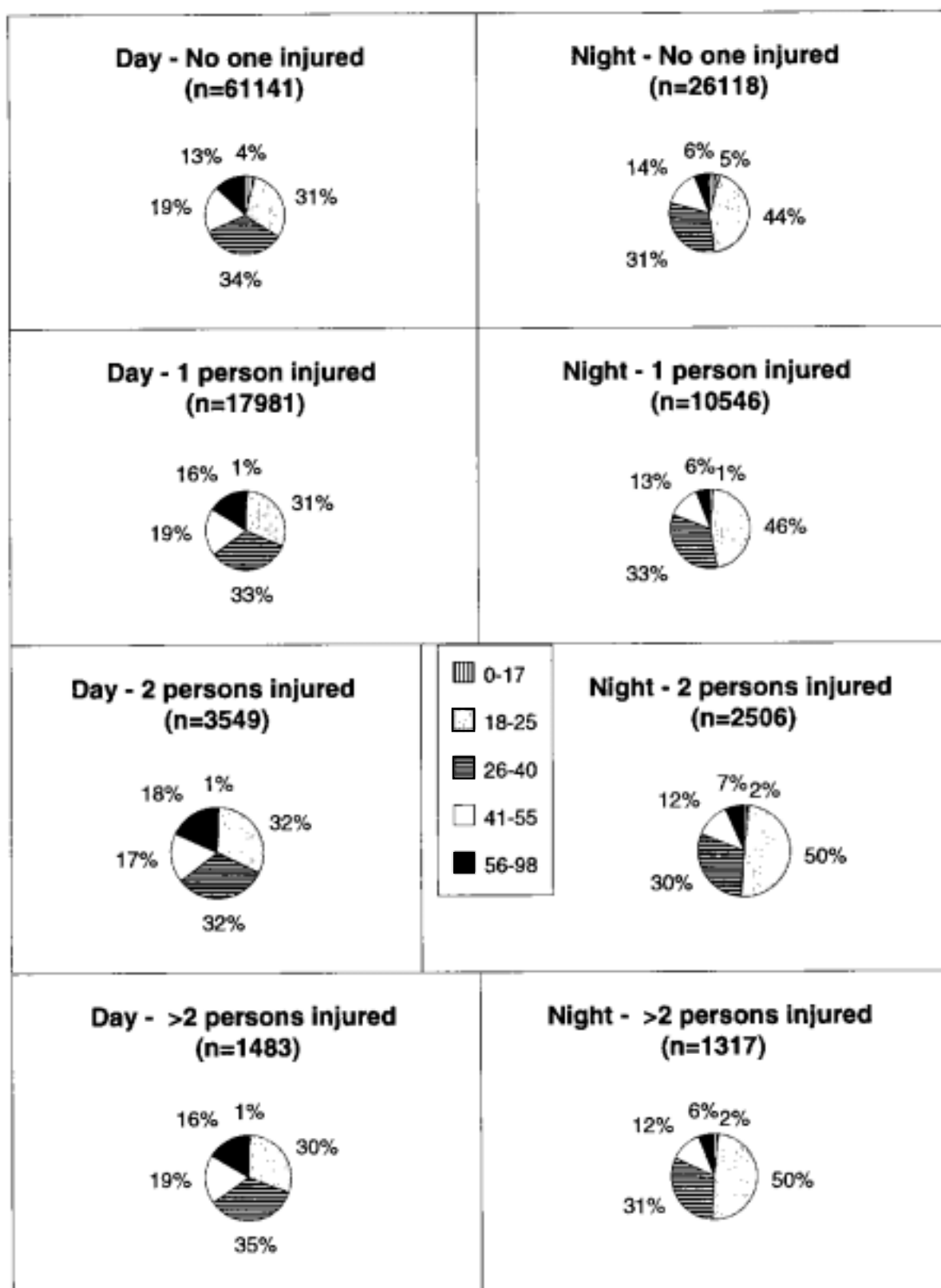
		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
1		426	5690	3303	1069	377	10865
2		783	10155	7481	3572	1716	23707
3		150	1829	1576	723	250	4528
4		27	382	366	178	63	1016
5		6	87	79	38	11	221
More than 5		8	49	59	28	6	150
		1400	18192	12864	5608	2423	40487

Missing cases = 7740

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
NUMBER OF SERIOUSLY INJURED BY AGE GROUP

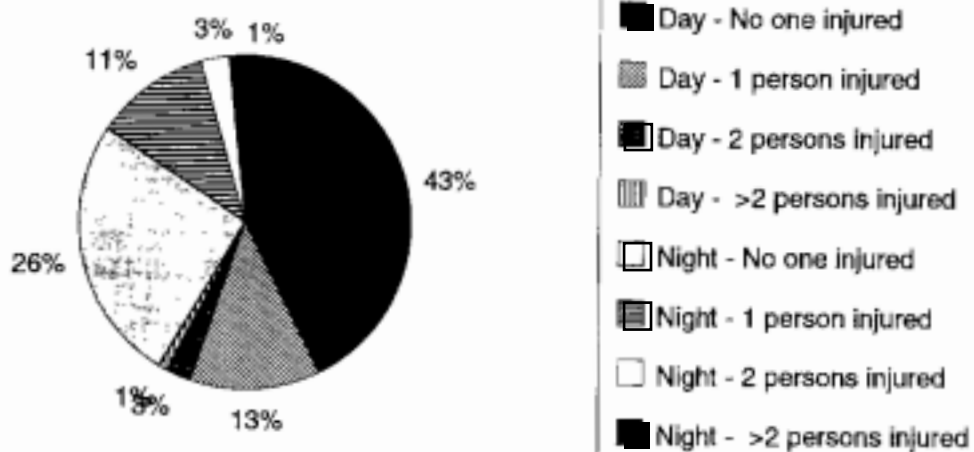
(N=132381)



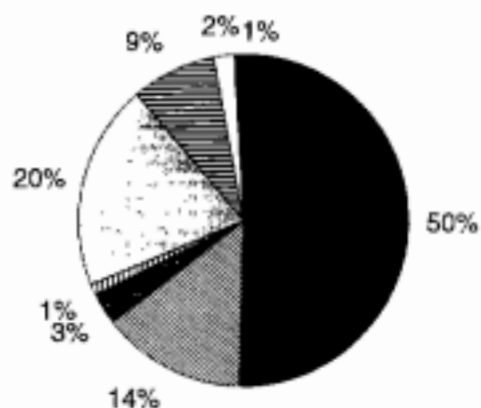
VICTORIA CASUALTY FILE (1986-1989)
NUMBER OF SERIOUSLY INJURED BY AGE GROUP

(N=132381)

18-25 years (n=44200)



26-40 years (n=41160)



VICTORIA CASUALTY FILE (1986-1989) *
NUMBER OF SERIOUSLY INJURED BY AGE GROUP

		DAY					
		0-17	18-25	26-40	41-55	56-98	Total
0		2378	18814	20703	11499	7747	61141
1		108	5626	5928	3492	2827	17981
2		29	1122	1153	611	634	3549
3		6	278	313	176	163	936
4		5	117	116	65	53	356
5		1	35	50	21	13	120
More than 5		0	16	33	12	10	71
		2527	26008	28296	15876	11447	84154

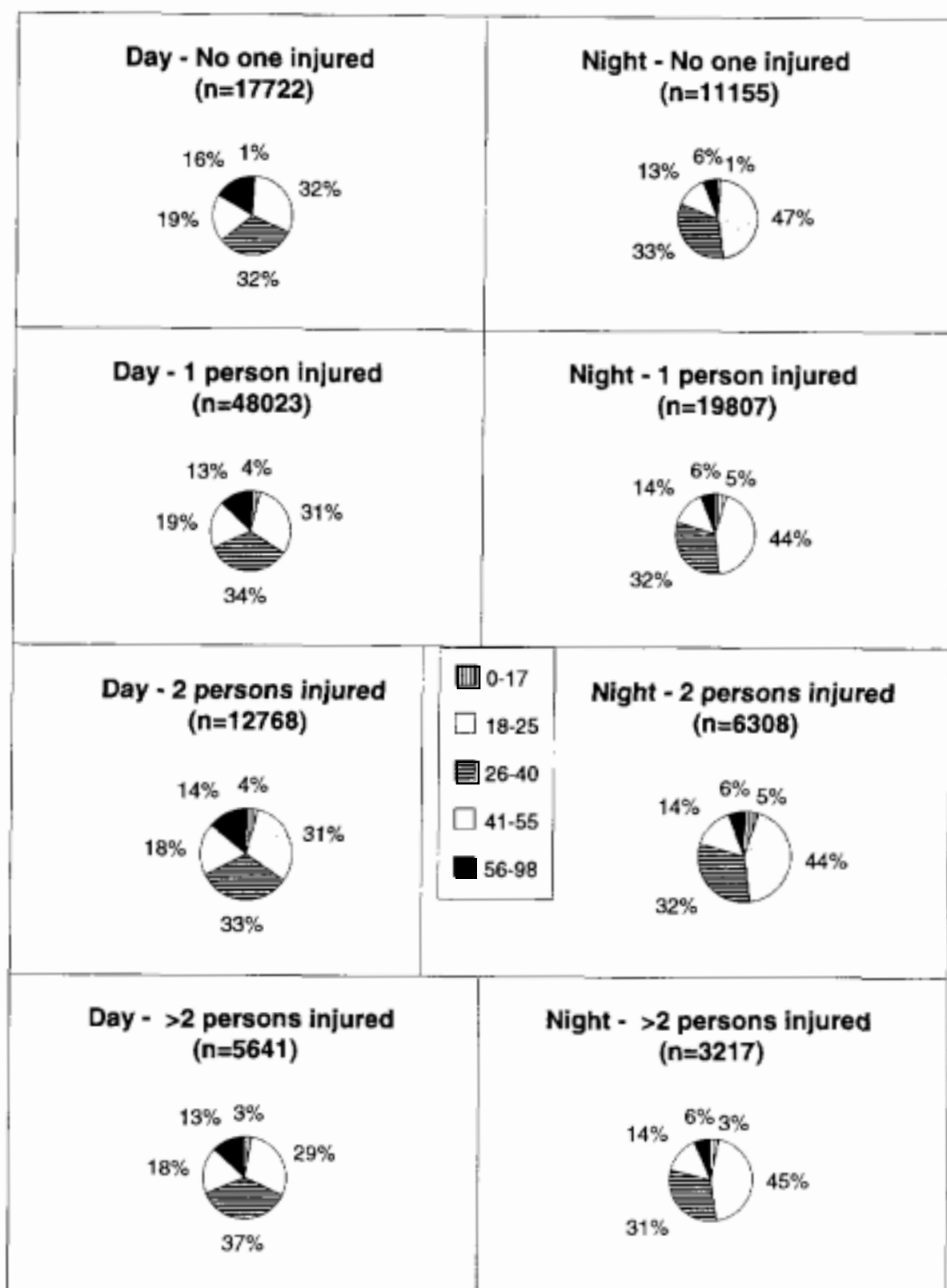
		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
0		1204	11401	8199	3749	1565	26118
1		129	4892	3511	1400	614	10546
2		47	1246	743	304	166	2506
3		10	415	256	102	52	835
4		4	142	91	38	16	291
5		5	59	30	11	7	112
More than 5		1	37	34	4	3	79
		1400	18192	12864	5608	2423	40487

Missing cases = 7740

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY FILE (1986-1989)
NUMBER OF OTHER INJURY BY AGE GROUP

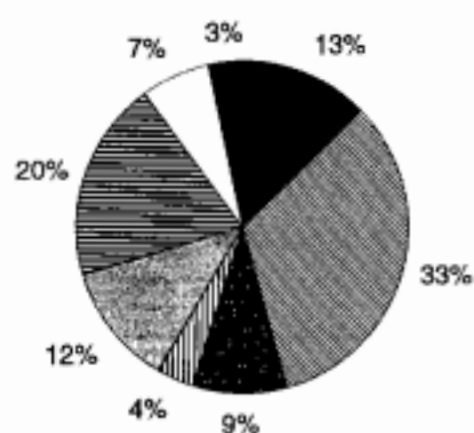
(N=132381)



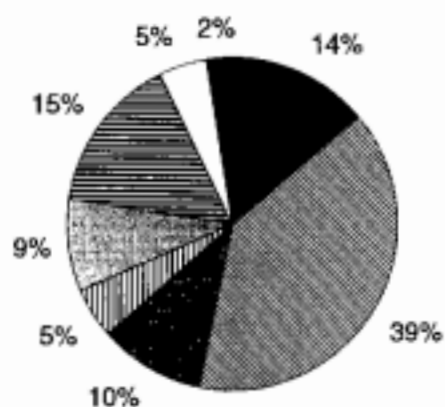
VICTORIA CASUALTY FILE (1986-1989)
NUMBER OF OTHER INJURY BY AGE GROUP

(N=132381)

18-25 years (n=44200)



26-40 years (n=41160)



VICTORIA CASUALTY FILE (1986-1989) *
NUMBER OF OTHER INJURY BY AGE GROUP

		DAY					
		0-17	18-25	26-40	41-55	56-98	Total
0		107	5601	5756	3384	2874	17722
1		1799	14775	16247	9120	6082	48023
2		464	3975	4219	2334	1776	12768
3		98	1105	1291	658	475	3627
4		43	344	480	238	148	1253
5		7	134	187	93	62	483
More than 5		9	74	116	49	30	278
		2527	26008	28296	15876	11447	84154

		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
0		133	5210	3707	1433	672	11155
1		907	8642	6272	2823	1163	19807
2		261	2896	1873	887	391	6308
3		68	891	607	286	121	1973
4		24	355	259	116	49	803
5		6	115	93	37	17	268
More than 5		1	83	53	26	10	173
		1400	18192	12864	5608	2423	40487

Missing cases = 7740

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989) •
NUMBER NOT INJURED BY AGE GROUP

		DAY					
		0-17	18-25	26-40	41-55	56-98	Total
0		110	4979	4388	2409	2178	14064
1		104	10899	11914	6953	4907	34777
2		88	5520	6105	3523	2543	17779
3		36	2438	2955	1528	980	7937
4		12	1116	1486	760	457	3831
5		8	541	711	341	205	1806
More than 5		9	515	737	362	177	1800
		367	26008	28296	15876	11447	81994

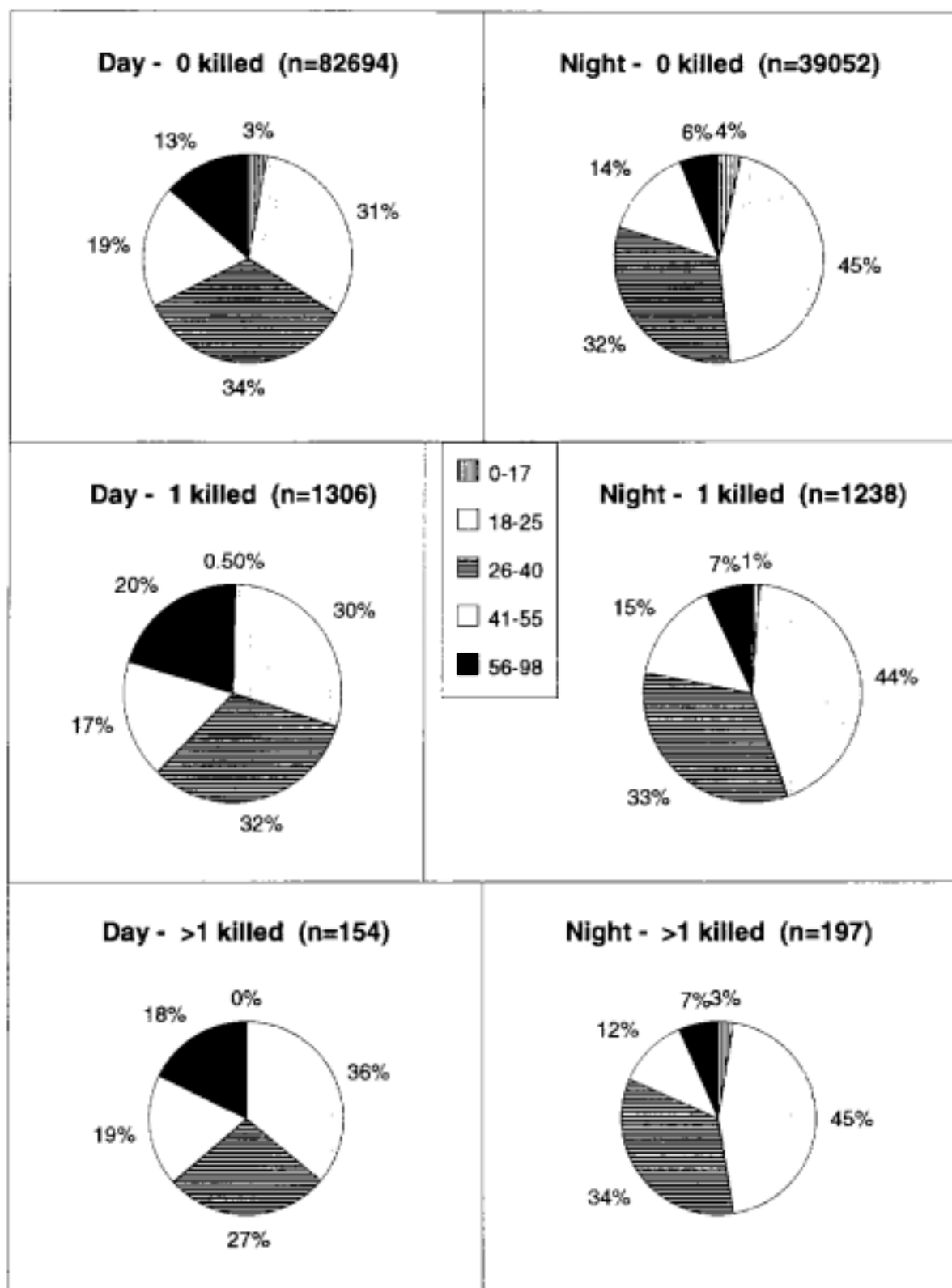
		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
0		199	5462	3557	1233	506	10957
1		101	5795	4221	1986	926	13029
2		49	3451	2460	1179	538	7677
3		40	1727	1209	587	231	3794
4		13	889	720	316	115	2053
5		10	461	361	156	62	1050
More than 5		8	407	336	151	45	947
		420	18192	12864	5608	2423	39507

Missing cases = 10880

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
NUMBER KILLED BY AGE GROUP

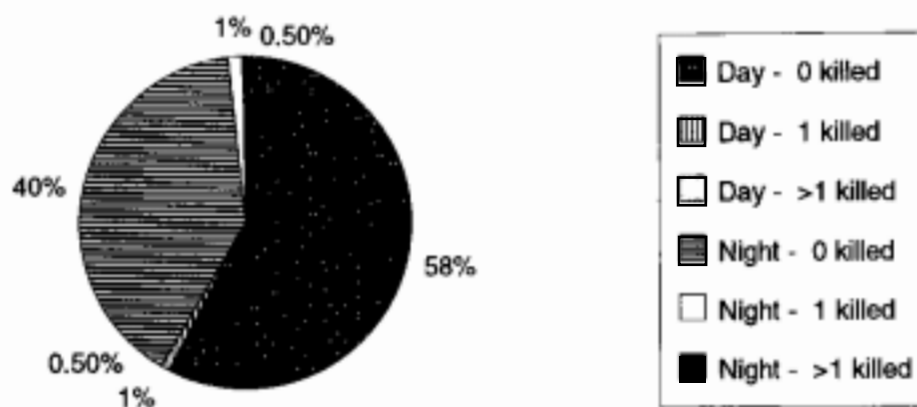
(N=132381)



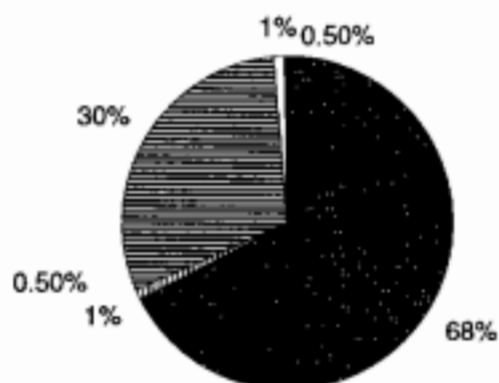
VICTORIA CASUALTY FILE (1986-1989)
NUMBER KILLED BY AGE GROUP

(N=132381)

18-25 years (n=44200)



26-40 years (n=41160)



VICTORIA CASUALTY FILE (1986-1989) •
DAY OF WEEK BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Monday	359	3623	4026	2321	1593	11922
Tuesday	330	3606	4290	2462	1681	12369
Wednesday	357	3844	4379	2510	1752	12842
Thursday	398	3769	4469	2434	1851	12921
Friday	403	4029	4794	2656	1951	13833
Saturday	400	3935	3617	1981	1432	11365
Sunday	280	3202	2721	1512	1187	8902
	2527	26008	28296	15876	11447	84154

