

FEDERAL GOVERNMENT'S ROAD SAFETY INITIATIVE

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)

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South Australian Casualty Crash File (1986-1990)

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Abstract

This report is second 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 South Australia (1986 to 1990) were conducted. Results are discussed and accompanied by a series of tables. The data was also examined for day and night-time differences. 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

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 - (d) minor reports of research conducted by other organizations on behalf of FORS are published in the MR series.

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

Overview report

Report N ^o	
11	Reviews the main findings presented in Report N ^{os} 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^o 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 (N^o 2 in the series) presents results for South Australian casualty crashes during the years 1986 to 1990, and outlines, in turn:

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

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 SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990) - BIVARIATE ANALYSES

2.1 INTRODUCTION

Data was obtained from the South Australian Department of Transport of reported South Australian 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 (sedans and tourers), 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. Because of this, it has been the practice for this series of reports to only include the three most severe crash levels in the analysis; ie. fatalities, injuries requiring hospitalization (admitted injuries) and injuries not requiring hospitalization (treated injuries). However, the South Australian data does not differentiate injury severity levels: hence both fatal and all injury crashes have been included for the analysis.
- Age of drivers was grouped as follows: 0 to 15, 16 to 25 (16 being the minimum licensing age in South Australia), 26 to 40 years, 41 to 55 years and 56 to 97 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 16 to 25 year old drivers only.
- All 'not known' cases (eg. not known age group, not known day of week, etc) were collapsed with other missing cases. The proportion of not known or missing data was high for the South Australian data at 24% over the five year sample period.

2.2 TABLES - BIVARIATE ANALYSES

The tables on the following pages present frequencies for each variable of interest distributed by age group for each year in the file. Consistent with the data presented in the first report, the tables have been grouped as follows (page numbers have been included here for the convenience of the reader):

	Page
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Crash degree	7
Number of units involved	8
Number of unit casualties	10
Number of casualties	12

	Page
WHEN DID THE CRASHES OCCUR?	
Day of week	14
Weekday versus weekend	16
Time period	17
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 WHERE DID THE CRASHES OCCUR?	
Metro/rural	21
Intersection type	22
Speed limit	24
Road feature (alignment of road)	26
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 WHAT WERE THE FACTORS WITHIN THE VEHICLE - DRIVER	
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**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
SEVERITY OF CRASH BY AGE GROUP BY YEAR**

N = 53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Injury		11	2544	2075	962	724	6316
Fatality		2	77	47	19	15	160
		13	2621	2122	981	739	6476
		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Injury		12	3586	3028	1491	1099	9216
Fatality		2	96	63	38	37	236
		14	3682	3091	1529	1136	9452
		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Injury		5	3081	2742	1455	1053	8336
Fatality		1	88	57	37	28	211
		6	3169	2799	1492	1081	8547
		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Injury		18	3041	2715	1326	1035	8135
Fatality			81	54	23	30	188
		18	3122	2769	1349	1065	8323
		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Injury		18	2851	2622	1408	985	7884
Fatality			68	53	31	29	181
		18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
NUMBER OF UNITS INVOLVED BY AGE GROUP BY YEAR**

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
1		4	169	85	40	31	329
2		7	1935	1578	739	565	4824
3		1	365	324	135	115	940
4		1	109	96	46	19	271
5 or more			43	39	21	9	112
		13	2621	2122	981	739	6476

		1987					
		0-15	16-25	26-40	41-55	56-97	Total
1		5	255	158	57	35	510
2		6	2677	2281	1117	873	6954
3		2	535	497	261	163	1458
4			161	116	62	42	381
5 or more		1	54	39	32	23	149
		14	3682	3091	1529	1136	9452

		1988					
		0-15	16-25	26-40	41-55	56-97	Total
1		2	256	148	68	57	531
2			2284	2052	1076	797	6209
3		3	460	455	277	175	1370
4			117	103	50	39	309
5 or more		1	52	41	21	13	128
		6	3169	2799	1492	1081	8547

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
1		5	221	133	67	49	475
2		11	2271	2061	992	796	6131
3		2	482	414	207	160	1265
4			125	127	65	42	359
5 or more			23	34	18	18	93
		18	3122	2769	1349	1065	8323

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
NUMBER OF UNITS INVOLVED BY AGE GROUP BY YEAR

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
1	6	225	149	65	50	495
2	9	2095	1937	1052	745	5838
3	3	419	411	231	157	1221
4		129	131	67	49	376
5 or more		51	47	24	13	135
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
NUMBER OF UNIT CASUALTY BY AGE GROUP BY YEAR

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
0	5	960	863	388	294	2510
1	4	1289	1005	496	347	3141
2	2	289	177	72	90	630
3	1	64	58	16	7	146
4 or more	1	19	19	9	1	49
	13	2621	2122	981	739	6476

1987						
	0-15	16-25	26-40	41-55	56-97	Total
0	1	1259	1184	624	441	3509
1	7	1826	1473	733	539	4578
2	6	444	316	123	127	1016
3		106	81	40	14	241
4 or more		47	37	9	15	108
	14	3682	3091	1529	1136	9452

1988						
	0-15	16-25	26-40	41-55	56-97	Total
0	2	1093	1097	638	448	3278
1	4	1549	1360	671	488	4072
2		391	238	140	124	893
3		93	79	33	20	225
4 or more		43	25	10	1	79
	6	3169	2799	1492	1081	8547

1989						
	0-15	16-25	26-40	41-55	56-97	Total
0	4	1091	1058	506	400	3059
1	8	1551	1354	683	524	4120
2	4	327	246	120	123	820
3	1	107	88	31	13	240
4 or more	1	46	23	9	5	84
	18	3122	2769	1349	1065	8323

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
NUMBER OF UNIT CASUALTY BY AGE GROUP BY YEAR

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
0	2	1008	1038	575	390	3013
1	8	1432	1267	724	483	3914
2	5	333	255	105	127	825
3	3	106	79	27	12	227
4 or more		40	36	8	2	86
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
NUMBER OF CASUALTIES BY AGE GROUP BY YEAR

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
1		7	1813	1539	722	515	4596
2		3	540	370	171	164	1248
3		2	187	146	57	39	431
4 or more		1	81	67	31	21	201
		13	2621	2122	981	739	6476

		1987					
		0-15	16-25	26-40	41-55	56-97	Total
1		7	2514	2186	1067	770	6544
2		5	786	601	306	249	1947
3		1	239	196	108	76	620
4 or more		1	143	108	48	41	341
		14	3682	3091	1529	1136	9452

		1988					
		0-15	16-25	26-40	41-55	56-97	Total
1		5	2191	2019	1068	770	6053
2		0	661	484	267	204	1616
3		1	213	218	108	76	616
4 or more		0	104	78	49	31	262
		6	3169	2799	1492	1081	8547

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
1		12	2160	1985	993	741	5891
2		4	617	506	249	219	1595
3		1	233	183	71	74	562
4 or more		1	112	95	36	31	275
		18	3122	2769	1349	1065	8323

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
NUMBER OF CASUALTIES BY AGE GROUP BY YEAR

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
1	9	1932	1893	1076	689	5599
2	5	630	490	238	242	1605
3	3	263	191	86	60	603
4 or more	1	94	101	39	23	258
	18	2919	2675	1439	1014	8065

Total missing cases = 12030

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
DAY OF WEEK BY AGE GROUP BY YEAR

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
Monday	2	292	277	142	106	819
Tuesday	0	332	309	146	125	912
Wednesday	0	346	311	164	131	952
Thursday	2	368	353	154	115	992
Friday	2	429	366	161	107	1065
Saturday	3	470	278	122	74	947
Sunday	4	384	228	92	81	789
	13	2621	2122	981	739	6476

1987						
	0-15	16-25	26-40	41-55	56-97	Total
Monday	0	419	400	224	123	1166
Tuesday	1	430	429	205	183	1248
Wednesday	1	484	458	236	185	1364
Thursday	2	548	514	268	206	1538
Friday	4	593	528	264	202	1591
Saturday	3	657	402	198	127	1387
Sunday	3	551	360	134	110	1158
	14	3682	3091	1529	1136	9452

1988						
	0-15	16-25	26-40	41-55	56-97	Total
Monday	0	396	368	221	152	1137
Tuesday	0	395	409	228	159	1191
Wednesday	1	361	381	200	181	1124
Thursday	2	439	464	247	186	1338
Friday	0	498	523	252	168	1441
Saturday	2	567	351	186	110	1216
Sunday	1	513	303	158	125	1100
	6	3169	2799	1492	1081	8547

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
DAY OF WEEK BY AGE GROUP BY YEAR

N=53802

	1989					Total
	0-15	16-25	26-40	41-55	56-97	
Monday	2	360	352	207	143	1064
Tuesday	5	383	389	184	133	1094
Wednesday	1	380	411	215	171	1178
Thursday	2	459	452	213	204	1330
Friday	1	508	454	233	170	1366
Saturday	5	570	391	169	132	1267
Sunday	2	462	320	128	112	1024
	18	3122	2769	1349	1065	8323

