CONTENTS

INTRODUCTION

Background to the report

This report presents an overview of reported road traffic crashes in Queensland for the year ended 31 December 2001 in the context of the previous five years.

The information in this report is based on data contained in the Queensland Road Crash Information System maintained by Queensland Transport's Land Transport & Safety Division. Additional data supplied by the Queensland Government Chemical Laboratory is used for the analysis of alcohol involvement in road crashes, in particular those involving a fatality. Validation and enhancement of the raw data which originates from the Queensland Police Service Traffic Incident Report System (TIRS) is completed by the Road Crash Database Group. This group provides a statistical service for the Land Transport & Safety Division and is a unit located within the Queensland Treasury Office of Economic and Statistical Research.

Since 1991, Queensland Transport has been the official source for road traffic crash statistics. The implementation of the Australian Road Rules in Queensland in December 1999 has affected the figures in this report. In particular, the definition of a “property damage only” crash was altered to include crashes where the damage was greater than $2500 to property other than vehicles or at least one vehicle was towed away.

Amendments in 2000 to the *Motor Accident Insurance Act (MAIA)1994* have also affected the figures in this report. The amendments changed the requirement for notification of crashes. Prior to October 2000, a motor accident insurance claimant in a road crash involving an injury was not required, under the MAIA 1994, to report the crash to police. The 2000 amendment required reporting in line with the *Transport Operations (Road Use Management – Road Rules) Regulation 1999.*

There has been a significant increase in the number of reported crashes in the categories of minor injury, medical treatment and hospitalised in 2001 as a result of the MAIA amendments. This means that there is a series break between 2000 and 2001 for these crash categories. Comparisons of numbers of crashes and injured people between 2001 and previous years may not be reliable.

All crashes and casualties reported in this report are dated in terms of the actual crash dates. Because of this and the fact that some non-fatal crashes may take 12 months or longer for validation, crash data for prior years will contain a percentage of changed data as late reports continue to be entered.

Figures presented in the body of the report are based on the crashes validated in the Queensland Road Crash Information System prior to April 2002. Figures presented in the appendices are based on the crashes validated in the Queensland Road Crash Information System prior to August 2002. Therefore some figures in this report may differ slightly between the two sections.

Main features of road traffic crashes in Queensland 2001

- Queensland's road toll for 2001 was 324 fatalities. This was seven fatalities (or two per cent) more than for 2000. The 2001 toll was seven fatalities (or two per cent) lower than the previous five-year average of 331.

- In comparison with Queensland's two per cent increase, the Australian road toll decreased by three per cent when compared with the previous year. The Australian toll for 2001 was 1756, a decrease of 62 fatalities on the 2000 toll. Queensland's 8.9 road fatalities per 100,000 population was below the national figure of 9.1 and the third lowest of any Australian state (behind New South Wales at 8.2 and Western Australia at 8.6).

- Young adult road users continue to be over-represented in road fatalities. In 2001, road users aged between 17 and 20 years experienced fatality rates per 100,000 persons of almost three times the average for Queensland. Road users aged 21 to 24 and 25 to 29 were also over-represented although at a much lower rate per 100,000 persons.

- Older road users were also over-represented in the 2001 road toll. Road users aged 60 and over had fatality rates per 100,000 persons of almost one and a half times the Queensland average.

- Based on police opinion of the cause of traffic crashes, alcohol/drugs was the largest contributor to fatal crashes in 2001 (28 per cent of fatal crashes). As in previous years, disregard for traffic rules was the largest contributor to all reported crashes (38 per cent). At 28 per cent, disregard for traffic rules was the second largest contributor to fatal crashes.

- Although speed was a contributing factor in five per cent of all reported crashes, it was judged to contribute to 17 per cent of fatal crashes in 2001 for which it was the fourth most often cited contributing factor.

- Of the 51 pedestrian fatalities in 2001, 29 (or 57 per cent) were killed whilst attempting to cross a road with the majority of these occurring where there was no traffic control.

- In regard to the 21503 road crashes on Queensland roads in 2001, by far the majority (13253 or 62 per cent) were multi-vehicle crashes.

- The majority (66 per cent) of single vehicle fatal crashes in 2001 involved vehicles hitting objects. The actual number of "hit object" crashes has increased when compared to 2000.

- During 2001 the highest number of fatal crashes occurred on Friday or Saturday. Over 36 per cent of fatal crashes occurred on these days. This was also reflected in all crashes where these two days equated to 31 per cent of all crashes.

- Forty-seven percent of all crashes occurred within the greater Brisbane area (Brisbane City and Brisbane Statistical Division) with the majority of the rest occurring in rural Queensland. For fatal crashes, 63 per cent occurred in rural Queensland.

Road Crash Database

Road crash data plays a major role in the road safety planning and action of major agencies in Queensland and major developments have occurred in its use in recent years.

Queensland Transport provides a range of analysis services using the road crash data. As well as the present report, road crash data is used to provide crash profile reports, on request, on specific crash categories. Crash data is also used to evaluate the effectiveness of all major countermeasures in Queensland (see Chapter 1 of this report) so as to influence program development.

The Department of Main Roads takes core data from the road crash data system operated by Queensland Transport and adds further site information to enable better planning for road safety engineering.

1. ROAD TOLL IN CONTEXT

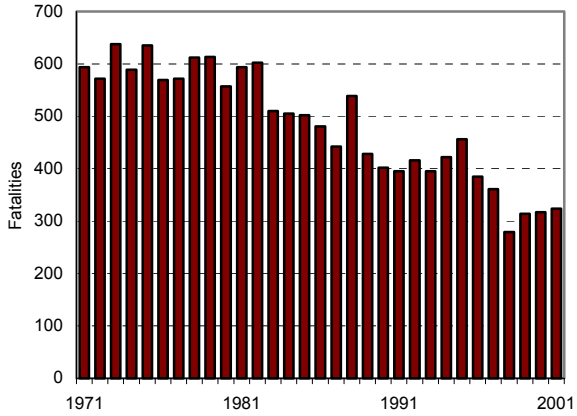
In this section, road traffic crashes for a range of severities in Queensland during 2001 are analysed. The analysis compares 2001 crashes (i) with past trends, (ii) with other states of Australia and (iii) in terms of population growth and economic activity. Finally, the key road safety initiatives of the Queensland Road Safety Action Plan are evaluated and future actions to reduce the Queensland road toll are summarised.

1.1 Road fatality trends

A total of 324 people died on Queensland roads during 2001. This represents an increase of seven fatalities (or 2.2 per cent) on the 2000 road toll. The 2001 road toll was seven fatalities (or 2.1 per cent) lower than the average number of fatalities for the previous five years, of 331.

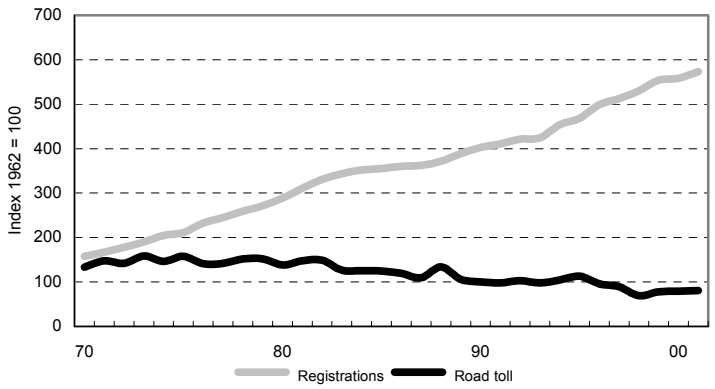
Figure 1.1 shows the longer-term trend in Queensland's road toll. Since the mid-1970s the road toll has been progressively declining. Particularly from 1988, the number of road fatalities has reverted to low levels not experienced since the early 1960s. Between 1989 and 1995 fatalities stabilised within the range of 456 (highest in 1995) and 395 (lowest in 1991). Since 1995, road tolls have declined with the1998 toll being the lowest in Queensland since 1955. Whilst the 2001 toll was an increase over the historically low 1998, it was still lower than the tolls in the late 1950's.

Fig. 1.1: Annual road toll
Queensland 1971-2001



The general decline in the Queensland road toll has been achieved despite a steadily rising population and an escalation in the number of registered motor vehicles. Figure 1.2, which charts the road toll and motor vehicle registrations since 1970, shows the divergence of trends.

Fig. 1.2: Road toll and motor vehicle registration trends
Queensland 1970-2001



Fatalities in 2001 were 45 per cent below the 1971 toll of 594 fatalities, but vehicle registrations in 2001 were almost three and a half times the 1971 level (see Table 1.1). From the early 1960s, annual road toll figures increased until the mid-1970s, after which a substantial decrease occurred. This decline was achieved despite a continuing strong increase in the number of motor vehicles registered.

A number of road safety initiatives introduced since 1971 have contributed to the reduction in road fatalities, particularly:

- compulsory seat belt wearing for occupants of cars (1972);
- reduction of illegal blood alcohol levels to 0.05 per cent (1982);
- introduction of Random Breath Testing (1988);
- introduction of Random Road Watch (1991);
- compulsory helmet wearing for bicyclists (1991);
- introduction of Speed Cameras (1997); and
- introduction of 50 km/h speed limits on local streets (1999).

As shown in Table 1.1, the fatality rates relative to both population and vehicle registration have declined significantly since 1971. Since that year the fatality rate based on population has declined by more than two-thirds and the rate based on number of vehicles on register has fallen over 85 per cent. Approximately 8.9 persons per 100,000 population died on Queensland roads in 2001 in contrast to 31.7 in 1971. Further, there were 1.3 road fatalities per 10,000 Queensland vehicles on register in 2001 in contrast to 8.2 in 1971.

Table 1.1: Fatality rates per head of population and vehicles registered Queensland 1971 to 2001

Year	Road Toll	Population * ('000)	Fatality rate per 100,000 population	Vehicles on register ('000)	Fatality rate per 10,000 vehicles
1971	594	1874.9	31.7	726.5	8.2
1976	569	2110.4	27.0	1012.2	5.6
1981	594	2387.9	24.9	1355.6	4.4
1986	481	2648.5	18.2	1567.4	3.1
1991	395	2999.9	13.2	1787.0	2.2
1996	385	3354.7	11.5	2171.9	1.8
2001	324	3642.4	8.9	2495.6	1.3

* ABS Cat. No. 3201.0

1.2 Road casualty trends

Casualties from road traffic crashes on Queensland roads totalled 17,825 in 2001. This is a significant increase from 2000. The increase is due to legislation changes regarding Compulsory Third Party insurance requiring that all injuries from a casualty crash be reported. Previously, injured persons did not need to report an incident to receive injury compensation. The 2001 figures show all crash casualties, including those reported under CTP legislation. Therefore the 2001 casualty figure is difficult to compare to previous years, except for fatalities.

Table 1.2: Severity of road crash casualties Queensland 1996-2001

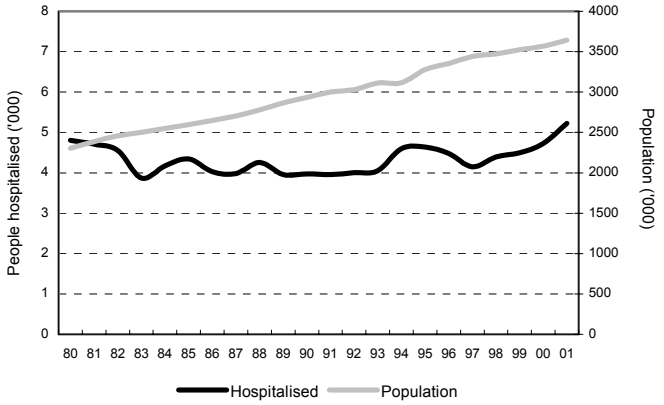
Severity	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fatal	385	2%	360	2%	279	2%	314	2%	317	2%	324	2%
Hospitalisation	4481	28%	4146	28%	4397	29%	4501	30%	4786	31%	5225	29%
Medical treatment required	6836	43%	6483	43%	6323	42%	6250	42%	6429	42%	7595	43%
Other injury	4131	26%	3928	26%	4008	27%	3839	26%	3931	25%	4681	26%
Total	**15833**	**100%**	**14917**	**100%**	**15007**	**100%**	**14904**	**100%**	**15463**	**100%**	**17825**	**100%**

As indicated in Table 1.2:

- the proportion of casualties in each severity category remained roughly the same for both the five year trend and in comparison to 2000;
- 31 per cent of all road crash casualties in 2001 were either killed or admitted to hospital; and
- medical treatment injuries accounted for the greatest percentage of all casualties in 2001 (43 per cent).

Figure 1.3 charts the recent trend of the more severe road injuries (defined as persons requiring admission to hospital) compared with state population data.

Fig. 1.3: Road user hospitalisation and population trends Queensland 1980-2001



As Figure 1.3 shows, the number of persons hospitalised due to road crashes declined between 1980 and 1991, while the Queensland population increased each year. However hospitalisations increased from 1991 to 1996 at a higher rate than that for population growth. This trend reversed from 1994 to 1997 but has reverted to an increase since 1998.

1.3 Trends in total reported crashes

There were 21503 reported crashes on Queensland roads in 2001. This represents an increase of eight per cent on the 2000 figure and an eight per cent increase on the average for the previous five years. This is also affected by the change in CTP legislation, described in section 1.2.

Table 1.3 shows that the proportion of crashes in each severity category has remained relatively constant over the period 1996 to 2001. The fatality rate per 100 crashes has dropped from 1.6 in 1996 to 1.4 in 2001.

Table 1.3: Severity of road crashes Queensland 1996-2001

Severity	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fatal	338	2%	321	2%	257	1%	273	1%	275	1%	296	1%
Hospitalisation	3559	17%	3328	17%	3518	18%	3565	18%	3818	19%	4154	19%
Medical treatment required	4936	24%	4762	25%	4611	24%	4570	23%	4778	24%	5696	26%
Other injury	2872	14%	2697	14%	2757	14%	2626	13%	2735	14%	3296	15%
Property damage only	9211	44%	8235	43%	8418	43%	8504	44%	8313	42%	8061	37%
Total	**20916**	**100%**	**19343**	**100%**	**19561**	**100%**	**19538**	**100%**	**19919**	**100%**	**21503**	**100%**

Table 1.3 also shows there were 296 fatal crashes in 2001, an increase of 21 (or eight per cent) on 2000 and an increase of three per cent on the average for the previous five years.

Table 1.4 presents data on road crashes for 1996 to 2001 by the level of vehicle damage.

Table 1.4: Extent of vehicle damage in road crashes*
Queensland 1996-2001

Overall damage	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Vehicle towed away	17204	82%	15865	82%	15957	82%	16080	82%	16375	82%	17107	80%
Minor damage	2731	13%	2545	13%	2606	13%	2553	13%	2587	13%	3302	15%
No damage	633	3%	628	3%	671	3%	625	3%	659	3%	703	3%
Unit not a vehicle	286	1%	251	1%	255	1%	229	1%	238	1%	298	1%
Not stated	62	0%	54	0%	72	0%	51	0%	60	0%	93	0%
Total	**20916**	**100%**	**19343**	**100%**	**19561**	**100%**	**19538**	**100%**	**19919**	**100%**	**21503**	**100%**

* Based on the most severe vehicle damage in each crash

The table indicates that:

- tow-away crashes declined in 1997 but have been rising since then;
- in 80 per cent of reported road crashes, the damage is extensive enough for at least one vehicle to be towed away; and
- the proportion of vehicles in each damage category has remained constant since 1995.

A further breakdown of vehicles in each damage category arising from reported crashes in 2001 is shown in Table 1.5.

Table 1.5: Extent of vehicle property damage in road crashes*
Queensland 2001

Damage	No.	%
Extensive, unrepairable	2772	13%
Major - towed away	6154	29%
Moderate - towed away	8181	38%
Moderate - vehicle driveable	1471	7%
Minor damage	1831	9%
No damage	703	3%
Unit not a vehicle	298	1%
Not stated	93	0%
Total	**21503**	**100%**

* Based on the most severe vehicle damage in each crash.

1.4 Queensland in relation to Australia

The Australian road toll in 2001 was 1756, a decrease of 65 fatalities on the 2000 toll. Table 1.6 shows that changes to road tolls varied in Australian states from those of 2000. The largest increases were in Tasmania (up 42 per cent) and Victoria (up 11 per cent) whilst the largest decrease occurred in Western Australia (down 23 per cent). Queensland had the fourth lowest per capita toll of all states only bettered by ACT, NSW and WA. Australian Capital Territory had the lowest per capita toll at 5.09 fatalities per 100,000 population.

As indicated previously, Queensland's 8.93 road fatalities per 100,000 population and 1.3 road fatalities per 10,000 motor vehicles on register were both below the Australian average rates of 9.06 and 1.41 respectively.

Table 1.6: Road toll in 2001 compared with 2000
States and territories of Australia

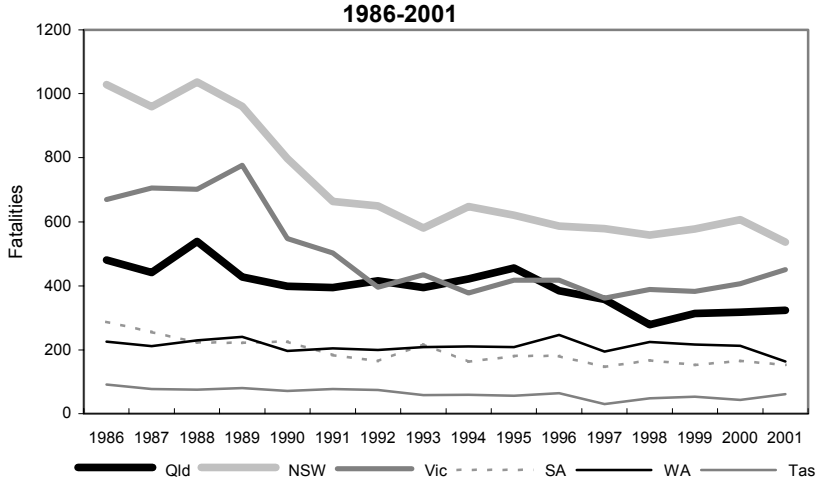
	Fatalities				Fatality rate	
	2001 No.	2000 No.	Variation No.	Variation per cent	per 100,000 population *	per 10,000 vehicles on register **
New South Wales	537	606	-69	-11%	8.22	1.43
Queensland	324	317	7	2%	8.93	1.38
Victoria	451	407	44	11%	9.34	1.36
Western Australia	164	213	-49	-23%	8.59	1.20
South Australia	153	166	-13	-8%	10.18	1.46
Tasmania	61	43	18	42%	12.97	1.84
Northern Territory	50	51	-1	-2%	25.30	4.86
Australian Capital Territory	16	18	-2	-11%	5.09	0.79
Australia	**1756**	**1821**	**-65**	**-4%**	**9.06**	**1.41**

* Based on ABS Cat. No. 3201.0

** Vehicle data supplied by relevant road authorities

To place this situation into a longer-term perspective, Figure 1.4 plots annual road fatalities by state for the period 1986 to 2001.

Fig. 1.4: Annual road fatalities by state
1986-2001



The figure shows that:

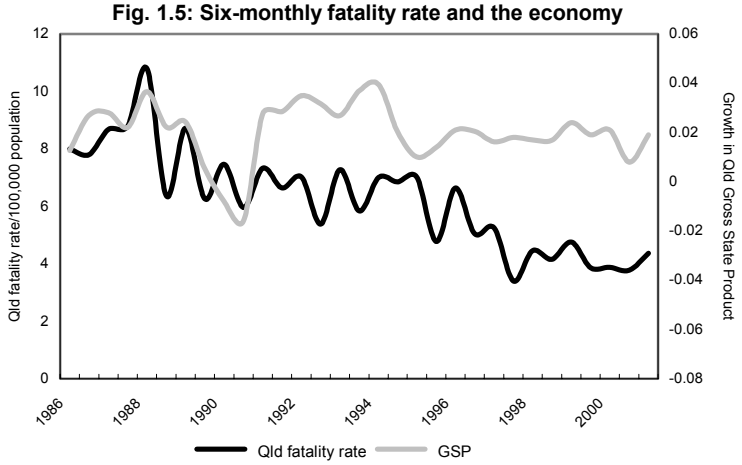
- after a period of relative stability, road fatalities in NSW and Victoria fell significantly from 1988 to 1992;
- the road toll in other jurisdictions remained relatively constant over the period; and
- the Queensland road toll has declined markedly from 1995 to 1998, then leveled off from 1999 to 2001.

1.5 Factors behind the road toll

There is strong evidence that much of Queensland's road toll performance in both the longer (1986 to 1997) and shorter (since 1998) term can be explained by the interaction between the level of traffic activity (crash risk) and traffic safety management (safety measures carried out either by government, as in the Queensland Road Safety Strategy, or others – vehicle manufacturers, individual road users, and so on).

Figure 1.5 illustrates both the longer and shorter term points by comparing Queensland road fatalities with a measure of community (and hence traffic) activity, the Queensland Gross State Product (GSP).

Fig. 1.5: Six-monthly fatality rate and the economy



Road toll and the economy

Concerning the longer term, Figure 1.5 shows that the road toll since 1991 has been lower than for the same level of activity from 1986 to 1990. This suggests (and separate, more rigorous studies support) the concept that the 1990s toll decrease is due to the effect of the measures of the Queensland Road Safety Strategy introduced from 1993 onwards. To name but a few, these measures include compulsory bicycle helmets, red light cameras, random road watch and, in 1997, the implementation of speed cameras.

The year 2001, then, can be seen as a period in which the latest generation of road safety improvements (the Queensland Road Safety Action Plan) combined with a high-risk environment. Previous results would suggest that these factors combined should lead to a somewhat higher road toll and, as reported at the start of this chapter, this is the result that has occurred.

1.6 The major contributors to the 2001 fatal road toll

In this section, over 30 road crash descriptors, which are analysed in more detail in the following chapters, are ranked together in order of their contribution to the entire fatal road toll. By doing this, major contributors to the road toll can be isolated for further consideration.

Table 1.7 shows that of the seven highest-ranked factors involved in fatal road crashes in 2001, none involved the traditional risk factors of speed, alcohol and failure to wear seat belts. The highest ranking factors included such 'good conditions' as alcohol not involved, seat belt used, straight level road and daylight.

Table 1.7: Fatal crash descriptors by characteristic of fatal crashes: per cent of crashes, units or persons involved Queensland 2001

Crash descriptor	% Total	Crash descriptor	% Total
Seat belt used	86%	17-24 years	28%
Alcohol not involved	85%	Speed	20%
Non-intersection	76%	60 years and over	16%
Cars and variants	66%	Alcohol involvement	15%
Weekday	65%	Seatbelt not used	14%
Daylight	60%	Fatigue	14%
25-59 years	58%	Brisbane City	13%
Multi-vehicle	56%	Pedestrians	11%
Built-up area	54%	Uncontrolled intersections	11%
Open road	46%	Heavy freight vehicles	10%
Single vehicle	44%	Motorcycle	6%
Age/inexperience	42%	Rain/wet road	4%
After dark	36%	Bicycles	3%
Disobeyed traffic rules	35%	Vehicle defects	2%
Weekend	35%		

The high levels of these categories of crashes point to the influence of the road and travel environment on fatal crashes. Hence widespread as well as targeted safety programs may be more likely to achieve benefits through greater deterrence.