	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Monday	122	1694	1265	635	250	3966
Tuesday	125	1827	1409	640	286	4287
Wednesday	123	1934	1531	719	284	4591
Thursday	187	2292	1892	820	355	5546
Friday	274	3535	2491	1137	503	7940
Saturday	310	3633	2246	888	371	7448
Sunday	259	3277	2030	769	374	6709
	1400	18192	12864	5608	2423	40487

Missing cases = 7740

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY FILE (1986-1989) •
NUMBER KILLED BY AGE GROUP

	DAY					
	0-17	18-25	26-40	41-55	56-98	Total
0	2520	25564	27833	15621	11156	82694
1	7	388	421	226	264	1306
2	0	45	36	23	24	128
3	0	9	6	4	2	21
4	0	2	0	0	0	2
5	0	0	0	2	1	3
	2527	26008	28296	15876	11447	84154

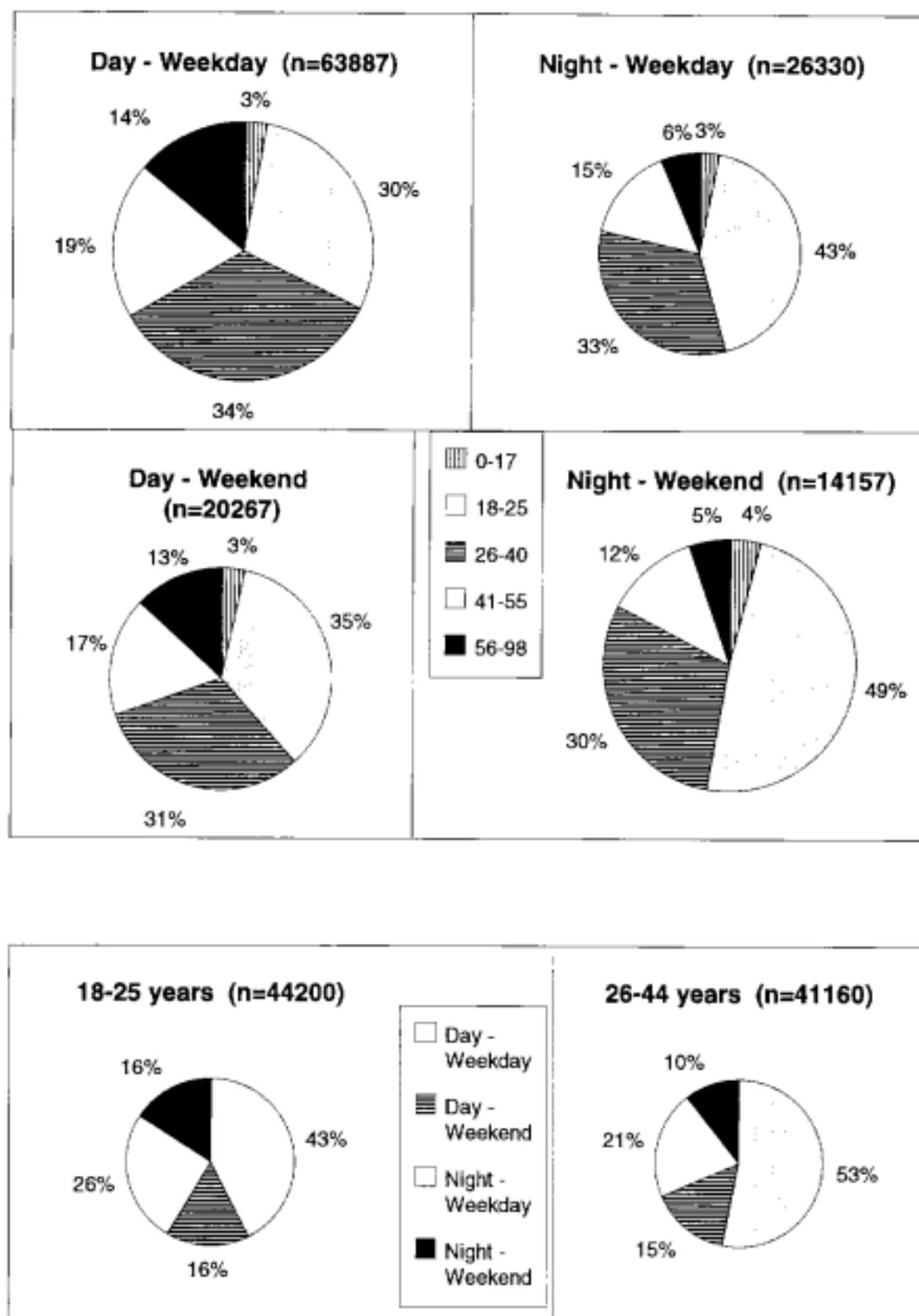
	NIGHT					
	0-17	18-25	26-40	41-55	56-98	Total
0	1378	17564	12384	5399	2327	39052
1	17	539	413	186	83	1238
2	4	65	40	16	11	136
3	1	17	22	5	2	47
4	0	6	3	1	0	10
5	0	1	2	1	0	4
	1400	18192	12864	5608	2423	40487

Missing cases = 7740

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
WEEKDAY VS. WEEKEND BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989) *
WEEKDAY VS. WEEKEND BY AGE GROUP

		DAY					
		0-17	18-25	26-40	41-55	56-98	Total
Weekday		1847	18871	21958	12383	8828	63887
Weekend		680	7137	6338	3493	2619	20267
		2527	26008	28296	15876	11447	84154

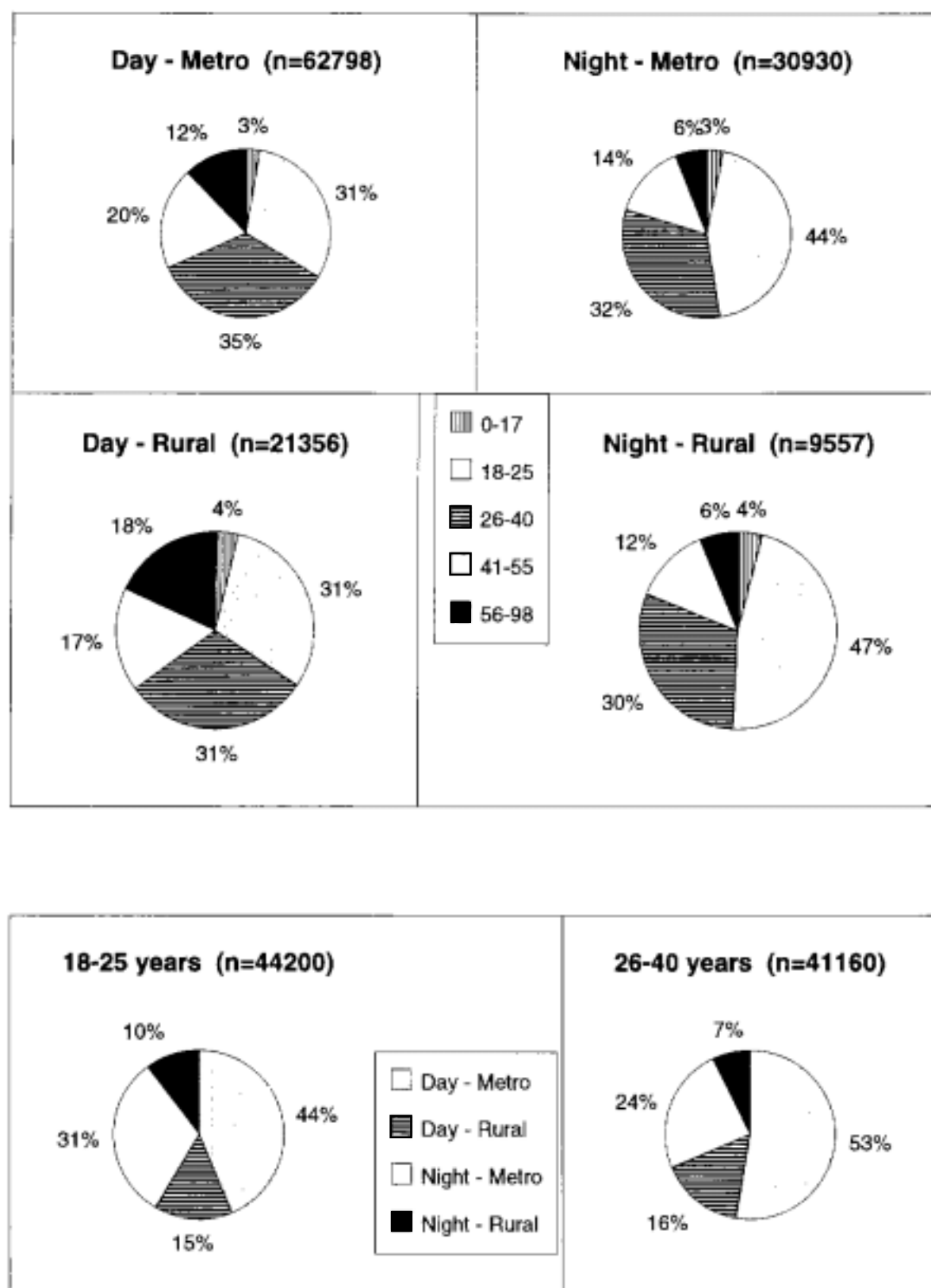
		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
Weekday		831	11282	8588	3951	1678	26330
Weekend		569	6910	4276	1657	745	14157
		1400	18192	12864	5608	2423	40487

Missing cases = 7740

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
METRO VS. RURAL BY AGE GROUP

(N=132381)



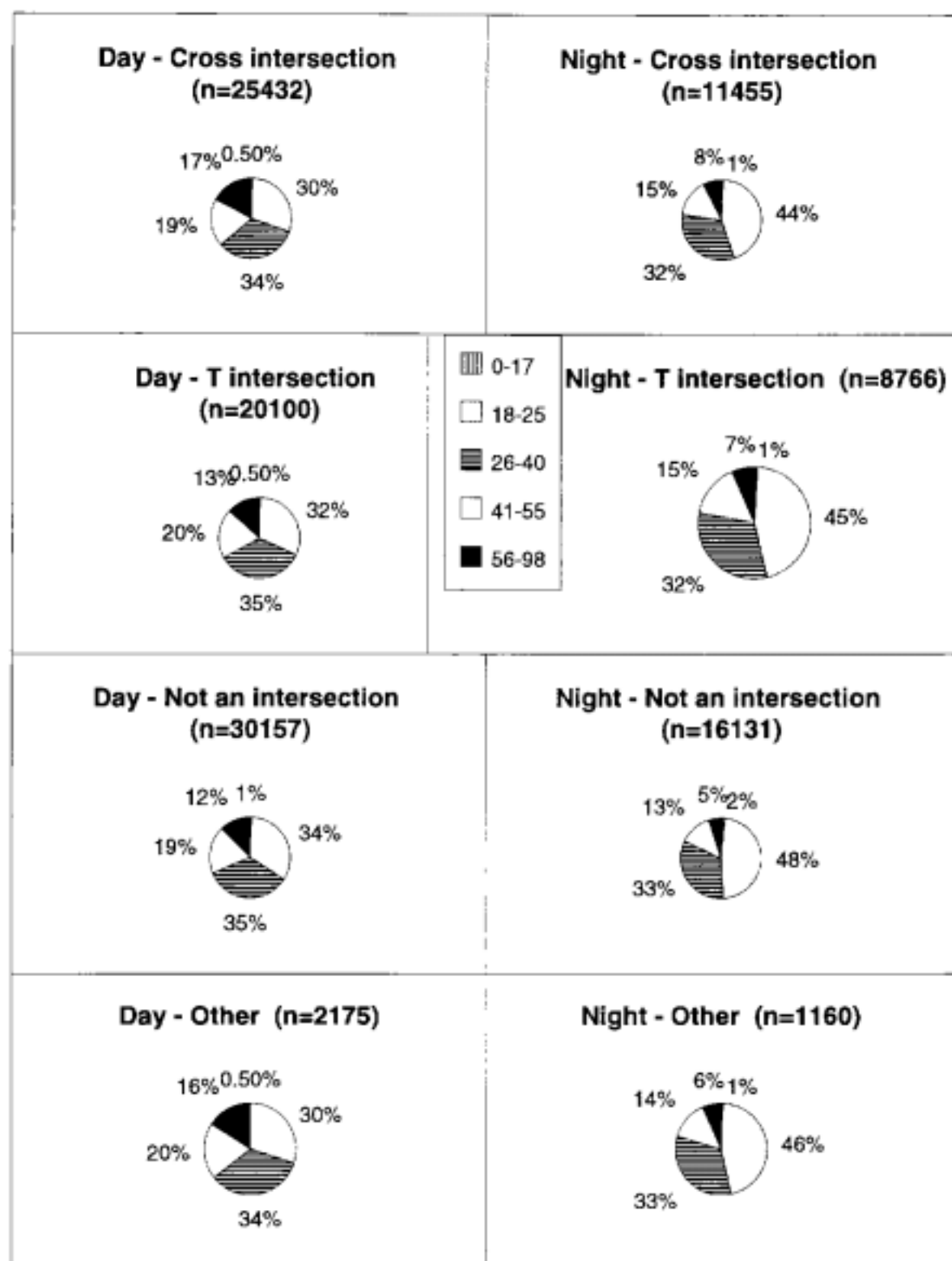
VICTORIA CASUALTY FILE (1986-1989) •
METRO VS. RURAL BY AGE GROUP

		DAY					
		0-17	18-25	26-40	41-55	56-98	Total
Metro		1742	19390	21781	12255	7630	62798
Rural		785	6618	6515	3621	3817	21356
		2527	26008	28296	15876	11447	84154

		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
Metro		1003	13705	9975	4434	1813	30930
Rural		397	4487	2889	1174	610	9557
		1400	18192	12864	5608	2423	40487

Missing cases = 7740

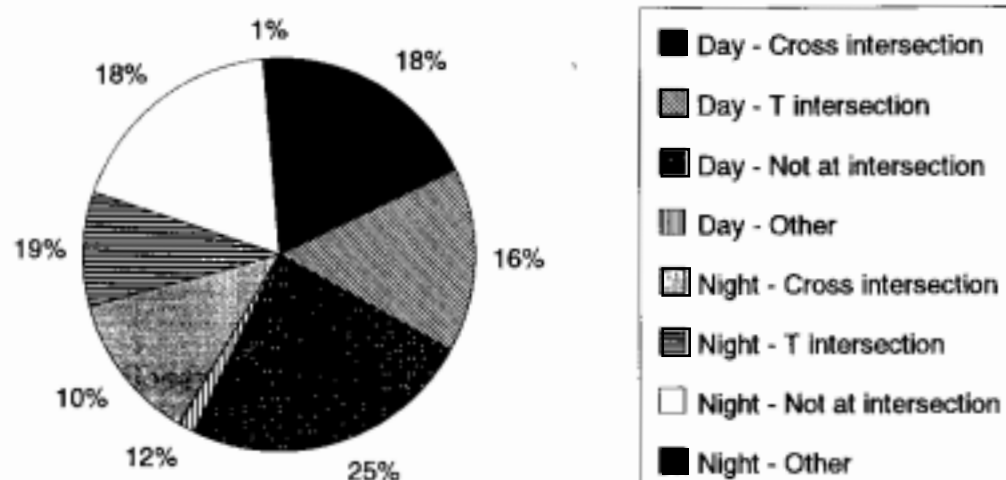
* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.



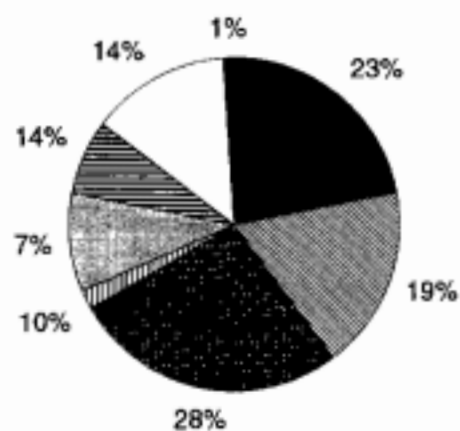
VICTORIA CASUALTY FILE (1986-1989)
GEOMETRY OF LOCATION BY AGE GROUP

(N=132381)

18-25 years (n=41496)



26-40 years (n=38634)



**VICTORIA CASUALTY FILE (1986-1989) •
GEOMETRY OF LOCATION BY AGE GROUP**

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Cross intersection	93	7537	8571	4884	4347	25432
T intersection	80	6386	7027	3980	2627	20100
Y intersection	4	194	218	130	97	643
Multiple intersection	2	437	507	291	229	1466
Not at intersection	205	10136	10470	5702	3644	30157
Dead end	0	4	5	2	3	14
Road closure	0	0	0	0	0	0
Private property	0	15	17	9	11	52
	384	24709	26815	14998	10958	77864

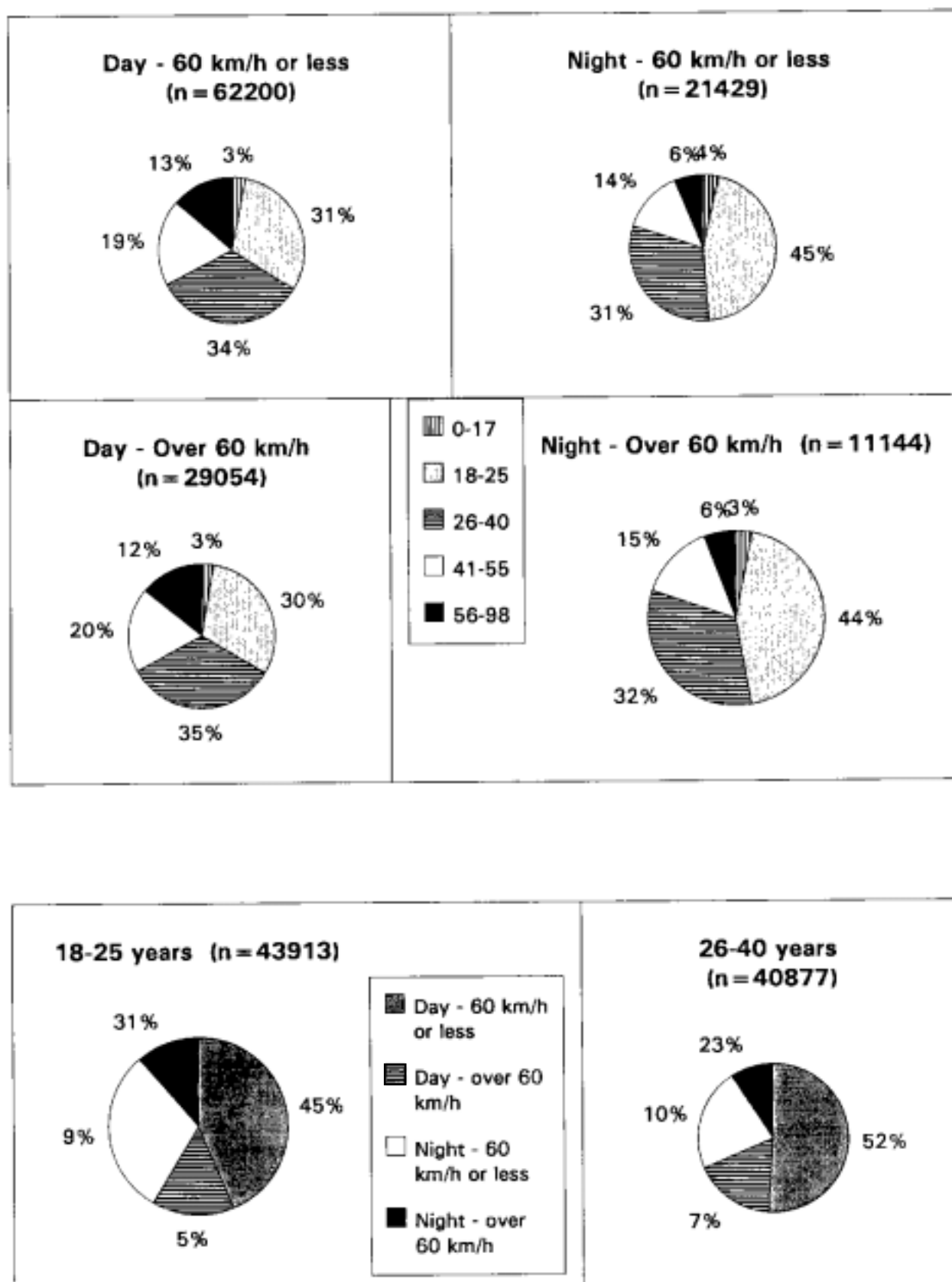
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Cross intersection	74	5093	3690	1721	877	11455
T intersection	94	3975	2782	1333	582	8766
Y intersection	4	168	97	47	19	335
Multiple intersection	2	353	273	112	48	788
Not at intersection	242	7719	5347	2051	772	16131
Dead end	1	9	8	0	2	20
Road closure	0	1	0	0	0	1
Private property	0	5	6	3	2	16
	417	17323	12203	5267	2302	37512