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
Monday	2	329	360	193	141	1025
Tuesday	1	385	385	231	152	1154
Wednesday	2	400	394	209	141	1146
Thursday	3	408	412	245	144	1212
Friday	4	469	463	251	199	1386
Saturday	1	537	346	197	134	1215
Sunday	5	391	315	113	103	927
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
WEEKDAY VERSUS WEEKEND BY AGE GROUP BY YEAR

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday		6	1767	1616	767	584	4740
Weekend		7	854	506	214	155	1736
		13	2621	2122	981	739	6476

		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday		8	2474	2329	1197	899	6907
Weekend		6	1208	762	332	237	2545
		14	3682	3091	1529	1136	9452

		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday		3	2089	2145	1148	846	6231
Weekend		3	1080	654	344	235	2316
		6	3169	2799	1492	1081	8547

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday		11	2090	2058	1052	821	6032
Weekend		7	1032	711	297	244	2291
		18	3122	2769	1349	1065	8323

		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday		12	1991	2014	1129	777	5923
Weekend		6	928	661	310	237	2142
		18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TIME PERIOD BY AGE GROUP BY YEAR

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
12 am - 6 am	3	338	127	36	11	515
6 am - 12 pm	4	549	568	276	239	1636
12 pm - 6 pm	0	952	895	452	373	2672
6 pm - 12 am	6	770	525	216	114	1631
	13	2609	2115	980	737	6454

1987						
	0-15	16-25	26-40	41-55	56-97	Total
12 am - 6 am	2	488	211	42	13	756
6 am - 12 pm	0	780	874	498	367	2519
12 pm - 6 pm	9	1336	1312	660	581	3898
6 pm - 12 am	3	1075	694	328	175	2275
	14	3679	3091	1528	1136	9448

1988						
	0-15	16-25	26-40	41-55	56-97	Total
12 am - 6 am	1	414	156	37	11	619
6 am - 12 pm	0	690	806	500	373	2369
12 pm - 6 pm	4	1174	1210	654	537	3579
6 pm - 12 am	1	889	623	299	160	1972
	6	3167	2795	1490	1081	8539

1989						
	0-15	16-25	26-40	41-55	56-97	Total
12 am - 6 am	6	375	166	33	15	595
6 am - 12 pm	2	653	824	442	345	2266
12 pm - 6 pm	5	1166	1191	595	569	3526
6 pm - 12 am	5	927	586	278	136	1932
	18	3121	2767	1348	1065	8319

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TIME PERIOD BY AGE GROUP BY YEAR

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
12 am - 6 am	4	379	146	41	19	589
6 am - 12 pm	2	648	729	488	323	2190
12 pm - 6 pm	4	1107	1195	634	529	3469
6 pm - 12 am	8	785	605	276	143	1817
	18	2919	2675	1439	1014	8065

Total missing cases = 12977

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TIME PERIOD BY WEEKDAY/WEEKEND BY AGE GROUP BY YEAR

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday:	12 am - 6 am	1	117	56	20	5	199
	6 am - 12 pm	2	432	472	237	192	1335
	12 pm - 6 pm		674	692	358	300	2024
	6 pm - 12 am	3	537	390	151	85	1166
		6	1760	1610	766	582	4724
Weekend:	12 am - 6 am	2	221	71	16	6	316
	6 am - 12 pm	2	117	96	39	47	301
	12 pm - 6 pm		278	203	94	73	648
	6 pm - 12 am	3	233	135	65	29	465
		7	849	505	214	155	1730
		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday:	12 am - 6 am	1	156	96	19	7	279
	6 am - 12 pm		629	705	407	306	2047
	12 pm - 6 pm	4	968	1039	518	455	2984
	6 pm - 12 am	3	720	489	253	131	1596
		8	2473	2329	1197	899	6906
Weekend:	12 am - 6 am	1	332	115	23	6	477
	6 am - 12 pm		151	169	91	61	472
	12 pm - 6 pm	5	368	273	142	126	914
	6 pm - 12 am		355	205	75	44	679
		6	1206	762	331	237	2542
		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday:	12 am - 6 am		124	69	19	5	217
	6 am - 12 pm		534	664	412	303	1913
	12 pm - 6 pm	2	827	961	499	424	2713
	6 pm - 12 am	1	602	447	216	114	1380
		3	2087	2141	1146	846	6223
Weekend:	12 am - 6 am	1	290	87	18	6	402
	6 am - 12 pm		156	142	88	70	456
	12 pm - 6 pm	2	347	249	155	113	866
	6 pm - 12 am		287	176	83	46	592
		3	1080	654	344	235	2316

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TIME PERIOD BY WEEKDAY/WEEKEND BY AGE GROUP BY YEAR

N=53802

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday:	12 am - 6 am	5	115	57	15	7	199
	6 am - 12 pm	2	504	671	357	257	1791
	12 pm - 6 pm	3	851	919	473	465	2711
	6 pm - 12 am	1	620	411	207	92	1331
		11	2090	2058	1052	821	6032
Weekend:	12 am - 6 am	1	260	109	18	8	396
	6 am - 12 pm		149	153	85	88	475
	12 pm - 6 pm	2	315	272	122	104	815
	6 pm - 12 am	4	307	175	71	44	601
		7	1031	709	296	244	2287
		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Weekday:	12 am - 6 am	2	141	59	20	10	232
	6 am - 12 pm		523	587	415	254	1779
	12 pm - 6 pm	4	799	932	493	409	2637
	6 pm - 12 am	6	528	436	201	104	1275
		12	1991	2014	1129	777	5923
Weekend:	12 am - 6 am	2	238	87	21	9	357
	6 am - 12 pm	2	125	142	73	69	411
	12 pm - 6 pm		308	263	141	120	832
	6 pm - 12 am	2	257	169	75	39	542
		6	928	661	310	237	2142

Total missing cases = 12977

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
METRO/RURAL BY AGE GROUP BY YEAR**

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Metro		5	2048	1745	818	576	5192
Rural		8	573	377	163	163	1284
		13	2621	2122	981	739	6476
		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Metro		8	2846	2507	1251	874	7486
Rural		6	836	584	278	262	1966
		14	3682	3091	1529	1136	9452
		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Metro		4	2391	2227	1176	805	6603
Rural		2	778	572	316	276	1944
		6	3169	2799	1492	1081	8547
		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Metro		7	2336	2137	1064	762	6306
Rural		11	786	632	285	303	2017
		18	3122	2769	1349	1065	8323
		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Metro		10	2198	2073	1131	736	6148
Rural		8	721	602	308	278	1917
		18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
INTERSECTION TYPE BY AGE GROUP BY YEAR

N=53802

	1986					Total
	0-15	16-25	26-40	41-55	56-97	
Interchange	0	0	0	1	1	2
Cross road	2	675	565	286	212	1740
Y-junction	0	20	9	7	5	41
T-junction	1	662	583	276	213	1735
Multiple	0	20	26	11	8	65
Rail crossing	0	1	0	0	0	1
	3	1378	1183	581	439	3584

	1987					Total
	0-15	16-25	26-40	41-55	56-97	
Interchange	0	4	11	2	2	19
Cross road	0	842	757	423	335	2357
Y-junction	0	18	21	6	2	47
T-junction	2	974	901	380	304	2561
Multiple	0	38	39	20	19	116
Rail crossing	0	3	1	2	0	6
	2	1879	1730	833	662	5106

	1988					Total
	0-15	16-25	26-40	41-55	56-97	
Interchange	0	6	2	5	1	14
Cross road	1	703	714	372	323	2113
Y-junction	0	23	28	8	3	62
T-junction	2	858	768	428	316	2372
Multiple	0	19	21	14	10	64
Rail crossing	0	3	4	0	0	7
	3	1612	1537	827	653	4632

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
INTERSECTION TYPE BY AGE GROUP BY YEAR

N=53802

	1989					Total
	0-15	16-25	26-40	41-55	56-97	
Interchange	0	1	1	2	0	4
Cross road	1	735	721	362	326	2145
Y-junction	0	22	15	7	4	48
T-junction	4	800	785	396	324	2309
Multiple	0	27	31	17	10	85
Rail crossing	0	1	3	0	2	6
	5	1586	1556	784	666	4597

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
Interchange	0	3	0	1	2	6
Cross road	1	690	697	382	293	2063
Y-junction	0	19	15	11	3	48
T-junction	3	792	714	381	326	2216
Multiple	1	31	37	23	12	104
Rail crossing	0	1	2	0	1	4
	5	1536	1465	798	637	4441

Total missing cases = 31442

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

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

N = 53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
10-60	10	2105	1722	814	610	5261
70-90	0	131	119	50	34	334
100	0	37	32	9	10	88
110	3	316	234	102	82	737
	13	2589	2107	975	736	6420

1987						
	0-15	16-25	26-40	41-55	56-97	Total
10-60	8	2958	2496	1258	914	7634
70-90	1	176	134	69	55	435
100	0	35	37	15	15	102
110	5	476	397	167	142	1187
	14	3645	3064	1509	1126	9358