1.7 Proposed next steps

As discussed above, during the 1990s Queensland has been subject to a wide range of road safety risk factors including Australia's:

- most rapid population growth; and
- strongest economic performance.

However, as outlined above, the road toll has not increased to the extent expected (see Section 1.5). As also outlined this reflects the success of the road safety initiatives discussed above, including those implemented since the release of the 1993 Queensland Road Safety Strategy.

Despite the benefits of these programs, the road toll remains high. Following the success of the 2000/2001 Road Safety Action Plan, the Queensland Government developed the 2002/2003 Queensland Road Safety Action Plan to enhance the measures which were proven to work and to introduce further effective programs.

The 2002/2003 Queensland Road Safety Action Plan Top 10 actions in priority order are presented in Table 1.8.

Table 1.8: Queensland Road Safety Action Plan - Top 10 actions in priority order

Action	Type of crash addressed	Coverage of road toll	Proven crash reductions	Value for money score	Target group
Improve partnerships between road safety stakeholders	All crashes	Medium	Y	High	All road users
Implement the Driver Safety and Education Strategy	All crashes	High	Y	High	Drivers
Enhanced Speed Management Strategy	Speed-related crashes	Medium	Y	High	Drivers
More effective penalties and sanctions	All crashes	Medium	Y	High	All road users
Enhanced drink driving deterrence	All crashes	High	Y	Medium	All road users
Road safety engineering works	All crashes	Low	Y	Medium	All road users
Targeted public education and enforcement campaigns	All crashes	Low	Y	Medium	All road users
Enhance the application of random deterrence-oriented practices	All crashes	High	Y	High	All road users
Promote road safety research	All crashes	High	Y	Medium	All road users
Improve compliance levels with road rules	All crashes	High	Y	High	All road users

These initiatives have been prioritised on the basis of:

- the extent to which they target the total road toll;
- their ability to reduce crashes; and
- their value for money.

Once implemented, it is expected that the Top 10 initiatives will make significant further inroads into the state road toll.

2. CHARACTERISTICS OF ROAD USERS INVOLVED IN CRASHES

2.1 Introduction

Of the 324 road users killed on Queensland roads in 2001, 236 (or 73 per cent) were male and 87 (or 27 per cent) were female. There was one fatality of unknown gender. This represents an increase of three males and an increase of three females over the figures for 2000.

2.2 Trend

The long term trends in fatalities by age group and gender are shown in Table 2.1. This table shows that while there is a slight increase in fatalities, the total fatalities in age groups of both genders have fallen since 1996.

Table 2.1: Annual trends in fatalities by age group and gender: Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
All fatalities										
0-11 years*	26	19	22	25	20	21	17	18	12	14
12-16 years	22	18	18	21	20	17	14	19	16	13
17-24 years	119	122	103	121	107	113	79	77	61	84
25-59 years	172	174	194	208	172	155	121	143	166	147
60 years+	77	63	85	81	66	54	48	57	62	66
Total	416	396	422	456	385	360	279	314	317	324
Female fatalities										
0-11 years*	10	9	8	12	8	5	4	8	4	6
12-16 years	5	9	6	8	5	3	6	7	4	3
17-24 years	32	25	29	29	19	39	18	17	13	13
25-59 years	47	40	46	63	55	41	36	36	37	45
60 years+	33	23	38	32	30	21	17	20	26	20
Total	127	106	127	144	117	109	81	88	84	87
Male fatalities										
0-11 years*	16	10	14	13	12	16	12	8	8	7
12-16 years	17	9	12	13	15	14	8	12	12	10
17-24 years	87	97	74	92	88	74	61	60	48	71
25-59 years	125	134	148	145	117	114	85	107	129	102
60 years+	44	40	47	49	36	33	31	37	36	46
Total	289	290	295	312	268	251	197	224	233	236

* includes fatalities of unknown age

Table 2.2 provides more detailed data concerning persons killed during 2001, presented by gender and age group.

Table 2.2: Age and gender of fatalities
Queensland 2001

Age group	Male	Female	Total	Proportion of road toll**	Proportion of population**	Fatalities per 100,000 persons*
0 - 4 years***	2	2	5	2%	7%	1.93
5 - 11 years	5	4	9	3%	10%	2.46
12 - 16 years	10	3	13	4%	7%	4.89
17 - 20 years	42	9	51	16%	6%	23.40
21 - 24 years	29	4	33	10%	7%	13.66
25 - 29 years	27	2	29	9%	8%	10.20
30 - 39 years	33	10	43	13%	16%	7.58
40 - 49 years	29	16	45	14%	14%	8.60
50 - 59 years	13	17	30	9%	10%	8.19
60 - 69 years	21	9	30	9%	7%	11.29
70 - 79 years	14	7	21	6%	5%	10.83
80 years & over	11	4	15	5%	2%	16.74
Total	**236**	**87**	**324**	**100%**	**100%**	**8.90**

* ABS Cat. No. 3201.0 ** Figures in this column have been rounded

*** Includes fatalities of unknown gender

The data above indicates that:

- the largest over-represented road user age group is young adult road users. Road users aged 17 to 20 years recorded a fatality rate of more than two and a half times the state average;

- young adult road users aged 17 to 20 and 21 to 24 years accounted for 26 per cent of the total fatalities but only 13 per cent of the population. Fatalities in this group increased from 63 in 2000 to 84 in 2001. The 17 to 20 years age group increased significantly from 10 per cent of the road toll in 2000 to 16 percent in 2001; and

- in the 17 to 24 years age group, males made up 85 percent of the total fatalities (up from 79 per cent in 2000), while females made up 15 percent of total fatalities (down from 21 per cent in 2000) in the 17 to 24 years age group.

Table 2.3 provides comparative information on fatality numbers by gender and age groups between 2001 and 2000.

Table 2.3: Age and gender of fatalities
Queensland 2001 compared to 2000

	Male			Female		
Age group	**2001**	**2000**	**Variation**	**2001**	**2000**	**Variation**
0 - 4 years	2	3	-33%	2	4	-50%
5 - 11 years	5	5	0%	4	0	-
12 - 16 years	10	12	-17%	3	4	-25%
17 - 20 years	42	22	91%	9	8	13%
21 - 24 years	29	26	12%	4	5	-20%
25 - 29 years	27	29	-7%	2	11	-82%
30 - 39 years	33	51	-35%	10	8	25%
40 - 49 years	29	27	7%	16	12	33%
50 - 59 years	13	22	-41%	17	6	183%
60 - 69 years	21	9	133%	9	7	29%
70 - 79 years	14	15	-7%	7	14	-50%
80 years and over	11	12	-8%	4	5	-20%
Total	**236**	**233**	**1%**	**87**	**84**	**4%**

Table 2.3 indicates that, compared with 2000:

- the number of male road user fatalities increased by one per cent from 233 to 236 in 2001. Fatalities for females increased four per cent from 84 to 87;
- the largest percentage decrease of male age groups occurred in fatalities aged 50 to 59 years (a decrease of 41 per cent from 22 to 13);
- the largest percentage decrease for any female age group occurred in the 25 to 29 years age group, where fatalities decreased by 82 per cent (from 11 to two) compared with 2000. Female fatalities in the 0 to 4 years age group and 70 to 79 years age group decreased by 50 per cent from four and 14 respectively in 2000 to two and seven respectively in 2001; and
- in contrast to 2000, the largest percentage increases in male fatalities occurred in the 60 to 69 years age group (133% from nine to 21). The largest percentage increase in female fatalities occurred in the 50 to 59 years (183% from six to 17).

Table 2.4 presents data concerning fatalities by road user type over the period 1996 to 2001.

Table 2.4: Fatalities by road user type
Queensland 1996-2001

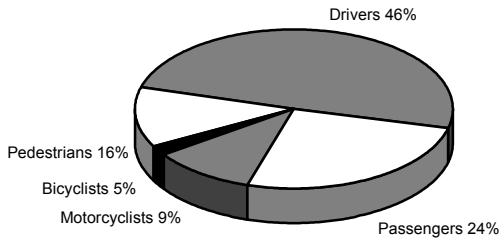
Road user type	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	174	45%	158	44%	121	43%	128	41%	157	50%	150	46%
Passengers	105	27%	88	24%	75	27%	87	28%	82	26%	78	24%
Motorcyclists	41	11%	43	12%	25	9%	41	13%	33	10%	29	9%
Bicyclists	10	3%	12	3%	9	3%	9	3%	6	2%	15	5%
Pedestrians	55	14%	59	16%	48	17%	49	16%	39	12%	51	16%
Other	0	0%	0	0%	1	0%	0	0%	0	0%	1	0%
Total	**385**	**100%**	**360**	**100%**	**279**	**100%**	**314**	**100%**	**317**	**100%**	**324**	**100%**

It can be seen from the table that:

- the 324 fatalities in 2001 represent a two per cent decrease on the average of the previous five years of 331 fatalities;
- on average over the past six years, vehicle drivers made up 45 per cent of those killed in each year;
- passengers were the next largest group with an average of 26 per cent of all fatalities;
- pedestrian fatalities in 2001 showed an increase of 31 per cent over 2000, but were in line with five year average;
- there was a four per cent decrease of driver fatalities in 2001 compared with 2000; and
- the proportion of fatalities made up by each user group has been similar in most years from 1996 to 2001.

Figure 2.1 illustrates the proportion of the 2001 road toll represented by each road user type.

Fig 2.1: Road toll by road user type Queensland 2001



The injury severity category "admitted to hospital" indicates a severe injury from a traffic crash and is second to "fatal" as the highest severity level recorded by police. Data on persons involved in a road crash and admitted to hospital over the period 1996 to 2001 is presented in Table 2.5, classified by type of road user.

Table 2.5: Hospitalised casualties by road user type Queensland 1996-2001

Road user type	1996		1997		1998		1999		2000	0	2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	1928	43%	1841	44%	1998	45%	2145	48%	2259	47%	2560	49%
Passengers	1273	28%	1131	27%	1173	27%	1197	27%	1292	27%	1397	27%
Motorcyclists	606	14%	546	13%	590	13%	532	12%	527	11%	576	11%
Bicyclists	259	6%	253	6%	240	5%	241	5%	277	6%	271	5%
Pedestrians	411	9%	373	9%	393	9%	385	9%	425	9%	418	8%
Other	4	0%	2	0%	3	0%	1	0%	5	0%	3	0%
Total	**4481**	**100%**	**4146**	**100%**	**4397**	**100%**	**4501**	**100%**	**4785**	**100%**	**5225**	**100%**

Table 2.5 shows that:

- when compared to the previous five-year average, the number of road users admitted to hospital as a result of a road crash has increased by 15 per cent;
- the number of hospitalised drivers increased by 13 per cent from 2,259 in 2000 to 2,560 in 2001;
- in 2001, passengers hospitalised made up 27 per cent of the total, which is consistent with the previous five-year average proportion of the total; and
- over the past six years motorcyclists consistently averaged around 12 per cent of the hospitalised casualties.

Comparing tables 2.4 and 2.5, it can be seen that:

- pedestrians make a higher proportion of fatalities (16%) than hospitalised (8%); and
- the proportions of most other road user categories are similar.

2.3 Children

The majority of fatalities among children aged up to 16 years in 2001 involved crashes during daylight hours (70 per cent), between intersections (63 per cent) and during the working week (63 per cent). Compared with all fatalities in 2001, fatalities among children aged up to 16 years were more likely to involve bicycles (184 per cent more) and were more likely to involve pedestrians (164 per cent more).

Twenty-seven children aged up to 16 years were fatally injured in 2001, accounting for eight per cent of the state's road fatalities. The number killed in 2001 was lower than in 2000 (28). As children make up of one-quarter of the state's population, this group is under represented in road fatalities.

Figure 2.2 and Table 2.6 provide details of fatalities of children grouped by road user type.

Fig. 2.2: Fatally injured children
Queensland 2001

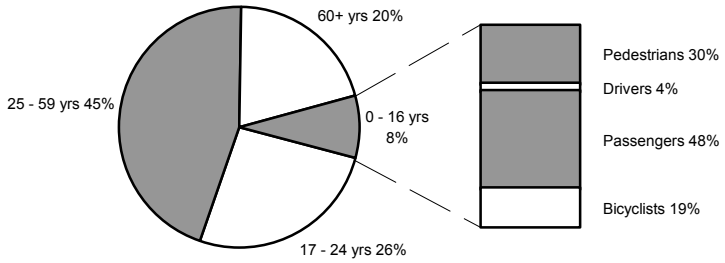


Table 2.6: Child fatalities by road user type and age group
Queensland 2001

Age group	Drivers	Passengers	Motorcyclists	Bicyclists	Pedestrians	Total
0 - 4 years	0	3	0	0	2	5
5 - 11 years	0	2	0	2	5	9
12 - 16 years	1	8	0	3	1	13
Total	**1**	**13**	**0**	**5**	**8**	**27**

The data shows that:

- 48 per cent of the children killed on Queensland roads in 2001 were passengers;
- there were eight pedestrian fatalities among children in 2001, representing 30 per cent of all children killed. This was an increase from 2000 when three child pedestrians were killed, representing 11 per cent of 2000 child fatalities; and
- 48 per cent of child fatalities were of secondary school age (12 to 16 years). Sixty-two per cent of these were passengers.

Table 2.7 compares the level of seat belt wearing of child fatalities during 2001 by age group to that of all vehicle occupant fatalities.

Table 2.7: Non-seat belt wearing of child vehicle occupant fatalities Queensland 2001

Age group	Seat belt not worn	Total vehicle occupants killed *	Proportion of occupants unrestrained
0 - 4 years	0	1	0%
5 - 11 years	1	2	50%
12 - 16 years	3	5	60%
Total children	**4**	**8**	**50%**
All vehicle occupants	48	161	30%

* Where restraint use could be determined

The above data indicates that, in 2001, the proportion of child fatalities unrestrained (50 per cent) was above that for all road fatalities unrestrained (30 per cent).

The percentage of unrestrained vehicle occupants (regardless of age) has decreased when compared with 2000 (from 34 per cent to 30 per cent). In 2001, of the eight child vehicle occupant fatalities, four were unrestrained compared with nine (of 18 fatalities) in 2000.

Table 2.8 shows the time of day when children were killed on Queensland roads in 2001.

Table 2.8: Child road user fatalities by time of day Queensland 2001

Age group	Midnight to 6 am	6 am to 8 am	8 am to 2 pm	2 pm to 4 pm	4 pm to 6 pm	6 pm to midnight	Total
0 - 4 years	1	0	2	1	1	0	5
5 - 11 years	0	0	4	3	1	1	9
12 - 16 years	4	1	3	1	2	2	13
Total Children	**5**	**1**	**9**	**5**	**4**	**3**	**27**

The table shows that:

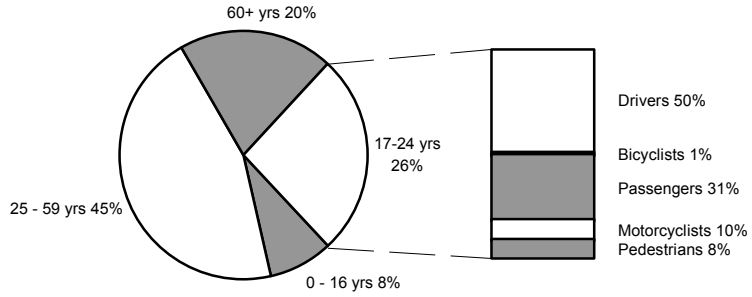
- half of child fatalities in 2001 occurred between 8am and 4pm;
- three (11 per cent) of the fatally injured children where involved in crashes occurring between 6pm and midnight; and
- eight (30 per cent) of the child fatalities died as a result of crashes occurring after dark.

2.4 Young adults

The majority of fatalities among young adults (that is, those aged between 17 and 24 years) in 2001 involved crashes between intersections (79 per cent) with 53 per cent occurring during the working week and 57 per cent occurring after dark. Seventy-seven per cent of units involved were cars whilst 57 per cent of crashes were single vehicle crashes. Compared with all fatalities in 2001, fatalities among young adults occurred proportionally more often after dark (42 per cent more), involving alcohol (39 per cent more) and occurring on a wet road surface (38 per cent more).

In Queensland, road crashes are a major cause of death for young adults (Australian Bureau of Statistics Cat. No. 3303.0). Young adults made up 84 of those killed on Queensland roads in 2001, this number representing 26 per cent of the year's total fatalities. This group continues to be over-represented in road traffic fatalities as they make up only 13 per cent of the total population of Queensland.

Fig. 2.3: Fatally injured young adults
Queensland 2001



The road user type of young adult fatalities is presented in Table 2.9. The table is divided into the two principal age groups; 17 to 20 years and 21 to 24 years.

Table 2.9: Young adult fatalities by road user type and age group
Queensland 2001

Age group	Drivers	Passengers	Motorcyclists	Bicyclists	Pedestrians	Total
17 - 20 years	22	21	3	1	4	51
21 - 24 years	20	5	5	0	3	33
Total	**42**	**26**	**8**	**1**	**7**	**84**

Table 2.9 indicates that:

- in 2001, 51 young adult fatalities (60 per cent) were aged 17 to 20 years. This is an increase on the 2000 proportion of 49 per cent;
- 68 of the young adults killed in road crashes (81 per cent) were vehicle occupants, with the majority of those being drivers; and
- seven young adult pedestrian fatalities occurred in 2001, equal to the number in 2000 in this age group.

Table 2.10 shows that, where restraint use was known, 35 per cent of young adult vehicle occupant fatalities were unrestrained in 2001. This is an increase on 2000 when this proportion was 27 per cent, and is above the rate for all vehicle occupant fatalities (30 per cent).

Table 2.10: Non - seat belt wearing by young adult vehicle occupant fatalities
Queensland 2001

Age group	Seat belt not worn	Total vehicle occupants killed *	Proportion of vehicle occupants unrestrained
17 - 20 years	10	31	32%
21 - 24 years	5	12	42%
Total young adults	**15**	**43**	**35%**
All vehicle occupants	48	161	30%

* Where restraint use could be determined

Table 2.11 shows that the alcohol involvement of young adults in fatal crashes was above that for all drivers and riders. In 2001, 31 per cent of young adult fatalities tested for alcohol returned blood alcohol levels of 0.05 per cent or greater, above the figure for all road users (25 per cent).

Table 2.11: Alcohol involvement of young adult driver and rider fatalities Queensland 2001

Age group	Tested	BAC 0.05% or greater	Proportion
17 - 20 years	23	5	22%
21 - 24 years	19	8	42%
Total young adults	**42**	**13**	**31%**
All drivers and riders	156	39	25%

Compared with 2000, proportional alcohol involvement amongst young adults increased by seven percentage points in 2001. The total number of young adults with alcohol involvement rose by 63 per cent compared to 2000.

Table 2.12: Young adult road user fatalities by day of week Queensland 2001

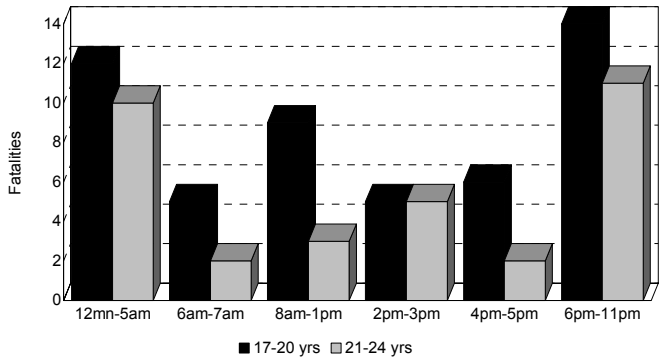
Age group	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
17 - 20 years	11	1	4	4	7	7	17	51
21 - 24 years	8	5	2	6	3	4	5	33
Total young adults	**19**	**6**	**6**	**10**	**10**	**11**	**22**	**84**

Analysis by the day of the week on which crashes occurred reveals Saturday and Sunday to be high-risk periods for young adult road users, as shown in Table 2.12. This is particularly the case for 17 to 20 year olds, where over half were killed on these two days.

The table indicates that of the 84 young adult road users killed in 2001, 52 (or 62 per cent) died on a Friday, Saturday or Sunday, down slightly from 63 percent in 2000.

Figure 2.4 illustrates that 25 (or 28 per cent) of the 84 young adult fatalities were killed between 6pm and midnight, and a further 22 (26 per cent) were killed between midnight and 6am, making those the highest risk times for young adults.

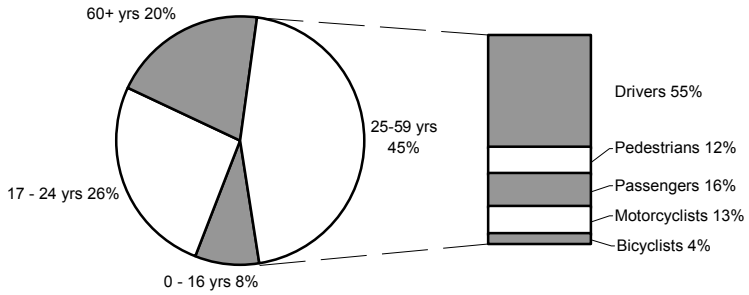
Fig. 2.4: Young adult road user fatalities by time of day Queensland 2001



2.5 Mature age road users

The majority of fatalities among mature age road users (that is, those aged 25 to 59 years) in 2001 involved crashes between intersections (84 per cent) with 69 per cent occurring during the working week and 57 percent in daylight. Sixty-seven per cent of units involved were cars. Compared with all fatalities in 2001, fatalities among mature age road users were more likely to involve vehicle defects (52 per cent) or involve a motorcycle (42 per cent more likely). In 2001 there were 147 mature age road fatalities, which accounted for 45 per cent of Queensland's road toll, similar to 2000. Within the mature age group, road users aged 30 to 39 years and 50 to 59 years were slightly under represented in fatal road crashes. These groups comprised 13 and nine per cent respectively of the population in 2001, but made up 16 and ten per cent of those killed on the roads (see Table 2.2 page 10).

Fig. 2.5: Mature age road user fatalities
Queensland 2001



Mature age road user fatalities in the four main age groups are shown in Table 2.13.

Table 2.13: Mature age road user fatalities by type and age group
Queensland 2001

Age group	Drivers	Passengers	Motorcyclists	Bicyclists	Pedestrians	Total
25 - 29 years	17	4	5	1	2	29
30 - 39 years	20	7	9	1	6	43
40 - 49 years	26	5	5	3	6	45
50 - 59 years	17	7	0	1	5	30
Total	**80**	**23**	**19**	**6**	**19**	**147**

Data presented in Table 2.13 and Figure 2.5 indicate that:

- 70 per cent of the mature age road users killed in 2001 were vehicle occupants;
- 80 (55 per cent) of the mature age road users were drivers; and
- motorcycle fatalities decreased by 27 per cent from 26 in 2000 to 19 in 2001.

Table 2.14 shows that, where restraint use was known, mature age vehicle occupant fatalities were unrestrained 29 per cent of the time which is one per cent lower than that for all road users.