Missing cases = 17005

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
SPEED LIMIT (KM/H) BY AGE GROUP

(N = 132381)



VICTORIA CASUALTY FILE (1986-1989) •
SPEED LIMIT (KM/H) BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
40	3	26	15	12	2	58
50	5	28	25	14	6	78
60	1931	19151	20858	11781	8340	62061
75	186	2213	2596	1504	926	7425
80	5	96	137	86	66	390
90	19	234	228	121	97	699
100	357	3899	4058	2165	1858	12337
110	13	191	201	96	77	578
Other speed limit	0	2	1	1	0	4
Camping grounds, off road	0	1	0	1	1	3
	2519	25841	28119	15781	11373	83633

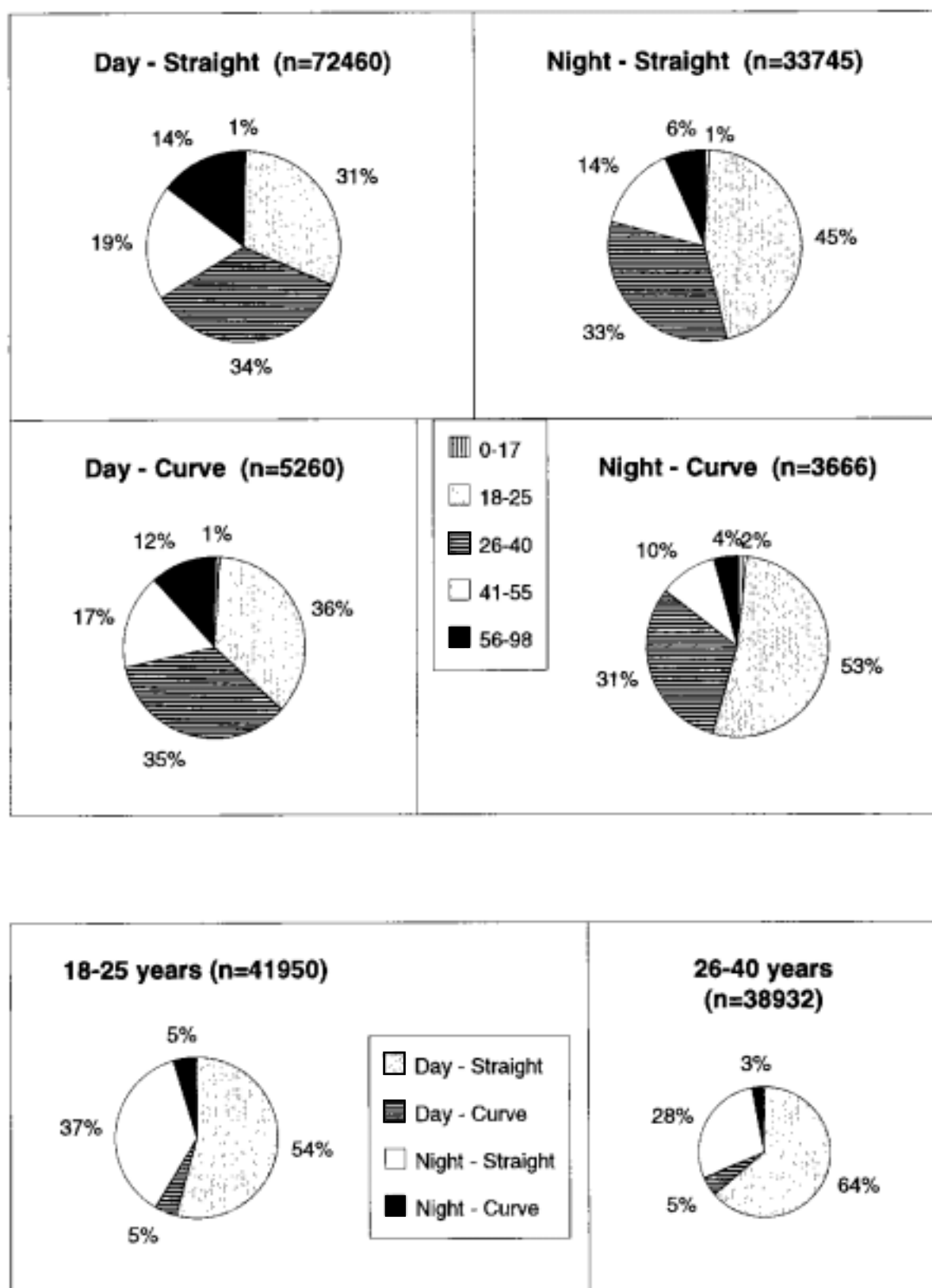
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
40	5	24	10	3	1	43
50	6	23	4	3	2	38
60	1020	13128	9045	3995	1783	28971
75	108	1565	1122	525	202	3522
80	6	89	73	32	16	216
90	11	157	125	42	22	357
100	233	2959	2264	919	356	6731
110	11	127	116	39	25	318
Other speed limit	0	2	0	1	0	3
Camping grounds, off road	0	2	0	0	0	2
	1400	18076	12759	5559	2407	40201

Missing cases = 8547

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes

VICTORIA CASUALTY FILE (1986-1989)
FIRST ROAD FEATURE BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989) *
FIRST ROAD FEATURE BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Straight	332	22772	24935	14097	10324	72460
Curve	52	1896	1834	870	608	5260
Divided Road	0	23	39	20	16	98
Median opening	0	1	2	0	1	4
Bridge, Culvert	0	2	2	2	2	8
Driveway	0	30	20	20	10	80
Roadworks	0	0	0	0	0	0
	384	24724	26832	15009	10961	77910

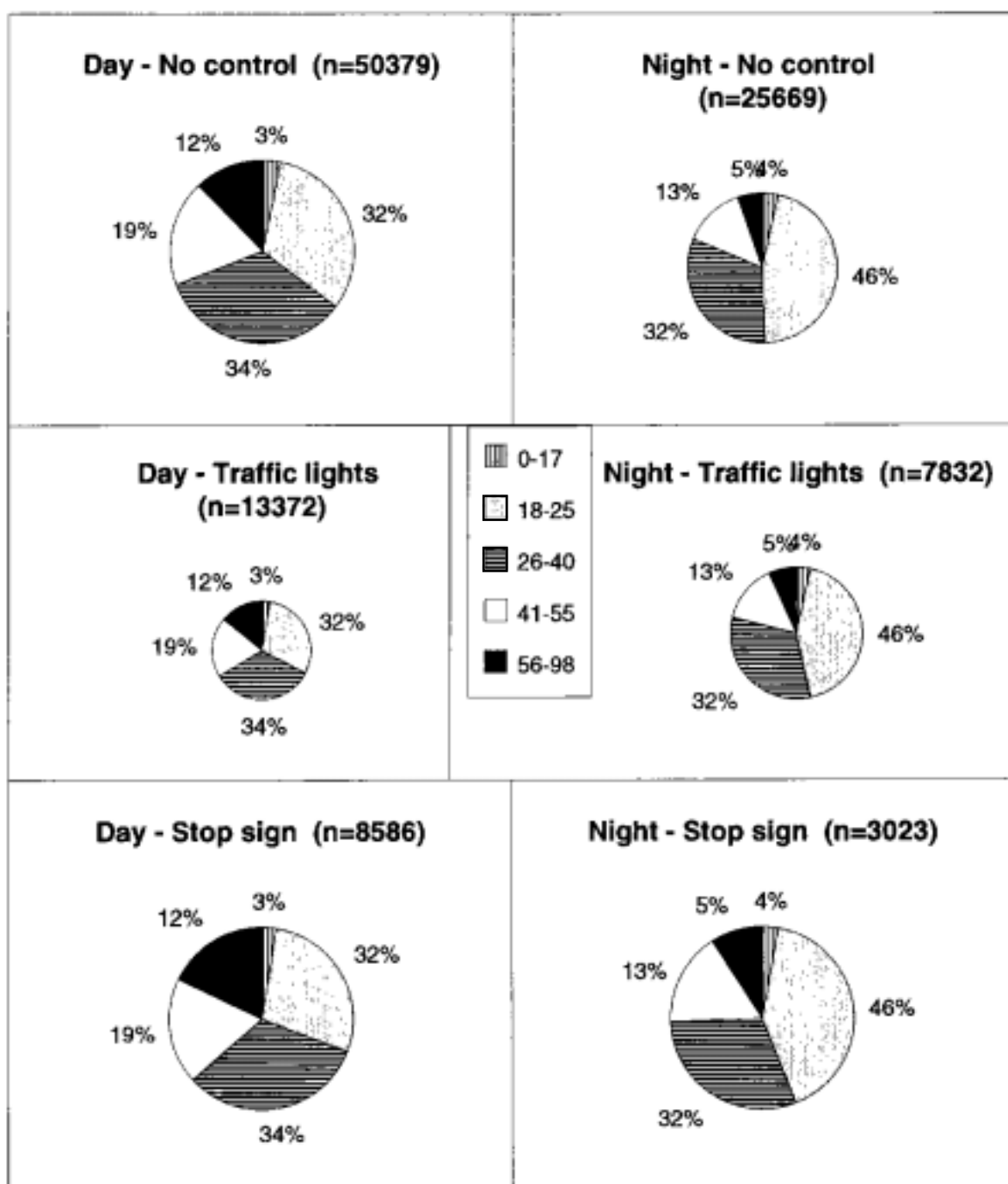
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Straight	347	15350	11023	4868	2157	33745
Curve	69	1932	1140	382	143	3666
Divided Road	1	24	23	13	4	65
Median opening	0	4	2	1	0	7
Bridge, Culvert	0	3	1	0	0	4
Driveway	0	14	15	7	2	38
Roadworks	0	1	1	0	0	2
	417	17328	12205	5271	2306	37527

Missing cases = 16944

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

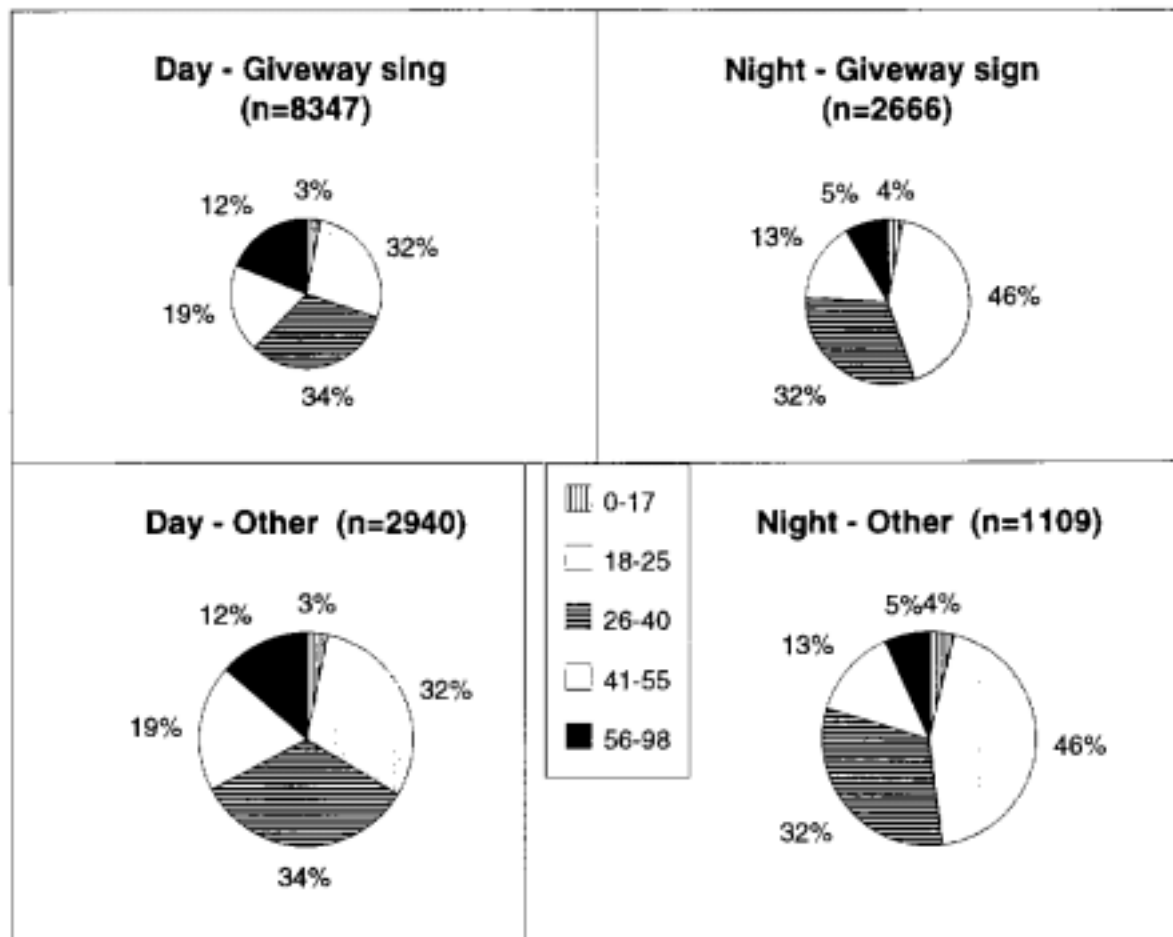
VICTORIA CASUALTY FILE (1986-1989)
TRAFFIC CONTROL BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989)
TRAFFIC CONTROL BY AGE GROUP

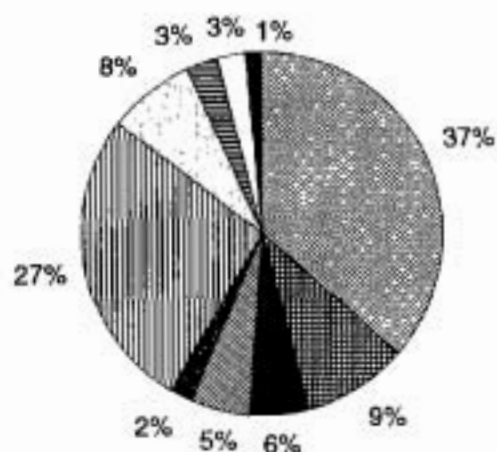
(N=132381)



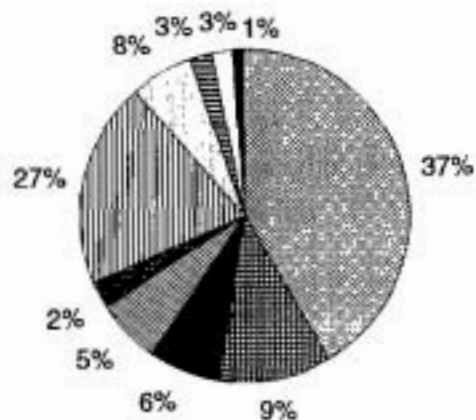
VICTORIA CASUALTY FILE (1986-1989)
TRAFFIC CONTROL BY AGE GROUP

(N=132381)

18-25 years (n=43946)



26-40 years (n=40900)



VICTORIA CASUALTY FILE (1986-1989) •
TRAFFIC CONTROL BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
No control	1587	16231	17116	9385	6060	50379
Traffic lights	341	4033	4530	2609	1859	13372
Flashing lights	8	62	71	38	23	202
Out of order	3	43	74	39	24	183
Pedestrian lights	11	109	108	75	52	355
Pedestrian crossing	15	100	117	62	42	336
Railway crossing: gates/booms	2	33	45	28	23	131
Railway crossing: bells/lights	2	11	11	9	12	45
Railway crossing: no control	3	10	10	11	9	43
Roundabout	39	336	339	190	128	1032
Stop sign	229	2423	2786	1627	1521	8586
Giveway sign	271	2247	2687	1573	1569	8347
School flags	1	34	55	17	16	123
School no flags	0	11	13	16	5	45
Police	2	20	12	4	7	45
Other	9	132	126	80	53	400
	2523	25835	28100	15763	11403	83624

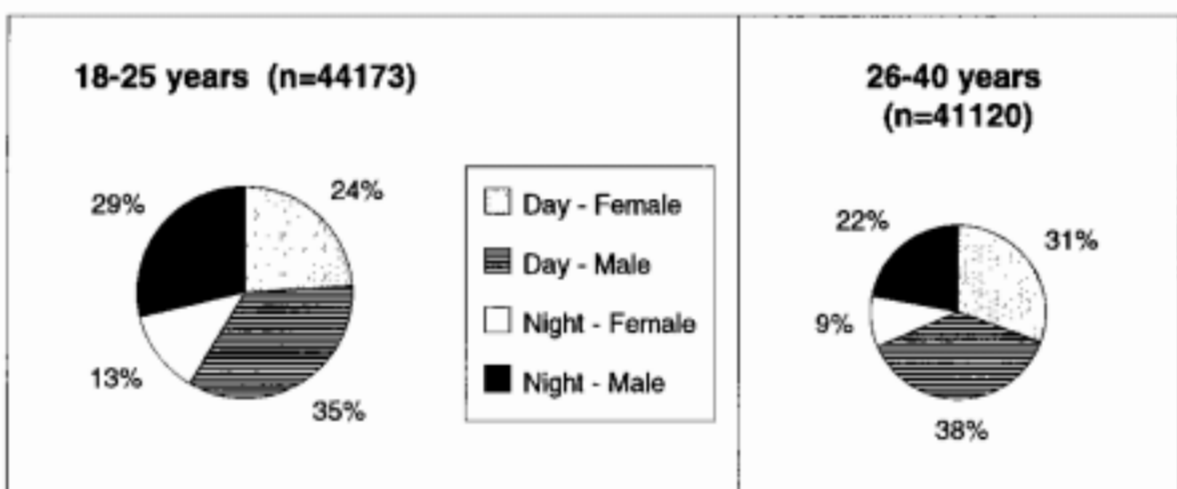
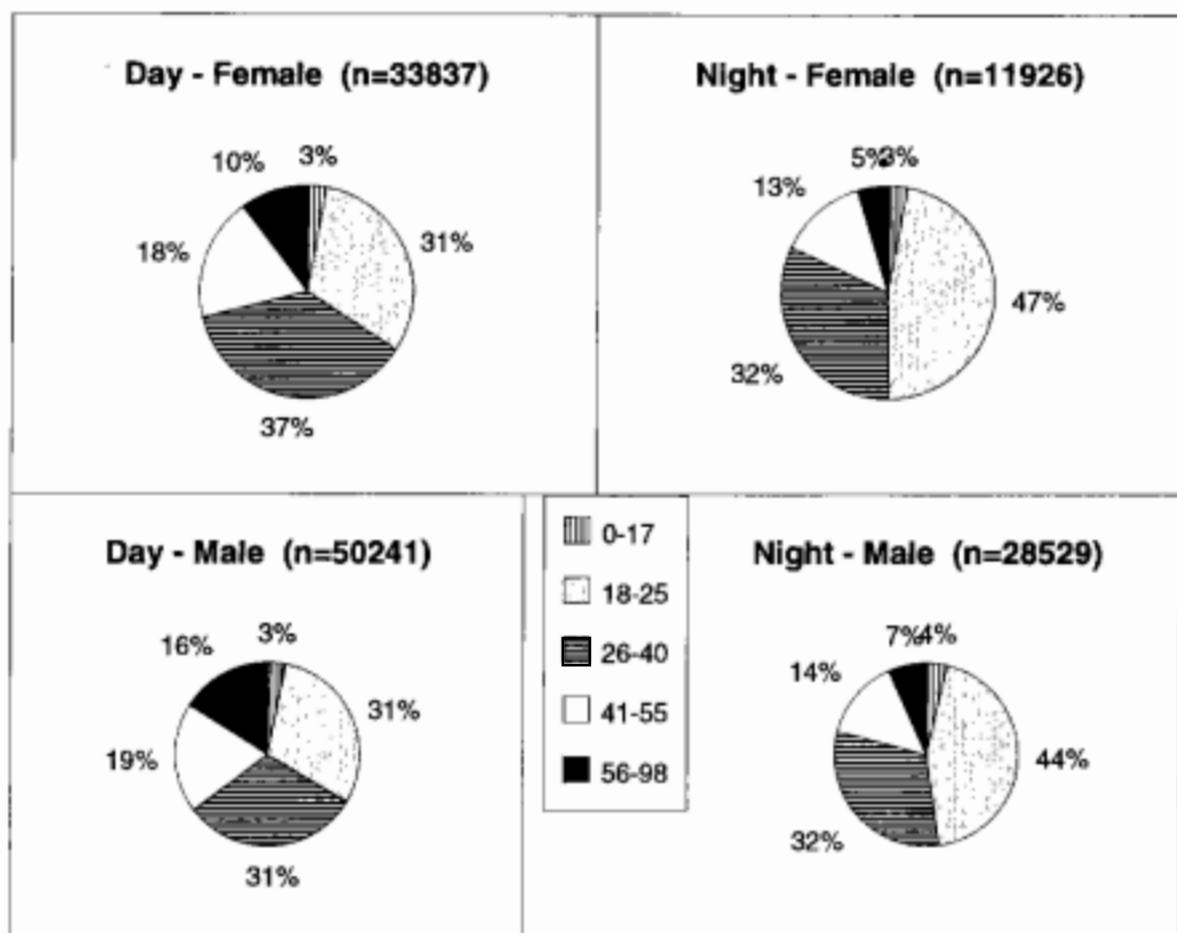
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
No control	905	11857	8191	3391	1325	25669
Traffic lights	279	3397	2506	1126	524	7832
Flashing lights	7	29	29	10	5	80
Out of order	4	46	30	17	6	103
Pedestrian lights	0	38	28	7	13	86
Pedestrian crossing	1	28	36	14	5	84
Railway crossing: gates/booms	0	11	18	4	5	38
Railway crossing: bells/lights	2	13	8	6	1	30
Railway crossing: no control	1	4	3	3	2	13
Roundabout	24	241	128	56	21	470
Stop sign	86	1255	913	496	273	3023
Giveway sign	87	1109	840	408	222	2666
School flags	0	3	1	0	0	4
School no flags	0	13	15	11	3	42
Police	0	16	12	8	1	37
	3	51	42	16	10	122
	1399	18111	12800	5573	2416	40299