1988						
	0-15	16-25	26-40	41-55	56-97	Total
10-60	3	2528	2293	1211	877	6912
70-90	1	144	134	77	33	389
100	0	39	30	12	15	96
110	2	449	336	185	154	1126
	6	3160	2793	1485	1079	8523

1989						
	0-15	16-25	26-40	41-55	56-97	Total
10-60	8	2496	2263	1112	847	6726
70-90	2	147	134	54	41	378
100	0	40	34	16	18	108
110	8	438	336	167	159	1108
	18	3121	2767	1349	1065	8320

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

N = 53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
10-60	10	2301	162	87	38	2598
70-90	1	159	162	87	38	447
100	0	41	36	13	9	99
110	7	417	353	171	141	1089
	18	2918	713	358	226	4233

Total missing cases = 13119

N.B. Several unusual speed zones were (5, 6, 9, 56, 62, 66, 89 km/h) recoded as missing case

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
ROAD FEATURE BY AGE GROUP BY YEAR**

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
Straight road	9	2314	1905	908	694	5830
Curve or bend	4	292	208	68	45	617
Bridge, culvert or causeway	0	15	9	5	0	29
	13	2621	2122	981	739	6476
1987						
	0-15	16-25	26-40	41-55	56-97	Total
Straight road	12	3205	2778	1400	1050	8445
Curve or bend	2	450	298	121	81	952
Bridge, culvert or causeway	0	27	15	8	5	55
	14	3682	3091	1529	1136	9452
1988						
	0-15	16-25	26-40	41-55	56-97	Total
Straight road	4	2769	2593	1378	1005	7749
Curve or bend	2	377	192	103	69	743
Bridge, culvert or causeway	0	23	14	11	7	55
	6	3169	2799	1492	1081	8547
1989						
	0-15	16-25	26-40	41-55	56-97	Total
Straight road	15	2701	2473	1217	979	7385
Curve or bend	3	407	281	120	82	893
Bridge, culvert or causeway	0	14	15	12	4	45
	18	3122	2769	1349	1065	8323
1990						
	0-15	16-25	26-40	41-55	56-97	Total
Straight road	13	2548	2389	1313	927	7190
Curve or bend	4	358	269	123	84	838
Bridge, culvert or causeway	1	13	17	3	3	37
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
ROAD CONDITION (SEALED/UNSEALED) BY AGE GROUP BY YEAR

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Sealed		11	2466	2035	944	718	6174
Unsealed		2	155	87	37	21	302
		13	2621	2122	981	739	6476
		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Sealed		10	3482	2951	1471	1094	9008
Unsealed		4	200	140	58	42	444
		14	3682	3091	1529	1136	9452
		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Sealed		6	2982	2680	1424	1032	8124
Unsealed		0	187	119	68	49	423
		6	3169	2799	1492	1081	8547
		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Sealed		13	2952	2654	1286	1021	7926
Unsealed		5	170	115	63	44	397
		18	3122	2769	1349	1065	8323
		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Sealed		13	2746	2533	1393	979	7664
Unsealed		5	173	142	46	35	401
		18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TRAFFIC CONTROLS BY AGE GROUP BY YEAR

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
Traffic signals	0	415	348	167	101	1031
Rail crossing	0	7	5	2	4	18
Stop sign	1	109	106	44	45	305
Give way sign	1	187	154	90	69	501
No control	11	1880	1484	671	509	4555
Roundabout	0	23	25	7	11	66
	13	2621	2122	981	739	6476

1987						
	0-15	16-25	26-40	41-55	56-97	Total
Traffic signals	0	556	530	294	196	1576
Rail crossing	0	13	5	6	2	26
Stop sign	1	156	137	92	86	472
Give way sign	0	253	237	104	105	699
No control	13	2665	2142	1016	739	6575
Roundabout	0	36	38	16	6	96
	14	3679	3089	1528	1134	9444

1988						
	0-15	16-25	26-40	41-55	56-97	Total
Traffic signals	1	498	482	276	186	1443
Rail crossing	0	10	6	2	1	19
Stop sign	0	114	130	68	60	372
Give way sign	0	184	199	116	119	618
No control	5	2330	1949	1017	699	6000
Roundabout	0	32	31	12	15	90
	6	3168	2797	1491	1080	8542

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TRAFFIC CONTROLS BY AGE GROUP BY YEAR

N=53802

	1989					Total
	0-15	16-25	26-40	41-55	56-97	
Traffic signals	0	497	479	281	188	1445
Rail crossing	0	4	11	3	3	21
Stop sign	0	114	149	59	84	406
Give way sign	3	203	210	108	137	661
No control	15	2266	1881	878	643	5683
Roundabout	0	38	36	20	10	104
	18	3122	2766	1349	1065	8320

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
Traffic signals	1	490	497	277	176	1441
Rail crossing	0	5	7	3	3	18
Stop sign	1	125	124	86	65	401
Give way sign	0	174	190	99	113	576
No control	16	2097	1827	963	645	5548
Roundabout	0	28	28	11	12	79
	18	2919	2673	1439	1014	8063

Total missing cases = 12957

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
SEX BY AGE GROUP BY YEAR

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Male		6	1755	1307	634	508	4210
Female		7	866	815	347	231	2266
		13	2621	2122	981	739	6476

		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Male		12	2419	1769	962	809	5971
Female		2	1263	1322	567	327	3481
		14	3682	3091	1529	1136	9452

		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Male		6	2050	1610	944	761	5371
Female		0	1118	1189	547	319	3173
		6	3168	2799	1491	1080	8544

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Male		16	1959	1631	775	761	5142
Female		2	1163	1138	573	304	3180
		18	3122	2769	1348	1065	8322

		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Male		14	1880	1520	843	691	4948
Female		4	1039	1153	596	322	3114
		18	2919	2673	1439	1013	8062

Total missing cases = 12946

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
FORENSIC BAC READING BY AGE GROUP BY YEAR**

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
.05 or less		1	35	8	3	5	52
	more than .05	3	159	90	35	16	303
		4	194	98	38	21	355
		1987					
		0-15	16-25	26-40	41-55	56-97	Total
.05 or less		9	1664	1197	643	576	4089
	more than .05	0	388	221	38	32	679
		9	2052	1418	681	608	4768
		1988					
		0-15	16-25	26-40	41-55	56-97	Total
.05 or less		0	1389	1002	584	490	3465
	more than .05	1	309	192	48	23	573
		1	1698	1194	632	513	4038
		1989					
		0-15	16-25	26-40	41-55	56-97	Total
.05 or less		4	1409	1157	570	564	3704
	more than .05	4	295	198	52	23	572
		8	1704	1355	622	587	4276
		1990					
		0-15	16-25	26-40	41-55	56-97	Total
.05 or less		10	1451	1217	674	552	3904
	more than .05	2	279	172	52	28	533
		12	1730	1389	726	580	4437

Total missing cases = 35928

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
LICENCE TYPE BY AGE GROUP BY YEAR**

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
Learner's permit	0	39	4	1	0	44
Provisional	0	329	24	0	1	354
Full	0	1618	1703	809	591	4721
Unlicenced	13	24	14	6	0	57
	13	2010	1745	816	592	5176

1987						
	0-15	16-25	26-40	41-55	56-97	Total
Learner's permit	0	54	7	3	0	64
Provisional	0	479	16	4	4	503
Full	0	2262	2511	1274	928	6975
Unlicenced	14	48	11	3	0	76
	14	2843	2522	1284	932	7618

1988						
	0-15	16-25	26-40	41-55	56-97	Total
Learner's permit	0	40	7	2	0	49
Provisional	0	467	33	10	1	511
Full	0	1977	2287	1250	911	6425
Unlicenced	6	43	15	5	2	71
	6	2527	2342	1267	914	7056

1989						
	0-15	16-25	26-40	41-55	56-97	Total
Learner's permit	0	53	14	2	0	69
Provisional	0	457	23	5	0	485
Full	0	1987	2264	1143	879	6273
Unlicenced	18	60	24	6	1	109
	18	2557	2325	1156	880	6936

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
LICENCE TYPE BY AGE GROUP BY YEAR

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
Learner's permit	0	43	8	3	2	56
Provisional	0	450	46	6	5	507
Full	0	1858	2169	1241	845	6113
Unlicenced	18	61	38	5	3	125
	18	2412	2261	1255	855	6801

Total missing cases = 20215

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
VEHICLE DRIVING EXPERIENCE IN YEARS BY AGE GROUP BY YEAR**

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
less than 1	1	411	135	40	21	608
1	0	349	115	48	20	532
2	0	311	126	53	30	520
3	0	255	83	38	26	402
4	0	151	57	30	16	254
5	0	135	59	25	16	235
more than 6	0	348	1072	528	404	2352
	1	1960	1647	762	533	4903