Table 2.14: Non-seat belt wearing of mature age vehicle occupant fatalities
Queensland 2001

Age group	Seat belt not worn	Total vehicle occupants killed *	Proportion of occupants unrestrained
25 - 29 years	2	12	17%
30 - 39 years	8	20	40%
40 - 49 years	6	22	27%
50 - 59 years	6	21	29%
Total mature age	**22**	**75**	**29%**
All vehicle occupants	48	161	30%

* Where restraint use could be determined

The data in Table 2.14 indicate that vehicle occupant fatalities aged 30 to 39 years had the lowest seat belt wearing rates of mature age groups, with 40 per cent unrestrained.

Table 2.15 presents data on alcohol involvement of mature age driver and rider fatalities in 2001.

Table 2.15: Alcohol involvement of mature age driver and rider fatalities Queensland 2001

Age group	Tested	BAC 0.05% or greater	Proportion
25 - 29 years	21	8	38%
30 - 39 years	25	8	32%
40 - 49 years	27	5	19%
50 - 59 years	16	4	25%
Total mature age	**89**	**25**	**28%**
All drivers and motorcycle riders	156	39	25%

The table shows that:

- compared with 2000, proportional alcohol involvement amongst mature adults showed an increase;
- 28 per cent of mature age driver and rider fatalities in 2001 (25 of 89 tested) returned a BAC reading of 0.05 per cent or greater (the general adult legal drink driving limit). This was three percentage points above the proportion for all drivers and riders killed; and
- fatalities aged from 25 to 29 years had the highest incidence of illegal drink driving (38 per cent).

Table 2.16 shows the occurrence of mature age road user fatalities by day of the week.

Table 2.16: Mature age road user fatalities by day of week Queensland 2001

Age group	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
25 - 29 years	6	2	1	3	4	8	5	29
30 - 39 years	5	5	8	5	5	3	12	43
40 - 49 years	6	3	4	7	8	10	7	45
50 - 59 years	3	5	7	4	6	2	3	30
Total Mature Age	**20**	**15**	**20**	**19**	**23**	**23**	**27**	**147**

It can be seen from the data above that fatalities were spread throughout the week, with peaks on Thursday, Friday and Saturday (16, 16 and 18 per cent respectively), and the lowest rate on Monday (10 per cent).

2.6 Older road users

The majority of fatalities among older road users (that is, those aged 60 years and over) in 2001 occurred during daylight hours (84 per cent), 70 per cent during the working week and involving vehicles moving straight ahead (79 per cent). Compared with all fatalities in 2001, fatalities among older road users were 129 per cent more likely to occur at roundabouts, at give way and stop signs (110 per cent) and 70 per cent more likely to be caused by road conditions.

Sixty-six road users aged 60 years and over were killed on Queensland roads in 2001, comprising 20 per cent of the road toll. This is four (or six per cent) more fatalities for this age group than in 2000.

Figure 2.6 presents the distribution of older road user fatalities by road user type.

Fig. 2.6: Older road user fatalities
Queensland 2001

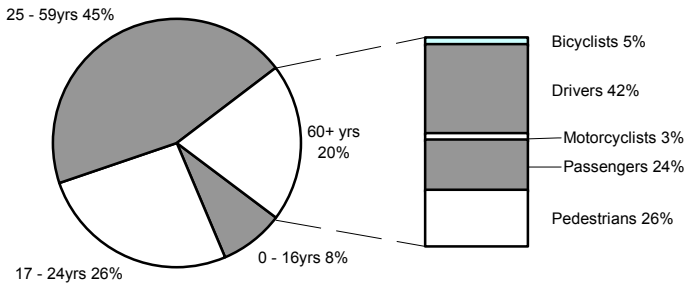


Table 2.17 groups the data by road user type and age.

Table 2.17: Older road user fatalities by type and age group
Queensland 2001

Age group	Drivers	Passengers	Motorcyclists	Bicyclists	Pedestrians	Total
60 - 69 years	16	6	1	2	5	30
70 - 79 years	8	7	1	0	5	21
80 years and over	4	3	0	1	7	15
Total	**28**	**16**	**2**	**3**	**17**	**66**

From Table 2.17, it can be seen that:

- the majority of older road users killed were vehicle occupants (67 per cent);
- 57 per cent of older drivers killed were aged 60-69 years;
- there were 16 passenger fatalities in 2001, six (or 27 per cent) less than 2000; and
- there were 17 pedestrian fatalities in 2001, a 13 per cent increase on the 2000 level. Over 70 per cent of these fatalities were aged 70 years and over.

Table 2.18 (and previous annual crash reports) indicate that older vehicle occupants fatally injured are more likely to be wearing seat belts when compared with other age groups. For vehicle occupant fatalities, 21 per cent of older road users were unrestrained, compared with 30 per cent of all vehicle occupants.

Table 2.18: Non - seat belt wearing of older vehicle occupant fatalities
Queensland 2001

Age group	Seat belt not worn	Total vehicle occupants killed *	Proportion of occupants unrestrained
60 - 69 years	4	16	25%
70 - 79 years	2	12	17%
80 years +	1	6	17%
Total older occupants	**7**	**34**	**21%**
All vehicle occupants	48	161	30%

* Where restraint use could be determined

Table 2.19 provides details of responsibility for fatal crashes involving older road users, as indicated by the reporting police officer.

Table 2.19: Responsibility for fatal crashes involving older drivers or pedestrians Queensland 2001

	Drivers			Pedestrians		
Age group	**Responsible**	**Total**	**%**	**Responsible**	**Total**	**%**
60 - 69 years	16	31	52%	2	5	40%
70 - 79 years	8	16	50%	3	5	60%
80 years and over	4	6	67%	4	7	57%
Total older age group	**28**	**53**	**53%**	**9**	**17**	**53%**
All age groups	223	391	57%	36	48	75%

Table 2.19 shows that:

- older drivers were believed to be responsible for 53 per cent of fatal crashes in which they were involved in 2001 in contrast to drivers generally, who were believed to be responsible for 57 per cent of fatal crashes in which they were involved. This was a significant proportional improvement for older drivers, down from 67 per cent in 2000;

- this allocated responsibility for drivers varied with age from 52 per cent in the 60 to 69 years group, 50 per cent for the 70 to 79 years age group and 67 per cent for the 80 years and over group; and

- older pedestrians were believed to be responsible for 53 per cent of fatal crashes in which they were involved in 2001. This is lower than the proportion of pedestrians responsible for fatal crashes across all age groups (75 per cent).

Table 2.20 shows the daily time periods during which fatal crashes involving older road users occurred in 2001.

Table 2.20: Older road user fatalities by time of day Queensland 2001

Age group	**6am - 8am**	**8am - 10am**	**10am - 12 noon**	**12 noon - 2pm**	**2pm - 4pm**	**4pm - 6pm**	**6pm - 6am**	**Total**
60 - 69 years	0	1	7	7	6	3	6	30
70 - 79 years	1	2	4	2	4	3	5	21
80 years and over	0	3	3	3	2	4	0	15
Total older age group	**1**	**6**	**14**	**12**	**12**	**10**	**11**	**66**

The data show that:

- 82 per cent of older road user fatalities (54 out of 66) occurred between 8am and 6pm;

- 36 per cent of the older road user fatalities (24) occurred between 12pm and 4pm; and

- 17 per cent of the older road user fatalities (11) occurred between 6pm and 6am.

3. UNITS IN CRASHES

3.1 Introduction

There were 39,627 vehicles and other crash unit types involved in the 21,503 reported road traffic crashes on Queensland roads during 2001. This indicates a crash rate of 1.84 units per crash during 2001, while for the more severe crashes the number of units per crash was lower (fatal 1.72; hospitalisation 1.74). Table 3.1 illustrates the involvement of the different unit types by the severity level of crashes in 2001.

Table 3.1: Units involved in crashes by severity of crash
Queensland 2001

	Fatal		Hospitalisation		All crashes	
Unit type	**No.**	**%**	**No.**	**%**	**No.**	**%**
Car	243	48%	4337	60%	27504	69%
4-wheel drive	33	6%	378	5%	2196	6%
Utility/van	59	12%	778	11%	4335	11%
Rigid truck	17	3%	152	2%	823	2%
Articulated truck	26	5%	107	1%	552	1%
Road Train/Bdouble	6	1%	28	0%	168	0%
Bus	4	1%	64	1%	323	1%
Motorcycle	29	6%	576	8%	1301	3%
Tractor	4	1%	39	1%	213	1%
Towed device	0	0%	4	0%	35	0%
Bicycle	16	3%	279	4%	881	2%
Pedestrian	65	13%	421	6%	966	2%
Animal - ridden	1	0%	1	0%	3	0%
Animal - stock *	2	0%	29	0%	159	0%
Animal - other *	2	0%	23	0%	93	0%
Railway stock	1	0%	9	0%	20	0%
Other	2	0%	8	0%	55	0%
Total units	**510**	**100%**	**7233**	**100%**	**39627**	**100%**

The data above indicates that:

- 69 per cent of units involved in all reported crashes were cars, whereas cars comprised 48 per cent of the units involved in fatal crashes;

- in fatal crashes, unprotected road users (motorcyclists, bicyclists and pedestrians) comprised 22 per cent of the units involved, whereas they comprised only seven per cent of units in all reported crashes; and

- the involvement of heavy freight vehicles (rigid, articulated and road trains/b-doubles/triples) in fatal crashes was three times the involvement of these vehicles in all heavy vehicle crashes. These vehicles comprised ten per cent of the units involved in fatal crashes in 2001, whereas they comprised four per cent of the units involved in all crashes.

Figure 3.1 illustrates the involvement of units in fatal crashes in 2001.

Fig. 3.1: Unit involvement in fatal crashes Queensland 2001

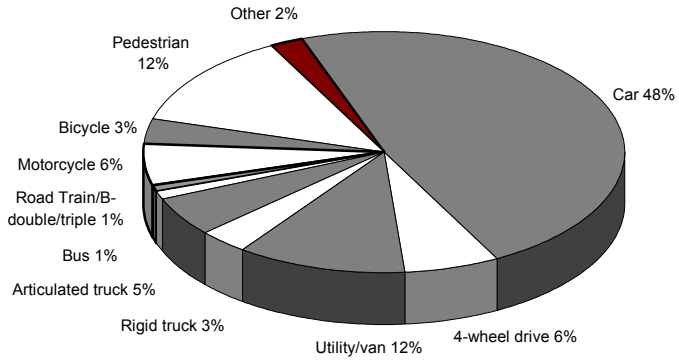


Table 3.2 lists the number of units involved in fatal crashes by unit type since 1996.

Table 3.2: Units involved in fatal crashes by year Queensland 1996-2001

Type of vehicle	1996	1997	1998	1999	2000	2001
Car	292	286	209	229	210	243
Utility/van	84	78	75	73	56	59
4-wheel drive*	N/A	N/A	N/A	N/A	37	33
Rigid truck	24	24	17	17	31	17
Articulated truck	34	31	29	34	22	26
Roadtrain/Bdouble**	N/A	N/A	N/A	N/A	8	6
Bus	6	2	7	12	5	4
Motorcycle	44	44	25	44	34	29
Tractor	7	6	3	5	3	4
Towed device	1	0	1	1	0	0
Bicycle	11	12	10	10	6	16
Pedestrian	59	61	48	52	43	65
Animal - ridden	0	0	2	0	0	1
Animal - stock	2	5	3	1	0	2
Animal - other	1	0	2	0	0	2
Railway stock	4	3	4	0	2	1
Other	0	3	2	5	0	2
Total	**569**	**555**	**437**	**483**	**457**	**510**

* Was included in 'Car' prior to 2000
** Was included in 'Articulated truck' prior to 2000

The main trends indicated in Table 3.2 are:

- overall, the number of units involved in fatal crashes during 2001 was in line with the average of the previous five years;
- motorcycle and heavy vehicle involvement both showed decreases in 2001 over 2000 (down 15 per cent and 20 per cent respectively);
- the involvement of motorcycles in fatal crashes decreased in 2001 when compared to the average of the previous five years (down 24 per cent); and
- bus involvement had a 20 per cent decrease over 2000 and a significant decrease (60 per cent) when compared to the previous five-year average.

The trend of the involvement of the major vehicle types in fatal crashes since 1986 is illustrated in Figure 3.2.

Fig. 3.2: Unit involvement trend for fatal crashes
Queensland 1986 - 2001

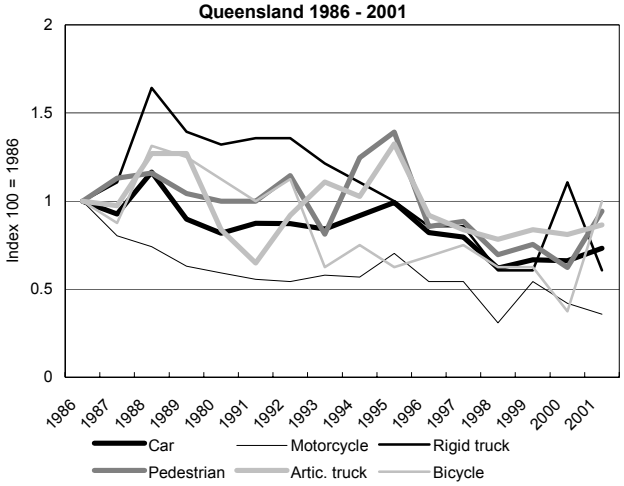


Figure 3.2 highlights the general downward trend of all units involved in fatal crashes from 1988 until 2000. In 2001, bicycle and pedestrian involvement increased markedly.

3.2 Fatal crash involvement by unit type

Cars and variants

Fatal crash involvement of cars, utilities and panel vans have shown decreases in 2001 over the previous nine year averages, of 14 per cent and 26 per cent respectively (see Table 3.3). The majority of these crashes in 2001 involved vehicles between intersections (75 per cent), with 64 per cent occurring during the working week, 60 per cent in daylight and 60 per cent on straight roads. Compared with all fatal crashes in 2001, fatal crashes involving cars occurred in similar proportions for all descriptors.

Table 3.3: Annual trends in fatal crash involvement of cars and variants
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Car	310	313	335	347	292	286	209	229	210	243
Utility/van	89	72	85	107	84	78	75	73	56	59
4-wheel drive	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	37	33

During 2001, 335 cars (including utilities, panel vans and 4-wheel drives) were involved in fatal crashes. Of the 335 cars, 201 (or 60 per cent) were considered “most at fault” by investigating police. Of the fatal crashes in which a car was considered most at fault, more than half (107 crashes) were single vehicle crashes. Overall, cars were considered the unit most at fault in 68 per cent of all fatal crashes.

An analysis of the relative involvement in fatal crashes of all types of cars in 2001 is provided in Table 3.4.

Table 3.4: Comparison of fatal crash involvement for cars and variants
Queensland 2001

Vehicle type	% of units in fatal crashes	% of total vehicle registrations	Fatal crash rate/10,000 vehicles
Car/Station wagon/4-wheel drive	54%	73%	1.5
Utility/van	12%	17%	1.4
Total cars	**66%**	**90%**	**1.3**

Heavy freight vehicles

Fatal crash involvement of heavy vehicles showed a significant decrease in 2001. Overall, the involvement of heavy vehicles showed a decrease in 2001 over the previous nine year average (down by 20 per cent, see Table 3.5). The majority of these crashes occurred between intersections (79 per cent) and during the working week (71 per cent), with 71 per cent during daylight and 75 per cent on straight roads. Twenty-three per cent of these crashes occurred within the Central and North Coast region. Compared with all fatal crashes in 2001, fatal crashes involving heavy vehicles were more likely to involve fatigue (64 per cent more) and less likely to involve alcohol (59 per cent less often).

Table 3.5: Annual trends in fatal crash involvement of heavy vehicles
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Rigid Truck	38	34	31	28	24	24	17	17	31	17
Articulated Truck	34	41	38	49	34	31	29	31	22	26
Road train/Bdouble*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	6

* Prior to 2000, road trains/bdoubles/triples were included in articulated trucks

During 2001, 49 heavy freight vehicles (rigid and articulated trucks and road trains/bdoubles) were involved in fatal crashes. Of the 49 heavy freight vehicles, 19 (or 39 per cent) were considered most at fault by investigating police. Of those fatal crashes in which a heavy freight vehicle was considered most at fault, 58 per cent were single vehicle crashes. Overall, heavy freight vehicles were considered the unit most at fault in only six per cent of all fatal crashes. An analysis of the relative involvement in fatal crashes in 2001 of heavy freight vehicles compared with cars is provided in Table 3.6.

Table 3.6: Comparison of fatal crash involvement for cars and heavy freight vehicles
Queensland 2001

Vehicle type	% of units in fatal crashes	% of total vehicle registrations	Fatal crash rate/10,000 vehicles
Total cars	66%	90%	1.3
Rigid trucks	3%	3%	2.0
Articulated trucks/bdouble/road trains	6%	1%	23.7

The data indicates that in 2001 articulated trucks had a fatal crash rate per 10,000 registered vehicles of over 18 times that for cars. Articulated trucks were involved in 23.7 fatal crashes per 10,000 registered trucks in 2001. The figure for cars was 1.3 fatal crashes per 10,000 cars registered. Rigid trucks had a total crash rate of 1.5 times that for cars.

Buses

Fatal crash involvement of buses has shown a relatively flat trend over the past ten years apart from a peak in 1999 (see Table 3.7). Bus crashes in 2001 resulted in one bus occupant killed. The majority of fatal crashes involving buses in 2001 occurred during the working week (75 per cent), in daylight (75 per cent) and on straight roads (50 per cent).

Table 3.7: Annual trends in fatal crash involvement of buses
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Bus	4	7	7	6	6	2	7	12	5	4

During 2001, four buses were involved in fatal crashes on Queensland roads. In one of these crashes, the bus was considered most at fault by investigating police, and one bus occupant was killed in those crashes. A comparison of the relative fatal crash involvement per 10,000 vehicles of registered buses compared with cars indicates a fatal crash rate for buses of almost twice that of cars for 2001. Table 3.8 presents this comparison.

Table 3.8: Comparison of fatal crash involvement for cars and buses
Queensland 2001

Vehicle type	% of units in fatal crashes	% of total vehicle registrations	Fatal crash rate/10,000 vehicles
Total cars	66%	90%	1.3
Buses	1%	1%	2.3

Motorcycles

The trend in the involvement of motorcycles in fatal crashes was relatively flat from 1992 to 2001, except for an increase in 1995 and decreases in 1998, 2000 and 2001 (see Table 3.9). The majority of fatal motorcycle crashes in 2001 occurred during the working week (79 per cent), between intersections (83 per cent), during daylight hours (69 per cent) and on straight roads (45 per cent). Compared with all fatal crashes in 2001, fatal crashes involving motorcycles more often involved speed (126 per cent more often) but less often involved fatigue (62 per cent less often).

Table 3.9: Annual trends in fatal crash involvement of motorcycles
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Motorcycle	44	47	46	57	44	44	25	44	34	29

During 2001, 29 motorcycles were involved in fatal crashes, in which 28 motorcycle riders and one pillion passenger died. Twenty-five of these motorcycles (or 86 per cent of motorcycles involved) were considered most at fault by investigating police. Sixteen (or 55 per cent) of motorcycles considered most at fault were involved in single vehicle crashes. Overall, motorcycles were considered the unit most at fault in eight per cent of all fatal crashes.

Table 3.10 indicates that in 2001, motorcycles had a fatal crash involvement rate, based on vehicles registered, that was almost three times that for cars.

Table 3.10: Comparison of fatal crash involvement for cars and motorcycles
Queensland 2001

Vehicle type	% of units in fatal crashes	% of total vehicle registrations	Fatal crash rate/10,000 vehicles
Total cars	66%	90%	1.3
Motorcycles	6%	3%	3.6

Cars comprised 66 per cent of units involved in fatal crashes, while motorcycles comprised six per cent. However, based on vehicle registrations, motorcycles were involved in 3.6 fatal crashes per 10,000 registered motorcycles compared to the car fatal crash rate of 1.3 fatal crashes per 10,000 registered cars.

Bicycles

The trend in fatal bicycle crashes was relatively flat during 1992 to 2001, with a high in 1992 and low in 2000. The majority of crashes in 2001 occurred during the working week (80 per cent), during daylight hours (67 per cent), between intersections (67 per cent) and on straight roads (73 per cent).

Table 3.11: Annual trends in fatal crash involvement of bicycles
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Bicycle	18	10	12	10	11	12	10	10	6	16

During 2001, 16 bicycles were involved in 15 fatal crashes on Queensland roads. In 12 of these fatal crashes (or 80 per cent), the cyclist was considered most at fault. Overall, bicycles were considered the unit most at fault in four per cent of all fatal crashes.

Pedestrians

The trend in pedestrian crashes increased from 1992 to 1995. The trend then declined from 1996 to 2000 but increased again in 2001 (see Table 3.12). Pedestrian fatal crash involvement showed a 51 per cent increase from 2000 and a one per cent increase compared with the previous nine year average. The majority of crashes in 2001 occurred between intersections (67 per cent), on straight roads (73 per cent), during the working week (53 per cent) and during daylight hours (55 per cent).

Table 3.12: Annual trends in fatal crash involvement of pedestrians
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Pedestrian	79	56	86	96	59	61	48	52	43	65

During 2001, 65 pedestrians were involved in fatal crashes which resulted in 51 pedestrian fatalities. As indicated in Table 3.13, 29 (or 57 per cent) of the pedestrian fatalities in 2001 occurred while the pedestrian was attempting to cross a road. Of these, 21 (or 72 per cent) were killed on roads with no traffic controls, while six were killed at traffic lights.

Table 3.13: Attempted action of pedestrians killed in fatal crashes
Queensland 2001

Attempted action	No. of fatalities	% involvement in fatal pedestrian crashes
Crossing carriageway - Traffic lights	6	12%
Crossing carriageway - Pedestrian Crossing	2	4%
Crossing carriageway - No traffic control	21	41%
Crossing carriageway - Other	1	2%
Remain stationary	10	20%
Walk against traffic	4	8%
Walk with traffic	6	12%
Playing	1	2%

Of the pedestrians involved in fatal crashes, 34 (or 52 per cent) were considered by police to be most at fault. Eighty-five per cent of these most at fault pedestrians were crossing where no traffic control was present.

4. CHARACTERISTICS OF CRASHES

4.1 Introduction

Of the 21,503 road crashes reported in Queensland in 2001, by far the majority (13,253 or 62 per cent) were multi-vehicle crashes. Single vehicle crashes made up 6,976 crashes or 32 per cent of all crashes in 2001.

4.2 Comparative trends

The long-term trends in the nature of fatal crashes are shown in Table 4.1. This table shows that, while there have been no dramatic changes in these trends over the past ten years, the hit object and hit pedestrian categories showed significant increases in 2001 compared with the previous year. Compared to 2000, head-on, overturned and fall from vehicle recorded slight decreases, while hit parked vehicle recorded no fatalities. Compared to the previous nine year average, sideswipe showed a 48 per cent increase.