Total missing cases = 8458

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
SEX OF DRIVER BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989) •
SEX OF DRIVER BY AGE GROUP

		DAY					
		0-17	18-25	26-40	41-55	56-98	Total
Female		968	10596	12586	6211	3476	33837
Male		1557	15398	15678	9650	7958	50241
		2525	25994	28264	15861	11434	84078

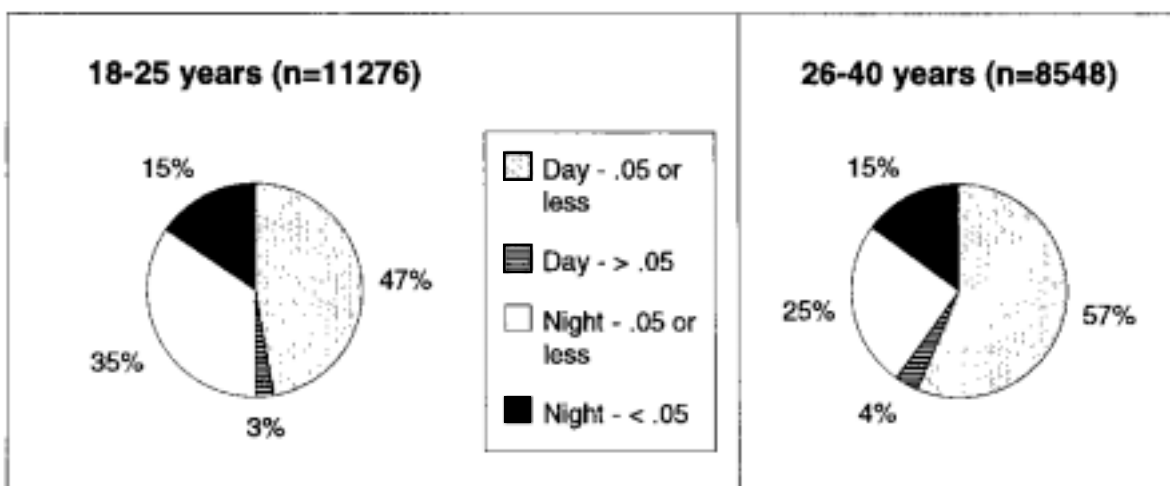
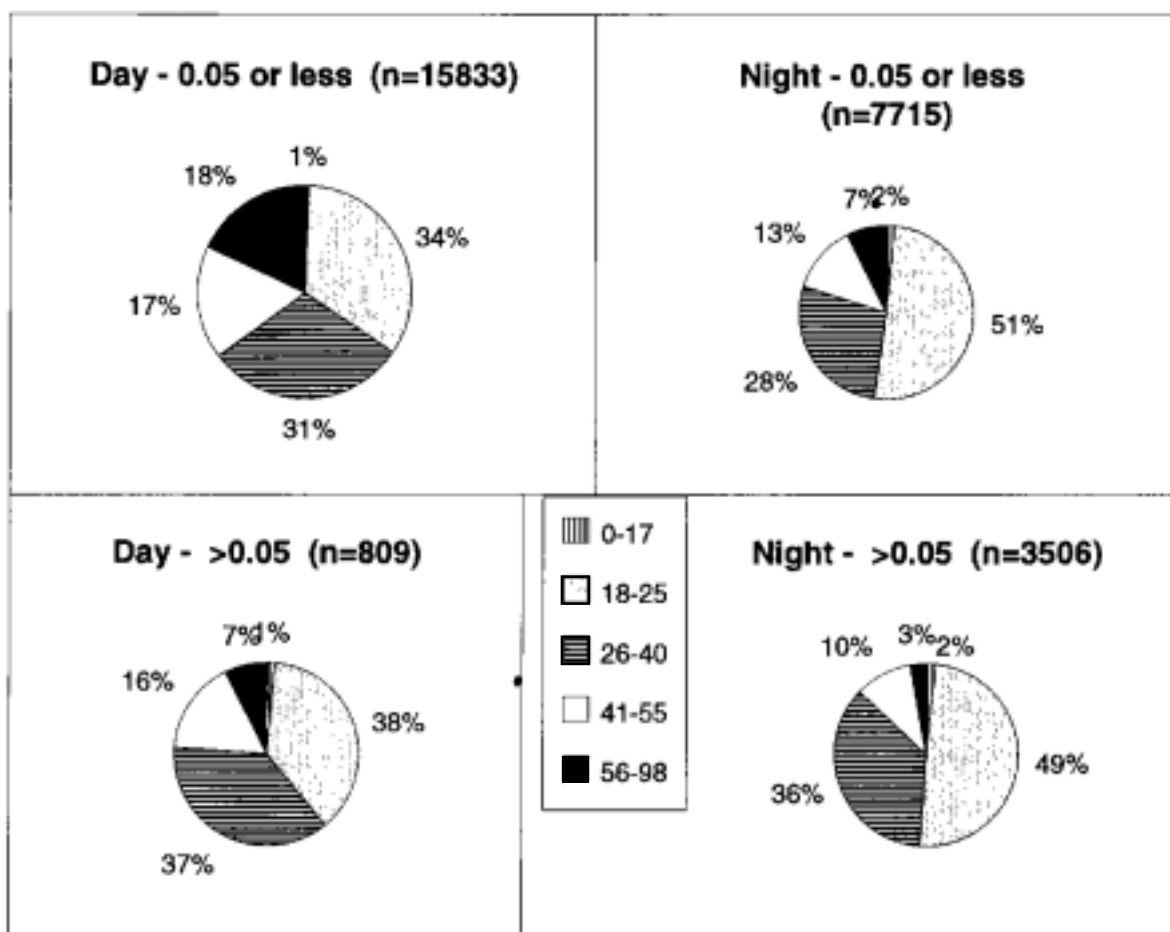
		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
Female		364	5576	3858	1583	545	11926
Male		1036	12603	8998	4017	1875	28529
		1400	18179	12856	5600	2420	40455

Missing cases = 7848

-
- Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
BAC OF DRIVER BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989) •
BAC OF DRIVER BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
.05 or less	119	5340	4831	2699	2844	15833
More than .05	12	305	300	132	60	809
Insufficient/lost	0	15	23	9	12	59
	131	5660	5154	2840	2916	16701

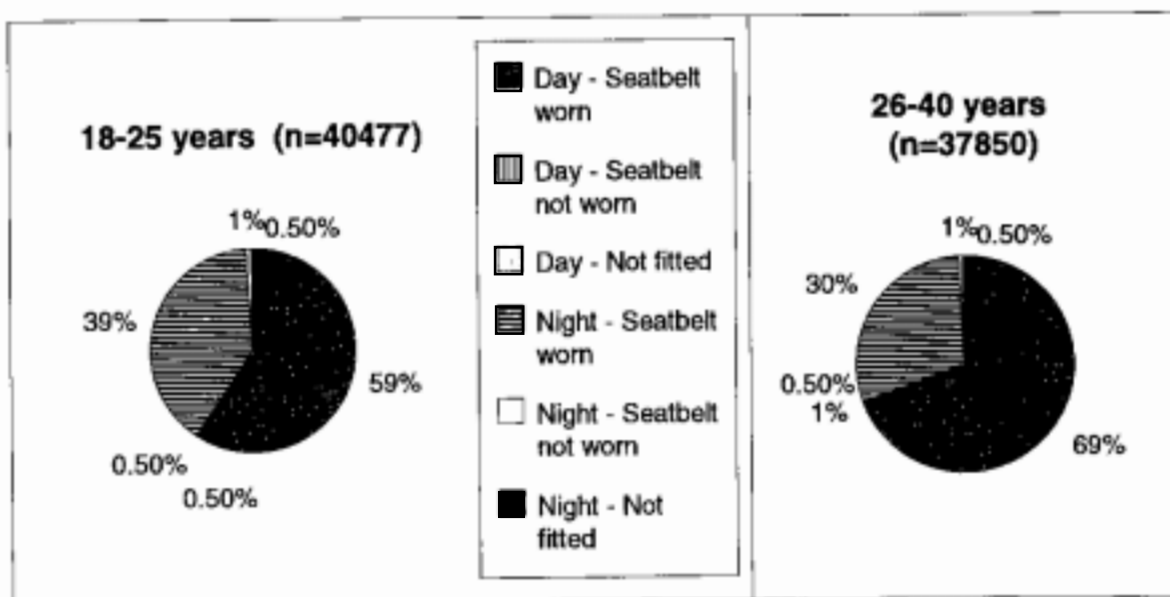
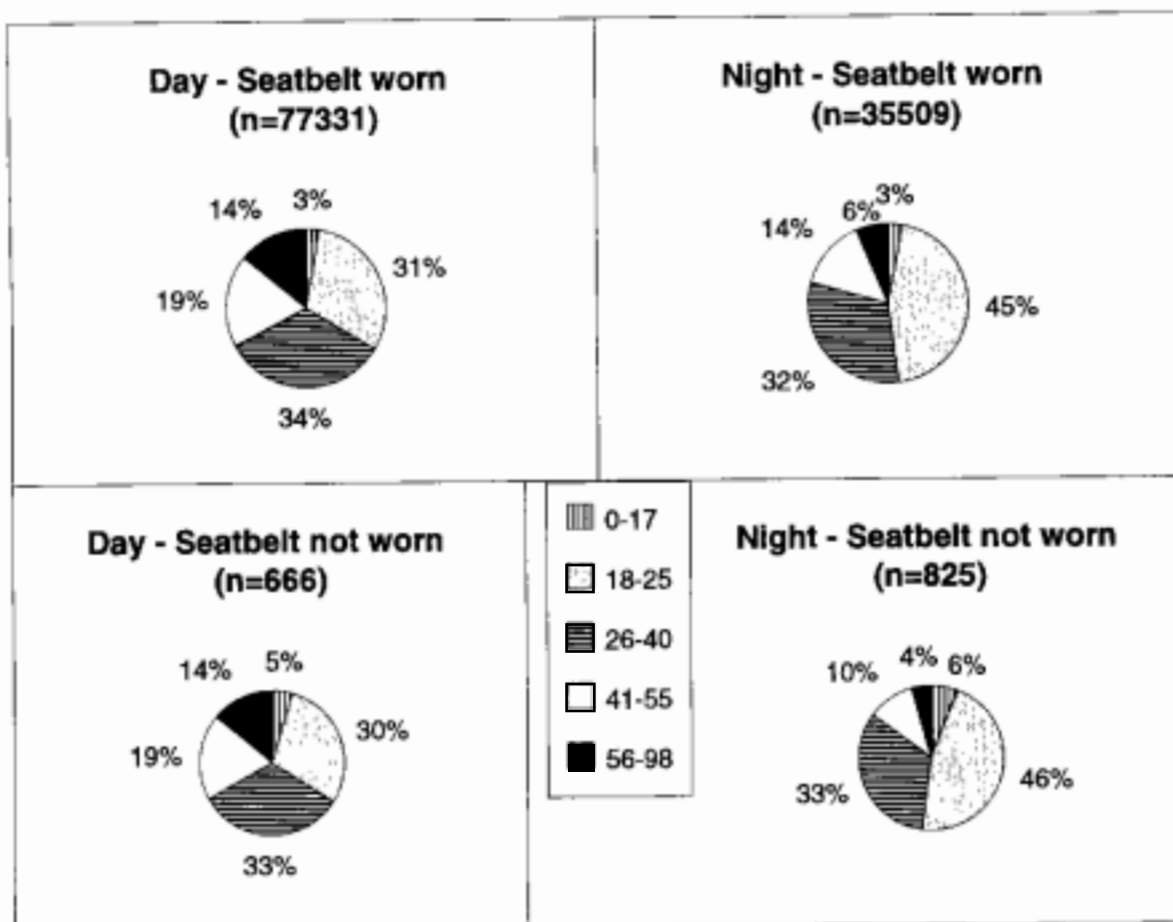
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
.05 or less	126	3905	2148	972	564	7715
More than .05	68	1726	1269	348	95	3506
Insufficient/lost	0	24	14	4	5	47
	194	5655	3431	1324	664	11268

Missing cases = 104412

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
 RESTRAINT USE BY DRIVER BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989) *
RESTRAINT USE BY DRIVER BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Seatbelt worn	2280	23851	26036	14594	10570	77331
Seatbelt not worn	31	197	218	129	91	666
Not fitted	12	79	87	56	43	277
Not appropriate	13	21	38	31	12	115
	2336	24148	26379	14810	10716	78389

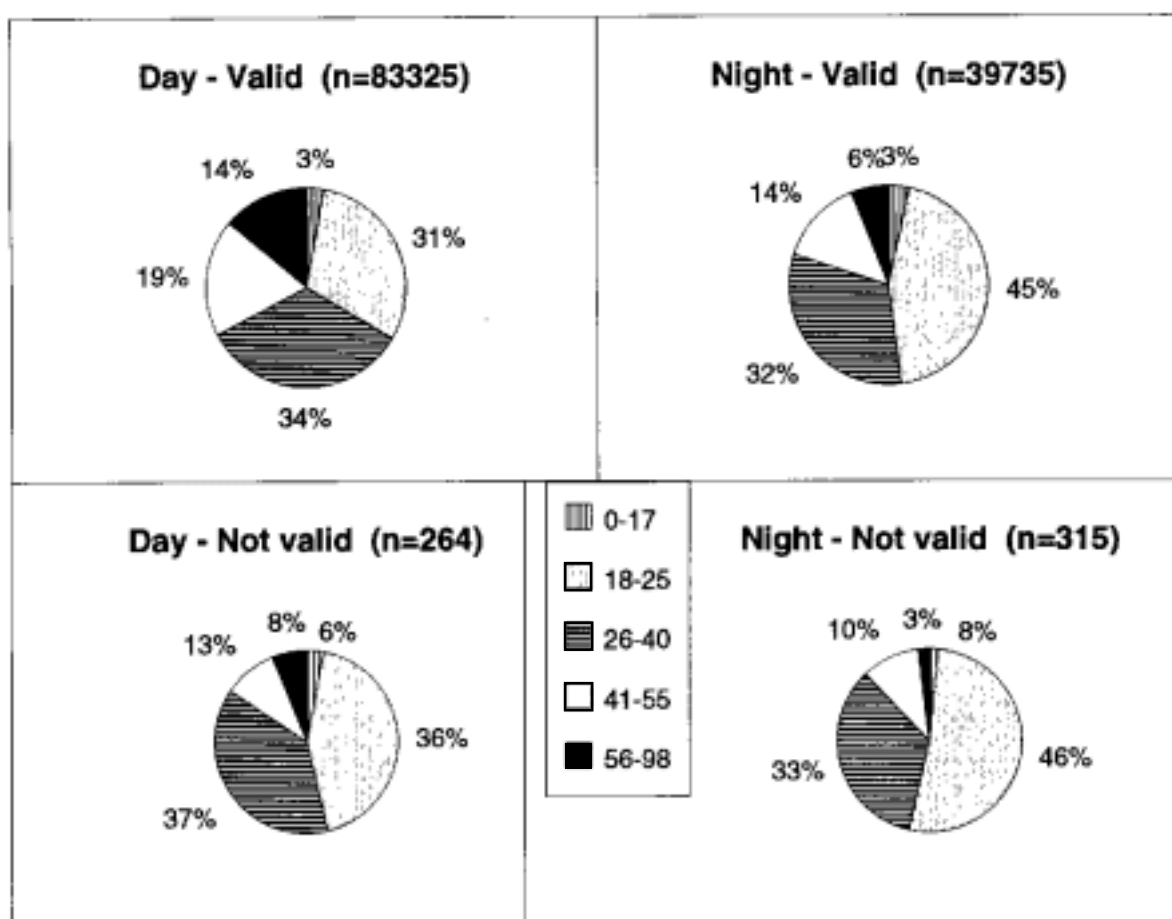
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Seatbelt worn	1182	15916	11202	5022	2187	35509
Seatbelt not worn	50	383	272	85	35	825
Not fitted	8	51	35	16	6	116
Not appropriate	13	26	31	9	1	80
	1253	16376	11540	5132	2229	36530

Missing cases = 17462

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
LICENCE STATUS BY AGE GROUP

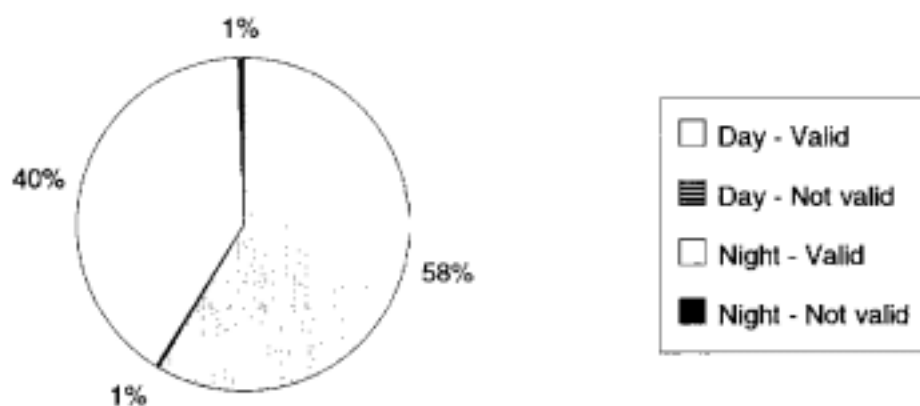
(N=132381)



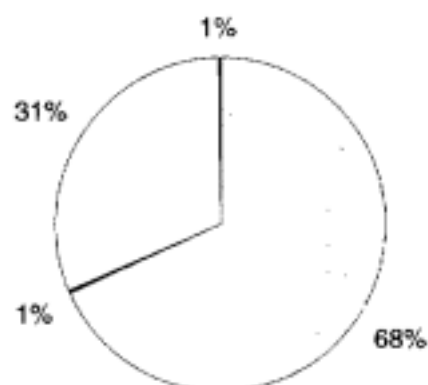
VICTORIA CASUALTY FILE (1986-1989)
LICENCE STATUS BY AGE GROUP

(N=132381)

18-25 years (n=43837)



26-40 years (n=40808)



VICTORIA CASUALTY FILE (1986-1989) •
LICENCE STATUS BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Cancelled	5	53	41	9	6	114
Disqualified	2	20	26	5	3	56
Expired	0	33	25	10	1	69
Suspended	0	6	6	1	0	13
Surrendered	1	3	2	0	6	12
Valid	2480	25712	27987	15765	11381	83325
	2488	25827	28087	15790	11397	83589