1987						
	0-15	16-25	26-40	41-55	56-97	Total
less than 1	0	543	154	61	16	774
1	0	466	170	70	30	736
2	0	471	198	67	47	783
3	0	313	152	80	38	583
4	0	234	104	45	40	423
5	0	213	85	53	35	386
more than 6	0	456	1563	794	605	3418
	0	2696	2426	1170	811	7103

1988						
	0-15	16-25	26-40	41-55	56-97	Total
less than 1	0	371	140	60	25	596
1	0	362	129	68	40	599
2	0	293	137	53	39	522
3	0	225	80	41	20	366
4	0	167	90	37	39	333
5	0	452	1352	817	621	3242
more than 6	1	435	137	59	16	648
	1	2305	2065	1135	800	6306

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
VEHICLE DRIVING EXPERIENCE IN YEARS BY AGE GROUP BY YEAR

N=53802

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
less than 1		0	444	164	53	15	676
1		0	394	110	46	25	575
2		0	368	132	55	20	575
3		0	298	96	53	22	469
4		0	188	99	42	29	358
5		0	155	80	37	20	292
more than 6		0	394	1338	717	600	3049
		0	2241	2019	1003	731	5994

		1990					
		0-15	16-25	26-40	41-55	56-97	Total
less than 1		0	383	137	53	19	592
1		0	421	166	58	15	660
2		0	347	131	64	20	562
3		0	227	85	43	27	382
4		0	192	88	36	23	339
5		0	135	89	40	39	303
more than 6		0	360	1230	750	532	2872
		0	2065	1926	1044	675	5710

Total missing cases = 23786

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TOTAL DRIVING EXPERIENCE IN YEARS BY AGE GROUP BY YEAR

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Less than 1		1	213	14	3	0	231
1		0	249	10	4	2	265
2		0	289	20	2	1	312
3		0	278	16	4	1	299
4		0	195	15	5	2	217
5		0	182	25	2	0	209
More than 5		0	495	1512	726	513	3246
		1	1901	1612	746	519	4779

		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Less than 1		0	304	11	4	1	320
1		0	347	11	2	1	361
2		0	454	35	4	3	496
3		0	375	40	6	1	422
4		0	296	33	2	0	331
5		0	267	35	4	3	309
More than 5		0	702	2298	1157	818	4975
		0	2745	2463	1179	827	7214

		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Less than 1		0	259	11	4	0	274
1		1	288	19	2	1	311
2		0	358	20	5	1	384
3		0	325	28	5	2	360
4		0	274	25	3	1	303
5		0	223	35	4	3	265
More than 5		0	626	1983	1147	810	4566
		1	2353	2121	1170	818	6463

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
TOTAL DRIVING EXPERIENCE IN YEARS BY AGE GROUP BY YEAR**

N=53802

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Less than 1		0	244	10	2	0	256
1		0	289	12	3	0	304
2		0	387	26	2	1	416
3		0	313	25	2	1	341
4		0	237	27	3	3	270
5		0	221	26	2	0	249
More than 5		0	605	1955	1028	749	4337
		0	2296	2081	1042	754	6173

		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Less than 1		0	193	8	1	1	203
1		0	317	25	1	1	344
2		0	349	21	4	0	374
3		0	273	14	6	0	293
4		0	256	26	7	1	290
5		0	213	41	2	0	256
More than 5		0	547	1872	1076	702	4197
		0	2148	2007	1097	705	5957

Total missing cases = 23216

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

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

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
NSW	0	26	20	8	4	58
VIC	0	33	34	15	12	94
QLD	0	6	10	7	1	24
SA	0	2162	1803	836	631	5432
WA	0	6	9	2	3	20
TAS	0	1	1	2	0	4
NT	0	6	5	1	0	12
ACT	0	0	2	0	2	4
Overseas	0	4	8	5	1	18
	0	2244	1892	876	654	5666

1987						
	0-15	16-25	26-40	41-55	56-97	Total
NSW	0	18	32	13	12	75
VIC	0	41	40	11	18	110
QLD	0	10	10	2	1	23
SA	0	2968	2625	1324	967	7884
WA	0	16	8	3	2	29
TAS	0	4	1	0	1	6
NT	0	6	9	6	1	22
ACT	0	2	5	1	0	8
Overseas	0	21	16	3	2	42
	0	3086	2746	1363	1004	8199

1988						
	0-15	16-25	26-40	41-55	56-97	Total
NSW	0	17	11	8	10	46
VIC	0	21	24	11	11	67
QLD	0	6	12	4	6	28
SA	0	2593	2380	1293	923	7189
WA	0	13	12	5	7	37
TAS	0	1	2	0	1	4
NT	0	7	6	2	0	15
ACT	0	2	3	1	0	6
Overseas	0	3	17	5	3	28
	0	2663	2467	1329	961	7420

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

N=53802

	1989					Total
	0-15	16-25	26-40	41-55	56-97	
NSW	0	17	19	13	3	52
VIC	0	35	40	19	6	100
QLD	0	8	12	4	2	26
SA	0	2615	2346	1189	925	7075
WA	0	5	11	3	1	20
TAS	0	2	1	1	0	4
NT	0	7	14	0	3	24
ACT	0	1	4	3	1	9
Overseas	0	14	20	1	3	38
	0	2704	2467	1233	944	7348

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
NSW	0	8	18	16	6	48
VIC	0	35	35	26	18	114
QLD	0	9	12	5	5	31
SA	0	2385	2260	1248	856	6749
WA	0	5	12	5	0	22
TAS	0	0	2	1	1	4
NT	0	9	7	2	1	19
ACT	0	1	1	2	1	5
Overseas	0	17	23	5	2	47
	0	2469	2370	1310	890	7039

Total missing cases = 18130

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
YEAR OF VEHICLE MANUFACTURE BY AGE GROUP BY YEAR

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
<1971	3	307	149	65	53	577
1971-1975	2	550	342	159	100	1153
1976-1980	2	546	414	180	142	1284
1981-1985	1	360	529	281	179	1350
1986-1990	0	12	30	10	9	61
	8	1775	1464	695	483	4425

1987						
	0-15	16-25	26-40	41-55	56-97	Total
<1971	1	365	209	92	89	756
1971-1975	5	706	453	188	129	1481
1976-1980	1	737	605	282	193	1818
1981-1985	4	503	661	350	247	1765
1986-1990	0	125	213	118	69	525
	11	2436	2141	1030	727	6345

1988						
	0-15	16-25	26-40	41-55	56-97	Total
<1971	0	274	171	59	65	569
1971-1975	1	549	360	152	120	1182
1976-1980	0	591	492	232	170	1485
1981-1985	2	400	572	309	230	1513
1986-1990	1	163	229	210	107	710
	4	1977	1824	962	692	5459

1989						
	0-15	16-25	26-40	41-55	56-97	Total
<1971	1	246	136	40	64	487
1971-1975	2	499	302	118	116	1037
1976-1980	4	548	447	225	162	1386
1981-1985	4	413	492	254	188	1351
1986-1990	2	192	359	197	109	859
	13	1898	1736	834	639	5120

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
 YEAR OF VEHICLE MANUFACTURE BY AGE GROUP BY YEAR**

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
<1971	0	194	113	56	54	417
1971-1975	3	473	272	124	82	954
1976-1980	3	532	430	199	121	1285
1981-1985	1	361	456	261	191	1270
1986-1990	6	214	379	256	137	992
	13	1774	1650	896	585	4918

Total missing cases = 27535

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
NATURAL LIGHT CONDITION BY AGE GROUP BY YEAR**

N=53802

1986						
	0-15	16-25	26-40	41-55	56-97	Total
Daylight	6	1506	1460	729	613	4314
Dawn/Dusk	1	78	71	27	19	196
Night	6	1037	591	225	107	1966
	13	2621	2122	981	739	6476

1987						
	0-15	16-25	26-40	41-55	56-97	Total
Daylight	11	2254	2256	1192	978	6691
Dawn/Dusk	0	52	33	15	10	110
Night	3	1376	802	322	148	2651
	14	3682	3091	1529	1136	9452

1988						
	0-15	16-25	26-40	41-55	56-97	Total
Daylight	4	1988	2112	1210	940	6254
Dawn/Dusk	0	4	1	0	0	5
Night	2	1177	686	282	141	2288
	6	3169	2799	1492	1081	8547

1989						
	0-15	16-25	26-40	41-55	56-97	Total
Daylight	9	1968	2120	1086	937	6120
Dawn/Dusk	0	0	0	0	0	0
Night	9	1154	649	263	128	2203
	18	3122	2769	1349	1065	8323

1990						
	0-15	16-25	26-40	41-55	56-97	Total
Daylight	8	1876	2032	1177	878	5971
Dawn/Dusk	0	0	0	0	0	0
Night	10	1043	643	262	136	2094
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
WEATHER BY AGE GROUP BY YEAR

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Raining		2	280	242	104	73	681
Not raining		11	2361	1880	877	666	5795
		13	2621	2122	981	739	6476

		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Raining		1	343	292	148	90	874
Not raining		13	3339	2799	1381	1046	8578
		14	3682	3091	1529	1136	9452