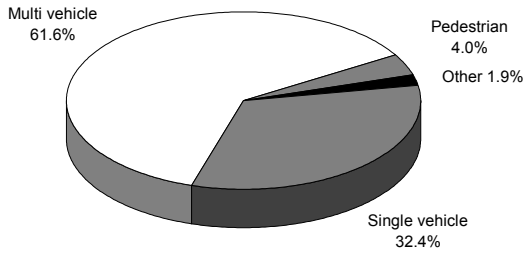
Table 4.1: Annual trends in the nature of fatal crashes: Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Hit object	82	101	93	105	93	95	80	65	79	89
Hit pedestrian	73	44	73	88	55	55	46	47	37	47
Head-on	67	55	62	70	46	48	23	47	47	44
Angle	53	71	60	50	60	54	44	36	34	37
Overturned	39	53	35	47	45	25	24	27	40	38
Rear-end	17	7	11	16	10	8	8	12	6	10
Fall from vehicle	20	9	10	11	13	11	8	12	12	8
Sideswipe	9	7	10	10	9	16	11	19	13	17
Hit parked vehicle	1	2	6	7	4	3	6	5	6	0
Hit animal	2	7	4	3	3	5	6	1	0	4
Other	0	1	4	1	0	1	1	2	1	2

* Vehicle includes motor or pedal cycle

Figure 4.1 illustrates the proportion of each of the major road crash types for 2001.

Fig. 4.1: Type of road crashes Queensland 2001



The relative occurrence of single vehicle crashes increases as the crash severity increases. Of the 296 fatal crashes in 2001, 135 crashes (or 46 per cent) were single vehicle crashes, while multi-vehicle crashes accounted for 108 crashes (or 36 per cent).

Figure 4.2 shows how the nature of crashes changed in relation to the severity of the crash.

Fig. 4.2: Type of road crash by severity
Queensland 2001

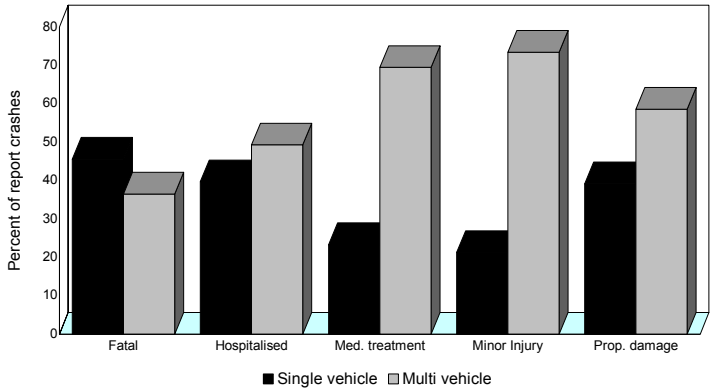


Table 4.2 provides a more detailed analysis of the nature of crashes in Queensland in 2001 grouped by the severity of crash.

Table 4.2: Crashes by nature of crash and severity
Queensland 2001

	Fatal		Hospitalisation		All crashes**	
Nature of crash	**No.**	**%**	**No.**	**%**	**No.**	**%**
Hit object	89	30%	1052	25%	4591	21%
Hit pedestrian	47	16%	374	9%	861	4%
Head-on	44	15%	137	3%	388	2%
Overturned	38	13%	368	9%	1366	6%
Angle	37	13%	1223	29%	6728	31%
Sideswipe	17	6%	169	4%	1007	5%
Rear-end	10	3%	518	12%	5130	24%
Fall from vehicle *	8	3%	159	4%	355	2%
Hit animal	4	1%	52	1%	253	1%
Other	2	1%	31	1%	160	1%
Hit parked vehicle	0	0%	71	2%	664	3%
Total	**296**	**100%**	**4154**	**100%**	**21503**	**100%**

* Vehicle includes motor or pedal cycle

** Including casualty and property damage only

Table 4.2 indicates that in 2001:

- 89 fatal crashes (or 30 per cent of all fatal crashes) occurred as the result of a vehicle hitting an object, whilst 21 per cent of all crashes were of this nature;
- vehicles involved in head-on crashes (44 fatal crashes or 15 per cent of fatal crashes), and vehicles hitting a pedestrian (47 fatal crashes or 16 per cent of fatal crashes) were also markedly over-represented in fatal crashes compared with all reported crashes;
- the majority of hospitalisation crashes resulted from vehicles colliding at intersections, i.e. angle crashes (29 per cent), or colliding with an object, e.g. trees or power poles (25 per cent); and
- intersection collisions and rear end crashes, both multi-vehicle type crashes, made up over half (55 per cent) of all reported crashes.

4.3 Multi-vehicle crashes

The trend in fatal multi-vehicle crashes has been relatively stable over the period 1996 to 2001 and, in line with fatal crashes overall, the number of fatal multi-vehicle crashes has trended downwards from 1996 to 2001. The majority of these crashes in 2001 occurred between Monday and Friday (75 per cent), in daylight (76 per cent) and at non-intersections (68 per cent). Compared with all fatal crashes in 2001, fatal multi-vehicle crashes occurred proportionally more often where a unit was not moving straight ahead (86 per cent more often), at Give Way/Stop signs (118 per cent more often) and were 112 per cent more likely to result from disobeying traffic rules. Similarly, multi-vehicle fatal crashes were 71 per cent less likely to involve alcohol, 68 per cent less likely to involve fatigue and 50 per cent less likely to involve speed.

In 2001, 108 fatal multi-vehicle crashes were reported. This figure is two per cent below the average for the last five years. Table 4.3 presents multi-vehicle fatal crash data for 1996 to 2001 by the nature of the crash.

Table 4.3: Multi-vehicle fatal crashes by nature of crash
Queensland 1996-2001

Nature of crash	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Angle	60	48%	54	43%	44	51%	36	32%	34	34%	37	34%
Head-on	46	37%	48	38%	23	27%	47	41%	47	47%	44	41%
Rear-end	10	8%	8	6%	8	9%	12	11%	6	6%	10	9%
Sideswipe	9	7%	16	13%	11	13%	19	17%	13	13%	17	16%
Total	**125**	**100%**	**126**	**100%**	**86**	**100%**	**114**	**100%**	**100**	**100%**	**108**	**100%**

Table 4.3 indicates that:

- angle crashes represented 34 per cent of fatal multi-vehicle crashes in 2001, which is less than the 1996 to 2000 average of 42 per cent;
- head-on crashes represented 41 per cent of fatal multi-vehicle crashes in 2001 which is above the 1996 to 2000 average of 38 per cent; and
- rear-end crashes contributed a slightly higher proportion of fatal multi-vehicle crashes (nine per cent), compared with the previous five-year average (eight per cent), whereas the proportion of sideswipe crashes is 27 per cent above the previous five-year proportional average.

Multi-vehicle crashes in which at least one road user was hospitalised but no road user was killed totalled 2,047 in 2001. This figure is an increase on the 2000 total (1,810) and 359 above the average of the 1996 to 2000 period. Table 4.4 presents multi-vehicle crash data involving hospitalisation for 1996 to 2001 by the nature of the crash.

Table 4.4: Multi-vehicle crashes involving hospitalisation by nature of crash
Queensland 1996-2001

Nature of crash	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Angle	1035	61%	976	63%	999	61%	1039	60%	1124	62%	1223	60%
Head-on	224	13%	165	11%	178	11%	166	10%	141	8%	137	7%
Rear-end	297	17%	279	18%	325	20%	368	21%	381	21%	518	25%
Sideswipe	146	9%	141	9%	145	9%	147	9%	164	9%	169	8%
Total	**1702**	**100%**	**1561**	**100%**	**1647**	**100%**	**1720**	**100%**	**1810**	**100%**	**2047**	**100%**

Table 4.4 indicates that:

- the majority (60 per cent) of multi-vehicle crashes involving hospitalisation in 2001 were angle crashes (i.e. intersection collisions). This proportion has remained relatively constant over the last six-year period and is almost twice that for fatal angle crashes which accounted for 34 per cent of multi-vehicle fatal crashes;

- the proportion of head-on crashes involving hospitalisation has gradually decreased over the last six-year period;

- the proportion of rear-end crashes involving hospitalisation has gradually increased over the last six-year period; and

- the proportion of sideswipe crashes involving hospitalisation has remained relatively constant over the last six-year period.

4.4 Single vehicle crashes

The trend in fatal single vehicle crashes over the last six years had been tending downward only to have the trend reversed in the last two years (see Table 4.5). The majority of these crashes in 2001 involved moving straight ahead (92 per cent), occurred between intersections (86 per cent) with 71 per cent involving cars. Compared with all fatal crashes in 2001, fatal single vehicle crashes were proportionally more likely to involve alcohol (106 per cent more likely), speed (76 per cent more likely), fatigue (60 per cent more likely) and 86 per cent more likely to involve motorcycles. Similarly, fatal single vehicle crashes were less likely to occur at Give Way/Stop signs (68 per cent less likely), at operating traffic lights (48 per cent less likely), and were 84 per cent less likely to result from disobeying traffic rules.

In 2001, 135 fatal single vehicle crashes were reported. This figure is two crashes (or one per cent) less than the 2000 total and 18 per cent greater than the average of the 1996 to 2000 period. In Table 4.5 single vehicle fatal crash data are presented for 1996 to 2001 by the nature of the crash.

Table 4.5: Single vehicle fatal crashes by nature of crash
Queensland 1996-2001

Nature of crash	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Hit object	93	60%	95	71%	80	68%	65	60%	79	58%	89	66%
Overturned	45	29%	25	19%	24	20%	27	25%	40	29%	38	28%
Hit parked vehicle	**4**	3%	3	2%	6	5%	5	5%	6	4%	0	0%
Fall from vehicle *	13	8%	11	8%	8	7%	12	11%	12	9%	8	6%
Total	**155**	**100%**	**134**	**100%**	**118**	**100%**	**109**	**100%**	**137**	**100%**	**135**	**100%**

* Vehicle include motor or pedal cycle

Table 4.5 indicates that:

- 89 single vehicle fatal crashes in 2001 (66 per cent) involved vehicles hitting objects (such as trees or power poles). This is above the 1996 to 2000 proportional average (63 per cent); and

- the other major category in 2001, vehicle overturning, represents 28 per cent of the total number of fatal single vehicle crashes for that year. The number of overturning fatal crashes was six (or 18 per cent) higher than the average for the previous five years of 32 fatal crashes.

In 2001, there were 1,664 single vehicle crashes in which a road user was hospitalised. This figure is 122 above the figure for 2000 and 229 (or 16 per cent) above the average for the 1996 to 2000 period. In Table 4.6, the data represents single vehicle crashes involving hospitalisation for the period 1996 to 2001 by the nature of crash.

Table 4.6: Single vehicle crashes involving hospitalisation by nature of crash
Queensland 1996-2001

Nature of crash	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Hit object	840	60%	861	64%	902	62%	906	64%	915	59%	1059	64%
Overturned	346	25%	313	23%	327	22%	291	21%	386	25%	372	22%
Hit parked vehicle	80	6%	61	5%	87	6%	86	6%	96	6%	72	4%
Fall from vehicle *	139	10%	120	9%	142	10%	133	9%	145	9%	161	10%
Total	**1405**	**100%**	**1355**	**100%**	**1458**	**100%**	**1416**	**100%**	**1542**	**100%**	**1664**	**100%**

* Vehicle includes motor or pedal cycle

Table 4.6 indicates that:

- 64 per cent of the single vehicle crashes involving hospitalisation in 2001 (1,059 of a total 1,664) resulted from a vehicle hitting an object. This proportion is above the 2000 level of 59 per cent, and two percentage points above the 1996 to 2000 proportional average of 62 per cent;

- vehicles overturning represented 22 per cent of single vehicle crashes involving hospitalisation in 2001. This proportion is one percentage point lower than the 1996 to 2000 average of 23 per cent; and

- in 2001, motorcyclists, bicyclists or other vehicle occupants falling from their vehicles represented ten per cent of single vehicle crashes involving hospitalisation. The number of this crash type in 2001 (161 hospitalisation crashes) is 19 per cent higher than the 1996 to 2000 average of 136.

4.5 Crashes by time of day

The long term trend in the proportion of fatal crashes occurring after dark has remained relatively stable from 1992 to 2001 as shown in Table 4.7.

Table 4.7: Annual trends in the nature of fatal crashes occuring after dark
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Fatal crashes after dark	161	150	154	171	142	152	102	124	111	118
All fatal crashes	363	357	368	408	338	321	257	273	275	296
% after dark	44%	42%	42%	42%	42%	47%	40%	45%	40%	40%

Different patterns appear when looking at high-risk periods of the day for multi-vehicle and single vehicle fatal crashes. Generally speaking, multi-vehicle fatal crashes occurred most frequently during daytime periods, while single vehicle crashes occurred more often after dark. Figure 4.3 demonstrates this occurrence for crashes in 2001.

Fig. 4.3: Fatal crashes by time of day
Queensland 2001

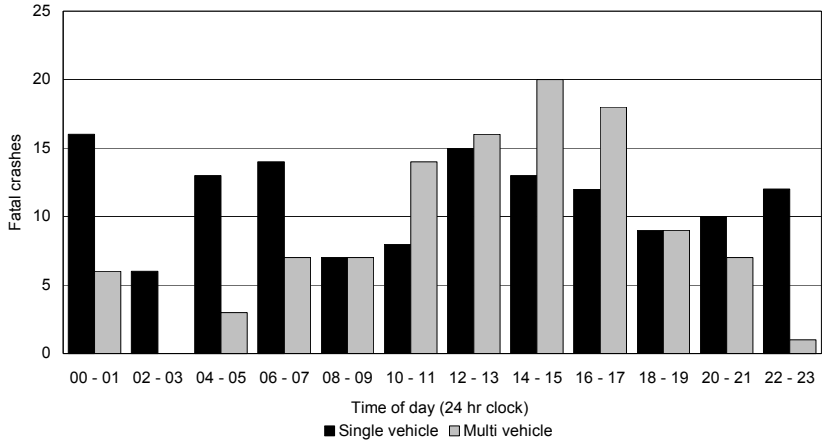


Figure 4.3 indicates that:

- during morning and afternoon commuting periods (6 to 10am and 4 to 6pm), 30 per cent of multi-vehicle fatal crashes occurred with a similar percentage (24 per cent) for single vehicle fatal crashes;

- during the balance of daylight hours (10am to 4pm), 46 per cent of multi-vehicle fatal crashes occurred, in contrast to 27 per cent of single vehicle fatal crashes; and

- during the after dark periods (6pm to 6am), the trend was reversed; 24 per cent of fatal multi-vehicle crashes occurred, in contrast to 49 per cent of fatal single vehicle crashes.

An analysis of the data in Table 4.8 reveals that crashes which occurred after dark are more likely to result in a fatality than daytime crashes.

Table 4.8: Crashes by time of day by severity
Queensland 2001

	Fatal		Hospitalisation		All crashes	
Time period	**No.**	**%**	**No.**	**%**	**No.**	**%**
Midnight - 6 am	56	19%	426	10%	1833	9%
6 am - 10 am	38	13%	697	17%	4049	19%
10 am - 4 pm	100	34%	1484	36%	7874	37%
4 pm - 6 pm	40	14%	649	16%	3535	16%
6 pm - midnight	62	21%	898	22%	4212	20%
Total	**296**	**100%**	**4154**	**463%**	**21503**	**100%**

Table 4.8 indicates that:

- 40 per cent of fatal crashes occurred after dark (i.e. 6pm to 6am) compared with 29 per cent for all crashes. Between midnight and 6am the proportion of fatal crashes at 19 per cent was more than double that of all crashes (nine per cent); and

- the reverse trend applied during the middle of the day (between 10am and 4pm) when 37 per cent of all reported crashes occurred while 34 per cent of fatal crashes occurred during this period.

4.6 Crashes by day of week

The long-term trend in the fatal crashes by day of week has remained stable over the period 1992 to 2001 (see Table 4.9). In 2001, fatal crashes on Monday, Friday and Sunday showed the biggest decreases of 21, 20 and 17 per cent respectively when compared to the previous nine year average.

Table 4.9: Annual trends in fatal crashes by day of week
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Monday	53	41	42	45	36	30	31	33	31	30
Tuesday	36	41	43	43	48	44	25	24	36	39
Wednesday	46	45	54	58	34	45	32	29	35	36
Thursday	44	45	50	52	46	42	36	35	41	42
Friday	69	59	65	74	53	56	39	57	46	46
Saturday	67	65	59	67	60	64	55	50	49	61
Sunday	48	61	55	69	61	40	39	45	37	42

During 2001 the number of crashes generally increased as the week progressed, with most categories of crashes peaking on Friday or Saturday.

Table 4.10 presents the number of crashes by the day of week grouped by the severity of the crash.

Table 4.10: Crashes by day of week by severity
Queensland 2001

	Fatal		Hospitalisation		All crashes*	
Day of week	**No.**	**%**	**No.**	**%**	**No.**	**%**
Monday	30	10%	528	13%	2838	13%
Tuesday	39	13%	563	14%	2943	14%
Wednesday	36	12%	592	14%	3172	15%
Thursday	42	14%	589	14%	3281	15%
Friday	46	16%	704	17%	3750	17%
Saturday	61	21%	657	16%	3089	14%
Sunday	42	14%	521	13%	2430	11%
Total	**296**	**100%**	**4154**	**100%**	**21503**	**100%**

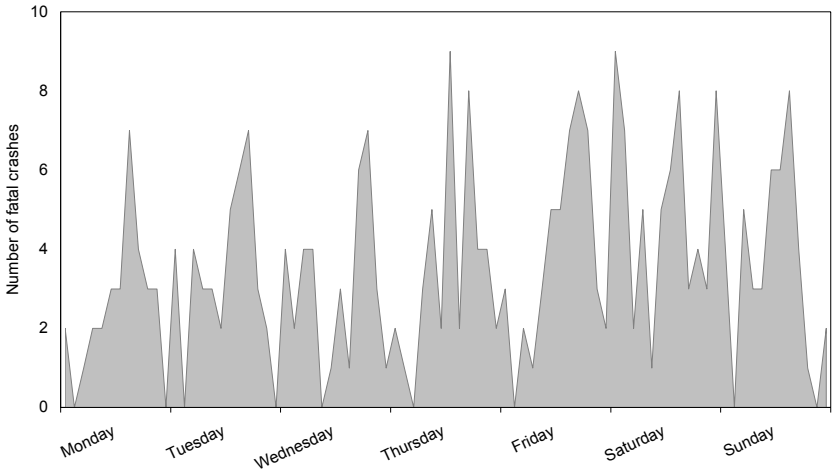
* Including casualty and property damage only

As indicated in Table 4.10, in 2001:

- Friday and Saturday were the days on which the most severe crashes were more likely to occur. Approximately 37 per cent of fatal crashes and 33 per cent of hospitalisation crashes occurred on these days;
- the day least likely to have fatal crashes was Monday (10 per cent); and
- Sunday recorded the lowest number of both hospitalisation crashes and all crashes.

Combining the fatal crash trends for day of week with time of day, it is seen that the numbers of crashes generally peak in the late afternoon hours each day. Figure 4.4 shows these trends for 2001.

Fig. 4.4: Fatal crashes by time of day* & day of week
Queensland 2001



* For each day, time begins at midnight

4.7 Spatial location of crashes

Forty-seven per cent of Queensland's reported road crashes in 2001 occurred in the greater Brisbane urban area (Brisbane City and Rest of Brisbane Statistical Division). Some 10,133 crashes occurred in this area during 2001. A further 6,472 crashes (or 30 per cent) occurred in Queensland provincial cities in 2001. Fatal crashes are more likely to occur outside of urban areas (shown in Table 4.11 as "rest of state") than crashes of lower severity.

Table 4.11: Location of crashes by severity
Queensland 2001

	Fatal		Hospitalisation		All crashes	
Location	**No.**	**%**	**No.**	**%**	**No.**	**%**
Brisbane City	39	13%	1029	25%	6304	29%
Rest of BSD*	41	14%	692	17%	3829	18%
Provincial cities	74	25%	1250	30%	6472	30%
Rest of state	142	48%	1183	28%	4898	23%
Total	**296**	**100%**	**4154**	**100%**	**21503**	**100%**

* Brisbane Statistical Division

As indicated in Table 4.11:

- during 2001, 29 per cent of all reported crashes in Queensland occurred in Brisbane City, but only 13 per cent of fatal crashes occurred in the metropolitan area; and

- while 23 per cent of Queensland's reported crashes occurred outside urban areas, 48 per cent of fatal crashes occurred in these non-urban areas.

Table 4.12 shows the location of fatal crashes.

Table 4.12: Location of fatal crashes
Queensland 1996-2001

Location	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Brisbane City	50	15%	39	12%	34	13%	39	14%	35	13%	39	13%
Rest of BSD*	42	12%	49	15%	29	11%	40	15%	38	14%	41	14%
Provincial cities	114	34%	81	25%	77	30%	64	23%	72	26%	74	25%
Rest of state	132	39%	152	47%	117	46%	130	48%	130	47%	142	48%
Total	**338**	**100%**	**321**	**100%**	**257**	**100%**	**273**	**100%**	**275**	**100%**	**296**	**100%**

* Brisbane Statistical Division

As indicated in Table 4.12:

- Brisbane City had 39 fatal crashes (or 13 per cent of the state total) in 2001 which, while consistent in percentage terms, is also equal to the average over the 1996 to 2000 period; and

- rest of BSD had 41 fatal crashes (or 14 per cent of the state total) in 2001, which is slightly higher than the 1996 to 2001 average of 40 fatal crashes.

Table 4.13 shows the location of crashes of different severities listed by Main Roads districts.

Table 4.13: Location of crashes by severity
Queensland 2001

Department of Main Roads	Fatal		Hospitalisation		All crashes	
District Location	No.	%	No.	%	No.	%
Barcaldine	3	1%	23	1%	81	0%
Bundaberg	18	6%	204	5%	946	4%
Cairns	20	7%	285	7%	1275	6%
Cloncurry	7	2%	66	2%	197	1%
Emerald	6	2%	64	2%	214	1%
Gympie	38	13%	456	11%	2364	11%
Mackay	16	5%	143	3%	686	3%
Metropolitan Brisbane	73	25%	1555	37%	9335	43%
Nerang	33	11%	590	14%	2622	12%
Rockhampton	17	6%	178	4%	960	4%
Roma	4	1%	46	1%	145	1%
Toowoomba	33	11%	259	6%	1320	6%
Townsville	15	5%	216	5%	1063	5%
Warwick	13	4%	69	2%	295	1%
Total	**296**	**100%**	**4154**	**100%**	**21503**	**100%**

The table shows that:

- Metropolitan Brisbane, Nerang and Gympie districts accounted for 66 per cent of reported crashes, and 49 per cent of fatal crashes;

- the highest proportion of crashes for all severity levels occurred in Metropolitan Brisbane district, with over 40 per cent of Queensland's crashes; and

- Brisbane district also recorded the highest number of fatal crashes with 73 (or 25 per cent), followed by Gympie with 38 fatal crashes (or 13 per cent), and Nerang and Toowoomba, both with 33 fatal crashes (or 11 per cent) respectively.