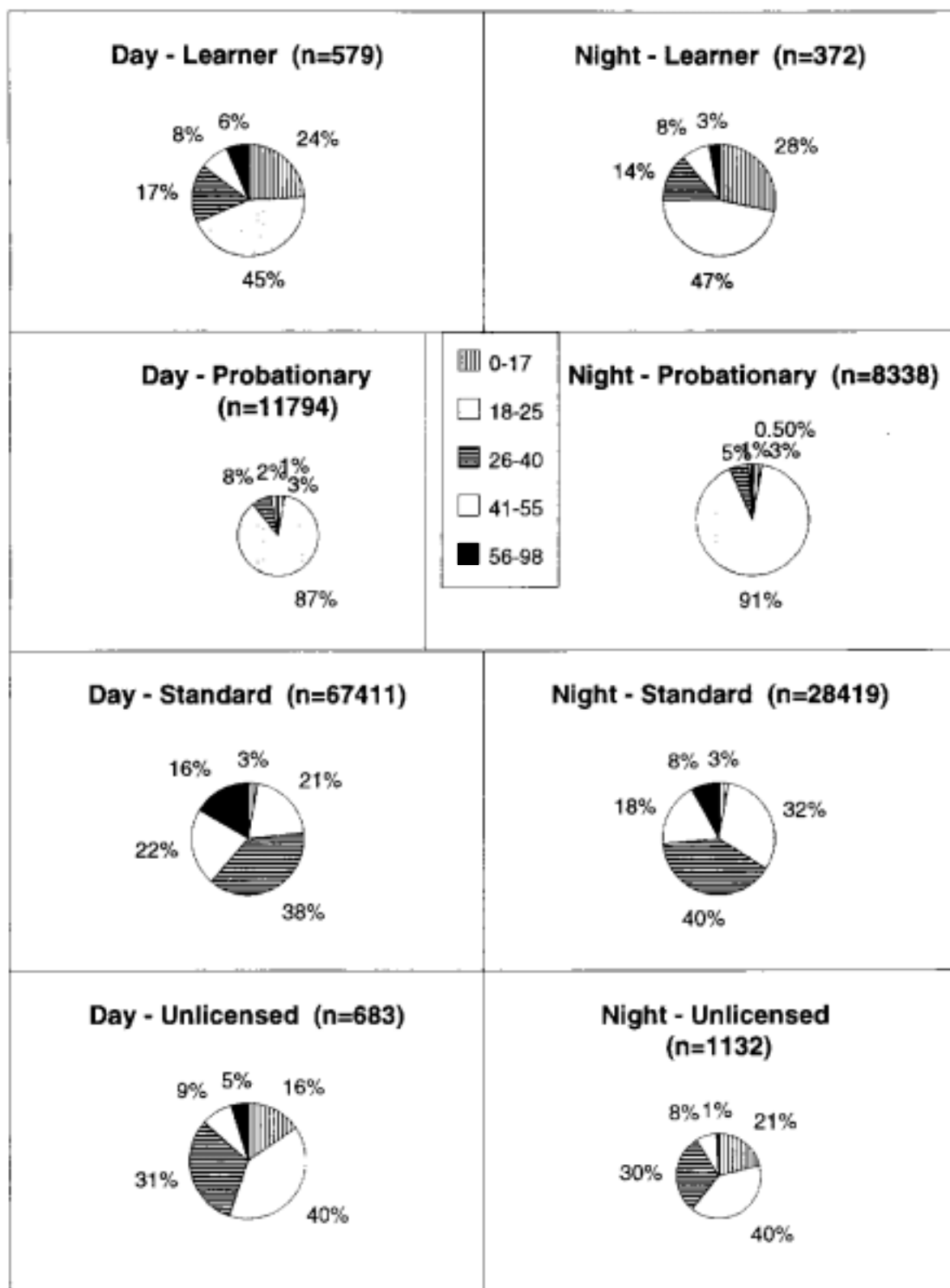
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Cancelled	4	74	36	13	3	130
Disqualified	1	45	41	10	1	98
Expired	0	40	26	6	0	72
Suspended	0	4	3	2	0	9
Surrendered	0	1	2	1	2	6
Valid	1338	17846	12613	5535	2403	39735
	1343	18010	12721	5567	2409	40050

Missing cases = 8742

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
LICENCE TYPE BY AGE GROUP

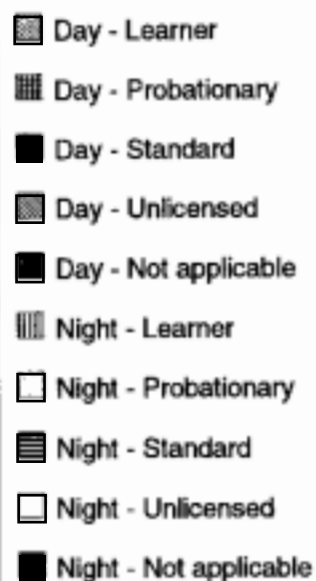
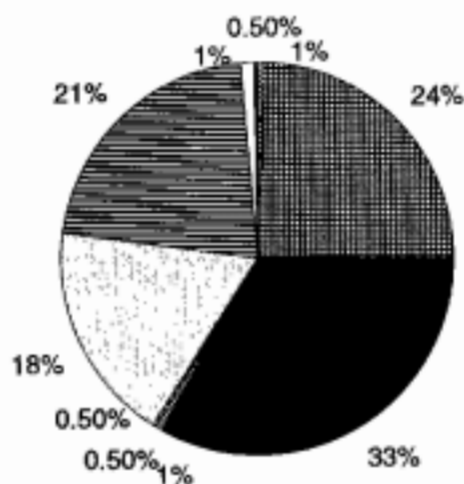
(N=132381)



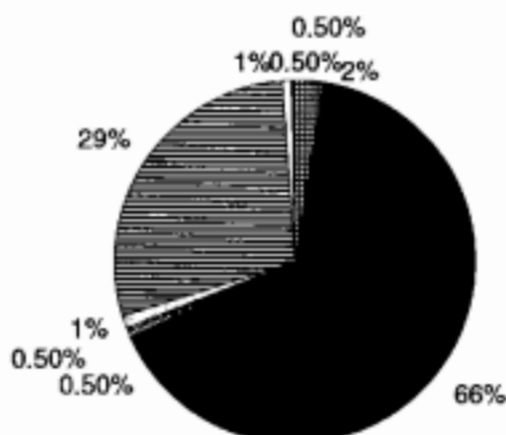
VICTORIA CASUALTY FILE (1986-1989)
LICENCE TYPE BY AGE GROUP

(N=132381)

18-25 years (n=41894)



26-40 years (n=39196)



VICTORIA CASUALTY FILE (1986-1989) •
LICENCE TYPE BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Learner's permit	140	258	98	47	36	579
Probationary	309	9802	868	193	73	11245
Probationary/conditional	18	419	70	25	17	549
Standard	1784	13660	25257	14657	10662	66020
Standard/conditional	12	300	555	308	216	1391
Not applicable	0	3	2	0	0	5
Unlicensed	106	272	214	59	32	683
Inappropriate	3	10	8	6	1	28
	2372	24724	27072	15295	11037	80500

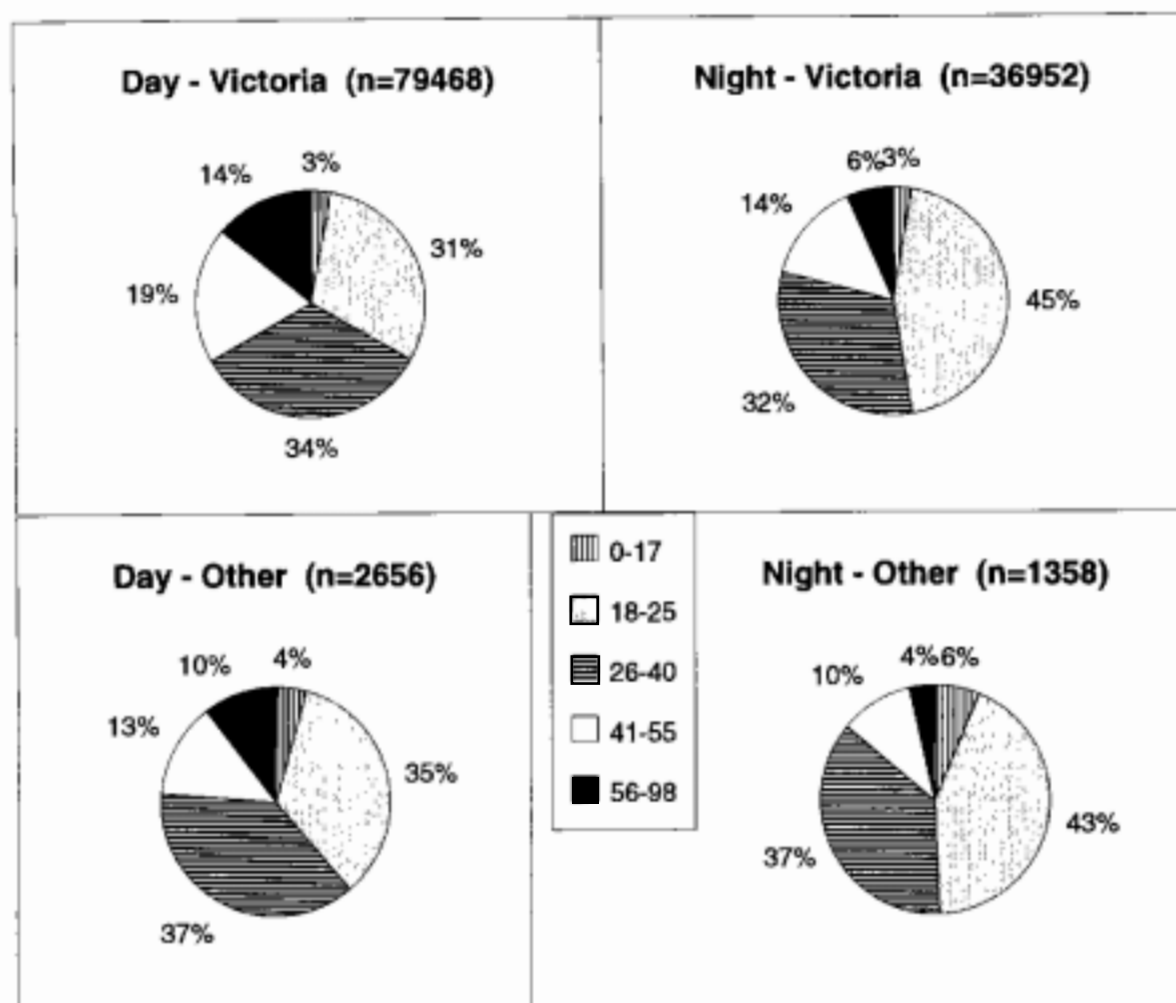
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Learner's permit	106	174	51	30	11	372
Probationary	238	7255	427	62	16	7998
Probationary/conditional	5	301	20	8	6	340
Standard	707	8790	11057	5085	2237	27876
Standard/conditional	10	178	218	88	49	543
Not applicable	0	2	3	2	0	7
Unlicensed	236	455	344	87	10	1132
Inappropriate	3	15	4	1	0	23
	1305	17170	12124	5363	2329	38291

Missing cases = 13590

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
STATE OF LICENCE ISSUE BY AGE GROUP

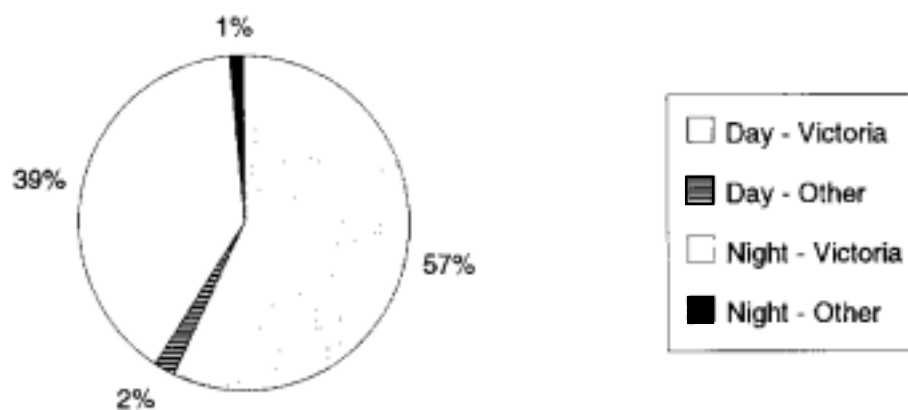
(N=132381)



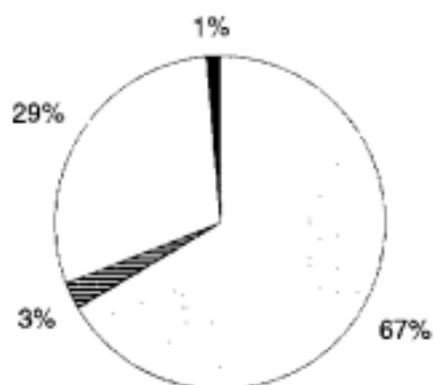
VICTORIA CASUALTY FILE (1986-1989)
STATE OF LICENCE ISSUE BY AGE GROUP

(N=132381)

18-25 years (n=42426)



26-40 years (n=39853)



VICTORIA CASUALTY FILE (1986-1989) *
STATE OF LICENCE ISSUE BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
ACT	2	18	26	10	5	61
Commonwealth	0	1	3	0	2	6
Northern Territory	3	14	15	6	0	38
NSW	67	364	378	158	133	1100
Overseas	4	120	165	56	29	374
Queensland	13	152	136	43	25	369
South Australia	16	143	167	54	62	442
Tasmania	4	57	39	13	9	122
Victoria	2235	24292	26653	15265	11023	79468
Western Australia	3	53	66	18	4	144
	2347	25214	27648	15623	11292	82124

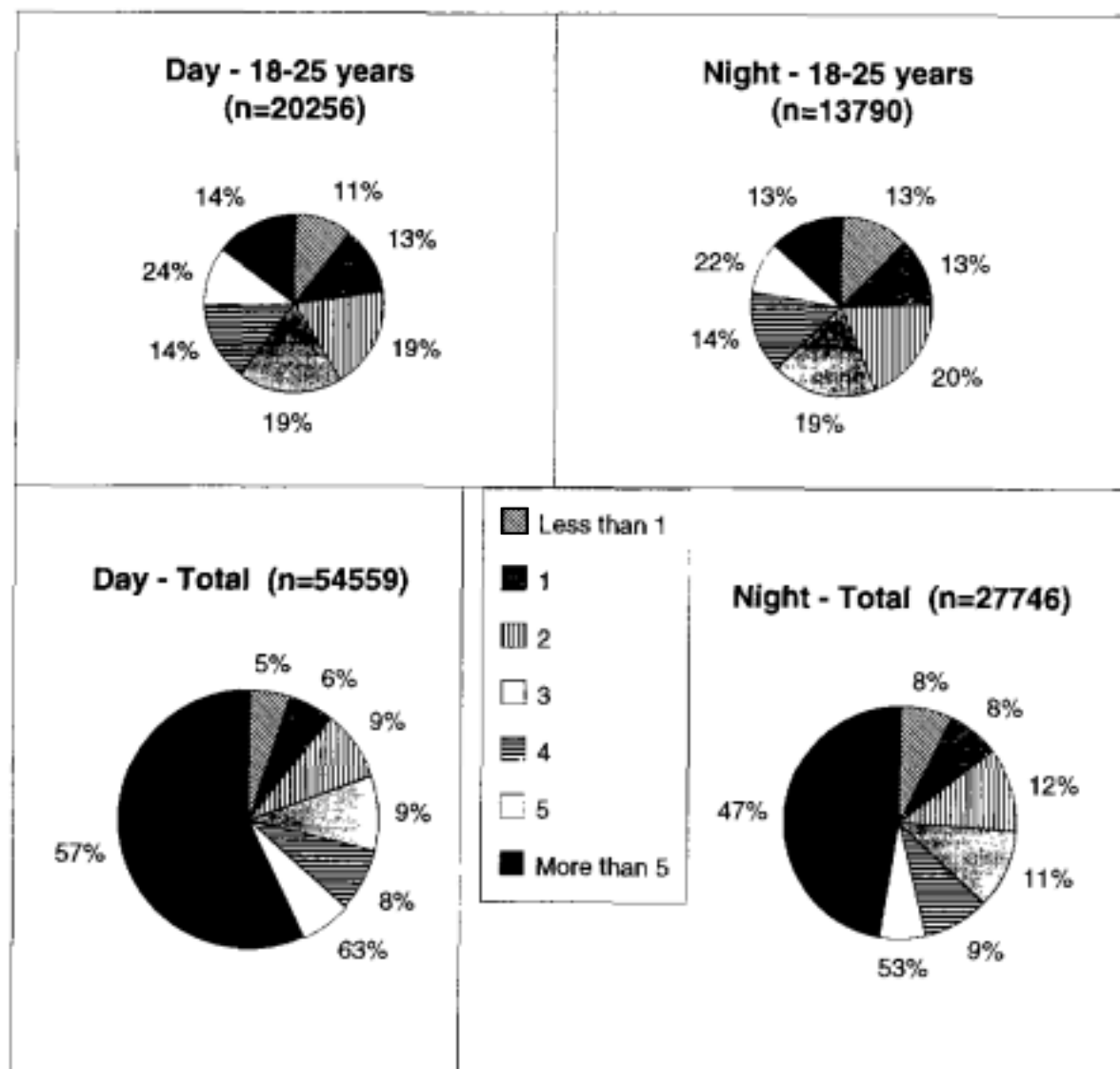
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
ACT	3	18	12	2	2	37
Commonwealth	0	3	1	1	0	5
Northern Territory	0	7	13	2	1	23
NSW	33	236	159	55	20	503
Overseas	11	85	84	22	6	208
Queensland	11	79	72	20	4	186
South Australia	20	93	82	27	12	234
Tasmania	4	24	39	6	1	74
Victoria	1019	16623	11707	5282	2321	36952
Western Australia	3	44	36	3	2	88
	1104	17212	12205	5420	2369	38310

Missing cases = 11947

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
DRIVING EXPERIENCE IN YEARS BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989) *
DRIVING EXPERIENCE IN YEARS BY AGE GROUP

	DAY					
	0-17	18-25	26-40	41-55	56-98	Total
Less than 1	78	2173	359	115	43	2768
1	154	2456	384	81	49	3124
2	172	3767	680	174	57	4850
3	120	3836	867	228	91	5142
4	95	2951	872	265	79	4262
5	93	2142	790	256	83	3364
More than 5	860	2931	20042	5530	1686	31049
Not applicable	506	184	1912	8462	8833	19897
	2078	20440	25906	15111	10921	74456

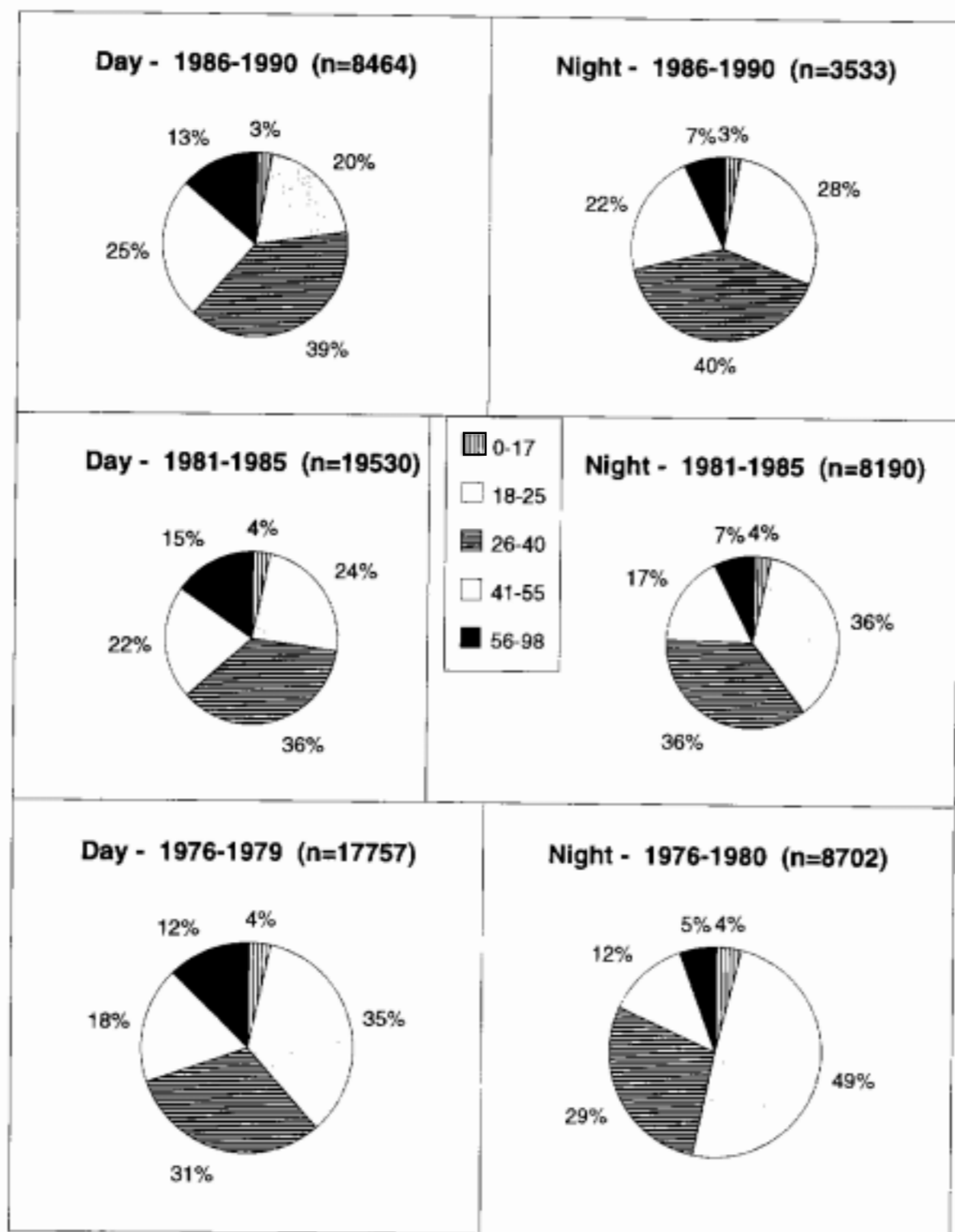
		NIGHT					
		0-17	18-25	26-40	41-55	56-98	Total
Less than 1		60	1719	198	27	14	2018
1		111	1695	195	36	5	2042
2		106	2669	323	79	12	3189
3		75	2598	353	83	20	3129
4		52	2007	351	77	27	2514
5		43	1286	382	85	17	1813
More than 5		351	1816	8712	1779	383	13041
Not applicable		125	128	807	3062	1816	5938
		923	13918	11321	5228	2294	33684