		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Raining		2	271	224	144	61	702
Not raining		4	2898	2575	1348	1020	7845
		6	3169	2799	1492	1081	8547

		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Raining		1	263	222	121	93	700
Not raining		17	2859	2547	1228	972	7623
		18	3122	2769	1349	1065	8323

		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Raining		1	244	228	119	67	659
Not raining		17	2675	2447	1320	947	7406
		18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
ROAD CONDITION (WET/DRY) BY AGE GROUP BY YEAR**

N=53802

		1986					
		0-15	16-25	26-40	41-55	56-97	Total
Wet		3	505	418	172	121	1219
Dry		10	2116	1704	809	618	5257
		13	2621	2122	981	739	6476
		1987					
		0-15	16-25	26-40	41-55	56-97	Total
Wet		3	638	505	248	141	1535
Dry		11	3044	2586	1281	995	7917
		14	3682	3091	1529	1136	9452
		1988					
		0-15	16-25	26-40	41-55	56-97	Total
Wet		2	545	437	247	132	1363
Dry		4	2624	2362	1245	949	7184
		6	3169	2799	1492	1081	8547
		1989					
		0-15	16-25	26-40	41-55	56-97	Total
Wet		1	516	438	217	147	1319
Dry		17	2606	2331	1132	918	7004
		18	3122	2769	1349	1065	8323
		1990					
		0-15	16-25	26-40	41-55	56-97	Total
Wet		2	488	453	227	122	1292
Dry		16	2431	2222	1212	892	6773
		18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
VEHICLE MOVEMENT BY AGE GROUP BY YEAR

N=53802

	1986					Total
	0-15	16-25	26-40	41-55	56-97	
Right turn	1	290	222	119	125	757
Left turn	0	61	62	25	21	169
U turn	1	37	30	15	22	105
Swerving	1	120	71	32	16	240
Reversing	1	21	12	8	6	48
Stopped on carriageway	0	309	361	198	82	950
Straight ahead	9	1628	1211	503	406	3757
Entering private driveway	0	30	30	13	7	80
Leaving private driveway	0	28	16	13	14	71
Parked	0	54	82	48	23	207
Parking	0	6	1	0	3	10
Unparking	0	7	8	1	7	23
Overtaking	0	29	15	6	7	57
Other	0	1	1	0	0	2
	13	2621	2122	981	739	6476

	1987					Total
	0-15	16-25	26-40	41-55	56-97	
Right turn	1	406	305	156	196	1064
Left turn	0	90	74	36	22	222
U turn	0	52	26	16	25	119
Swerving	1	213	87	36	36	373
Reversing	0	22	17	18	11	68
Stopped on carriageway	0	394	589	321	138	1442
Straight ahead	11	2306	1805	844	628	5594
Entering private driveway	0	20	31	18	12	81
Leaving private driveway	0	29	31	10	20	90
Parked	0	107	100	51	30	288
Parking	0	4	4	3	1	12
Unparking	1	9	11	3	8	32
Overtaking	0	27	11	15	9	62
Other	0	3	0	2	0	5
	14	3682	3091	1529	1136	9452

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
VEHICLE MOVEMENT BY AGE GROUP BY YEAR

N=53802

	1988					Total
	0-15	16-25	26-40	41-55	56-97	
Right turn	1	377	306	165	213	1062
Left turn	1	82	83	41	41	248
U turn	0	47	24	23	28	122
Swerving	1	145	68	35	29	278
Reversing	0	22	18	15	16	71
Stopped on carriageway	0	313	416	266	92	1087
Straight ahead	3	2053	1730	853	607	5246
Entering private driveway	0	11	10	10	7	38
Leaving private driveway	0	23	15	10	11	59
Parked	0	52	86	50	24	212
Parking	0	4	10	4	0	18
Unparking	0	6	6	5	4	21
Overtaking	0	34	27	14	9	84
Other	0	0	0	1	0	1
	6	3169	2799	1492	1081	8547

	1989					Total
	0-15	16-25	26-40	41-55	56-97	
Right turn	1	380	298	163	205	1047
Left turn	1	80	80	49	36	246
U turn	0	35	36	18	32	121
Swerving	2	154	90	29	28	303
Reversing	1	32	21	12	10	76
Stopped on carriageway	0	326	445	272	126	1169
Straight ahead	12	1984	1688	741	566	4991
Entering private driveway	0	18	19	13	11	61
Leaving private driveway	1	28	19	10	17	75
Parked	0	32	38	24	18	112
Parking	0	8	1	2	3	14
Unparking	0	9	7	5	6	27
Overtaking	0	36	25	11	7	79
Other	0	0	2	0	0	2
	18	3122	2769	1349	1065	8323

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
VEHICLE MOVEMENT BY AGE GROUP BY YEAR**

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
Right turn	2	346	276	179	198	1001
Left turn	0	78	58	44	25	205
U turn	0	30	33	15	36	114
Swerving	3	160	102	49	27	341
Reversing	0	17	29	13	10	69
Stopped on carriageway	0	316	488	308	132	1244
Straight ahead	13	1831	1555	754	529	4682
Entering private driveway	0	25	18	14	11	68
Leaving private driveway	0	29	24	12	15	80
Parked	0	31	45	29	13	118
Parking	0	2	6	1	2	11
Unparking	0	9	10	6	4	29
Overtaking	0	44	30	15	12	101
Other	0	1	1	0	0	2
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
CRASH TYPE BY AGE GROUP BY YEAR

N = 53802

	1986					Total
	0-15	16-25	26-40	41-55	56-97	
Rear end	0	677	686	339	190	1892
Hit fixed object	3	324	152	49	32	560
Side swipe	0	143	127	51	44	365
Right angle	4	652	566	270	256	1748
Head on	0	120	90	39	33	282
Hit pedestrian	1	170	123	36	45	375
Roll over	4	138	66	30	22	260
Right turn	0	225	154	90	71	540
Hit parked vehicle	1	112	119	54	35	321
Hit animal	0	2	6	6	0	14
Hit object on road	0	2	3	3	1	9
Left road - out of control	0	43	20	10	9	82
Other	0	13	10	4	1	28
	13	2621	2122	981	739	6476

	1987					Total
	0-15	16-25	26-40	41-55	56-97	
Rear end	1	949	1055	537	279	2821
Hit fixed object	5	529	235	71	67	907
Side swipe	0	199	173	89	76	537
Right angle	1	894	793	421	386	2495
Head on	1	155	146	60	51	413
Hit pedestrian	1	207	171	103	57	539
Roll over	5	223	131	49	35	443
Right turn	0	276	197	121	124	718
Hit parked vehicle	0	172	133	57	53	415
Hit animal	0	7	8	3	2	20
Hit object on road	0	4	4	1	1	10
Left road - out of control	0	48	29	6	3	86
Other	0	19	16	11	2	48
	14	3682	3091	1529	1136	9452

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
CRASH TYPE BY AGE GROUP BY YEAR

N = 53802

	1988					Total
	0-15	16-25	26-40	41-55	56-97	
Rear end	0	797	933	495	265	2490
Hit fixed object	1	461	195	70	54	781
Side swipe	0	193	183	98	82	556
Right angle	0	672	642	369	349	2032
Head on	2	120	119	70	40	351
Hit pedestrian	1	183	176	104	58	522
Roll over	2	242	136	64	58	502
Right turn	0	312	255	147	131	845
Hit parked vehicle	0	110	118	51	32	311
Hit animal	0	6	4	6	1	17
Hit object on road	0	2	1	2	1	6
Left road - out of control	0	54	27	9	9	99
Other	0	17	10	7	1	35
	6	3169	2799	1492	1081	8547

	1989					Total
	0-15	16-25	26-40	41-55	56-97	
Rear end	1	803	884	473	266	2427
Hit fixed object	9	401	201	68	62	741
Side swipe	0	203	184	87	66	540
Right angle	2	664	709	321	360	2056
Head on	0	133	119	59	28	339
Hit pedestrian	1	208	167	68	48	492
Roll over	5	203	119	69	40	436
Right turn	0	300	250	146	135	831
Hit parked vehicle	0	103	73	37	35	248
Hit animal	0	4	4	4	1	13
Hit object on road	0	3	1	0	2	6
Left road - out of control	0	75	42	14	21	152
Other	0	22	16	3	1	42
	18	3122	2769	1349	1065	8323

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
CRASH TYPE BY AGE GROUP BY YEAR

N = 53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
Rear end	2	766	838	480	254	2340
Hit fixed object	8	313	172	56	36	585
Side swipe	0	181	176	89	65	511
Right angle	1	616	648	352	342	1959
Head on	0	122	99	74	25	320
Hit pedestrian	0	171	189	100	55	515
Roll over	6	217	124	62	45	454
Right turn	0	295	232	141	131	799
Hit parked vehicle	1	84	81	37	33	236
Hit animal	0	4	7	6	3	20
Hit object on road	0	2	4	0	0	6
Left road - out of control	0	139	95	36	21	291
Other	0	9	10	6	4	29
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
APPARENT ERROR BY AGE GROUP BY YEAR