5. FACTORS CONTRIBUTING TO CRASHES

5.1 Introduction

It is relatively uncommon for a single factor to be identified as the sole cause of a crash. Several factors are often represented in the "causal chain" of events resulting in crashes. However, issues such as alcohol use, excessive speed, fatigue (which are consistently reported as the causal factor by investigating police) and the failure to wear seat belts are discussed in more detail in this chapter.

Table 5.1 presents information collected by the police at the scene of traffic crashes concerning the causes of crashes. The data is usually collected within 24 hours of a crash, and the assessment of contributing factors may differ from those arrived at after a comprehensive investigation. Nevertheless, the table provides an indicative ranking list of the major causal factors.

Table 5.1: Assessed contributing factors to crashes* - Queensland 2001

	Fatal crashes		All reported crashes	
	No.	Proportion of fatal crashes	No.	Proportion of all reported crashes
Alcohol/drugs	84	28%	2283	11%
Disobeyed traffic rules**	82	28%	8147	38%
Inexperience	72	24%	4519	21%
Speed	50	17%	1066	5%
Inattention	50	17%	7051	33%
Other	41	14%	3018	14%
Fatigue	40	14%	1136	5%
Other driver conditions ***	25	8%	1274	6%
Age	24	8%	1158	5%
Negligence	17	6%	411	2%
Rain/wet road	13	4%	1540	7%
Road conditions	10	3%	980	5%
Vehicle defects	7	2%	652	3%
No street lighting	3	1%	79	0%
Total crashes	**296**	**100%**	**21503**	**100%**

* More than one contributing factor could be attributed to a crash and therefore this table may not reflect crash totals

** Disobeyed traffic rules does not include Alcohol/Drugs, Inexperience, Speed and Inattention

*** Driver conditions do not include Inattention, Negligence, Inexperience, Fatigue, Age

The data presented in Table 5.1 concerning police opinion of cause-of-crash indicates that:

- alcohol or drug use was the largest contributor with 28 per cent of fatal crashes, but only eleven per cent of all reported crashes;
- disobedience of traffic rules was the equally largest contributor, being regarded as responsible for 28 per cent of fatal crashes and 38 per cent of all reported crashes during 2001;
- inexperience was cited as the third-ranking contributor for fatal crashes and ranked third for all reported crashes;
- speed contributed to five per cent of all crashes and 17 per cent of fatal crashes;
- whilst inattention was a contributing factor in 33 per cent of all reported crashes, it contributed to 17 per cent of fatal crashes; and
- other factors (such as medical condition, some atmospheric and lighting conditions etc) were considered to have contributed to 14 per cent of fatal crashes and 13 per cent of all reported crashes.

Fatigue and negligence are difficult to assess and thus may be understated in the data.

5.2 Trends

Long term trends in contributing circumstances in fatal crashes are shown in Table 5.2. The top contributing circumstance (disobeyed traffic rules) showed a slight decrease in 2001 compared with 2000 and remained well below the high numbers of the mid-1990's.

Table 5.2: Annual trends in contributing circumstances in fatal crashes
Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Disobeyed traffic rules	107	125	125	128	115	110	73	97	95	82
Alcohol/drugs	107	98	103	132	101	101	86	85	94	84
Inexperience	69	57	82	102	91	95	62	52	41	72
Speed	66	80	51	46	48	51	30	40	49	50
Other driver conditions	45	51	42	50	32	26	31	24	27	25
Age	54	35	36	41	30	28	25	28	33	24
Rain/wet road	47	25	35	41	22	16	29	10	14	13
Negligence	19	15	31	25	14	17	19	18	18	17
Inattention	25	15	24	41	26	26	28	47	38	50
Road conditions	32	35	23	29	26	9	14	15	13	10
Other	48	21	23	41	31	36	22	33	35	41
Vehicle defects	23	21	11	17	13	7	13	14	10	7
Fatigue	38	50	34	48	54	45	30	26	28	40
No street lighting	15	3	6	7	5	9	9	1	4	3

5.3 Alcohol

Alcohol use is considered to be a substantial contributor of the more severe crashes, especially those involving a fatality (see Table 5.1). Drivers, motorcycle and bicycle riders, and pedestrians affected by alcohol play a major role in road crashes, and the extent of alcohol involvement in fatal crashes is analysed in more detail in the following section.

Table 5.3 presents information on the level of post-mortem testing of driver and motorcycle rider fatalities over the period 1996 to 2001, and the blood alcohol content (BAC) of those tested.

Table 5.3: Blood alcohol content of driver and motorcycle rider fatalities*
Queensland 1996-2001

	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Untested	42	20%	26	13%	15	10%	40	24%	22	11%	22	12%
Tested	171	80%	172	87%	129	90%	127	76%	165	83%	155	88%
Total Fatalities	213	100%	198	100%	144	100%	167	100%	199	100%	177	100%
BAC results for those tested												
Nil	106	62%	113	66%	87	67%	89	70%	106	64%	112	72%
.01-.04 %	5	3%	13	8%	8	6%	6	5%	13	8%	4	3%
.05 - .14 %	19	11%	21	12%	15	12%	15	12%	13	8%	14	9%
.15 - .24 %	31	18%	15	9%	14	11%	8	6%	23	14%	23	15%
.25% and above	10	6%	10	6%	5	4%	9	7%	10	6%	2	1%
BAC .05% or more	60	35%	46	27%	34	26%	32	25%	46	28%	39	25%
BAC .15% or more	41	24%	25	15%	19	15%	17	13%	33	20%	25	16%

* Based on post-mortem tests

The table indicates that alcohol involvement in crashes has declined since 1996. After a notable rise in 2000 figures, the 2001 figures have decreased well below the levels of the late 1990's. Total driver and rider fatalities involving a BAC of 0.05 per cent or greater for 2001 was 39, a decrease of five fatalities over the 1996 to 2000 average of 44.

Of 177 driver and motorcycle rider fatalities during 2001:

- 88 per cent were given a post-mortem blood alcohol test;
- of those tested, 25 per cent had a BAC at or in excess of the general legal limit of 0.05 per cent for open license holders and provisional license holders over 25 years of age. This figure is three percentage points less than the 1996 to 2000 average; and
- 16 per cent of those tested had a BAC of 0.15 per cent or greater (three times the legal limit for most open license holders). In 2001, 25 fatalities recorded these levels representing a 24 per cent decrease over 2000. Compared with the average of 27 fatalities over the period 1996 to 2000, the 2001 figures have decreased by seven per cent.

Figure 5.1 provides a graphical representation of blood alcohol levels for all driver and motorcycle rider fatalities in 2001.

Fig. 5.1: Blood alcohol level for driver & motorcycle rider fatalities Queensland 2001

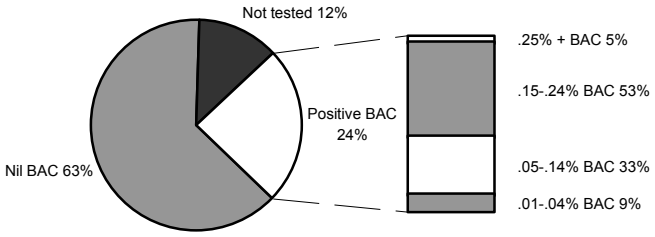


Table 5.4 presents data by year from 1996 to 2001 on the age groups of fatally injured drivers and motorcycle riders who were found to have a blood alcohol content of 0.05 per cent or greater.

Table 5.4: Age of drivers and motorcycle rider fatalities with BAC of 0.05% or greater* Queensland 1996-2001

Age group	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 16 years	1	2%	2	4%	0	0%	2	6%	0	0%	1	3%
17 - 24 years	31	52%	14	30%	11	32%	7	22%	8	17%	13	33%
25 - 59 years	28	47%	30	65%	22	65%	21	66%	37	80%	25	64%
60 years and over	0	0%	0	0%	1	3%	2	6%	1	2%	0	0%
Total	**60**	**100%**	**46**	**100%**	**34**	**100%**	**32**	**100%**	**46**	**100%**	**39**	**100%**

* Based on post-mortem tests

The table indicates that:

- illegal BACs have been found almost exclusively in drivers and motorcycle riders between the ages of 17 and 59 years; and
- during 2001, 33 per cent of driver and motorcycle rider fatalities with illegal BACs were aged between 17 and 24 years. This was above the previous five-year average of 31 per cent but notable higher than for 2000. The result for ages 25 to 59 years of 64 per cent was similar to the previous five-year average of 65 per cent.

Table 5.5 provides information on the four main road user groups (drivers, motorcycle riders, bicyclists and pedestrians) in terms of positive blood alcohol tests following a fatal crash.

Table 5.5: Road user fatalities with BAC of 0.05% or greater*
Queensland 1996-2001

Roaduser type	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Bicyclist	1	1%	0	0%	0	0%	0	0%	0	0%	1	2%
Driver	50	70%	38	57%	29	53%	26	54%	36	62%	34	63%
Motorcyclist	10	14%	8	12%	5	9%	6	13%	10	17%	5	9%
Pedestrian	10	14%	21	31%	21	38%	16	33%	12	21%	14	26%
Total	**71**	**100%**	**67**	**100%**	**55**	**100%**	**48**	**100%**	**58**	**100%**	**54**	**100%**

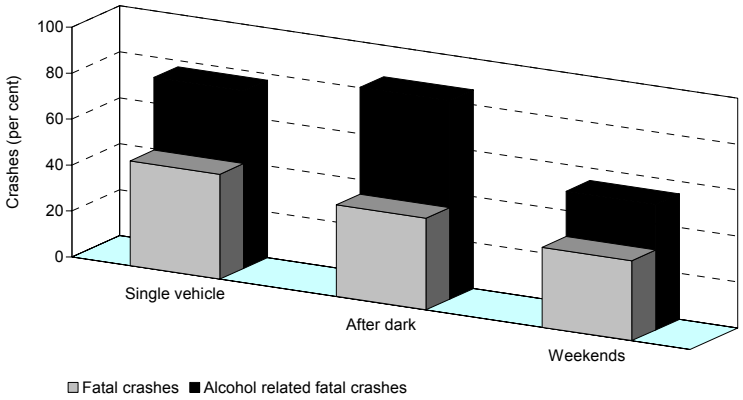
* Based on post-mortem tests

It can be seen that:

- drivers made up the largest group of alcohol-related fatalities in 2001, constituting 63 per cent of fatalities tested with a BAC of 0.05 per cent or greater. This figure is above the previous five-year average of 59 per cent;
- the percentage of pedestrians recording a BAC of 0.05 per cent or greater in 2001 was 26 per cent, an increase from 2000, but lower than the previous five-year average; and
- five motorcycle rider fatalities revealed a BAC of 0.05 per cent or greater in 2001, a decrease of 36 per cent on the previous five-year average and half the number in 2000.

Figure 5.2 shows that the incidence of single vehicle crashes, crashes after dark and crashes on weekends is greatly elevated for alcohol related crashes compared with all crashes.

Fig. 5.2: Crashes involving alcohol by selected variables
Queensland 2001



5.4 Speed

Table 5.1 demonstrated that although speed was a contributing factor in five per cent of all reported crashes, it was judged by the reporting officer to contribute to 17 per cent of fatal crashes and was the fourth most often cited contributing factor. Excessive speed for the prevailing conditions is believed to contribute to a further class of crashes.

Table 5.6 sets out information by year on the severities of crashes to which speed was judged by the reporting officer to be a contributing factor.

Table 5.6: Severity of crashes to which speed was a contributing factor
Queensland 1996-2001

Severity	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fatal	48	6%	51	6%	30	4%	40	5%	49	5%	50	5%
Hospitalisation	177	22%	177	22%	215	25%	211	25%	239	25%	277	26%
Other injury	259	32%	228	28%	233	27%	210	25%	257	27%	298	28%
Property damage	334	41%	348	43%	378	44%	393	46%	402	42%	442	41%
Total	**818**	**100%**	**804**	**100%**	**856**	**100%**	**854**	**100%**	**947**	**100%**	**1067**	**100%**

The table shows that the distribution of severity levels in crashes to which speed was a contributing factor remained relatively constant from 1996 to 2001. All severity levels in 2001 recorded increases in crash numbers. The involvement of speed in fatal crashes in 2001 was 15 per cent above the 1996 to 2000 average of 44 fatal crashes.

The age groups of fatally injured road users involved in crashes caused by speed as a contributing factor are presented in Table 5.7.

Table 5.7: Age of fatalities in crashes to which speed was a contributing factor
Queensland 1996-2001

Age group	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 16 years	3	5%	1	2%	4	12%	5	11%	1	2%	2	4%
17 - 24 years	31	55%	30	52%	19	56%	13	30%	19	34%	22	41%
25 - 59 years	19	34%	27	47%	11	32%	24	55%	36	64%	30	56%
60 years and over	3	5%	0	0%	0	0%	2	5%	0	0%	0	0%
Total	**56**	**100%**	**58**	**100%**	**34**	**100%**	**44**	**100%**	**56**	**100%**	**54**	**100%**

The table shows that the proportions of each age group involved in speed-related fatal crashes have shown an erratic trend over the period 1996 to 2001. However, in 2001, young adult (17-24 years) fatalities in speed related crashes showed an increase of 16 per cent over 2000. This age group comprised 41 per cent of all speed-related fatalities in 2001.

5.5 Fatigue

It is often difficult to isolate fatigue as a factor in crashes, particularly in the more severe crashes. One means of identifying likely fatigue-related crashes is to analyse single vehicle-type crashes (such as roll-over or hit object) on open roads during high-risk times for fatigue (i.e. 2pm to 4pm and 10pm to 6am). Also included in this analysis are other crashes where police reported fatigue to be a contributing factor. Naturally, this approach will ignore crashes which occur at other times of day, occur in urban areas or are multi-vehicle collisions (e.g. head-on crashes), unless positively identified as a fatigue crash by police. However, the assumptions described above do point to factors which collectively constitute the major ingredients for fatigue crashes and therefore allow consistent analysis.

Table 5.8: Severity of fatigue related crashes*
Queensland 1996-2001

Severity	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fatal	53	4%	44	4%	34	3%	27	2%	27	2%	43	4%
Hospitalisation	322	25%	334	27%	324	28%	293	25%	309	26%	350	30%
Other injury	400	31%	370	30%	314	27%	372	31%	353	30%	340	29%
Property damage	502	39%	486	39%	501	43%	489	41%	499	42%	440	38%
Total	**1277**	**100%**	**1234**	**100%**	**1173**	**100%**	**1181**	**100%**	**1188**	**100%**	**1173**	**100%**

* Single vehicle-type crashes in 100km/h zones during typical fatigue times (2-4pm, 10pm-6am) or where police considered fatigue was a contributing factor.

The data presented in Table 5.8 indicates that:

- the total number of fatigue-related crashes in 2001 was lower than the 2000 figure by less than one per cent, and lower than the five-year average of 1211 crashes by three per cent; while
- the number of fatigue-related fatal crashes increased significantly by 59 per cent in 2001 compared with 2000 and was 16 per cent above the five-year period of 1996 to 2000 average.

An analysis of fatigue-related fatalities by various age groups is presented in Table 5.9.

Table 5.9: Fatalities by age group: fatigue related crashes
Queensland 1996-2001

Age group	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
0 - 16 years	5	9%	5	11%	2	5%	6	18%	1	3%	6	12%
17 - 24 years	21	38%	20	43%	20	50%	7	21%	14	37%	11	22%
25 - 59 years	27	49%	20	43%	17	43%	20	59%	17	45%	23	47%
60 years and over	2	4%	2	4%	1	3%	1	3%	6	16%	9	18%
Total	**55**	**100%**	**47**	**100%**	**40**	**100%**	**34**	**100%**	**38**	**100%**	**49**	**100%**

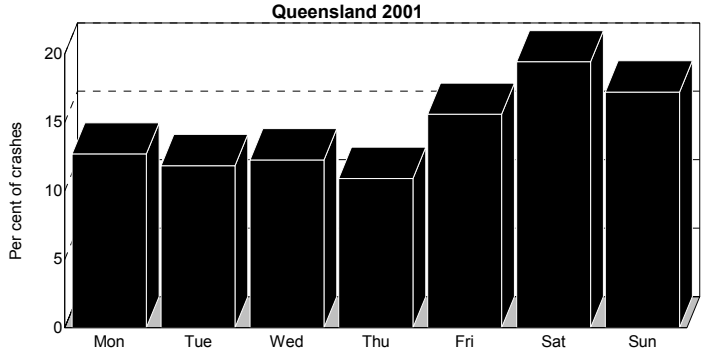
* Single vehicle-type crashes in 100km/h zones during typical fatigue times (2-4pm, 10pm-6am) or where police considered fatigue was a contributing factor.

Table 5.9 indicates that:

- during 2001, the number of fatigue-related fatalities for 17 to 24 year olds decreased by 21 per cent when compared with this age group in 2000 and showed a 33 per cent decrease against the previous five-year average; and
- 47 per cent of Queensland's fatigue-related fatalities in 2001 involved the 25 to 59 years age group (just one percentage point below the previous five-year average of 48 per cent).

An analysis by day of week of single-vehicle crashes on open roads during typical fatigue periods shows that, for 2001, fatigue-related crashes were most likely to occur on Fridays, Saturdays and Sundays. Figure 5.3 charts the occurrence of fatigue-related crashes by day of week.

Fig. 5.3: Fatigue-related crashes by day of week
Queensland 2001



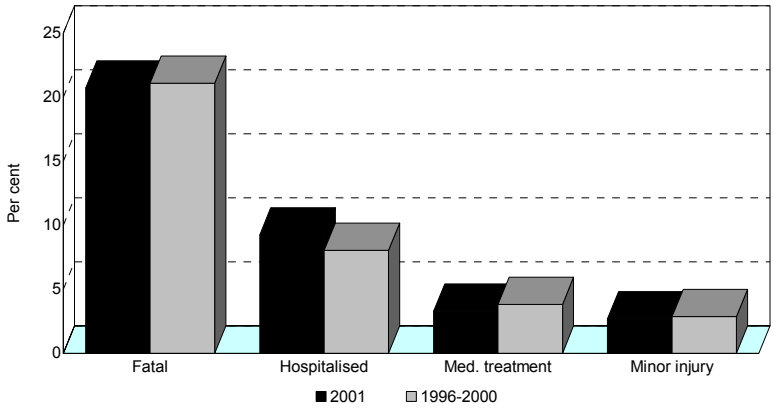
Analysis of previous years' data has revealed that the most over-represented days for fatigue-related crashes are the weekend and Friday. In 2001, this trend continued with 52 per cent of fatigue-related crashes occurring on Fridays, Saturdays and Sundays.

5.6 Seat belt usage

Recent research indicates that seat belt wearing rates have improved in the general driving population over the past five years. However, in 2001, 29 per cent of vehicle occupants were unrestrained (where restraint use could be determined) compared with the previous five-year average of 29 per cent.

Figure 5.4 shows that the greater the severity of a road crash, the less likely it was that seat belts were worn.

Fig 5.4: Proportion of unrestrained vehicle occupant casualties Queensland 2001 compared to 1996-2000



As indicated in Figure 5.4:

- in 2001, 21 per cent of vehicle occupant fatalities were unrestrained compared with nine per cent of hospitalised casualties, three per cent of persons medically treated, and three per cent of persons receiving minor injuries; and

- the incidence rate for unrestrained fatalities in 2001 was similar to the previous five-year average.

In many instances, investigating police were unable to determine whether or not a vehicle occupant was wearing a restraint at the time of a crash. Table 5.10 presents seat belt usage data for vehicle occupant fatalities in instances where restraint use could be determined. It should be noted that bus passengers were not included as vehicle occupants for seat belt analysis.

Table 5.10: Fatalities by seat belt usage - Queensland 1996-2001

	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Occupants:												
Not determined	89	33%	88	36%	62	32%	66	31%	63	27%	66	29%
Total determined	182	67%	155	64%	131	68%	145	69%	172	73%	160	71%
Total vehicle occupants	271	100%	243	100%	193	100%	211	100%	235	100%	226	100%
Of those occupants where restraint use could be determined:												
Restrained	137	75%	110	71%	97	74%	98	68%	115	67%	113	71%
Unrestrained	45	25%	45	29%	34	26%	47	32%	57	33%	47	29%
Drivers:												
Not determined	48	28%	49	31%	37	31%	36	29%	39	25%	46	31%
Total determined	122	72%	107	69%	83	69%	89	71%	116	75%	104	69%
Total drivers	170	100%	156	100%	120	100%	125	100%	155	100%	150	100%
Of those drivers where restraint use could be determined:												
Restrained	92	75%	75	70%	63	76%	65	73%	77	66%	79	76%
Unrestrained	30	25%	32	30%	20	24%	24	27%	39	34%	25	24%
Passengers:												
Not determined	41	41%	39	45%	25	34%	30	35%	24	30%	20	26%
Total determined	60	59%	48	55%	48	66%	56	65%	56	70%	56	74%
Total vehicle passengers	101	100%	87	100%	73	100%	86	100%	80	100%	76	100%
Of those passengers where restraint use could be determined:												
Restrained	45	75%	35	73%	34	71%	33	59%	38	68%	34	61%
Unrestrained	15	25%	13	27%	14	29%	23	41%	18	32%	22	39%

The data in Table 5.10 indicates that:

- the percentage of cases of fatally injured vehicle occupants where restraint use could not be determined increased from 27 per cent in 2000 to 29 per cent in 2001;
- in 2001, 29 per cent of drivers and passengers killed on Queensland roads were unrestrained, equivalent to the average proportion for the previous five years; and
- fatally injured drivers were more likely to be wearing a seat belt than fatally injured passengers in 2001.

Table 5.11 shows a breakdown by age group of unrestrained vehicle occupants who were fatally injured for the period 1996 to 2001. The percentages represent the proportion of all vehicle occupant fatalities in that age group (where restraint use could be determined).

Table 5.11: Unrestrained vehicle occupant fatalities by age group
Queensland 2001 compared with average (1996-2000) *

	2001			Average 1996-2000		
Age group	**Unrestrained**	**Total**	**%**	**Unrestrained**	**Total**	**%**
0 - 16 years**	4	8	50%	5	13	38%
17 - 24 years	15	43	35%	12	44	27%
25 - 39 years	9	31	29%	16	38	42%
40 - 59 years	12	44	27%	8	32	25%
60 years and over	7	34	21%	5	29	17%
Total	**47**	**160**	**29%**	**46**	**156**	**29%**

* Where restraint use could be determined

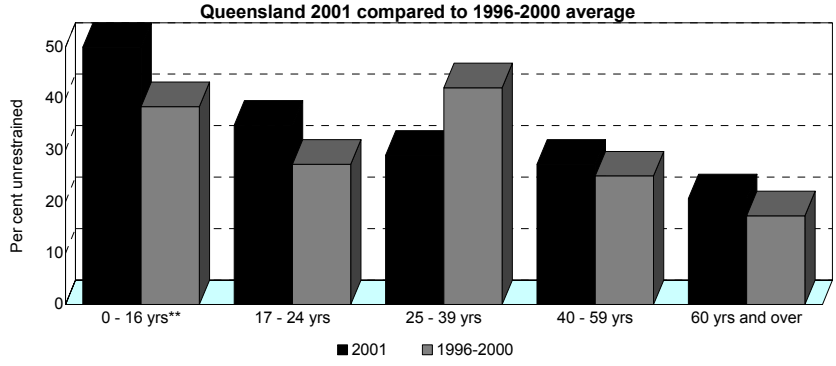
** Includes casualties of unknown age

The data presented in Table 5.11 indicate that:

- 50 per cent of vehicle occupants aged 0 to 16 years killed in road crashes during 2001 were unrestrained, making this the age group with least compliance;
- the 17 to 24 years age group, with 35 per cent non compliance, was the group next most likely to be unrestrained; and
- the only improvement over 1996 to 2000 occurred in the 25 to 39 years age group where the proportion of unrestrained vehicle occupants in 2001 decreased by 13 percentage points.