Missing cases = 24241

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

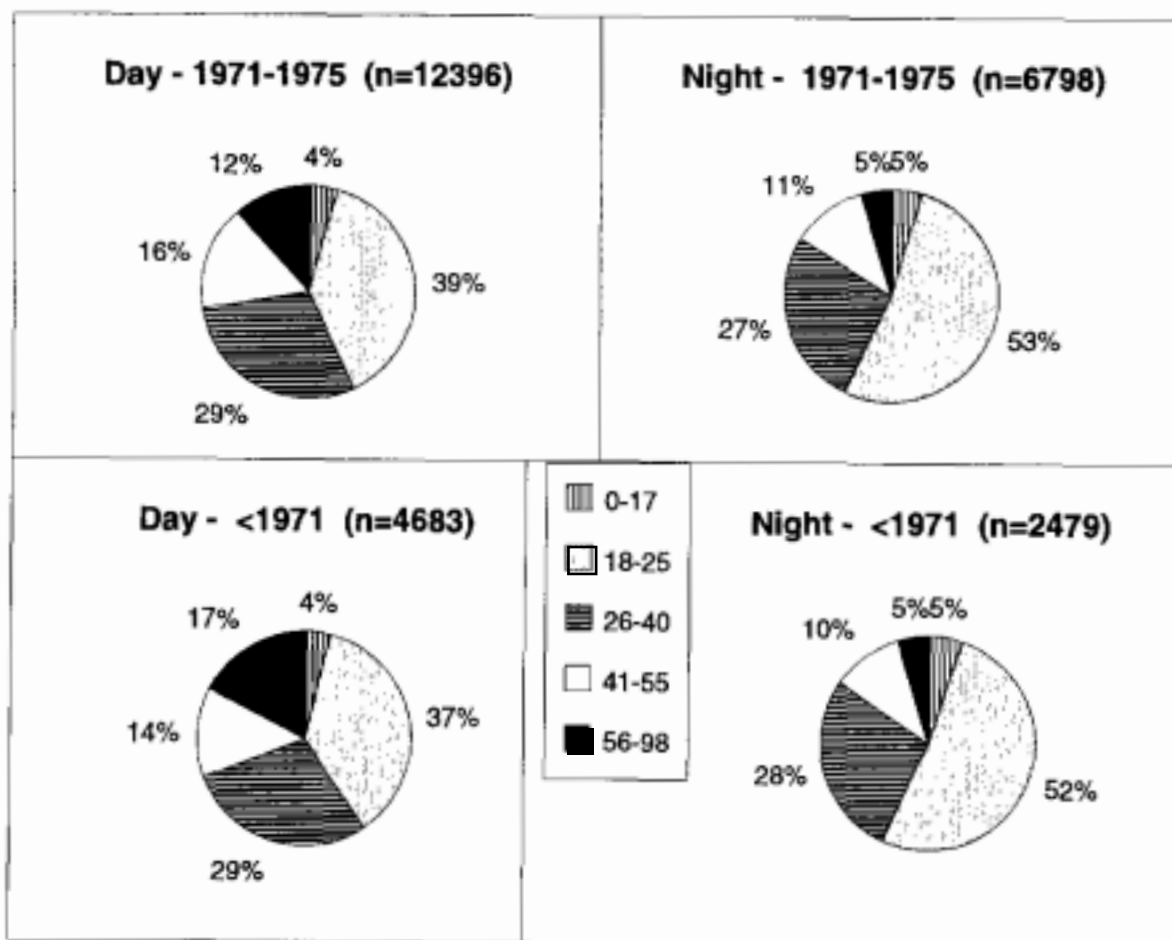
VICTORIA CASUALTY FILE (1986-1989)
YEAR OF MANUFACTURE BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989)
YEAR OF MANUFACTURE BY AGE GROUP

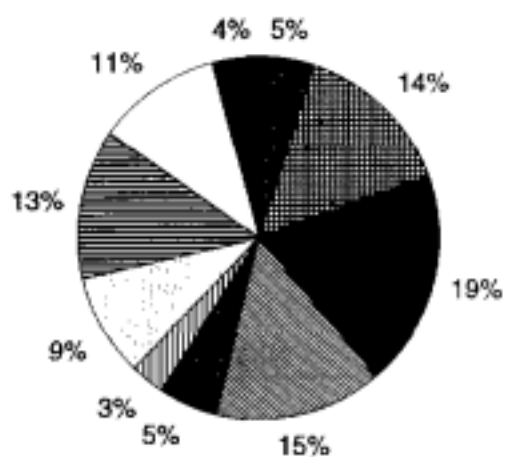
(N=132381)



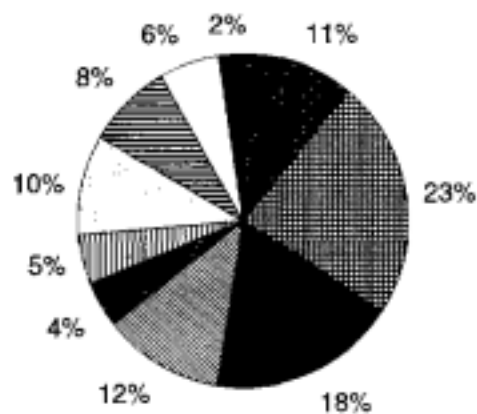
VICTORIA CASUALTY FILE (1986-1989)
YEAR OF MANUFACTURE BY AGE GROUP

(N=132381)

18-25 years (n=32308)



26-40 years (n=30196)



VICTORIA CASUALTY FILE (1986-1989) *
YEAR OF MANUFACTURE BY AGE GROUP

	DAY					
	0-17	18-25	26-40	41-55	56-98	Total
1986-1990	245	1700	3283	2099	1137	8464
1981-1985	703	4646	7038	4213	2930	19530
1976-1980	637	6244	5535	3138	2203	17757
1971-1975	523	4848	3631	1956	1438	12396
1970 and earlier	177	1727	1337	645	797	4683
	2285	19165	20824	12051	8505	62830

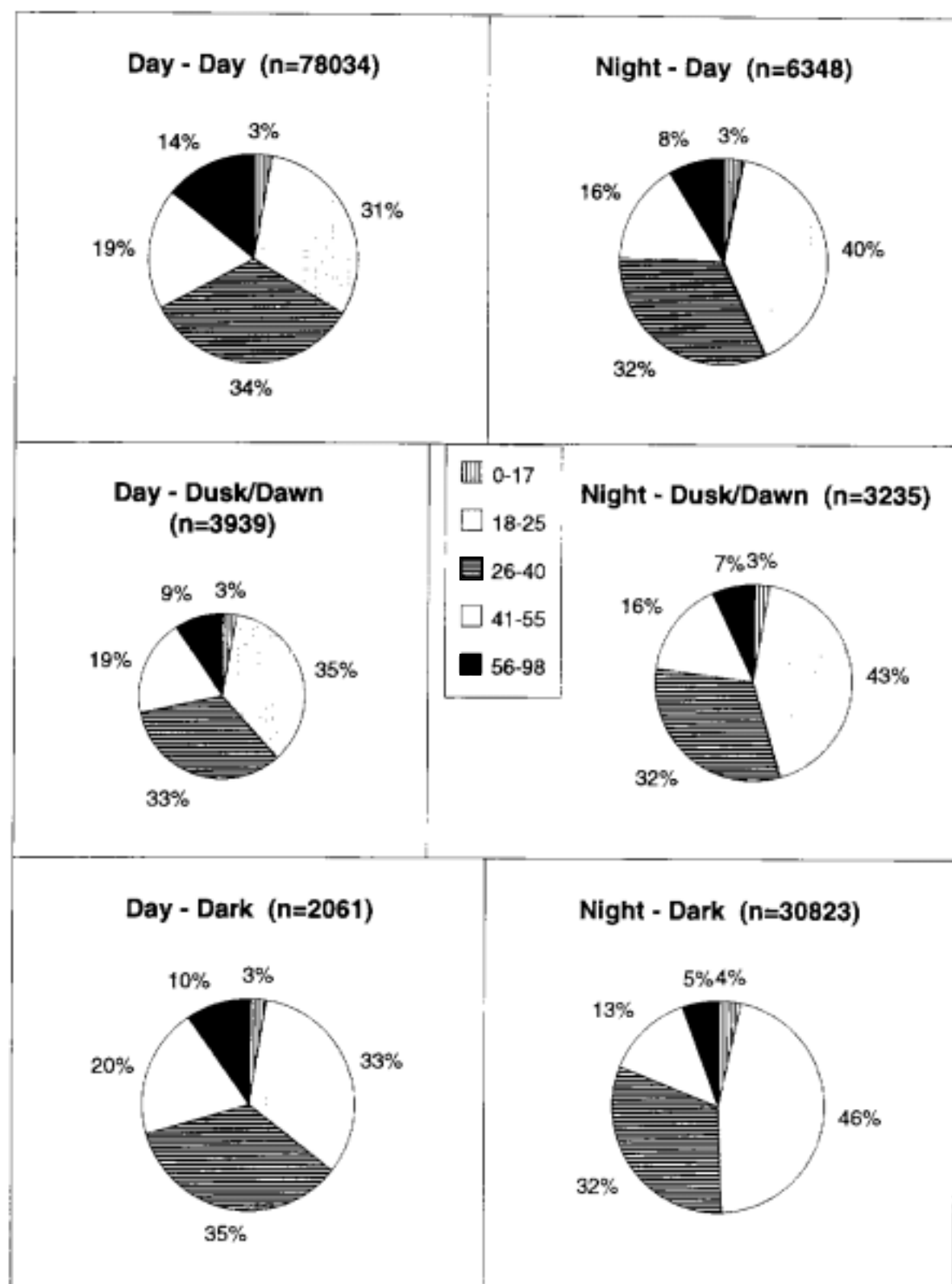
	NIGHT					
	0-17	18-25	26-40	41-55	56-98	Total
1986-1990	100	1001	1427	757	248	3533
1981-1985	291	2969	2949	1372	609	8190
1976-1980	361	4292	2488	1087	474	8702
1971-1975	307	3593	1817	771	310	6798
1970 and earlier	128	1288	691	255	117	2479
	1187	13143	9372	4242	1758	29702

Missing cases = 39849

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
LIGHT CONDITIONS BY AGE GROUP

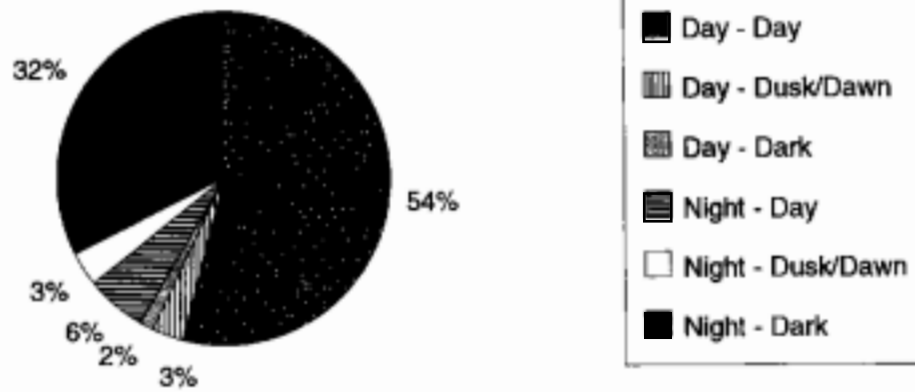
(N=132381)



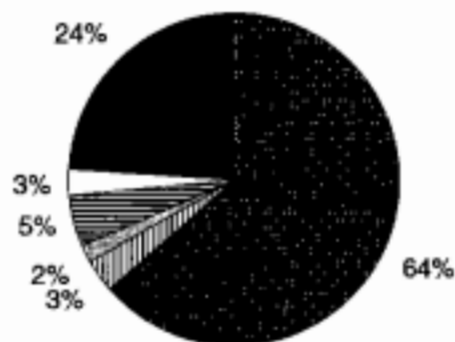
VICTORIA CASUALTY FILE (1986-1989)
LIGHT CONDITIONS BY AGE GROUP

(N=132381)

18-26 years (n=44123)



26-40 years (n=41089)



**VICTORIA CASUALTY FILE (1986-1989) •
LIGHT CONDITIONS BY AGE GROUP**

	DAY					
	0-17	18-25	26-40	41-55	56-98	Total
Day	2344	23901	26215	14697	10877	78034
Dusk/dawn	120	1391	1315	751	362	3939
Dark: street lights on	48	549	585	334	160	1676
Dark: street lights off	0	14	15	9	3	41
Dark: no street lights	9	96	115	53	29	302
Dark: street lights unknown	0	18	8	11	5	42
	2521	25969	28253	15855	11436	84034

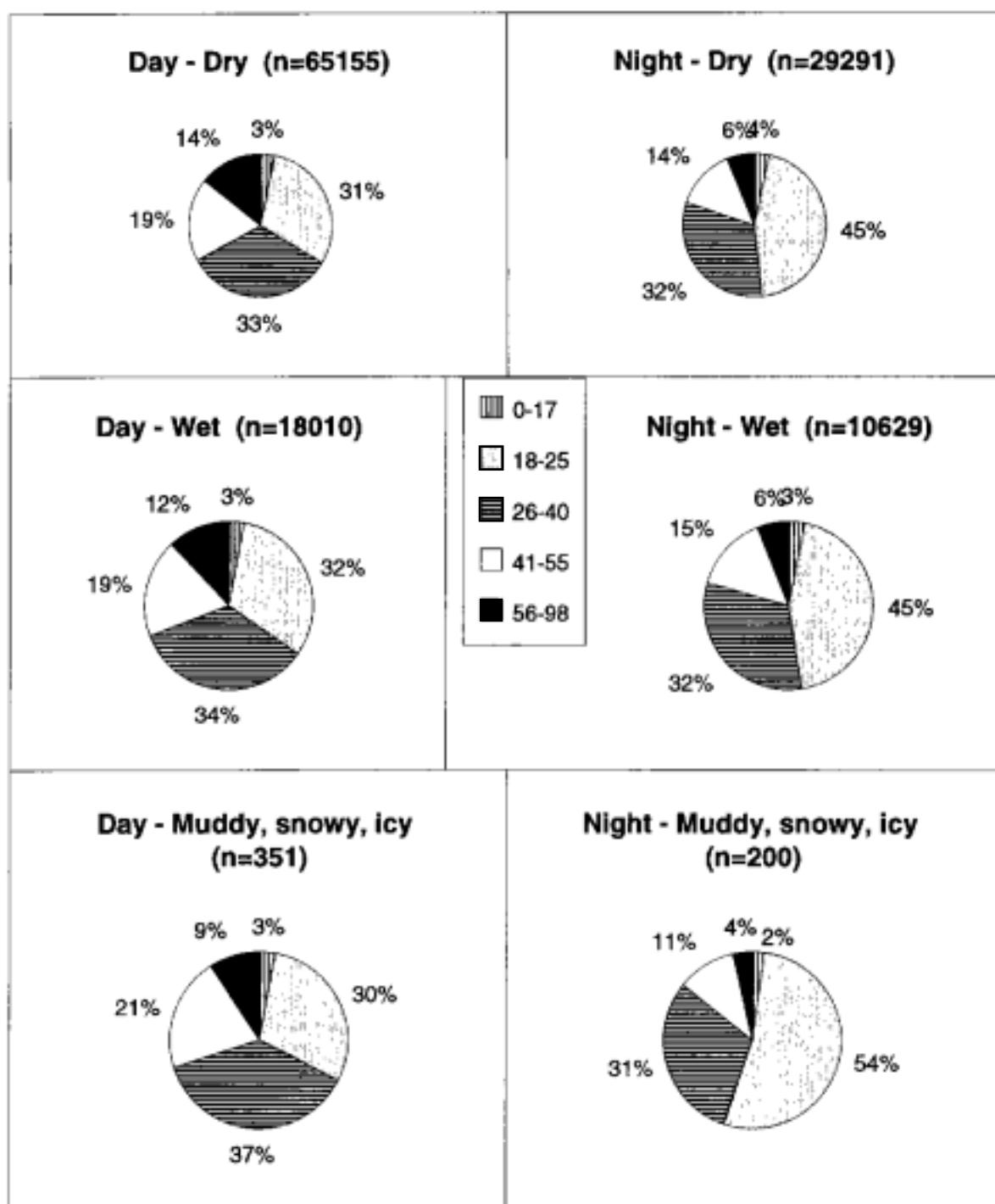
	NIGHT					
	0-17	18-25	26-40	41-55	56-98	Total
Day	201	2559	2037	1017	534	6348
Dusk/dawn	85	1392	1027	510	221	3235
Dark: street lights on	859	11007	7527	3216	1344	23953
Dark: street lights off	7	224	147	66	27	471
Dark: no street lights	234	2755	1952	744	269	5954
Dark: street lights unknown	8	217	146	48	26	445
	1394	18154	12836	5601	2421	40406

Missing cases = 7941

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
ROAD SURFACE CONDITION BY AGE GROUP

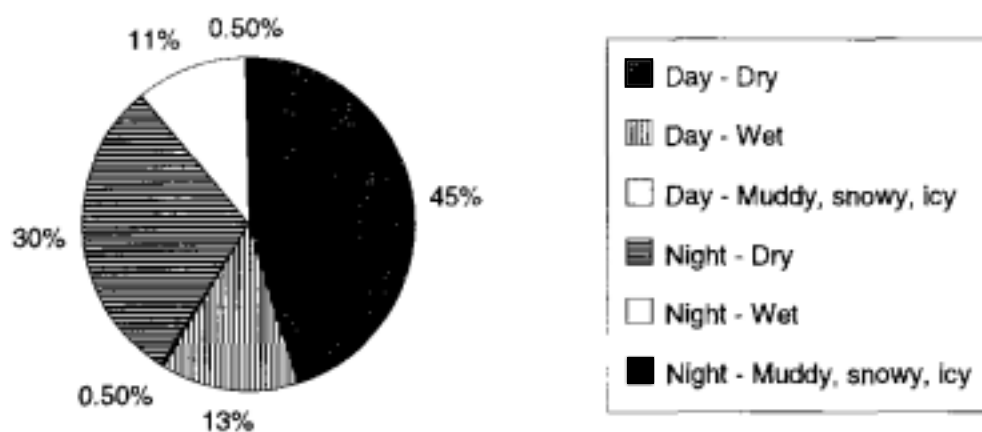
(N=132381)



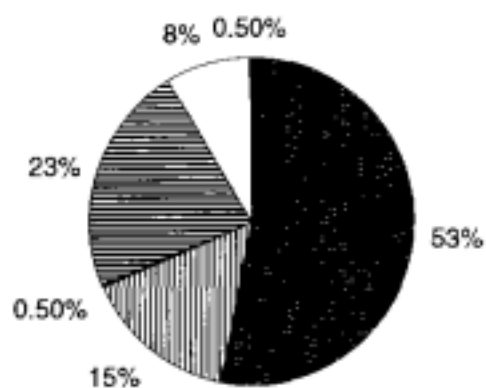
VICTORIA CASUALTY FILE (1986-1989)
ROAD SURFACE CONDITION BY AGE GROUP

(N=132381)

18-25 years (n=43834)



26-40 years (n=40807)



VICTORIA CASUALTY FILE (1986-1989) •
ROAD SURFACE CONDITION BY AGE GROUP

	DAY					
	0-17	18-25	26-40	41-55	56-98	Total
Dry	1993	19938	21731	12268	9225	65155
Wet	502	5780	6203	3422	2103	18010
Muddy/snowy/icy	10	105	131	73	32	351
	2505	25823	28065	15763	11360	83516