N=53802

	1986					Total
	0-15	16-25	26-40	41-55	56-97	
Excessive speed	3	123	34	8	5	173
Fail to stand	0	120	73	56	48	297
Fail to keep left	0	47	23	8	6	84
Change lanes to endanger	0	15	8	4	11	38
Fail to give way to right	1	158	126	66	91	442
Incorrect turn	0	3	6	3	3	15
Reversing without due care	1	19	12	7	6	45
Follow too closely	0	63	50	21	11	145
Overtake without due care	0	26	11	6	7	50
Disobey traffic lights	0	49	36	11	15	111
Disobey stop sign	1	39	35	16	29	120
Disobey give way sign	1	51	55	44	44	195
Disobey police signal	0	0	0	0	0	0
Disobey railway signal	0	1	0	0	1	2
Incorrect/no signal	0	2	0	0	0	2
Inattention	4	603	343	129	113	1192
No errors	1	1240	1261	588	336	3426
Other	1	7	4	2	0	14
Dangerous driving	0	18	11	1	1	31
DUI	0	16	9	5	0	30
Misjudgement	0	1	3	0	1	5
Vehicle fault	0	12	10	0	6	28
Insecure load	0	0	0	0	0	
Died/sick/asleep at wheel	0	5	7	3	3	18
Opening/closing door	0	3	5	3	2	13
Brake failure	0	0	0	0	0	0
Broken windscreen	0	0	0	0	0	0
	13	2621	2122	981	739	6476

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
APPARENT ERROR BY AGE GROUP BY YEAR

N=53802

	1987					Total
	0-15	16-25	26-40	41-55	56-97	
Excessive speed	2	165	55	14	6	242
Fail to stand	0	149	114	60	97	420
Fail to keep left	0	55	34	14	15	118
Change lanes to endanger	0	23	19	7	17	66
Fail to give way to right	1	235	187	92	121	636
Incorrect turn	0	14	7	3	6	30
Reversing without due care	0	17	15	16	10	58
Follow too closely	1	127	90	45	28	291
Overtake without due care	0	23	9	12	7	51
Disobey traffic lights	0	61	24	26	32	143
Disobey stop sign	1	55	37	34	41	168
Disobey give way sign	0	82	78	36	60	256
Disobey police signal	0	0	1	0	1	2
Disobey railway signal	0	1	0	1	0	2
Incorrect/no signal	0	0	0	0	1	1
Inattention	8	903	523	196	166	1796
No errors	0	1671	1845	952	509	4977
Other	0	1	2	2	1	6
Dangerous driving	1	42	7	3	3	56
DUI	0	23	20	2	2	47
Misjudgement	0	2	4	0	1	7
Vehicle fault	0	11	7	5	3	26
Insecure load	0	2	1	0	0	3
Died/sick/asleep at wheel	0	12	5	4	7	28
Opening/closing door	0	5	7	4	2	18
Brake failure	0	3	0	1	0	4
Broken windscreen	0	0	0	0	0	0
	14	3682	3091	1529	1136	9452

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
APPARENT ERROR BY AGE GROUP BY YEAR**

N=53802

	1988					Total
	0-15	16-25	26-40	41-55	56-97	
Excessive speed	2	156	55	18	2	233
Fail to stand	0	144	122	77	99	442
Fail to keep left	0	36	29	15	10	90
Change lanes to endanger	0	33	22	11	15	81
Fail to give way to right	0	163	128	68	101	460
Incorrect turn	0	7	8	7	10	32
Reversing without due care	0	19	17	15	15	66
Follow too closely	0	122	111	50	35	318
Overtake without due care	0	29	22	11	9	71
Disobey traffic lights	0	52	40	25	28	145
Disobey stop sign	0	36	43	23	29	131
Disobey give way sign	0	45	66	43	63	217
Disobey police signal	0	0	0	0	0	0
Disobey railway signal	0	2	0	0	1	3
Incorrect/no signal	0	0	1	1	0	2
Inattention	2	806	480	197	194	1679
No errors	1	1430	1594	908	450	4383
Other	0	2	0	1	0	3
Dangerous driving	0	45	12	5	2	64
DUI	1	16	22	5	2	46
Misjudgement	0	0	1	1	0	2
Vehicle fault	0	6	7	2	5	20
Insecure load	0	1	0	0	0	1
Died/sick/asleep at wheel	0	13	11	2	8	34
Opening/closing door	0	4	7	7	2	20
Brake failure	0	2	1	0	1	4
Broken windscreen	0	0	0	0	0	0
	6	3169	2799	1492	1081	8547

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
APPARENT ERROR BY AGE GROUP BY YEAR

N=53802

	1989					Total
	0-15	16-25	26-40	41-55	56-97	
Excessive speed	3	173	67	21	15	279
Fail to stand	0	153	110	75	97	435
Fail to keep left	0	52	37	15	9	113
Change lanes to endanger	0	36	21	12	10	79
Fail to give way to right	0	169	135	80	107	491
Incorrect turn	1	6	4	1	0	12
Reversing without due care	2	31	23	9	11	76
Follow too closely	0	96	72	21	23	212
Overtake without due care	0	28	19	8	5	60
Disobey traffic lights	0	47	29	21	26	123
Disobey stop sign	0	44	44	21	51	160
Disobey give way sign	1	56	59	41	68	225
Disobey police signal	0	0	0	0	0	0
Disobey railway signal	0	0	1	0	1	2
Incorrect/no signal	0	0	0	0	0	0
Inattention	8	744	455	191	174	1572
No errors	0	1374	1617	806	454	4251
Other	1	5	3	0	0	9
Dangerous driving	2	68	24	1	2	97
DUI	0	11	14	4	2	31
Misjudgement	0	0	0	0	1	1
Vehicle fault	0	13	10	8	3	34
Insecure load	0	0	1	1	0	2
Died/sick/asleep at wheel	0	15	12	6	5	38
Opening/closing door	0	1	11	7	1	20
Brake failure	0	0	1	0	0	1
Broken windscreen	0	0	0	0	0	0
	18	3122	2769	1349	1065	8323

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1990)*
APPARENT ERROR BY AGE GROUP BY YEAR**

N=53802

	1990					Total
	0-15	16-25	26-40	41-55	56-97	
Excessive speed	5	143	75	20	8	251
Fail to stand	0	136	100	81	88	405
Fail to keep left	0	41	27	16	8	92
Change lanes to endanger	0	17	23	15	10	65
Fail to give way to right	0	164	151	73	107	495
Incorrect turn	0	11	5	4	1	21
Reversing without due care	0	21	35	14	11	81
Follow too closely	0	107	61	21	23	212
Overtake without due care	0	36	21	14	9	80
Disobey traffic lights	0	36	42	23	24	125
Disobey stop sign	1	50	36	25	49	161
Disobey give way sign	0	46	55	40	75	216
Disobey police signal	0	0	0	0	0	0
Disobey railway signal	0	1	0	0	1	2
Incorrect/no signal	0	0	2	1	0	3
Inattention	9	703	435	181	146	1474
No errors	0	1297	1536	881	424	4138
Other	0	4	3	1	1	9
Dangerous driving	1	44	23	5	3	76
DUI	1	18	13	2	1	35
Misjudgement	0	0	2	1	2	5
Vehicle fault	0	21	7	8	6	42
Insecure load	0	0	0	0	0	0
Died/sick/asleep at wheel	1	18	13	4	8	44
Opening/closing door	0	3	9	7	5	24
Brake failure	0	2	1	1	4	8
Broken windscreen	0	0	0	1	0	1
	18	2919	2675	1439	1014	8065

Total missing cases = 12939

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

3 SOUTH AUSTRALIAN CASUALTY FILE (1986-1990)- DAY/NIGHT COMPARISONS

3.1 INTRODUCTION

Bivariate analyses which showed drivers who were involved in reported casualty crashes in NSW for the years 1986 to 1990 split by age group appeared 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 South Australian, New South Wales and Victorian databases and enable the reader to make some direct comparisons between the three states.