Figure 5.5 illustrates, for various age groups, the proportion of unrestrained vehicle occupant fatalities in 2001 compared with the average of the previous five years.

Fig. 5.5: Proportion of unrestrained vehicle occupant fatalities by age
Queensland 2001 compared to 1996-2000 average



APPENDIX 1 GLOSSARY

Road users are defined as:

- drivers of motor vehicles other than a motorcycle
- motorcycle riders
- bicycle riders
- horse riders
- passengers of the above
- pedestrians

A *road traffic* crash is a crash reported to the police which resulted from the movement of at least one road vehicle on a road and involving death or injury to any person, or property damage.

A *property damage only* crash is a crash where at least one vehicle is towed away or the damage cost is greater than $2,500 (or $1000 prior to 1 December 1991).

The *road toll* is a count of fatalities (excluding injuries) resulting from road traffic crashes.

A *fatality* is recorded when any person dies within 30 days as a result of injuries sustained in a road traffic crash.

A *serious injury* is recorded when any person involved in a road traffic crash: (a) requires hospitalisation (i.e. is admitted to hospital) or (b) requires medical treatment.

An *injury* is recorded when any person involved in a road traffic crash: (a) requires hospitalisation; (b) requires medical treatment; or (c) receives a minor injury (i.e. first aid treatment only).

A *casualty* is the grouping of both fatalities and injuries.

A *single vehicle* crash is a crash in which only one moving motor vehicle is involved in the initial event, either in a collision (e.g. with a roadside pole) or a non-collision (e.g. a roll over). A collision with a parked car is considered a single vehicle crash because the characteristics of this type of crash are similar to crashes where a vehicle collides with a roadside object.

A *multi-vehicle* crash is a crash which involves an initial collision between any two (or more) moving motor vehicles.

A *blood alcohol content* (BAC) reading is a measure of the proportion of alcohol in a person's blood. This reading is typically obtained using a breathalyser or by conducting a blood test. Where possible, a post-mortem blood analysis is carried out on a fatally injured road user.

A *controller* is a road user who exercises control over their movements at the time of an accident (i.e. driver, rider or pedestrian). Passengers are not regarded as controllers.

A *child* is regarded as being a road user aged under 17 years.

A *young adult* is a road user aged from 17 to 24 years.

A *mature aged road user* is a person who is aged from 25 to 59 years.

An *older road user* is a person who is aged 60 years or over.

Heavy freight vehicle refers to both rigid and articulated trucks.

A *vehicle occupant* is a person travelling in a car, utility, panel van, bus, rigid truck or articulated vehicle at the time of a crash.

A *driver* is the vehicle occupant in control of a motor vehicle at the time of a crash.

A *passenger* is any other occupant of a motor vehicle at the time of a crash.

A *motorcyclist* is either the rider or pillion passenger of a motorcycle.

A *pedal cyclist* is either the rider or pillion passenger of a bicycle.

A *pedestrian* is either an ordinary pedestrian or a person on a wheel recreational device. e.g. skateboard, rollerblades/skates.

A *peak commuter* period refers to that time of day when most commuters are either travelling to or returning from work. For this report it is considered to cover the periods from 6am to 10am and 4pm to 6pm, Monday to Friday.

The *provincial cities* are: Gold Coast, Gladstone, Charters Towers, Warwick, Cairns, Maryborough, Townsville, Gympie, Mackay, Mount Isa, Bundaberg, Rockhampton, Toowoomba, Hervey Bay City, Caloundra City and Thuringowa City.

APPENDIX 2 KEY SUMMARY TABLES

In this section, major characteristics of road traffic crashes in Queensland during 2001 are presented as a series of more detailed cross-tabulations from the Queensland Road Crash System maintained by Queensland Transport's Land Transport and Safety Division. A list of summary tables contained in this section is presented below.

Table 1: Road traffic casualties by road user type - Queensland 1996 - 2001

	Car, Truck, Bus						Motorcycle					
	Driver			Passenger			Rider			Pillion		
Year	K	H	M	K	H	M	K	H	M	K	H	M
1996	170	1919	3411	104	1270	2008	39	562	519	2	44	42
1997	157	1832	3328	88	1128	1891	40	504	406	3	42	44
1998	120	1991	3280	75	1169	1840	23	535	383	2	55	35
1999	125	2135	3315	87	1193	1840	39	490	395	2	42	23
2000	155	2251	3467	82	1287	1856	30	489	357	3	38	28
2001	150	2564	4219	77	1395	2223	28	536	451	1	48	40

	Pedestrian			Pedal Cyclist			Other			All Road Users		
Year	K	H	M	K	H	M	K	H	M	K	H	M
1996	55	411	393	10	259	444	5	16	18	385	4481	6835
1997	59	373	375	12	253	420	1	14	18	360	4146	6482
1998	48	393	336	9	240	427	2	14	21	279	4397	6322
1999	49	385	319	9	241	336	3	15	22	314	4501	6250
2000	39	425	349	6	277	356	2	18	17	317	4785	6430
2001	51	420	336	15	272	364	2	23	22	324	5258	7655

Legend:

K = Killed, H = Admitted to hospital, M = Received medical treatment

* Includes pillion passengers

Table 2A: Road traffic casualties Queensland 2001
by road user type and age group

	Males killed by age goup										
Road user type	**0-4 years**	**5-16 years**	**17-20 years**	**21-25 years**	**26-29 years**	**30-39 years**	**40-49 years**	**50-59 years**	**60 & years**	**Not stated**	**Total**
Drivers	0	0	20	24	10	12	15	8	21	0	110
%	0.0%	0.0%	18.2%	21.8%	9.1%	10.9%	13.6%	7.3%	19.1%	0.0%	100.0
Passengers	1	6	15	4	2	6	1	1	6	0	42
%	2.4%	14.3%	35.7%	9.5%	4.8%	14.3%	2.4%	2.4%	14.3%	0.0%	100.0
Pedestrians	1	4	3	4	1	5	5	4	14	0	40
%	2.5%	10.0%	7.5%	10.0%	2.5%	12.5%	12.5%	10.0%	35.0%	0.0%	100.0
Motorcycle riders	0	0	3	4	5	9	5	0	2	0	28
%	0.0%	0.0%	10.7%	14.3%	17.9%	32.1%	17.9%	0.0%	7.1%	0.0%	100.0
Motorcycle pillions	0	0	0	1	0	0	0	0	0	0	1
%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0
Bicycle riders	0	5	1	0	1	1	3	0	3	0	14
%	0.0%	35.7%	7.1%	0.0%	7.1%	7.1%	21.4%	0.0%	21.4%	0.0%	100.0
Bicycle pillions	0	0	0	0	0	0	0	0	0	0	0
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total killed	**2**	**15**	**42**	**37**	**19**	**33**	**29**	**13**	**46**	**0**	**236**
% of total	**0.8%**	**6.4%**	**17.8%**	**15.7%**	**8.1%**	**14.0%**	**12.3%**	**5.5%**	**19.5%**	**0.0%**	**100.0**

Table 2B: Road traffic casualties Queensland 2001
by road user type and age group

	Females killed by age goup										
Road user type	**0-4 years**	**5-16 years**	**17-20 years**	**21-25 years**	**26-29 years**	**30-39 years**	**40-49 years**	**50-59 years**	**60 & years**	**Not stated**	**Total**
Drivers	0	1	2	2	1	7	11	9	7	0	40
%	0.0%	2.5%	5.0%	5.0%	2.5%	17.5%	27.5%	22.5%	17.5%	0.0%	100.0
Passengers	1	4	6	2	1	2	4	6	10	0	36
%	2.8%	11.1%	16.7%	5.6%	2.8%	5.6%	11.1%	16.7%	27.8%	0.0%	100.0
Pedestrians	1	2	1	0	0	1	1	1	3	0	10
%	10.0%	20.0%	10.0%	0.0%	0.0%	10.0%	10.0%	10.0%	30.0%	0.0%	100.0
Motorcycle riders	0	0	0	0	0	0	0	0	0	0	0
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Motorcycle pillions	0	0	0	0	0	0	0	0	0	0	0
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycle riders	0	0	0	0	0	0	0	1	0	0	1
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0
Bicycle pillions	0	0	0	0	0	0	0	0	0	0	0
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total killed	**2**	**7**	**9**	**4**	**2**	**10**	**16**	**17**	**20**	**0**	**87**
% of total	**2.3%**	**8.0%**	**10.3%**	**4.6%**	**2.3%**	**11.5%**	**18.4%**	**19.5%**	**23.0%**	**0.0%**	**100.0**

Table 2C: Road traffic casualties Queensland 2001
by road user type and age group

Road user type	Persons killed by age goup										
	0-4* years	5-16 years	17-20 years	21-25 years	26-29 years	30-39 years	40-49 years	50-59 years	60 & years	Not stated	Total
Drivers	0	1	22	26	11	19	26	17	28	0	150
%	0.0%	0.7%	14.7%	17.3%	7.3%	12.7%	17.3%	11.3%	18.7%	0.0%	100.0
Passengers	3	10	21	6	3	8	5	7	16	0	79
%	3.8%	12.7%	26.6%	7.6%	3.8%	10.1%	6.3%	8.9%	20.3%	0.0%	100.0
Pedestrians	2	6	4	4	1	6	6	5	17	0	51
%	3.9%	11.8%	7.8%	7.8%	2.0%	11.8%	11.8%	9.8%	33.3%	0.0%	100.0
Motorcycle riders	0	0	3	4	5	9	5	0	2	0	28
%	0.0%	0.0%	10.7%	14.3%	17.9%	32.1%	17.9%	0.0%	7.1%	0.0%	100.0
Motorcycle pillions	0	0	0	1	0	0	0	0	0	0	1
%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0
Bicycle riders	0	5	1	0	1	1	3	1	3	0	15
%	0.0%	33.3%	6.7%	0.0%	6.7%	6.7%	20.0%	6.7%	20.0%	0.0%	100.0
Bicycle pillions	0	0	0	0	0	0	0	0	0	0	0
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total killed	**5**	**22**	**51**	**41**	**21**	**43**	**45**	**30**	**66**	**0**	**324**
% of total	**1.5%**	**6.8%**	**15.7%**	**12.7%**	**6.5%**	**13.3%**	**13.9%**	**9.3%**	**20.4%**	**0.0%**	**100.0**

* Includes fatalities of unknown gender

Table 2D: Road traffic casualties Queensland 2001
by road user type and age group

Road user type	Males injured by age goup										
	0-4 years	5-16 years	17-20 years	21-25 years	26-29 years	30-39 years	40-49 years	50-59 years	60 & years	Not stated	Total
Drivers	0	41	796	708	479	999	777	571	562	8	4941
%	0.0%	0.8%	16.1%	14.3%	9.7%	20.2%	15.7%	11.6%	11.4%	0.2%	100.0
Passengers	102	418	440	279	139	194	110	85	113	32	1912
%	5.3%	21.9%	23.0%	14.6%	7.3%	10.1%	5.8%	4.4%	5.9%	1.7%	100.0
Pedestrians	25	126	56	47	24	64	43	49	76	10	520
%	4.8%	24.2%	10.8%	9.0%	4.6%	12.3%	8.3%	9.4%	14.6%	1.9%	100.0
Motorcycle riders	1	12	134	204	142	304	187	81	31	1	1097
%	0.1%	1.1%	12.2%	18.6%	12.9%	27.7%	17.0%	7.4%	2.8%	0.1%	100.0
Motorcycle pillions	0	4	6	5	3	2	2	0	2	2	26
%	0.0%	15.4%	23.1%	19.2%	11.5%	7.7%	7.7%	0.0%	7.7%	7.7%	100.0
Bicycle riders	3	231	81	61	52	109	82	38	38	9	704
%	0.4%	32.8%	11.5%	8.7%	7.4%	15.5%	11.6%	5.4%	5.4%	1.3%	100.0
Bicycle pillions	0	1	0	0	0	0	0	0	0	0	1
%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0
Total injured	**131**	**833**	**1513**	**1304**	**839**	**1672**	**1201**	**824**	**822**	**62**	**9201**
% of total	**1.4%**	**9.1%**	**16.4%**	**14.2%**	**9.1%**	**18.2%**	**13.1%**	**9.0%**	**8.9%**	**0.7%**	**100.0**

Table 2E: Road traffic casualties Queensland 2001
by road user type and age group

	Females injured by age goup										
Road user type	**0-4 years**	**5-16 years**	**17-20 years**	**21-25 years**	**26-29 years**	**30-39 years**	**40-49 years**	**50-59 years**	**60 & years**	**Not stated**	**Total**
Drivers	0	15	757	695	484	1005	830	573	379	5	4743
%	0.0%	0.3%	16.0%	14.7%	10.2%	21.2%	17.5%	12.1%	8.0%	0.1%	100.0
Passengers	76	556	483	266	177	316	283	265	368	37	2827
%	2.7%	19.7%	17.1%	9.4%	6.3%	11.2%	10.0%	9.4%	13.0%	1.3%	100.0
Pedestrians	11	106	31	36	17	50	35	30	72	3	391
%	2.8%	27.1%	7.9%	9.2%	4.3%	12.8%	9.0%	7.7%	18.4%	0.8%	100.0
Motorcycle riders	0	1	7	12	9	27	17	9	4	0	86
%	0.0%	1.2%	8.1%	14.0%	10.5%	31.4%	19.8%	10.5%	4.7%	0.0%	100.0
Motorcycle pillions	0	2	15	12	5	12	12	12	3	2	75
%	0.0%	2.7%	20.0%	16.0%	6.7%	16.0%	16.0%	16.0%	4.0%	2.7%	100.0
Bicycle riders	0	52	14	19	10	24	14	7	3	1	144
%	0.0%	36.1%	9.7%	13.2%	6.9%	16.7%	9.7%	4.9%	2.1%	0.7%	100.0
Bicycle pillions	0	2	0	0	0	0	0	0	0	0	2
%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0
Total injured	**87**	**734**	**1307**	**1040**	**702**	**1434**	**1191**	**896**	**829**	**48**	**8268**
% of total	**1.1%**	**8.9%**	**15.8%**	**12.6%**	**8.5%**	**17.3%**	**14.4%**	**10.8%**	**10.0%**	**0.6%**	**100.0**

Table 2F: Road traffic casualties Queensland 2001
by road user type and age group*

	Persons injured by age goup										
Road user type	**0-4 years**	**5-16 years**	**17-20 years**	**21-25 years**	**26-29 years**	**30-39 years**	**40-49 years**	**50-59 years**	**60 & years**	**Not stated**	**Total**
Drivers	0	56	1553	1403	963	2004	1607	1144	941	13	9684
%	0.0%	0.6%	16.0%	14.5%	9.9%	20.7%	16.6%	11.8%	9.7%	0.1%	100.0
Passengers	178	974	923	545	316	510	393	350	481	69	4739
%	3.8%	20.6%	19.5%	11.5%	6.7%	10.8%	8.3%	7.4%	10.1%	1.5%	100.0
Pedestrians	36	232	87	83	41	114	78	79	148	13	911
%	4.0%	25.5%	9.5%	9.1%	4.5%	12.5%	8.6%	8.7%	16.2%	1.4%	100.0
Motorcycle riders	1	13	141	216	151	331	204	90	35	1	1183
%	0.1%	1.1%	11.9%	18.3%	12.8%	28.0%	17.2%	7.6%	3.0%	0.1%	100.0
Motorcycle pillions	0	6	21	17	8	14	14	12	5	4	101
%	0.0%	5.9%	20.8%	16.8%	7.9%	13.9%	13.9%	11.9%	5.0%	4.0%	100.0
Bicycle riders	3	283	95	80	62	133	96	45	41	10	848
%	0.4%	33.4%	11.2%	9.4%	7.3%	15.7%	11.3%	5.3%	4.8%	1.2%	100.0
Bicycle pillions	0	3	0	0	0	0	0	0	0	0	3
%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0
Total injured	**218**	**1567**	**2820**	**2344**	**1541**	**3106**	**2392**	**1720**	**1651**	**110**	**17469**
% of total	**1.2%**	**9.0%**	**16.1%**	**13.4%**	**8.8%**	**17.8%**	**13.7%**	**9.8%**	**9.5%**	**0.6%**	**100.0**

* Includes casualties of unknown gender

Table 3A: Road traffic casualties Queensland 2001
by road user type, age group and sex: persons killed

Age group	Drivers			Motor cyclists			Pedal cyclists		
	Male	Female	Not stated	Male	Female	Not stated	Male	Female	Not stated
0-4 years	0	0	0	0	0	0	0	0	0
5-16 years	0	1	0	0	0	0	5	0	0
17-20 years	20	2	0	3	0	0	1	0	0
21-25 years	24	2	0	5	0	0	0	0	0
26-29 years	10	1	0	5	0	0	1	0	0
30-34 years	9	2	0	6	0	0	0	0	0
35-39 years	3	5	0	3	0	0	1	0	0
40-49 years	15	11	0	5	0	0	3	0	0
50-59 years	8	9	0	0	0	0	0	1	0
60 years & over	21	7	0	2	0	0	3	0	0
Not stated	0	0	0	0	0	0	0	0	0
Total killed	110	40	0	29	0	0	14	1	0

Age group	Pedestrians			Passengers			Total		
	Male	Female	Not stated	Male	Female	Not stated	Male	Female	Not stated
0-4 years	1	1	0	1	1	1	2	2	1
5-16 years	4	2	0	6	4	0	15	7	0
17-20 years	3	1	0	15	6	0	42	9	0
21-25 years	4	0	0	4	2	0	37	4	0
26-29 years	1	0	0	2	1	0	19	2	0
30-34 years	4	0	0	2	0	0	21	2	0
35-39 years	1	1	0	4	1	0	12	8	0
40-49 years	5	1	0	1	4	0	29	16	0
50-59 years	4	1	0	1	6	0	13	17	0
60 years & over	14	3	0	6	10	0	46	20	0
Not stated	0	0	0	0	0	0	0	0	0
Total killed	41	10	0	42	35	1	236	87	1

Table 3B: Road traffic casualties Queensland 2001
by road user type, age group and sex: persons injured

Age group	Drivers			Motor cyclists			Pedal cyclists		
	Male	Female	Not stated	Male	Female	Not stated	Male	Female	Not stated
0-4 years	0	0	0	1	0	0	3	0	0
5-16 years	41	15	0	16	3	0	232	54	0
17-20 years	796	757	0	140	22	0	81	14	0
21-25 years	708	695	0	209	24	0	61	19	0
26-29 years	479	484	0	145	14	0	52	10	0
30-34 years	497	527	0	158	21	0	59	13	0
35-39 years	502	478	0	148	18	0	50	11	0
40-49 years	777	830	0	189	29	0	82	14	0
50-59 years	571	573	0	81	21	0	38	7	0
60 years & over	562	379	0	33	7	0	38	3	0
Not stated	8	5	4	3	2	0	9	1	0
Total injured	**4941**	**4743**	**4**	**1123**	**161**	**0**	**705**	**146**	**0**

Age group	Pedestrians			Passengers			Total		
	Male	Female	Not stated	Male	Female	Not stated	Male	Female	Not stated
0-4 years	25	11	0	102	76	0	131	87	0
5-16 years	126	106	0	418	556	0	833	734	0
17-20 years	56	31	0	440	483	0	1513	1307	0
21-25 years	47	36	0	279	266	0	1304	1040	0
26-29 years	24	17	0	139	177	0	839	702	0
30-34 years	35	26	1	115	162	0	864	749	1
35-39 years	29	24	0	79	154	0	808	685	0
40-49 years	43	35	0	110	283	0	1201	1191	0
50-59 years	49	30	0	85	265	0	824	896	0
60 years & over	76	72	0	113	368	0	822	829	0
Not stated	10	3	0	32	37	17	62	48	21
Total injured	**520**	**391**	**1**	**1912**	**2827**	**17**	**9201**	**8268**	**22**

Table 4A: Road traffic casualties Queensland 2001
Restraint details by age group: persons killed

Restraint details	0 - 4 years	5 - 16 years	17 - 20 years	21 - 25 years	26 - 29 years	30 - 39 years	40 - 49 years	50 - 59 years	60 years & over	Not stated	Total
Fitted:											
Worn	1	3	21	11	7	12	17	15	27	0	114
Not worn	0	4	9	5	2	6	5	6	7	0	44
Unknown if worn	1	2	8	7	5	4	4	2	7	0	40
Not fitted	0	0	1	0	0	1	1	0	0	0	3
Unknown	1	2	4	9	0	2	4	1	2	0	25
Not applicable	2	11	8	9	7	18	14	6	23	0	98
Total killed	**5**	**22**	**51**	**41**	**21**	**43**	**45**	**30**	**66**	**0**	**324**

Table 4B: Road traffic casualties Queensland 2001
Restraint details by age group: persons injured

Restraint details	0 - 4 years	5 - 16 years	17 - 20 years	21 - 25 years	26 - 29 years	30 - 39 years	40 - 49 years	50 - 59 years	60 years & over	Not stated	Total
Fitted:											
Worn	153	779	1996	1540	999	2048	1667	1278	1196	36	11692
Not worn	7	60	89	60	53	88	59	27	31	3	477
Unknown if worn	12	51	181	163	106	172	113	68	72	34	972
Not fitted	1	77	28	17	12	20	19	12	37	6	229
Unknown	5	61	182	166	102	171	125	100	81	30	1023
Not applicable	40	539	344	398	269	607	409	235	234	33	3108
Total injured	**218**	**1567**	**2820**	**2344**	**1541**	**3106**	**2392**	**1720**	**1651**	**142**	**17501**

Table 5A: Road traffic casualties Queensland 2001
Seat belt usage by age group: persons killed

Age group	Total killed *	Unknown seat belt usage	Unrestrained	Restrained
0-4	3	2	0	1
5-11	2	0	1	1
12-16	9	4	3	2
17-20	43	12	10	21
21-24	25	12	5	8
25-29	21	9	2	10
30-34	12	5	2	5
35-39	13	1	5	7
40-49	31	8	6	17
50-59	24	3	6	15
60-69	21	5	4	12
70-79	15	3	2	10
80+	7	1	1	5
Not stated	0	0	0	0
Total	**226**	**65**	**47**	**114**

Table 5B: Road traffic casualties Queensland 2001
Seat belt usage by age group: persons injured

Age group	Total seriously injured *	Unknown seat belt usage	Unrestrained	Restrained
0-4	120	14	5	101
5-11	273	21	19	233
12-16	368	53	29	286
17-20	1721	267	76	1378
21-24	1071	187	49	835
25-29	1041	174	46	821
30-34	836	113	44	679
35-39	760	99	26	635
40-49	1298	158	47	1093
50-59	961	100	21	840
60-69	464	51	12	401
70-79	400	31	11	358
80+	163	15	1	147
Not stated	60	35	4	21
Total	**9536**	**1318**	**390**	**7828**