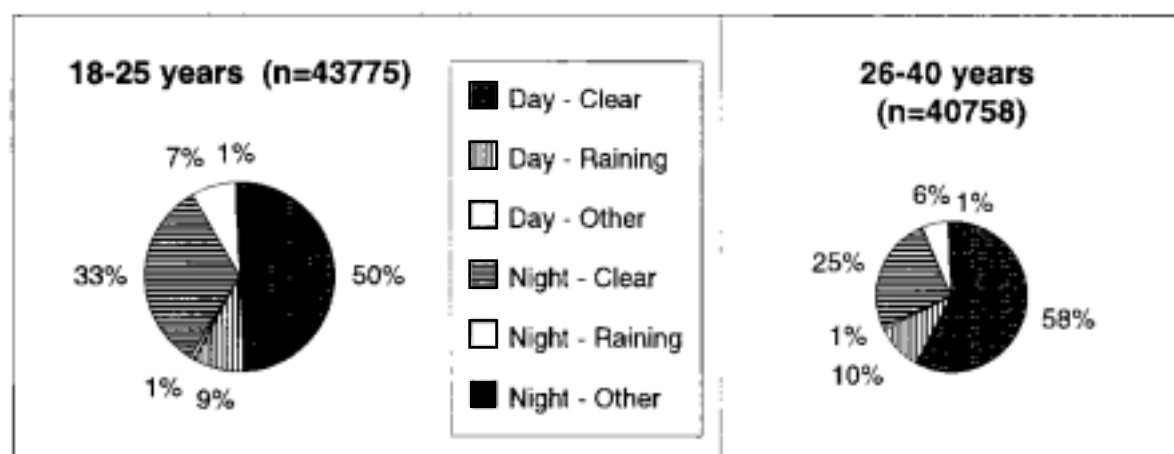
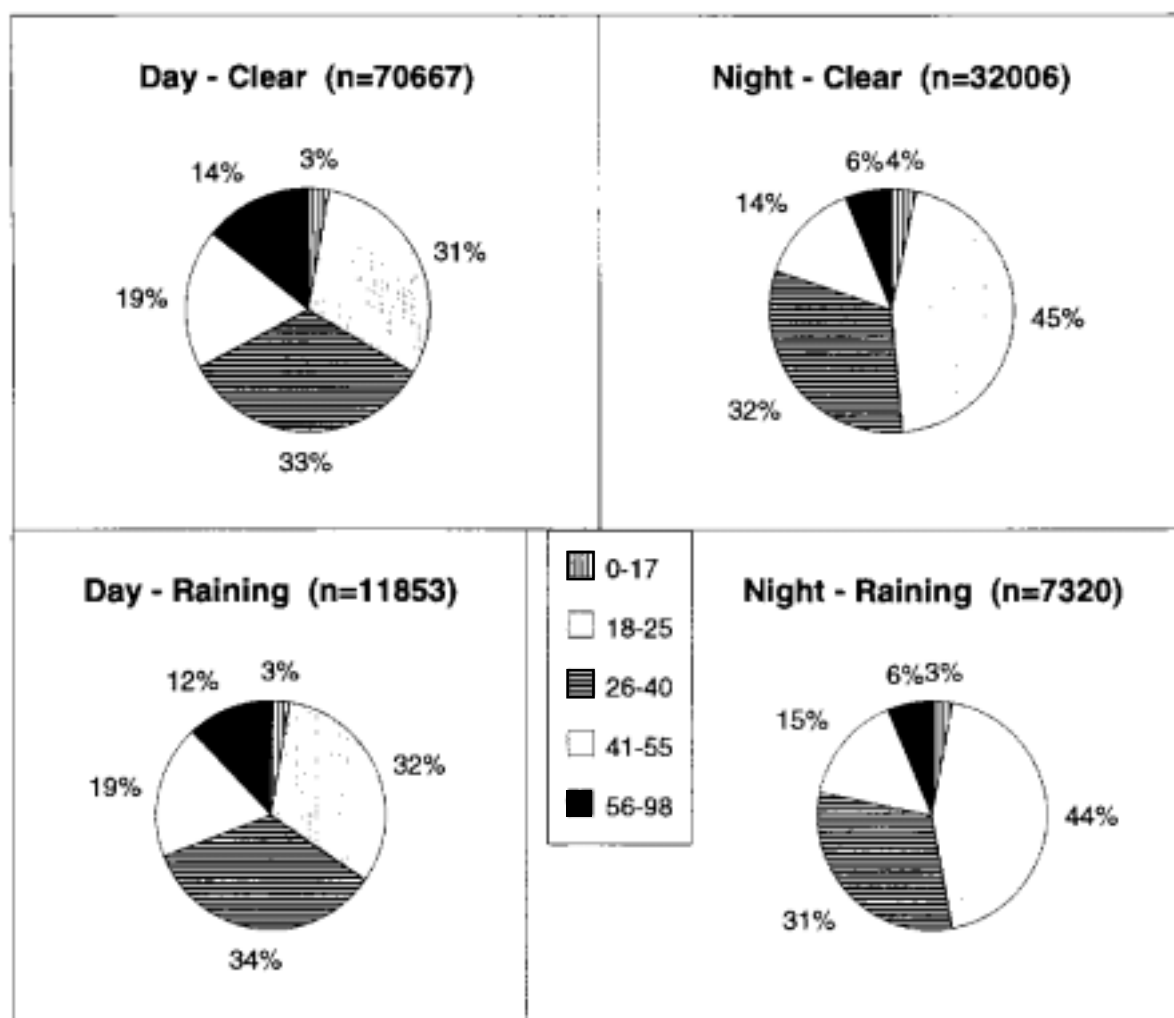
	NIGHT					
	0-17	18-25	26-40	41-55	56-98	Total
Dry	1054	13167	9298	3991	1781	29291
Wet	332	4737	3383	1554	623	10629
Muddy/snowy/icy	4	107	61	21	7	200
	1390	18011	12742	5566	2411	40120

Missing cases = 8745

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

VICTORIA CASUALTY FILE (1986-1989)
WEATHER CONDITION BY AGE GROUP

(N=132381)



**VICTORIA CASUALTY FILE (1986-1989) •
WEATHER CONDITIONS BY AGE GROUP**

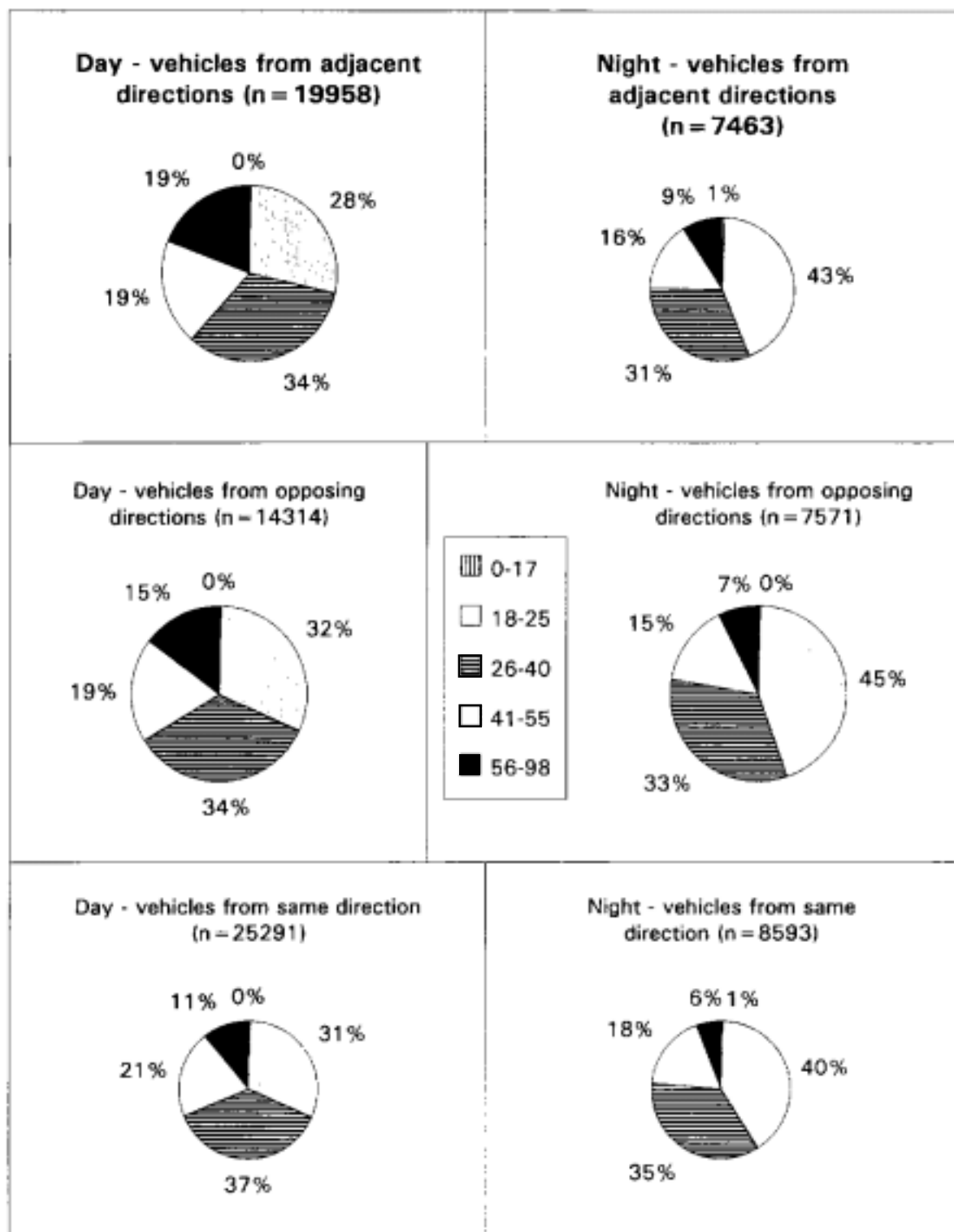
	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Clear	2157	21720	23628	13319	9843	70667
Raining	326	3790	4083	2242	1412	11853
Snowing	4	11	8	8	1	32
Fog	12	195	201	104	48	560
Smoke	0	0	8	2	1	11
Dust	3	30	32	8	9	82
Strong winds	5	64	86	52	37	244
	2507	25810	28046	15735	11351	83449

	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Clear	1140	14419	10183	4349	1915	32006
Raining	223	3236	2289	1113	459	7320
Snowing	6	22	18	7	3	56
Fog	17	209	155	58	25	464
Smoke	0	4	3	3	1	11
Dust	1	12	16	7	0	36
Strong winds	3	63	48	21	5	140
	1390	17965	12712	5558	2408	40033

Missing cases = 8899

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DCA EVENT BY AGE GROUP



VICTORIA CASUALTY CRASH FILE (1984-1989) •
DCA EVENT BY AGE GROUP

	DAY					
	0-17	18-25	26-40	41-55	56-98	Total
Pedestrian on foot or in toy/pram						
- near side	6	649	680	391	226	1952
- far side	5	471	507	236	120	1339
- other	7	504	585	294	194	1584
Vehicles from adjacent directions (intersection only)						
- cross traffic	40	3178	3716	2323	2395	11652
- right near	24	1793	2036	1109	941	5903
- other	10	715	825	432	421	2403
Vehicles from opposing directions						
- head on (not overtaking)	28	1332	1659	834	534	4387
- right thru	19	3161	3148	1863	1539	9730
- other	1	56	70	40	30	197
Vehicles from same direction						
- rear end	46	4914	5774	3226	1600	15560
- left rear	4	586	877	539	248	2254
- right rear	10	1377	1538	828	428	4181
- other	13	1059	1183	644	397	3296
Manoeuvring						
- u-turn	8	727	731	422	395	2283
- emerging from driveway/lane	14	516	622	368	235	1755
- other	9	436	499	326	216	1486
Overtaking						
- head on		122	115	67	46	350
- pulling out	1	243	245	136	77	702
- other	3	170	202	108	63	546
On path						
- parked	6	256	234	121	128	745
- other	1	237	257	153	101	749
Off path, on straight						
- left off carriageway into object/parked vehicle	27	833	627	281	269	2037
- right off carriageway into object/parked vehicle	24	545	414	224	205	1412
- other	15	592	491	249	211	1558
Off path, on curve or turning						
- off right bend into object/parked vehicle	19	443	306	130	102	1000
- other	20	673	490	239	174	1596
Passengers/miscellaneous	7	420	465	293	152	1337
	367	26008	28296	15876	11447	81994

VICTORIA CASUALTY CRASH FILE (1984-1989) *
DCA EVENT BY AGE GROUP

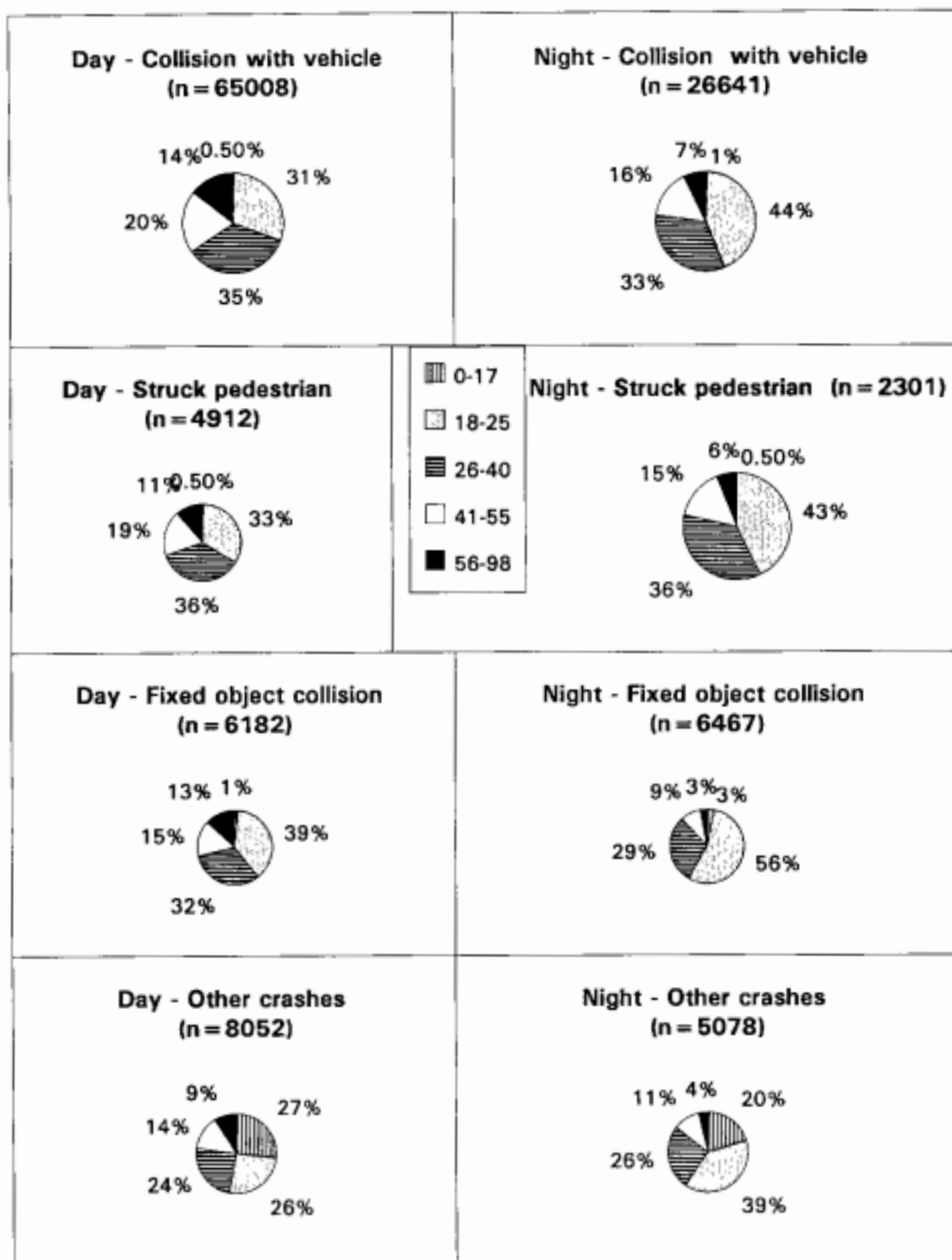
	NIGHT					
	0-17	18-25	26-40	41-55	56-98	Total
Pedestrian on foot or in toy/pram						
- near side	3	386	290	128	57	864
- far side		293	293	122	39	747
- other	2	301	245	99	45	692
Vehicles from adjacent directions (intersection only)						
- cross traffic	23	1986	1456	742	396	4603
- right near	11	836	582	290	178	1897
- other	12	414	306	157	74	963
Vehicles from opposing directions						
- head on (not overtaking)	19	1000	889	361	157	2426
- right thru	17	2305	1577	738	395	5032
- other		57	36	12	8	113
Vehicles from same direction						
- rear end	24	2020	1819	941	313	5117
- left rear	3	247	210	114	37	611
- right rear	11	713	619	316	98	1757
- other	8	526	367	162	45	1108
Manoeuvring						
- u-turn	7	435	239	113	68	862
- emerging from driveway/lane	3	200	156	94	48	501
- other	4	274	174	64	43	559
Overtaking						
- head on		81	75	28	9	193
- pulling out	3	113	83	32	7	238
- other	3	103	55	31	11	203
On path						
- parked	17	522	382	125	68	1114
- other	8	382	325	151	51	917
Off path, on straight						
- left off carriageway into object/parked vehicle	75	1423	686	210	76	2470
- right off carriageway into object/parked vehicle	56	997	570	139	40	1802
- other	38	719	397	123	39	1316
Off path, on curve or turning						
- off right bend into object/parked vehicle	33	693	343	92	35	1196
- other	32	847	448	123	42	1492
Passengers/miscellaneous	8	319	242	101	44	714
	420	18192	12864	5608	2423	39507

Missing cases = 10473

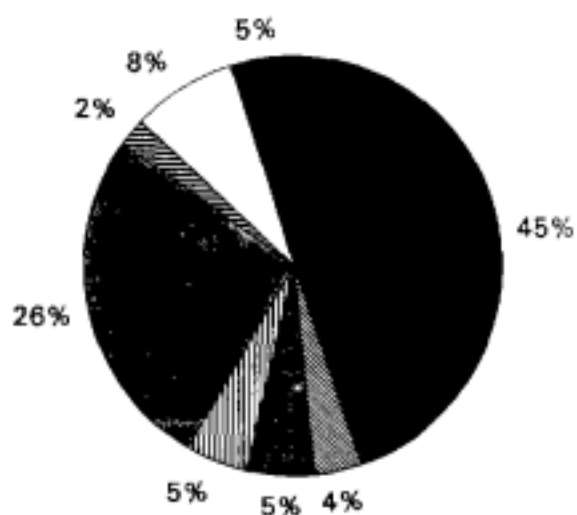
* Frequencies comprise drivers of cars and car derivatives only

VICTORIA CASUALTY FILE (1986-1989)
TYPE OF CRASH BY AGE GROUP

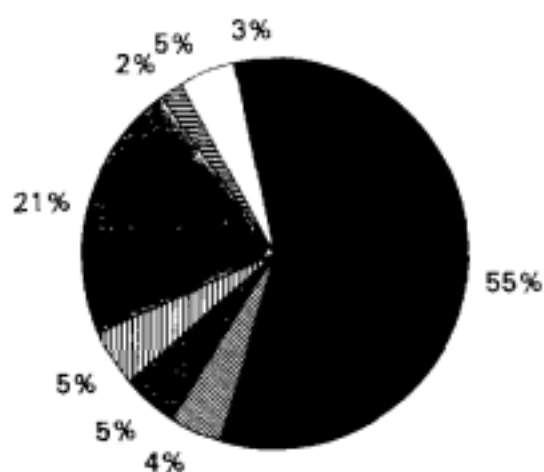
(N = 132381)



18-25 years (n = 42204)



26-40 years (n = 39839)



VICTORIA CASUALTY FILE (1986-1989) •
TYPE OF CRASH BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Collision with vehicle	244	19902	22606	12897	9359	65008
Struck pedestrian	20	1631	1782	930	549	4912
Struck animal	1	78	74	47	29	229
Fixed object collision	79	2383	1954	956	810	6182
Other object collision	4	187	130	65	47	433
Overtaken	18	520	386	186	151	1261
Fall from or in moving vehicle	1	41	51	18	14	125
No collision	5	323	266	141	103	838
Other crashes	2155	943	1047	636	385	5166
	2527	26008	28296	15876	11447	84154