3.2 TABLES - DAY/NIGHT COMPARISONS

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SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
SEVERITY OF CRASH BY AGE GROUP

		DAY					
		0-15	16-25	26-40	41-55	56-97	Total
Injury		23	7174	7585	4013	3300	22095
Fatal		1	126	95	64	84	370
		24	7300	7680	4077	3384	22465

		NIGHT					
		0-15	16-25	26-40	41-55	56-97	Total
Injury		23	5060	2962	1216	609	9870
Fatal		4	216	126	53	26	425
		27	5276	3088	1269	635	10295

Total missing cases = 10394

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
NUMBER OF UNITS INVOLVED BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
1	10	399	308	157	151	1025
2	9	5430	5730	3021	2553	16743
3	5	1088	1221	671	506	3491
4		292	313	162	120	887
5		60	73	44	33	210
6		16	22	11	10	59
More than 6		15	13	11	11	50
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
1	6	495	215	75	20	811
2	15	3727	2230	898	477	7347
3	3	753	469	209	107	1541
4	1	220	129	61	22	433
5	1	48	34	19	6	108
6	1	22	5	5	1	34
More than 6		11	6	2	2	21
	27	5276	3088	1269	635	10295

Total missing cases = 10394

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
NUMBER OF UNIT CASUALTY BY AGE GROUP

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
0	4	2841	3114	1646	1358	8963
1	12	3627	3676	2012	1577	10904
2	7	648	634	323	382	1994
3	1	134	186	73	45	439
4 or more	0	50	70	23	22	165
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
0	8	1558	1086	510	225	3387
1	11	2576	1508	566	319	4980
2	5	802	341	132	82	1362
3	1	235	119	47	9	411
4 or more	2	105	34	14	0	155
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
NUMBER OF CASUALTIES BY AGE GROUP

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
1	15	5335	5646	3012	2376	16384
2	6	1370	1330	729	699	4134
3	3	394	486	236	210	1329
4 or more	0	201	218	100	99	618
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
1	16	3330	2078	835	418	6677
2	6	1231	625	262	137	2261
3	2	476	255	108	55	896
4 or more	3	239	130	64	25	461
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
DAY OF WEEK BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Monday	2	1045	1136	662	466	3311
Tuesday	3	1091	1210	604	521	3429
Wednesday	1	1065	1224	660	577	3527
Thursday	4	1130	1305	679	598	3716
Friday	3	1088	1248	656	540	3535
Saturday	6	1035	859	458	352	2710
Sunday	5	846	698	358	330	2237
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Monday	2	420	258	132	58	870
Tuesday	3	448	323	157	79	1010
Wednesday	2	504	336	154	91	1087
Thursday	4	681	475	203	113	1476
Friday	4	938	623	254	105	1924
Saturday	7	1226	562	217	91	2103
Sunday	5	1059	511	152	98	1825
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
WEEKDAY VERSUS WEEKEND BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Weekday	13	5419	6123	3261	2702	17518
Weekend	11	1881	1557	816	682	4947
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Weekday	15	2991	2015	900	446	6367
Weekend	12	2285	1073	369	189	3928
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
TIME PERIOD BY AGE GROUP

	DAY					Total
	0-15	16-25	26-40	41-55	56-98	
6 am - 12 pm	6	2672	3072	1716	1324	8790
12 pm - 6 pm	18	4628	4608	2361	2060	13675
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-98	
6 pm - 12 am	12	1615	660	148	50	2485
12 am - 6 am	15	3661	2428	1121	585	7810
	27	5276	3088	1269	635	10295

Missing cases = 10394

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
TIME PERIOD BY WEEKDAY/WEEKEND BY AGE GROUP

		DAY					Total
		0-15	16-25	26-40	41-55	56-98	
Weekday:	6 am - 12 pm	4	2099	2512	1413	1058	7086
	12 pm - 6 pm	9	3320	3611	1848	1644	10432
Weekend:	6 am - 12 pm	2	573	560	303	266	1704
	12 pm - 6 pm	9	1308	997	513	416	3243
		24	7300	7680	4077	3384	22465

		NIGHT					Total
		0-15	16-25	26-40	41-55	56-98	
Weekday:	12 am - 6 am	7	512	278	73	24	894
	6 pm - 12 am	8	2479	1737	827	422	5473
Weekend:	12 am - 6 am	5	1103	382	75	26	1591
	6 pm - 12 am	7	1182	691	294	163	2337
		27	5276	3088	1269	635	10295

Missing cases = 10394

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
METRO/RURAL BY AGE GROUP**

		DAY					
		0-15	16-25	26-40	41-55	56-98	Total
Metro		10	5741	6253	3339	2538	17881
Rural		14	1559	1427	738	846	4584
		24	7300	7680	4077	3384	22465

		NIGHT					
		0-15	16-25	26-40	41-55	56-98	Total
Metro		14	3868	2353	965	479	7679
Rural		13	1408	735	304	156	2616
		27	5276	3088	1269	635	10295

Missing cases = 10394

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
INTERSECTION TYPE BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Interchange	0	9	12	8	4	33
Cross road	1	1763	2035	1100	1007	5906
Y-junction	0	55	43	26	13	137
T-junction	6	2097	2256	1150	978	6487
Multiple	0	66	92	47	38	243
Rail crossing	0	5	6	1	2	14
	7	3995	4444	2332	2042	12820

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Interchange	0	2	2	2	0	6
Cross road	3	1190	720	342	189	2444
Y-junction	0	28	30	2	1	61
T-junction	3	1193	775	328	179	2478
Multiple	0	38	25	15	9	87
Rail crossing	0	3	2	1	0	6
	6	2454	1554	690	378	5082

Total missing cases = 25301

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

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

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
5-60	13	6007	6410	3416	2745	18591
70-80	1	343	363	182	131	1020
100	0	83	89	39	47	258
110	10	830	786	416	447	2489
	24	7263	7648	4053	3370	22358

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
5-60	16	4067	2355	975	503	7916
70-80	3	255	158	68	32	516
100	0	68	44	13	11	136
110	8	844	515	204	88	1659
	27	5234	3072	1260	634	10227

Total missing cases = 10618

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
ROAD FEATURE BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Straight road	17	6547	7083	3761	3143	20551
Curve or bend	7	708	565	288	227	1795
Bridge, culvert or causeway	0	45	32	28	14	119
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Straight road	23	4427	2655	1137	583	8825
Curve or bend	4	816	412	124	50	1406
Bridge, culvert or causeway	0	33	21	8	2	64
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
ROAD CONDITION (SEALED VS. UNSEALED) READING BY AGE GROUP

		DAY					
		0-15	16-25	26-40	41-55	56-97	Total
Sealed		18	6915	7376	3914	3260	21483
Unsealed		6	385	304	163	124	982
		24	7300	7680	4077	3384	22465

		NIGHT					
		0-15	16-25	26-40	41-55	56-97	Total
Sealed		22	4949	2931	1206	603	9711
Unsealed		5	327	157	63	32	584
		27	5276	3088	1269	635	10295

Total missing cases = 10443

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
TRAFFIC CONTROLS BY AGE GROUP

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Traffic signals	0	1111	1273	761	533	3678
Rail crossing	0	15	19	10	10	54
Stop sign	1	312	392	211	245	1161
Give way sign	2	558	636	319	371	1886
No control	21	5223	5253	2724	2185	15406
Roundabout	0	78	101	50	37	266
	24	7297	7674	4075	3381	22451

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Traffic signals	1	852	565	256	138	1812
Rail crossing	0	19	8	3	0	30
Stop sign	1	181	130	52	30	394
Give way sign	2	269	164	99	59	593
No control	23	3903	2191	854	403	7374
Roundabout	0	51	29	5	5	90
	27	5275	3087	1269	635	10293

Total missing cases = 10459

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
SEX OF DRIVER BY AGE GROUP**

		DAY					
		0-15	16-25	26-40	41-55	56-97	Total
Male		21	4326	4130	2430	2346	13253
Female		3	2973	3550	1645	1037	9208
		24	7299	7680	4075	3383	22461

		NIGHT					
		0-15	16-25	26-40	41-55	56-97	Total
Male		19	3839	2180	884	491	7413
Female		8	1437	908	385	144	2882
		27	5276	3088	1269	635	10295

Total missing cases = 10447

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
FORENSIC BAC READING BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
.05 or less	7	2690	2490	1367	1379	7933
more than .05	1	160	140	46	48	395
	8	2850	2630	1413	1427	8328

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
.05 or less	7	1806	871	432	256	3372
more than .05	7	987	560	126	46	1726
	14	2793	1431	558	302	5098

Total missing cases = 29777

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
LICENCE TYPE BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Learner's permit		101	22	7		130
Provisional		1009	74	12	4	1099
Full		4845	6486	3496	2817	17644
Unlicenced	24	61	24	8	2	119
	24	6016	6606	3523	2823	18992

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Learner's permit		85	10	1		96
Provisional		721	22	7	2	752
Full		2988	2270	976	491	6725
Unlicenced	27	114	40	12	1	194
	27	3908	2342	996	494	7767

Total missing cases = 16444

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
VEHICLE DRIVING EXPERIENCE IN YEARS BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Less than 1	1	1141	410	177	61	1790
1	0	946	407	178	85	1616
2	0	914	443	195	123	1675
3	0	675	366	173	105	1319
4	0	504	272	133	86	995
5	0	432	253	117	98	900
More than 5	0	1064	3982	2247	1899	9192
	1	5676	6133	3220	2457	17487

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Less than 1	1	688	180	36	7	912
1	0	633	126	46	15	820
2	0	596	141	48	14	799
3	0	482	101	51	20	654
4	0	294	67	25	19	405
5	0	238	61	35	12	346
More than 5	0	584	1339	607	331	2861
	1	3515	2015	848	418	6797