* Does not include occupants of buses or tractors

Table 6: Road traffic casualties Queensland 2001
Seat belt and helmet wearing details by injury severity

Road user type/safety device used	Killed	Seriously injured	Other injury	Total
Driver:				
Restraint worn	79	5573	2414	8066
Fitted but not worn	24	202	56	282
No restraint fitted	1	17	8	26
Not stated	46	947	429	1422
Sub total driver	150	6739	2907	9796
Passenger:				
Restraint worn	34	2733	972	3739
Fitted but not worn	20	196	23	240
No restraint fitted	2	154	50	206
Not stated	20	502	118	640
Sub total passenger	76	3585	1163	4825
Total vehicle occupants	**226**	**10324**	**4070**	**14621**
Pedal cycle rider & pillion:				
Helmet worn	12	505	138	655
No helmet worn	3	83	27	113
Not stated	0	46	52	98
Total pedal cycle rider & pillion	**15**	**634**	**217**	**866**
Motorcycle cycle rider & pillion:				
Helmet worn	27	990	165	1182
No helmet worn	2	36	4	42
Not stated	0	40	52	92
Total motor cycle rider & pillion	**29**	**1066**	**221**	**1316**

Table 7: Road traffic casualties Queensland 2001
by road user type and most severe injury sustained: persons killed

Nature of injury	Drivers*	Motor cyclists	Pedal cyclists	Pedestrians	Passengers**	Other	TOTAL
Fractures							
Skull & Face	4	2	0	4	7	0	17
Spine & Trunk	6	3	0	2	6	0	17
Upper Limbs	0	0	0	0	0	0	0
Lower Limbs & Mult	0	0	0	1	0	0	1
Sub-Total	10	5	0	7	13	0	35
Lacerations							
Head & Face	0	0	0	0	0	0	0
Neck & Trunk	0	0	0	0	0	0	0
Upper Limbs	0	0	0	0	0	0	0
Lower Limbs	0	0	0	1	0	0	1
Sub-Total	0	0	0	1	0	0	1
Other							
Intracranial	28	3	6	16	10	0	63
Concussion	0	0	0	0	0	0	0
Internal	107	20	7	27	51	0	212
Nerve/Spinal Cord Injury	0	0	0	0	0	0	0
Crush Injury	2	0	0	0	1	0	3
Blood Vessel Injury	3	0	1	0	2	0	6
Foreign Matter in Orifice	0	0	0	0	0	0	0
Burn	1	0	0	0	1	0	2
Dislocation	0	0	0	0	0	0	0
Sprain/Strain	0	0	0	0	0	0	0
Abrasions	0	0	0	0	0	0	0
Contusion	0	0	0	0	0	0	0
Shock	0	0	0	0	0	0	0
Other	0	0	1	0	1	0	2
Sub-total	141	23	15	43	66	0	288
Total fatalities	151	28	15	51	79	0	324

* Includes horse riders

** Includes pillion passengers

Table 8A: Road traffic crashes Queensland 2001
Involved controllers by road user type and age group: males only

Age group	Driver		Motorcyclist		Bicyclist	
	Inv	Resp	Inv	Resp	Inv	Resp
0-4	1	0	1	1	3	3
5-7	0	0	1	1	20	19
8-12	2	2	0	0	85	69
13-15	48	43	7	7	101	74
16-19	2968	2114	94	62	101	62
20-24	3429	2067	235	136	65	28
25-29	2637	1438	193	114	69	26
30-34	2145	1069	171	86	60	18
35-39	1966	919	158	83	52	13
40-49	3341	1463	208	102	86	23
50-59	2480	1101	89	58	38	10
60-69	1269	622	21	13	28	8
70+	1049	705	14	7	14	9
Not stated	248	186	7	7	9	9
Total	21583	11729	1199	677	731	371

Age group	Pedestrian		Other road user		Total	
	Inv	Resp	Inv	Resp	Inv	Resp
0-4	26	20	0	0	31	24
5-7	27	25	1	1	49	46
8-12	56	44	1	1	144	116
13-15	38	26	0	0	194	154
16-19	61	36	2	2	3226	2378
20-24	49	34	7	3	3785	2408
25-29	34	17	21	12	2954	1734
30-34	39	19	23	11	2438	1320
35-39	30	12	33	19	2239	1152
40-49	48	18	58	37	3741	1830
50-59	53	19	35	21	2695	1347
60-69	35	20	9	5	1362	729
70+	55	27	3	3	1135	781
Not stated	9	5	1	0	274	221
Total	560	322	194	115	24267	14240

Legend:

Inv - Number of controllers* involved in a crash

Resp - The controller considered most responsible for the crash by police

* Controller - see definitions, Appendix 1

Table 8B: Road traffic crashes Queensland 2001
Involved controllers by road user type and age group: females only

Age group	Driver		Motorcyclist		Bicyclist	
	Inv	Resp	Inv	Resp	Inv	Resp
0-4	0	0	0	0	0	0
5-7	0	0	0	0	7	6
8-12	0	0	0	0	24	20
13-15	12	10	0	0	20	12
16-19	1572	973	6	4	13	7
20-24	1979	987	8	5	17	9
25-29	1647	728	16	9	14	5
30-34	1387	587	14	6	13	4
35-39	1344	533	13	8	11	1
40-49	2298	911	18	11	14	4
50-59	1460	643	9	4	8	1
60-69	561	284	5	4	1	0
70+	482	350	0	0	2	1
Not stated	70	47	0	0	2	1
Total	12812	6053	89	51	146	71

Age group	Pedestrian		Other road user		Total	
	Inv	Resp	Inv	Resp	Inv	Resp
0-4	13	6	0	0	13	6
5-7	22	16	0	0	29	22
8-12	35	26	0	0	59	46
13-15	40	24	0	0	72	47
16-19	29	15	0	0	1620	1022
20-24	44	17	0	0	2048	1070
25-29	23	5	1	1	1701	794
30-34	26	10	0	0	1440	664
35-39	25	10	1	1	1394	602
40-49	37	10	2	1	2369	1009
50-59	31	8	1	0	1509	697
60-69	20	8	0	0	587	311
70+	55	18	0	0	539	370
Not stated	3	3	0	0	75	54
Total	403	176	5	3	13455	6714

Legend:

Inv - Number of controllers* involved in a crash

Resp - The controller considered most responsible for the crash by police

* Controller - see definitions, Appendix 1

Table 8C: Road traffic crashes Queensland 2001
Involved controllers by road user type and age group: all persons

Age group	Driver		Motorcyclist		Bicyclist	
	Inv	Resp	Inv	Resp	Inv	Resp
0-4	1	0	2	2	1	0
5-7	0	0	1	1	27	25
8-12	2	2	0	0	109	89
13-15	60	53	7	7	121	86
16-19	4540	3087	100	66	114	69
20-24	5408	3054	243	141	82	37
25-29	4284	2166	209	123	83	31
30-34	3532	1656	185	92	73	22
35-39	3310	1452	171	91	63	14
40-49	5639	2374	226	113	100	27
50-59	3940	1744	98	62	46	11
60-69	1830	906	26	17	29	8
70+	1531	1055	14	7	16	10
Not stated	318	233	7	7	11	10
Total	34395	17782	1288	728	877	442

Age group	Pedestrian		Other road user		Total	
	Inv	Resp	Inv	Resp	Inv	Resp
0-4	39	26	2	2	1	0
5-7	49	41	1	1	78	68
8-12	91	70	1	1	203	162
13-15	78	50	0	0	266	201
16-19	90	51	2	2	4846	3400
20-24	93	51	7	3	5833	3478
25-29	57	22	22	13	4655	2528
30-34	65	29	23	11	3878	1984
35-39	55	22	34	20	3633	1754
40-49	85	28	60	38	6110	2839
50-59	84	27	36	21	4204	2044
60-69	55	28	9	5	1949	1040
70+	110	45	3	3	1674	1151
Not stated	12	8	1	0	349	275
Total	963	498	199	118	37722	20954

Legend:

Inv - Number of controllers* involved in a crash

Resp - The controller considered most responsible for the crash by police

* Controller - see definitions, Appendix 1

Table 9A: Blood alcohol analysis Queensland 2001
Controllers* killed in road traffic crashes

Blood alcohol analysis	Drivers	Motor cyclists	Pedal cyclists	Pedestrians	Other	Total
No blood analysis	21	1	8	18	0	48
Negative	94	20	6	17	0	137
Positive						
.01 - .04	3	2	0	1	0	6
.05 - .07	2	1	0	1	0	4
.08 - .14	11	0	0	5	0	16
.15 - .19	13	4	1	4	0	22
.20 - .24	6	0	0	2	0	8
.25 & over	2	0	0	3	0	5
Total positive	37	7	1	16	0	61
Total controllers	**152**	**28**	**15**	**51**	**0**	**246**
Total tested	131	27	7	33	0	198
% positive	28.2	25.9	14.3	48.5	0.0	30.8

Table 9B: Blood alcohol analysis Queensland 2001
Controllers* injured in road traffic crashes

Blood alcohol analysis	Drivers	Motor cyclists	Pedal cyclists	Pedestrians	Other	Total
No test required	5245	717	762	864	3	7591
Refused test	29	3	0	0	0	32
Negative	3751	405	83	45	1	4285
Positive						
.01 - .04	42	6	1	0	0	49
.05 - .07	42	1	0	0	0	43
.08 - .14	192	14	0	1	0	207
.15 - .19	162	21	0	1	0	184
.20 - .24	75	2	0	0	0	77
.25 & over	146	14	2	0	0	162
Total positive	659	58	3	2	0	722
Total controllers	**9684**	**1183**	**848**	**911**	**4**	**12630**
Total tested	4410	463	86	47	0	5007
% positive	14.9	12.5	3.5	4.3	0.0	14.4

* Controller - for definition see Glossary, Appendix 1

Table 10A: Blood alcohol analysis by age group Queensland 2001
Controllers* killed in road traffic crashes

Blood alcohol analysis	Under 17 years	17 - 20 years	21 - 24 years	25 - 29 years	30 - 39 years	40 - 49 years	50 years & over	Total
Failure to supply	0	0	0	0	0	0	0	0
Negative	0	18	15	10	20	25	49	137
Positive	0	0	0	0	0	0	0	0
.01 - .04	0	0	0	1	1	1	3	6
.05 - .07	1	1	0	1	0	0	1	4
.08 - .14	1	2	7	0	3	2	1	16
.15 - .19	0	4	3	3	6	3	3	22
.20 - .24	0	1	2	1	1	2	1	8
.25 & over	0	0	0	1	2	2	0	5
Total positive	2	8	12	7	13	10	9	61
Total tested for alcohol	2	26	27	17	33	35	58	198
% positive	100.0	30.8	44.4	41.2	39.4	28.6	15.5	30.8

* Controller - for definition see Glossary, Appendix 1

Table 10B: Blood alcohol analysis by age group Queensland 2001
Controllers* not killed but may have been injured in road traffic crashes

Blood alcohol analysis	Under 17 years	17 - 20 years	21 - 24 years	25 - 29 years	30 - 39 years	40 - 49 years	50 years & over	Total
Failure to supply	1	11	9	6	18	12	7	64
Negative	108	3013	2356	1551	3197	2650	3366	16242
Positive								
.01 - .04	4	34	41	21	29	19	14	162
.05 - .07	3	45	49	13	28	13	7	158
.08 - .14	4	156	130	69	105	60	37	561
.15 - .19	2	47	100	63	84	62	37	395
.20 - .24	0	9	26	20	53	33	11	152
.25 & over	3	127	84	69	118	96	131	628
Total positive	**16**	**418**	**430**	**255**	**417**	**283**	**237**	**2056**
Total tested for alcohol	**124**	**3431**	**2786**	**1806**	**3614**	**2933**	**3603**	**18298**
% positive	12.9	12.2	15.4	14.1	11.5	9.6	6.6	11.2

* Controller - for definition see Glossary, Appendix 1

Table 11A: Road traffic crashes Queensland 2001
Time of day and day of week - Total crashes

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Midnight - 2am	51	46	53	63	103	200	197	713
2am - 4am	32	40	33	50	55	136	154	500
4am - 6am	82	67	92	58	90	110	121	620
6am - 8am	216	273	258	261	258	165	112	1543
8am - 10am	414	390	401	466	398	241	200	2510
10am - noon	325	306	295	339	349	404	276	2294
Noon - 2pm	325	315	329	333	419	389	316	2426
2pm - 4pm	438	466	494	478	585	370	317	3148
4pm - 6pm	521	564	610	555	654	330	304	3538
6pm - 8pm	244	250	323	329	388	274	206	2014
8pm - 10pm	125	145	174	210	211	224	129	1218
10pm - midnight	70	82	112	136	237	247	95	979
Total	**2843**	**2944**	**3174**	**3278**	**3747**	**3090**	**2427**	**21503**

Table 11B: Road traffic crashes Queensland 2001
Time of day and day of week - Casualty crashes

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Midnight - 2am	26	28	29	29	56	108	114	390
2am - 4am	18	18	18	26	24	73	76	253
4am - 6am	42	38	61	29	48	59	69	346
6am - 8am	139	184	156	170	168	99	69	985
8am - 10am	266	261	246	305	256	138	130	1602
10am - noon	201	198	188	209	228	257	174	1455
Noon - 2pm	212	208	210	187	252	262	211	1542
2pm - 4pm	292	321	321	313	390	244	207	2088
4pm - 6pm	340	373	389	349	433	215	197	2296
6pm - 8pm	149	151	206	206	239	165	122	1238
8pm - 10pm	64	83	98	105	116	123	69	658
10pm - midnight	41	55	66	77	145	152	53	589
Total	**1790**	**1918**	**1988**	**2005**	**2355**	**1895**	**1491**	**13442**

Table 11C: Road traffic crashes Queensland 2001
Time of day and day of week - Persons killed

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Midnight - 2am	2	4	7	2	3	9	4	31
2am - 4am	0	0	2	1	0	7	0	10
4am - 6am	1	5	4	0	2	2	6	20
6am - 8am	2	3	4	3	1	5	4	22
8am - 10am	2	3	0	5	3	1	3	17
10am - noon	3	3	1	2	5	6	6	26
Noon - 2pm	3	5	3	9	5	7	12	44
2pm - 4pm	7	7	1	3	7	9	11	45
4pm - 6pm	4	7	6	8	8	3	4	40
6pm - 8pm	3	3	8	4	7	4	1	30
8pm - 10pm	4	3	3	5	5	4	0	24
10pm - midnight	0	0	1	2	2	8	2	15
Total	**31**	**43**	**40**	**44**	**48**	**65**	**53**	**324**

Table 11D: Road traffic crashes Queensland 2001
Time of day and day of week - Persons injured

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Midnight - 2am	41	34	34	33	78	140	158	518
2am - 4am	24	24	18	32	29	99	93	319
4am - 6am	43	40	72	34	58	76	85	410
6am - 8am	158	207	214	218	207	105	87	1197
8am - 10am	338	318	338	388	334	176	183	2076
10am - noon	269	259	240	263	286	354	224	1896
Noon - 2pm	267	259	252	245	332	356	298	2009
2pm - 4pm	364	405	426	425	511	309	304	2744
4pm - 6pm	441	470	512	436	559	296	290	3005
6pm - 8pm	190	191	277	253	325	238	185	1660
8pm - 10pm	70	98	131	139	169	181	84	872
10pm - midnight	49	73	96	92	211	213	69	803
Total	**2254**	**2378**	**2610**	**2558**	**3099**	**2543**	**2060**	**17509**

Table 12: Road traffic casualties Queensland 2001
Road users by vehicle type and injury severity

Road user type	Killed	Admitted to hospital	Medical treatment	Other injury	Total casualties
Driver					
Car, station wagon	107	1980	3506	2359	7952
Utility, panel van	17	316	388	316	1037
4-wheel drive	15	147	190	161	513
Rigid truck	5	46	29	39	119
Articulated truck	3	39	33	19	94
Road train/Bdouble/triple	3	10	14	10	37
Bus	0	6	15	11	32
Other motor vehicle	0	15	15	10	40
Sub-total	150	2559	4190	2925	9824
Motorcycle rider	28	536	445	205	1214
Pedal cycle rider	15	272	363	217	867
Other/not stated	1	1	3	1	6
Sub-total	44	809	811	423	2087
Passenger:					
Car, station wagon	57	1107	1734	921	3819
Utility, panel van	12	147	172	102	433
4-wheel drive	7	96	132	76	311
Rigid truck	0	6	9	9	24
Articulated truck	0	0	6	2	8
Road train/Bdouble/triple	0	0	0	4	4
Bus	1	30	160	45	236
Other motor vehicle	1	5	3	0	9
Sub-total	78	1391	2216	1159	4844
Motorcycle pillion	1	48	40	14	103
Pedal cycle pillion	0	0	1	2	3
Other/not stated	0	3	3	1	7
Sub-total	1	51	44	17	113
Pedestrian sub-total	51	415	334	157	957
Total casualties	**324**	**5225**	**7595**	**4681**	**17825**

Table 13: Road traffic crashes Queensland 2001
Type of unit most responsible by crash severity

Type of unit	Crash severity									
	F	%	H	%	M	%	O	%	All crashes	%
Car/station wagon	145	50	2506	59	3800	67	2263	71	14829	69
Utility, panel van	35	13	445	10	590	11	368	9	2358	11
Rigid truck	9	3	66	2	133	2	83	3	485	3
Articulated vehicle	7	3	64	2	90	2	51	1	375	2
Omnibus	1	1	33	1	90	1	26	1	187	1
Motorcycle	25	9	354	9	245	4	94	2	734	3
Tractor	2	1	22	0	34	0	19	1	121	0
Towed device (Caravan)	0	0	2	0	2	0	2	0	21	0
Bicycle	12	2	166	5	162	3	105	3	445	2
Pedestrian	34	11	245	7	166	4	56	2	501	3
Animal - ridden	1	0	1	0	0	0	0	0	2	0
Animal - stock	0	0	0	0	0	0	0	0	0	0
Animal - other	0	0	0	0	0	0	0	0	0	0
Railway rolling stock	0	0	0	0	0	0	0	0	0	0
4-wheel drive	21	7	228	6	362	5	208	6	1300	6
Road train/Bdouble/triple	3	1	17	0	21	0	14	0	114	0
Other	0	0	0	0	0	0	0	0	0	0
Not stated	1	0	7	0	5	0	5	0	31	0
Total number of crashes	**296**	**101**	**4156**	**100**	**5700**	**99**	**3294**	**100**	**21503**	**100**

Type of unit	Injury severity									
	K	%	HI	%	MI	%	Mm	%	Total casualties	%
Car/station wagon	168	52	3301	63	5190	68	3266	70	11925	67
Utility, panel van	39	12	574	11	751	10	530	11	1894	11
Rigid truck	9	3	83	2	183	2	116	2	391	2
Articulated vehicle	7	2	71	1	112	1	71	2	261	1
Omnibus	1	0	38	1	158	2	61	1	258	1
Motorcycle	25	8	373	7	281	4	122	3	801	4
Tractor	2	1	26	0	40	1	22	0	90	1
Towed device (Caravan)	0	0	2	0	3	0	3	0	8	0
Bicycle	12	4	168	3	167	2	109	2	456	3
Pedestrian	34	10	251	5	172	2	62	1	519	3
Animal - ridden	1	0	3	0	0	0	1	0	5	0
Animal - stock	0	0	0	0	0	0	0	0	0	0
Animal - other	0	0	0	0	0	0	0	0	0	0
Railway rolling stock	0	0	0	0	0	0	0	0	0	0
4-wheel drive	22	7	310	6	508	7	294	6	1134	6
Road train/Bdouble/triple	3	1	18	0	24	0	18	0	63	0
Other	0	0	0	0	0	0	0	0	0	0
Not stated	1	0	7	0	6	0	6	0	20	0
Total number of crashes	**324**	**100**	**5225**	**100**	**7595**	**100**	**4681**	**100**	**17825**	**100**

Legend:

F - worst casualty fatal
H - worst casualty admitted to hospital
M - worst casualty required medical treatment
O - worst casualty minor injury (first-aid or no treatment)

K - Killed
HI - admitted to hospital
MI - required medical treatment
Mm - minor injury (first-aid or no treatment)

Table 14: Single vehicle crashes Queensland 2001 by vehicle type and crash severity

Vehicle type	Fatal crashes	Serious injury	Other injury	Property damage only	Total crashes
Car/station wagon	72	1852	466	2397	4787
Utility/panel van	19	367	75	356	817
Truck	4	35	12	68	119
Articulated vehicle	4	57	14	61	136
Omnibus	0	20	4	9	33
Motor cycle	16	356	55	9	436
Bicycle	1	55	11	0	67
4-wheel drive	16	199	49	182	446
Road train/Bdouble/triple	3	22	11	40	76
Other vehicle	0	16	5	25	46
Total crashes	**135**	**2979**	**702**	**3147**	**6963**

Table 15: Road traffic crashes and casualties, Queensland 2001: by roadway feature and traffic control

	Road feature/traffic control	Total crashes	Casualty crashes	Persons killed	Persons injured
Intersection					
Cross roads controlled by:	- person	4	2	0	2
	- traffic lights	2032	1275	11	1687
	-stop/give way signs	1174	697	11	979
	- pedestrian crossing	19	17	1	17
Uncontrolled cross roads		644	391	1	522
T-junction controlled by:	- person	7	5	0	5
	- traffic lights	1095	705	4	960
	-stop/give way signs	925	612	8	807
	- pedestrian crossing	23	19	0	21
Uncontrolled T-junction		2598	1617	32	2074
Y-junction controlled by:	- person	0	0	0	0
	- traffic lights	7	3	0	3
	-stop/give way signs	9	7	1	7
	- pedestrian crossing	0	0	0	0
Uncontrolled Y-junction		9	6	0	9
Other intersections controlled by:	- person	2	1	0	1
	- traffic lights	146	92	3	131
	-stop/give way signs	937	568	1	675
	- pedestrian crossing	4	2	1	1
Uncontrolled other intersection		362	231	1	296
Railway level crossing controlled by:	- lights	21	13	0	19
	- signs	13	9	1	10
Uncontrolled railway level crossing		6	5	0	8
Other roadway features					
Bridge, culvert, causeway		340	220	8	318
Forestry/National Park Road		22	15	0	35
Bikeway		2	2	0	2
Straight road:	- median opening	55	31	0	35
	- merge lane	49	27	0	29
	- person	26	17	0	19
	- lights	54	33	0	42
	- signs	53	30	0	42
	- pedestrian crossing	74	62	0	69
No features		7848	4940	142	6354
Curved road:	- view open	2006	1223	77	1581
	- view obscured	937	565	21	741
Total crashes		**21503**	**13442**	**324**	**17501**

Table 16A: Road traffic crashes Queensland 2001
Roadway features by crash severity