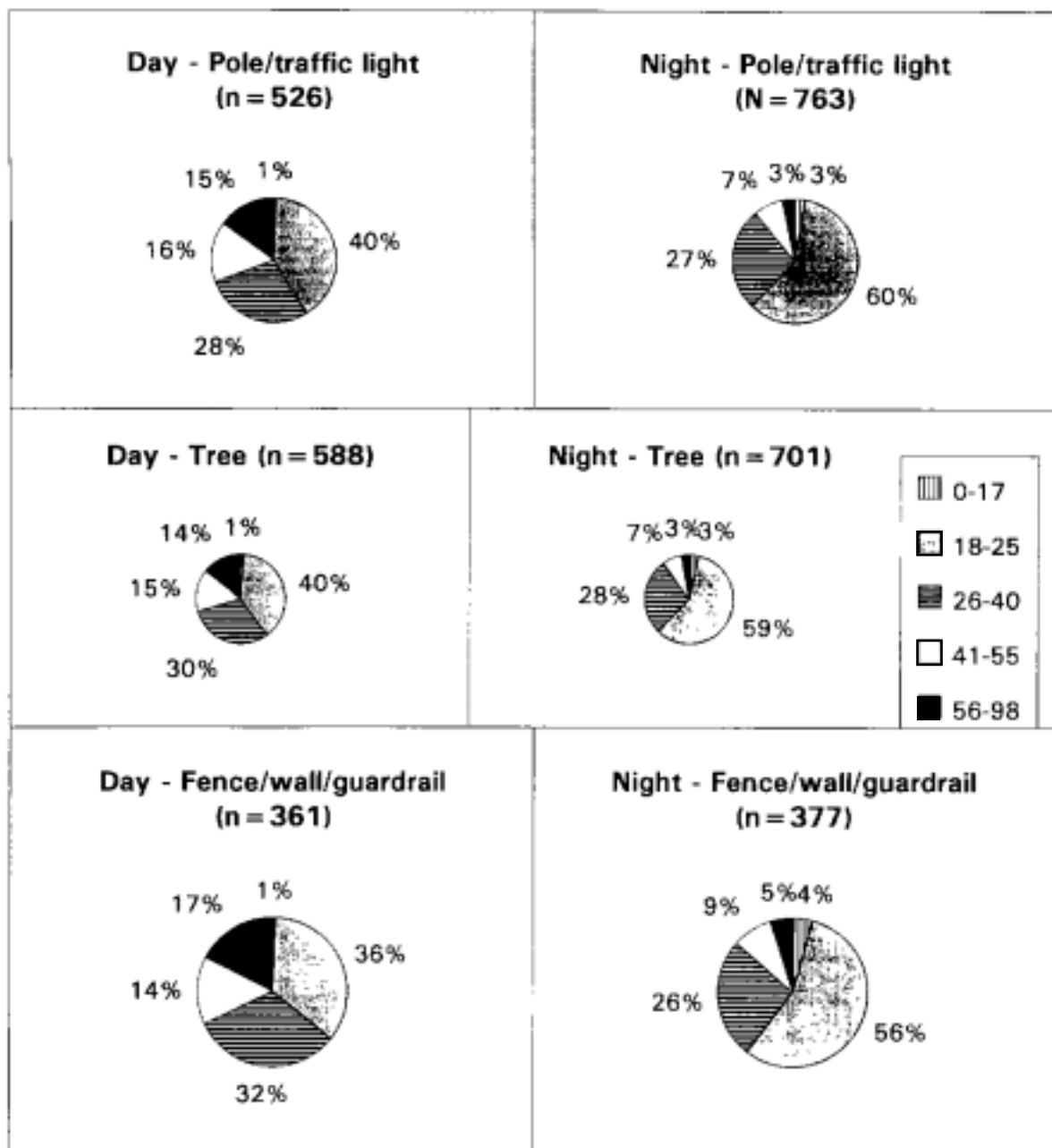
	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Collision with vehicle	174	11588	8811	4158	1910	26641
Struck pedestrian	5	985	825	349	137	2301
Struck animal	3	108	124	72	19	326
Fixed object collision	185	3623	1907	568	184	6467
Other object collision	10	252	148	40	22	472
Overtaken	25	501	281	90	33	930
Fall from or in moving vehicle	1	61	37	9	2	110
No collision	12	399	214	73	29	727
Other crashes	985	675	517	249	87	2513
	1400	18192	12864	5608	2423	40487

Missing cases = 7740

• Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

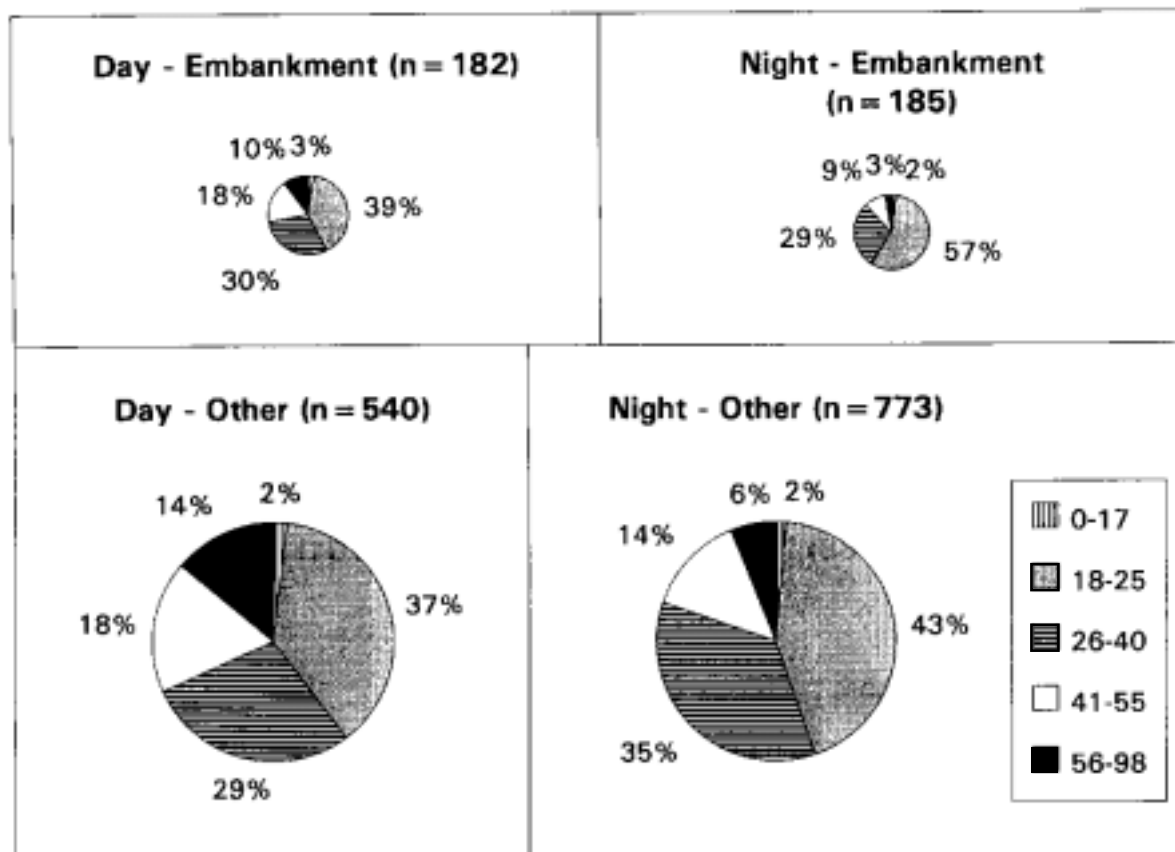
VICTORIA CASUALTY FILE (1986-1989)
OBJECT HIT BY AGE GROUP

(N=132381)



VICTORIA CASUALTY FILE (1986-1989)
OBJECT HIT BY AGE GROUP

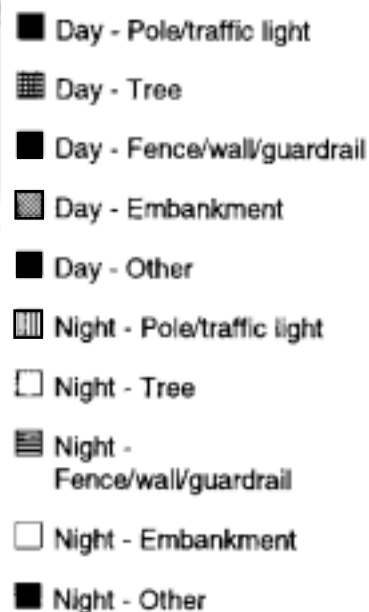
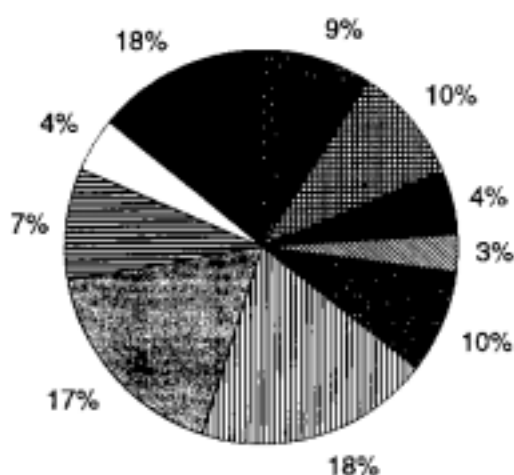
(N=132381)



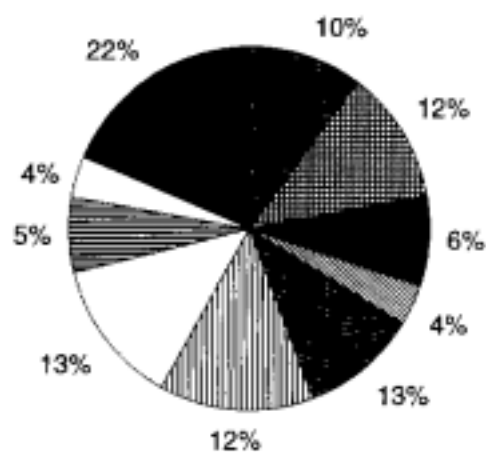
VICTORIA CASUALTY FILE (1986-1989)
OBJECT HIT BY AGE GROUP

(N=132381)

18-25 years (n=2374)



26-40 years (n=1476)



VICTORIA CASUALTY FILE (1986-1989) •
OBJECT HIT BY AGE GROUP

	DAY					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	3	215	148	82	78	526
Tree	7	229	179	90	83	588
Fence/wall/guardrail	3	127	116	52	63	361
Embankment	5	73	54	32	18	182
Guide post	1	23	10	5	9	48
Traffic sign	0	27	13	10	9	59
Fire hydrant	0	5	9	4	2	20
Building	5	15	20	15	15	70
Other fixed object	1	40	34	21	17	113
Unknown object	0	1	1	0	0	2
Bridge off path	2	14	10	4	4	34
Barrier	0	0	0	0	0	0
Non-fixed object	0	0	0	0	0	0
Traffic island	0	7	5	4	1	17
Bridge on path	0	6	7	2	1	16
Roadworks	0	4	5	1	4	14
Safety zone	0	9	4	3	3	19
Kerb	0	4	1	0	0	5
Animal	0	51	36	26	10	123
	27	850	652	351	317	2197

	NIGHT					Total
	0-17	18-25	26-40	41-55	56-98	
Pole/traffic light	20	456	205	57	25	763
Tree	24	414	195	47	21	701
Fence/wall/guardrail	16	213	97	33	18	377
Embankment	4	106	53	17	5	185
Guide post	2	30	24	1	3	60
Traffic sign	2	44	21	3	2	72
Fire hydrant	0	4	2	0	2	8
Building	0	27	12	3	3	45
Other fixed object	4	52	33	15	10	114
Unknown object	0	0	1	0	0	1
Bridge off path	0	32	15	6	2	55
Barrier	0	2	0	0	0	2
Non-fixed object	0	1	1	0	0	2
Traffic island	1	14	12	5	5	37
Bridge on path	1	3	9	0	1	14
Roadworks	0	10	10	0	2	22
Safety zone	0	13	18	7	0	38
Kerb	0	2	1	0	0	3
Animal	2	101	115	65	17	300
	76	1524	824	259	116	2799

Total missing cases = 127385

* Frequencies comprise drivers of cars and car derivatives involved in reported casualty crashes.

REFERENCES

- Cameron, M (1992), Accident Data Analysis to Develop Target Groups for Countermeasures, Clayton: Accident Research Centre, Monash University (draft report)
- Drummond, A E and Triggs, T J (1991), Driving as Skilled Performance: a Perspective For Improving Young Driver Safety, Clayton: Accident Research Centre, Monash University (unpublished report)
- Green, P (1990), Victorian Road Accident Database: Codebook For 1983 Through 1990, Melbourne: Vic Roads
- Macdonald, W A (1994a), Young Driver Research Program: A Review of Information on Young Driver Crashes, Report No CR 128, Canberra: Federal Office of Road Safety
- Macdonald, W A (1994b), Young Driver Research Program: A Review of Information on Young Driver Performance Characteristics and Capacities, Report No CR 129, Canberra: Federal Office of Road Safety
- Paterson, R and Baxter, D (1987), Coding Manual: User's Edition, Rosebery, NSW: Traffic Authority of NSW

APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW CASUALTY FILE (1986-1990)

DAY OF WEEK

Working week:	Monday Tuesday Wednesday Thursday Friday	Weekend:	Saturday Sunday
----------------------	--	-----------------	--------------------

TIME

Day:	0600-1759 hours	Night:	1800-0559 hours
-------------	-----------------	---------------	-----------------

LOCAL GOVERNMENT AREA

Metro:	001-100	Rural:	101-610
---------------	---------	---------------	---------

ROAD USER MOVEMENT

Pedestrian on foot or in toy/pram

near side

emerging

far side

other: playing, working, lying, standing on carriageway
 walking with traffic
 facing traffic
 on footpath/median
 driveway
 other

Vehicles from adjacent directions (intersection only)

cross traffic

right near

other: right far
 left far
 two turning
 right/left rear
 left near
 left/right far
 two left turning
 other adjacent

**APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW
CASUALTY FILE (1986-1990)**

Vehicles from opposing directions

head on (not overtaking)

right thru

other:	left thru
	right/left
	right/right
	left/left
	other opposing

Vehicles from same direction

- same lane

rear end

left rear

right rear

- parallel lanes

lane change right (not overtaking)

other:	lane side swipe
	lane change left
	right turn side swipe
	left turn side swipe
	other same direction

Manoeuvring

U-turn

emerging from driveway

other:	U-turn into fixed object/parked vehicle
	leaving parking
	entering parking
	parked vehicles only
	reversing
	reversing into fixed object/parked vehicle
	from footpath
	other manoeuvring

Overtaking

overtake turning

other:	head on
	out of control
	pulling out
	cutting in
	pulling out rear end
	other overtaking

**APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW
CASUALTY FILE (1986-1990)**

On path

parked

other: double parked
accident or broken down
vehicle door
permanent obstruction on carriageway
temporary roadworks
struck object on carriageway
animal (not ridden)
other on path

Off path, on straight

off carriageway to left (rollover)
left off carriageway into object/parked vehicle
right off carriageway into object/parked vehicle
other: off carriageway to right (rollover)
out of control on carriageway (rollover)
off end of road/t-intersection
other straight

Off path, on curve or turning

off carriageway to left on right bend
off carriageway, left on right bend into object/parked vehicle
off carriageway, right on right bend into object/parked vehicle
off carriageway, right on left bend into object/parked vehicle
off carriageway, left on left bend into object/parked vehicle
other: off carriageway to right on right bend
off carriageway to right on left bend
off carriageway to left on left bend
out of control on carriageway
other curve

Passengers/miscellaneous:

fell in/from vehicle
load or missile struck vehicle
struck train/aeroplane
parked vehicle run away into object/parked vehicle
parked vehicle run away into vehicle
struck while boarding or alighting vehicle
any accident not classified above

**APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW
CASUALTY FILE (1986-1990)**

MANOEUVRE OF TRAFFIC UNIT

Stationary

stationary in traffic

other: parked at kerbside/roadside
 parked at kerbside/roadside loading/depositing goods/passengers
 double parked
 broken down in traffic
 parked or stationary on footpath
 parked elsewhere

Moving along roadway

proceeding along lane

travelling on incorrect side of road

other: pulling out from kerb or parking (forward)
 veering to right to change to a lane moving in same direction
 veering to left to change to lane moving in same direction
 merging with traffic in same direction
 pulling out into opposite stream of traffic
 cutting back after overtaking

Turning/reversing

turning right out of own lane

other: turning left out of own lane
 waiting to turn right
 waiting to turn left
 performing U-turn
 entering roadway from driveway (forward)
 entering roadway from driveway (reversing)
 moving along footpath
 performing other forward manoeuvre
 reversing in lane (other than parking)
 parking (reversing)
 performing other reversing manoeuvre

APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW CASUALTY FILE (1986-1990)

TYPE OF OBJECT IMPACTED

Guardrail or fence

Utility pole/traffic signal pole

Embankments/cuttings/rocky outcrops/boulders etc

Trees or bushes

Other fixed objects: bridge railing or superstructure
 underpass or tunnel (wall or pier)
 guide post
 signpost or parking meter
 traffic island/roundabout/dome/median strip/Jersey median
 telephone box/post box/traffic signal box/bus shelter
 roadwork materials/temporary signs or barriers
 level crossing gates
 drain or culvert
 building
 vehicle interior
 vehicle exterior
 any other fixed objects
Non-fixed object: object falling from vehicle
 other non-fixed objects
Animals: straying stock
 stock driven or led
 riderless horse
 kangaroo or wallaby
 emu
 other large animals
 cat
 dog
 rabbit
 wombat
 other small animals

No object hit

STATUS OF LICENCE

Learner's permit

Provisional licence

Standard licence

Non-licensed: licence expired
 unlicensed
 disqualified
 cancelled

Other/police

**APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW
CASUALTY FILE (1986-1990)**

LEGAL ACTION

Driving offences

negligent driving

disobey traffic lights

drive contrary to stop sign

drive contrary to give way sign

not make turn with safety

not give way - terminating street

other:

exceed speed limit - over 30 km/h

exceed speed limit - over 15 km/h

exceed speed limit - 15 km/h and under

exceed speed limit - over 30 km/h (radar)

exceed speed limit - over 15 km/h (radar)

exceed speed limit - 15 km/h and under (radar)

drive contrary to roundabout sign

not give way to right

not give way - marked footcrossing

overtake stopped vehicle - marked footcrossing

overtake on nearside

cross centre line at grade/curve

drive/cross offside separation line

not keep wholly in traffic lane

cross unbroken centre line

not make turn in prescribed manner

not make U-turn with safety

make unlawful U-turn

not have proper control of vehicle

not give proper or timely signal

not leave kerb with safety

not cross lane line with safety

not yield way - overtaking vehicle

overtake turning lorry - left

drive contrary - bus/transit lane

drive contrary to a notice sign

drive median strip/traffic island

choke intersection

drive on footpath

drive with restricted vision

drive/ride outside edge line

overtake turning lorry - right

**APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW
CASUALTY FILE (1986-1990)**

Licence offences:	unlicensed driver not comply provisional licence - exceed 80 kph not comply provisional licence - one P plate not comply provisional licence - no P plates not comply conditions restrict licence not comply provisional licence - exceed 80 km/h (radar) owner permit unlicensed driver learner unaccompanied not display L plate not produce licence
Registration and number plate offences:	drive unregistered vehicle drive uninsured vehicle registration label not comply number plate - obscured/mutilated number plate missing/damaged
Heavy vehicles:	drive contrary - truck lane sign drive contrary - truck low gear sign exceed speed heavy vehicle - 15 km/h and under exceed speed heavy vehicle - over 30 km/h (radar) exceed speed heavy vehicle - 15 km/h and under (radar) not carry/display portable warning signs insecure loading - heavy vehicle
Equipment:	drive contrary to defect notice not have two lighted headlamps not dip headlamps unlawfully use additional lights not illuminate rear number plate unlawful use of horn undue smoke no rear reflector not have two efficient brake systems defective emergency brake not have seat belt fitted inefficient silencer tyres not comply inefficient brake equipment/component deficient/defective equipment

APPENDIX 1: GUIDE TO COLLAPSING OF VARIABLES FOR THE NSW CASUALTY FILE (1986-1990)

Miscellaneous:

- not cancel signalling device
- improper use - signalling device
- not stop vehicle - siren sounding
- not prevent start - unattended vehicle
- allow oil/grease - drop on roadway
- passenger unsafety seated
- body protude
- drive with person in trailer
- open door/alight - vehicle unsafely
- not wear seatbelt
- child unrestrained in vehicle
- towed vehicle - exceed weight - towing vehicle
- exceed space while towing
- competent person not in charge - tow
- not display red flag/object - towing
- no illuminated lamp/flag/object - tow
- projecting load
- insecure load - non heavy vehicle
- set up stand
- undue noise

Indictment codes

no legal action taken

culpable driving

PCA - lower range

PCA - middle range

PCA - higher range

other:

- manslaughter
- wanton driving
- negligent act causing grievous bodily harm
- larceny of motor vehicle
- unlawfully use conveyance
- dangerous driving
- fail to stop after accident
- fail to stop after accident and render assistance
- DUI drug
- DUI intoxicating liquor
- PCA special range
- wilfully alter concentration of alcohol
- refuse breath test
- disqualified driver
- cancelled driver
- suspended driver