Total missing cases = 18919

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
TOTAL DRIVING EXPERIENCE IN YEARS BY AGE GROUP

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Less than 1	0	701	40	9	3	753
1	0	859	81	6	6	952
2	0	749	85	13	2	849
3	0	621	77	11	5	714
4	0	579	100	8	4	691
5	0	1598	5807	3196	2470	13071
More than 5	1	627	30	11	0	669
	1	5734	6220	3254	2490	17699

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Less than 1	1	471	12	2	1	487
1	0	629	19	7	0	655
2	0	540	24	4	3	571
3	0	381	23	2	1	407
4	0	312	21	4	2	339
5	0	826	1933	860	420	4039
More than 5	0	391	16	2	1	410
	1	3550	2048	881	428	6908

Total missing cases = 18596

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

SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
STATE OF LICENCE ISSUE BY AGE GROUP

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
NSW	0	47	59	29	25	160
VIC	0	75	102	45	43	265
QLD	0	19	28	17	9	73
SA	0	6182	6686	3582	2911	19361
WA	0	20	29	10	12	71
TAS	0	6	2	2	2	12
NT	0	20	21	8	3	52
ACT	0	1	12	2	2	17
Overseas	0	27	46	11	7	91
	0	6397	6985	3706	3014	20102

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
NSW	0	31	23	13	4	71
VIC	0	55	36	11	4	106
QLD	0	11	16	0	1	28
SA	0	4142	2458	1055	534	8189
WA	0	20	11	3	1	35
TAS	0	2	3	1	0	6
NT	0	6	13	1	1	21
ACT	0	4	2	3	1	10
Overseas	0	15	15	3	2	35
	0	4286	2577	1090	548	8501

Total missing cases = 14600

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
YEAR OF MANUFACTURE BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
< 1971	2	630	437	185	227	1481
1971-1975	4	1310	977	461	393	3145
1976-1980	2	1451	1421	686	574	4134
1981-1985	8	1023	1686	946	699	4362
1986-1990	1	321	616	412	261	1611
	17	4735	5137	2690	2154	14733

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
< 1971	3	560	227	71	44	905
1971-1975	6	989	478	156	72	1701
1976-1980	5	966	536	232	93	1832
1981-1985	3	652	565	247	145	1612
1986-1990	2	171	215	123	33	544
	19	3338	2021	829	387	6594

Total missing cases = 21876

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
NATURAL LIGHT CONDITIONS BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Daylight	24	6985	7391	3937	3299	21636
Dawn/Dusk	0	51	61	27	15	154
Night	0	264	228	113	70	675
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Daylight	6	722	545	276	168	1717
Dawn/Dusk	1	82	44	15	14	156
Night	20	4472	2499	978	453	8422
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
 WEATHER BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Raining	2	635	673	385	254	1949
Not raining	22	6665	7007	3692	3130	20516
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Raining	4	501	307	132	63	1007
Not raining	23	4775	2781	1137	572	9288
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
ROAD CONDITION (WET/DRY) READING BY AGE GROUP**

		DAY					
		0-15	16-25	26-40	41-55	56-97	Total
Wet		5	1191	1216	662	447	3521
Dry		19	6109	6464	3415	2937	18944
		24	7300	7680	4077	3384	22465

		NIGHT					
		0-15	16-25	26-40	41-55	56-97	Total
Wet		4	1012	581	222	94	1913
Dry		23	4264	2507	1047	541	8382
		27	5276	3088	1269	635	10295

Total missing cases = 10443

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
VEHICLE MOVEMENT BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Right turn	2	865	828	458	608	2761
Left turn	2	186	240	126	108	662
U turn	1	98	87	61	91	338
Swerving	3	278	180	91	89	641
Reversing	0	59	56	44	38	197
Stopped on carriageway	0	972	1481	877	391	3721
Straight ahead	15	4502	4414	2184	1844	12959
Entering private driveway	0	51	71	45	34	201
Leaving private driveway	1	81	68	37	55	242
Parked	0	83	152	94	68	397
Parking	0	15	12	8	5	40
Unparking	0	20	26	10	23	79
Overtaking	0	86	63	41	30	220
Other	0	4	2	1	0	7
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Right turn	2	586	300	145	131	1164
Left turn	0	127	59	25	12	223
U turn	0	73	28	11	16	128
Swerving	2	354	136	41	20	553
Reversing	2	38	12	9	5	66
Stopped on carriageway	0	370	330	180	47	927
Straight ahead	20	3453	2011	752	361	6597
Entering private driveway	0	28	19	9	3	59
Leaving private driveway	0	27	13	6	7	53
Parked	0	162	154	79	27	422
Parking	0	7	4	1	2	14
Unparking	1	11	6	4	2	24
Overtaking	0	40	15	5	2	62
Other	0	0	1	2	0	3
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
CRASH TYPE BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Rear end	1	2326	2883	1514	885	7609
Hit fixed object	7	512	320	143	170	1152
Side swipe	0	502	519	284	237	1542
Right angle	4	1918	2047	1081	1144	6194
Head on	1	291	273	168	113	846
Hit pedestrian	1	454	465	226	185	1331
Roll over	10	369	270	138	135	922
Right turn	0	649	607	375	372	2003
Hit parked vehicle	0	158	182	96	98	534
Hit animal	0	9	7	4	2	22
Hit object on road	0	4	5	4	4	17
Left road - out of control	0	82	68	29	35	214
Other	0	26	34	15	4	79
	24	7300	7680	4077	3384	22465

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Rear end	1	899	674	329	115	2018
Hit fixed object	11	1200	462	114	44	1831
Side swipe	0	236	147	41	31	455
Right angle	3	963	659	299	207	2131
Head on	2	235	200	60	39	536
Hit pedestrian	3	313	172	85	23	596
Roll over	6	431	181	73	19	710
Right turn	0	461	245	128	89	923
Hit parked vehicle	1	339	261	103	57	761
Hit animal	0	10	15	15	2	42
Hit object on road	0	7	4	2	1	14
Left road - out of control	0	137	50	10	7	204
Other	0	45	18	10	1	74
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
APPARENT ERROR BY AGE GROUP**

	DAY					Total
	0-15	16-25	26-40	41-55	56-97	
Excessive speed	6	176	90	29	24	325
Fail to stand	0	320	299	199	280	1098
Fail to keep left	0	107	66	37	30	240
Change lanes to endanger	0	78	56	29	50	213
Fail to give way to right	1	507	449	255	354	1566
Incorrect turn	1	19	18	13	19	70
Reversing without due care	1	51	56	39	37	184
Follow too closely	1	299	250	114	89	753
Overtake without due care	0	73	51	32	27	183
Disobey traffic lights	0	103	70	59	83	315
Disobey stop sign	1	104	121	76	138	440
Disobey give way sign	1	147	210	128	199	685
Disobey police signal	0	0	1	0	1	2
Disobey railway signal	0	2	1	1	3	7
Incorrect/no signal	0	0	1	0	1	2
Inattention	11	1447	1047	474	541	3520
No errors	0	3754	4779	2538	1457	12528
Other	0	7	2	4	1	14
Dangerous driving	1	50	21	4	4	80
DUI	0	10	10	2	1	23
Misjudgement	0	1	8	1	3	13
Vehicle fault	0	19	27	13	16	75
Insecure load	0	2	0	1	0	3
Died/sick/asleep at wheel	0	11	18	8	19	56
Opening/closing door	0	11	27	20	6	64
Brake failure	0	2	2	1	1	6
	24	7300	7680	4077	3384	22465

**SOUTH AUSTRALIAN CASUALTY CRASH FILE (1986-1989)*
APPARENT ERROR BY AGE GROUP**

	NIGHT					Total
	0-15	16-25	26-40	41-55	56-97	
Excessive speed	4	440	120	31	4	599
Fail to stand	0	244	118	69	61	492
Fail to keep left	0	82	57	15	10	164
Change lanes to endanger	0	29	14	5	3	51
Fail to give way to right	1	218	124	51	66	460
Incorrect turn	0	11	7	1	0	19
Reversing without due care	2	35	11	8	5	61
Follow too closely	0	108	73	22	8	211
Overtake without due care	0	33	10	5	1	49
Disobey traffic lights	0	106	59	24	18	207
Disobey stop sign	1	70	38	18	12	139
Disobey give way sign	1	87	48	36	36	208
Disobey police signal	0	0	0	0	0	0
Disobey railway signal	0	2	0	0	0	2
Incorrect/no signal	0	2	0	1	0	3
Inattention	11	1604	753	238	104	2710
No errors	2	1957	1532	714	292	4497
Other	2	6	7	1	0	16
Dangerous driving	2	122	33	6	4	167
DUI	1	56	55	14	5	131
Misjudgement	0	2	0	0	0	2
Vehicle fault	0	22	7	2	1	32
Insecure load	0	1	2	0	0	3
Died/sick/asleep at wheel	0	34	17	7	4	62
Opening/closing door	0	2	3	1	1	7
Brake failure	0	3	0	0	0	3
	27	5276	3088	1269	635	10295

Total missing cases = 10443

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

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