Road way feature	Crash severity					
	Fatal	Admitted to hospital	Received medical treatment	Other injury	Non-injury	Total
Cross	23	687	1050	624	1490	3874
T junction	41	799	1341	779	1688	4648
Y junction	1	1	4	10	9	25
Multiple road	0	8	9	8	18	43
Interchange	3	88	171	115	189	566
Roundabout	2	88	236	168	347	841
Bridge, causeway	6	79	82	53	120	340
Railway crossing	1	15	5	6	13	40
Median opening	0	9	15	7	24	55
Merge lane	0	5	15	7	22	49
Bikeway	0	9	5	1	7	22
Forestry/National park road	0	1	1	0	0	2
No special features	219	2365	2762	1518	4134	10998
Total crashes	**296**	**4154**	**5696**	**3296**	**8061**	**21503**

Table 16B: Road traffic crashes Brisbane Statistical Division 2001
Roadway features by crash severity

Road way feature	Crash severity					
	Fatal	Admitted to hospital	Received medical treatment	Other injury	Non-injury	Total
Cross	9	318	541	339	634	1841
T junction	20	422	798	485	918	2643
Y junction	0	1	3	6	4	14
Multiple road	0	6	5	7	10	28
Interchange	1	71	124	94	150	440
Roundabout	0	36	106	85	137	364
Bridge, causeway	2	15	30	20	43	110
Railway crossing	0	1	1	2	1	5
Median opening	0	4	12	4	8	28
Merge lane	0	1	9	5	10	25
Bikeway	0	1	1	0	0	2
Forestry/National park road	0	1	1	0	1	3
No special features	48	844	1267	747	1725	4630
Total crashes	**80**	**1721**	**2898**	**1794**	**3641**	**10133**

Table 17: Road traffic crashes and casualties Queensland 2001 by region, crash severity and gender

Crashes and casualties	Brisbane City	Rest of BSD*	Provincial cities	Rest of Qld	Total Qld
Crashes					
Fatal crashes	39	41	74	142	296
Serious injury crashes	1029	692	1250	1183	4154
Other injury crashes	3071	1617	2667	1646	9001
Total casualty crashes	4139	2350	3991	2971	13451
Property damage only crashes	2165	1479	2481	1927	8052
Total crashes	6304	3829	6472	4898	21503
Casualties					
Fatalities					
Males	28	29	59	119	235
Females	12	12	17	46	88
Not stated	0	0	0	1	1
Total fatalities	40	41	76	166	324
Seriously injured					
Males	1803	1115	1937	1882	6737
Females	1684	1156	1862	1371	6073
Not stated	7	2	4	8	21
Total seriously injured	3494	2273	3803	3261	12831
Other injured					
Males	855	435	709	468	2467
Females	792	406	658	349	2205
Not stated	6	1	4	1	12
Total other injured	1653	842	1371	818	4684
Total casualties					
Males	2687	1579	2705	2469	9440
Females	2488	1574	2537	1766	8365
Not stated	13	3	8	10	34
Total casualties	5187	3156	5250	4245	17839

* Brisbane Statistical Division

Table 18: Road traffic crashes and casualties Queensland 2001 by Local Government Area

Local Government Area	Crashes		Persons									
			Drivers and passengers		Pedestrians		Motorcycle riders and pillions		Pedal cycle riders		Others	
	Total reported	Involving casualties	K	I	K	I	K	I	K	I	K	I
Aramac Shire Council	7	3	0	3	0	0	0	0	0	0	0	0
Atherton Shire Council	66	46	4	55	2	1	0	4	0	2	0	0
Aurukun Shire Council	3	1	0	1	0	0	0	0	0	0	0	0
Balonne Shire Council	22	11	0	16	0	1	0	1	0	0	0	0
Banana Shire Council	80	47	1	55	0	1	0	5	0	2	0	0
Barcaldine Shire Council	10	6	1	9	0	0	0	0	0	0	0	0
Barcoo Shire Council	5	3	1	7	0	0	0	0	0	0	0	0
Bauhinia Shire Council	19	14	1	17	0	0	0	1	0	0	0	0
Beaudesert Shire Council	218	154	6	198	0	5	0	13	0	0	0	0
Belyando Shire Council	42	30	3	32	0	0	0	1	0	4	0	0
Bendemere Shire Council	8	5	1	4	0	0	0	0	0	0	0	0
Biggenden Shire Council	10	6	2	8	0	0	0	0	0	0	0	0
Blackall Shire Council	8	4	0	4	0	0	0	0	0	0	0	0
Boonah Shire Council	76	44	0	46	0	0	0	4	0	3	0	0
Booringa Shire Council	7	4	1	7	0	0	0	0	0	0	0	0
Boulia Shire Council	5	2	0	7	0	0	0	0	0	0	0	0
Bowen Shire Council	83	46	2	48	0	3	0	6	0	1	0	0
Brisbane City Council	6304	4140	27	4219	8	310	4	352	2	230	0	0
Broadsound Shire Council	42	23	4	29	0	0	0	0	0	0	0	0
Bulloo Shire Council	5	3	0	4	0	0	0	0	0	0	0	0
Bundaberg City Council	271	166	1	158	1	13	0	24	2	23	0	0
Bungil Shire Council	21	15	0	21	0	0	0	0	0	0	0	0
Burdekin Shire Council	78	33	3	37	0	3	0	0	1	1	0	0
Burke Shire Council	8	7	0	15	0	0	0	0	0	0	0	0
Burnett Shire Council	77	55	1	67	0	1	0	6	0	0	0	0
Caboolture Shire Council	629	412	5	481	1	25	1	30	0	26	0	0
Cairns City Council	722	386	4	340	6	32	0	64	0	57	0	0
Calliope Shire Council	98	58	1	78	0	2	0	4	0	4	0	0
Caloundra City Council	476	270	3	278	1	18	0	39	1	16	0	0
Cambooya Shire Council	17	9	1	9	0	0	0	0	0	0	0	0
Cardwell Shire Council	46	19	5	21	0	1	0	1	0	0	0	0
Carpentaria Shire Council	10	6	2	13	0	0	0	0	0	0	0	0
Charters Towers City Council	33	24	0	17	0	3	0	3	1	0	0	0
Chinchilla Shire Council	24	12	0	17	0	0	0	1	0	1	0	0
Clifton Shire Council	8	6	0	8	0	0	0	0	0	0	0	0
Cloncurry Shire Council	32	25	1	30	1	0	0	2	0	1	0	0
Cook Shire Council	70	41	0	70	0	2	0	5	0	1	0	0
Cooloola Shire Council	274	155	5	184	0	4	0	18	0	10	0	0
Crows Nest Shire Council	50	27	1	46	1	0	0	3	0	0	0	0
Croydon Shire Council	3	2	0	3	0	0	0	0	0	0	0	0
Dalby Town Council	34	17	1	21	0	0	0	1	0	0	0	0
Dalrymple Shire Council	44	29	2	34	0	1	0	4	0	1	0	0
Diamantina Shire Council	13	8	0	7	1	1	0	1	0	0	0	0
Douglas Shire Council	79	48	1	44	0	2	0	12	0	3	0	0
Duaringa Shire Council	54	32	1	34	0	0	0	2	0	1	0	0
Eacham Shire Council	46	27	0	24	0	1	0	6	0	2	0	0

Table 18: Road traffic crashes and casualties Queensland 2000 by Local Government Area (cont'd)

Local Government Area	Crashes		Persons									
			Drivers and passengers		Pedestrians		Motorcycle riders and pillions		Pedal cycle riders		Others	
	Total reported	Involving casualties	K	I	K	I	K	I	K	I	K	I
Eidsvold Shire Council	10	1	0	1	0	0	0	0	0	0	0	0
Emerald Shire Council	60	39	2	41	0	2	0	5	0	3	0	0
Esk Shire Council	125	86	7	93	0	4	4	18	0	0	0	0
Etheridge Shire Council	13	9	0	15	0	0	0	0	0	0	0	0
Fitzroy Shire Council	48	31	2	77	0	1	0	1	0	0	0	0
Flinders Shire Council	18	12	1	17	0	1	0	2	0	0	0	0
Gatton Shire Council	114	62	1	71	1	5	0	0	0	1	0	0
Gayndah Shire Council	23	15	0	21	0	0	0	1	0	1	0	0
Gladstone City Council	138	79	0	70	0	3	0	13	0	9	0	0
Gold Coast City Council	2330	1646	14	1834	8	145	5	132	1	110	0	0
Goondiwindi Town Council	20	6	0	5	0	1	0	1	0	2	0	0
Herberton Shire Council	19	14	1	19	0	0	1	6	0	1	0	0
Hervey Bay City Council	176	112	2	113	0	5	0	12	0	13	0	0
Hinchinbrook Shire Council	62	43	1	50	0	5	0	4	0	4	0	0
Ilfracombe Shire Council	7	6	0	9	0	0	0	0	0	0	0	0
Inglewood Shire Council	17	12	2	16	0	0	0	0	0	0	0	0
Ipswich City Council	915	467	6	515	4	35	1	40	1	20	0	0
Isis Shire Council	50	31	1	44	0	0	0	2	0	0	0	0
Jericho Shire Council	12	7	0	10	0	0	0	0	0	0	0	0
Johnstone Shire Council	115	66	0	74	0	4	0	3	0	8	0	0
Jondaryan Shire Council	61	38	2	41	1	2	1	1	0	1	0	0
Kilcoy Shire Council	29	18	1	23	0	0	0	2	0	0	0	0
Kilkivan Shire Council	33	20	3	18	1	0	0	4	0	0	0	0
Kingaroy Shire Council	64	36	0	52	0	0	1	0	0	0	0	0
Kolan Shire Council	54	25	0	33	0	0	0	5	0	0	0	0
Laidley Shire Council	90	47	0	61	1	1	0	3	1	2	0	0
Livingstone Shire Council	114	69	5	100	0	1	0	5	0	2	0	0
Logan City Council	973	606	5	689	1	45	2	48	1	20	0	0
Longreach Shire Council	15	12	0	14	0	1	0	0	0	1	0	0
Mackay City Council	452	276	5	259	1	22	0	34	1	25	0	0
Mareeba Shire Council	127	84	2	83	1	6	0	21	1	1	0	0
Maroochy Shire Council	768	448	14	493	0	28	1	43	1	34	0	0
Maryborough City Council	144	85	0	76	1	14	1	11	0	18	0	0
Mckinlay Shire Council	22	14	1	14	0	0	0	1	0	0	0	0
Millmerran Shire Council	23	19	0	26	0	0	0	2	0	0	0	0
Mirani Shire Council	28	22	3	20	0	0	0	3	0	0	0	0
Miriam Vale Shire Council	42	26	1	33	0	0	0	1	0	0	0	0
Monto Shire Council	22	8	0	9	0	0	0	1	0	0	0	0
Mornington Shire Council	3	3	0	13	0	0	0	0	0	0	0	0
Mount Isa City Council	95	55	0	59	1	6	0	7	0	1	0	0
Mount Morgan Shire Council	10	5	0	5	1	0	0	1	0	0	0	0
Mundubbera Shire Council	19	8	0	16	0	0	0	0	0	0	0	0
Murgon Shire Council	20	13	2	15	0	0	0	1	0	2	0	0

Table 18: Road traffic crashes and casualties Queensland 2000
by Local Government Area (cont'd)

Local Government Area	Crashes		Persons									
			Drivers and passengers		Pedestrians		Motorcycle riders and pillions		Pedal cycle riders		Others	
	Total reported	Involving casualties	K	I	K	I	K	I	K	I	K	I
Murilla Shire Council	9	6	3	6	0	0	0	0	0	0	0	0
Murweh Shire Council	22	16	1	16	0	2	0	0	0	1	0	0
Nanango Shire Council	57	44	1	54	0	1	0	2	0	0	0	0
Nebo Shire Council	27	19	0	23	0	0	1	1	0	0	0	0
Noosa Shire Council	188	122	6	128	0	11	0	14	0	6	0	0
Paroo Shire Council	14	11	0	13	0	0	0	3	0	0	0	0
Peak Downs Shire Council	27	13	0	12	0	0	0	1	0	0	0	0
Perry Shire Council	9	6	0	6	0	0	0	2	0	0	0	0
Pine Rivers Shire Council	462	310	7	335	0	16	0	26	0	20	0	0
Pittsworth Shire Council	18	6	1	7	0	1	0	0	0	0	0	0
Quilpie Shire Council	8	7	0	8	0	0	0	0	0	1	0	0
Redcliffe City Council	258	156	1	151	1	18	0	17	0	18	0	0
Redland Shire Council	423	276	3	296	0	9	2	21	0	24	0	0
Richmond Shire Council	9	5	0	8	0	0	0	2	0	0	0	0
Rockhampton City Council	429	221	3	219	2	16	1	27	0	25	0	0
Roma Town Council	22	13	0	11	0	1	0	1	0	1	0	0
Rosalie Shire Council	17	9	1	13	0	1	0	1	0	0	0	0
Sarina Shire Council	56	41	0	52	1	0	0	2	0	1	0	0
Stanthorpe Shire Council	52	26	1	35	0	2	0	1	0	0	0	0
Tambo Shire Council	4	1	0	1	0	0	0	0	0	0	0	0
Tara Shire Council	18	10	2	13	0	0	0	0	0	0	0	0
Taroom Shire Council	21	10	0	13	0	0	0	0	0	0	0	0
Thuringowa City Council	140	84	1	78	1	6	0	14	0	8	0	0
Tiaro Shire Council	33	24	1	36	0	0	0	2	0	0	0	0
Toowoomba City Council	564	308	3	306	2	30	1	30	0	15	0	0
Torres Shire Council	12	6	0	4	0	0	0	0	0	2	0	0
Townsville City Council	576	337	1	287	0	23	1	55	0	55	0	0
Waggamba Shire Council	42	25	5	31	0	0	0	1	0	0	0	0
Wambo Shire Council	22	17	0	20	0	0	0	0	0	0	0	0
Warroo Shire Council	8	6	0	8	0	0	0	0	0	0	0	0
Warwick Shire Council	116	71	5	77	0	2	0	7	1	4	0	0
Whitsunday Shire Council	80	47	3	47	0	5	1	7	0	2	0	0
Winton Shire Council	7	5	0	8	0	0	0	0	0	0	0	0
Wondai Shire Council	19	12	1	14	0	0	0	0	0	0	0	0
Woocoo Shire Council	17	10	3	14	0	0	0	0	0	0	0	0
TOTAL for QUEENSLAND	**21503**	**13442**	**229**	**14423**	**51**	**911**	**29**	**1284**	**15**	**851**	**0**	**0**

K - Killed

I - Injured

Table 19: Annual road toll, population and vehicles on register

Queensland, 1953 - 2001

Year	Persons killed						Population ('000)	Motor vehicles ('000)
	Driver*	Motor cyclist	Pedal cyclist	Pedestrian	Passenger	Total killed		
1953	45	60	16	64	91	276	1,298.4	266.2
1954	46	60	18	64	85	273	1,322.8	284.2
1955	55	52	17	76	77	277	1,350.7	307.7
1956	68	43	15	89	108	323	1,378.9	326.6
1957	80	47	30	62	104	323	1,420.5	345.1
1958	92	41	29	89	102	353	1,449.3	365.2
1959	106	32	23	92	100	353	1,477.2	383.8
1960	103	31	17	78	117	346	1,502.3	406.7
1961	102	28	18	91	98	337	1,540.3	321.7
1962	131	32	21	100	119	403	1,562.8	453.3
1963	139	20	32	96	111	398	1,595.4	459.0
1964	164	25	12	115	145	461	1,626.5	497.4
1965	183	18	19	101	146	467	1,659.4	536.1
1966	181	20	20	102	143	466	1,687.1	563.4
1967	201	13	20	110	158	502	1,715.8	588.5
1968	197	16	9	82	173	477	1,747.7	620.9
1969	226	19	18	109	184	556	1,779.7	649.9
1970	223	22	13	111	158	527	1,812.8	686.1
1971	255	44	24	78	193	594	1,874.9	726.5
1972	217	55	18	98	184	572	1,924.7	774.0
1973	219	71	19	121	208	638	1,981.6	827.0
1974	215	83	10	107	174	589	2,033.0	889.7
1975	225	72	22	107	209	635	2,072.3	917.0
1976	196	83	16	89	185	569	2,110.4	1,012.2
1977	215	97	27	92	141	572	2,151.0	1,067.2
1978	237	70	15	92	198	612	2,191.6	1,129.6
1979	242	94	13	95	172	616	2,239.7	1,183.4
1980	211	87	14	87	158	557	2,301.7	1,256.9
1981	237	92	16	66	183	594	2,387.9	1,355.6
1982	255	94	18	71	164	602	2,456.5	1,439.5
1983	178	92	19	61	160	510	2,503.3	1,496.1
1984	192	74	16	66	157	505	2,547.1	1,533.5
1985	201	77	20	72	132	502	2,597.1	1,546.1
1986	186	75#	15#	65	140+	481	2,648.5	1,567.4
1987	165	55	14	73	135	442	2,703.4	1,575.3
1988	225	53	21	78	162	539	2,780.7	1,616.2
1989	173	47	19	68	121	428	2,864.6	1,693.4
1990	153	50	18	65	113	399	2,932.2	1,751.9
1991	163	41	16	66	109	395	2,999.9	1,787.0
1992	167	43	18	75	113	416	3,030.5	1,832.8
1993	189	47	10	49	101	396	3,112.6	1,847.2
1994	177	45	13	79	108	422	3,116.0	1,975.5
1995	180	54	10	92	120	456	3,277.3	2,038.9
1996	174	41	10	55	105	385	3,354.7	2,171.9
1997	159	43	12	59	87	360	3,440.2	2,232.9
1998	122	25	9	48	75	279	3,456.3	2,307.5
1999	128	41	9	49	87	314	3,525.6	2,385.6
2000	157	30	6	40	85	317	3,556.4	2,428.6
2001	151	29	15	51	78	324	3,642.4	2,495.6

* Includes horse riders

\# Includes pillions from 1986

\+ Includes pillions prior to 1986

Table 20: Annual trend data

Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Casualties by severity										
Fatalities	416	396	422	456	385	360	279	314	317	324
Hospitalised	4004	4052	4600	4636	4481	4146	4397	4501	4786	5258
Medical treatment	5473	5876	6207	6692	6836	6483	6323	6250	6430	7657
Minor injury	2926	3131	3587	3932	4131	3928	4008	3840	3931	4714
Total	12819	13455	14816	15716	15833	14917	15007	14905	15464	17953
Fatalities by age group										
0-11 years*	26	19	22	25	20	21	17	18	12	14
12-16 years	22	18	18	21	20	17	14	19	16	13
17-24 years	119	122	103	121	107	113	79	77	61	84
25-59 years	172	174	194	208	172	155	121	143	166	147
60 years and over	77	63	85	81	66	54	48	57	62	66
Total	416	396	422	456	385	360	279	314	317	324
Fatalities by age group: female										
0-11 years*	10	9	8	12	8	5	4	8	4	6
12-16 years	5	9	6	8	5	3	6	7	4	3
17-24 years	32	25	29	29	19	39	18	17	13	13
25-59 years	47	40	46	63	55	41	36	36	37	45
60 years and over	33	23	38	32	30	21	17	20	26	20
Total	127	106	127	144	117	109	81	88	84	87
Fatalities by age group: male										
0-11 years*	16	10	14	13	12	16	12	8	8	7
12-16 years	17	9	12	13	15	14	8	12	12	10
17-24 years	87	97	74	92	88	74	61	60	48	71
25-59 years	125	134	148	145	117	114	85	107	129	102
60 years and over	44	40	47	49	36	33	31	37	36	46
Total	289	290	295	312	268	251	197	224	233	236
Fatalities by road user										
Drivers	18	10	13	10	10	12	9	9	6	15
Passengers	168	189	177	181	174	158	122	128	157	151
Motorcyclists	43	47	45	54	41	43	25	41	33	29
Bicyclists	113	101	108	119	105	88	75	87	82	78
Pedestrians	74	49	79	92	55	59	48	49	39	51
Total	416	396	422	456	385	360	279	314	317	324
Fatalities by driver/rider blood alcohol content										
Tested	152	182	164	194	170	171	128	126	163	152
Untested	49	50	53	36	41	26	15	40	22	22
Total	201	232	217	230	211	197	143	166	185	174
Nil	96	123	103	112	105	112	86	88	104	109
0.01 - 0.04	4	7	10	18	5	13	8	6	13	4
0.05 - 0.14	18	14	20	20	19	21	15	15	13	14
0.15 - 0.24	25	32	23	31	31	15	14	8	23	23
0.25 and over	9	6	8	13	10	10	5	9	10	2
Total	152	182	164	194	170	171	128	126	163	152

* May include unknown age of fatality

Table 20: Annual trend data

Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Fatalities by seatbelt usage										
Not determined	114	105	89	105	89	88	62	66	63	66
Restrained	120	110	139	141	137	110	97	98	115	113
Unrestrained	44	69	40	46	45	45	34	47	57	47
Total	278	284	268	292	271	243	193	211	235	226
Fatalities by helmet usage										
Not determined	0	1	2	3	5	2	7	3	4	0
Worn	44	51	51	52	35	44	23	38	33	39
Not worn	17	5	5	9	11	9	4	9	2	5
Total	61	57	58	64	51	55	34	50	39	44
Injuries by age group										
0-11 years	790	863	850	930	935	887	858	874	851	884
12-16 years	847	829	899	1035	979	927	954	870	843	909
17-24 years	3954	4202	4633	4611	4572	4145	4200	4061	4174	4772
25-59 years	5476	5806	6583	7178	7379	7089	7167	7291	7752	9255
60 years and over	1283	1293	1384	1443	1525	1437	1471	1400	1420	1668
Unstated	53	66	45	63	58	72	78	95	107	143
Total	12403	13059	14394	15260	15448	14557	14728	14591	15147	17631
Injuries by age group: female										
0-11 years	351	353	373	434	381	367	372	392	369	390
12-16 years	365	358	371	439	437	397	408	369	393	435
17-24 years	1541	1742	1938	1959	1963	1767	1862	1801	1917	2173
25-59 years	2322	2561	2905	3228	3351	3281	3377	3332	3634	4449
60 years and over	656	686	747	725	792	777	757	722	762	839
Unstated	34	30	20	21	24	16	21	30	36	48
Total	5269	5730	6354	6806	6948	6605	6797	6646	7111	8334
Injuries by age group: male										
0-11 years	439	510	477	496	553	520	486	482	482	494
12-16 years	482	471	528	596	542	530	546	501	450	474
17-24 years	2413	2460	2695	2652	2609	2378	2338	2258	2256	2599
25-59 years	3154	3245	3678	3950	4028	3806	3789	3958	4118	4806
60 years and over	627	607	637	718	733	660	714	678	658	829
Unstated	16	23	14	27	26	38	34	46	41	62
Total	7131	7316	8029	8439	8491	7932	7907	7923	8005	9264
Injuries by road user type										
Drivers	5662	6149	7057	7677	7725	7458	7633	7742	8167	9757
Passengers	3593	3917	4250	4402	4434	4090	4113	4090	4206	4800
Motorcyclists	1278	1340	1374	1357	1396	1204	1221	1118	1083	1296
Bicyclists	980	798	795	828	928	920	882	772	792	855
Pedestrians	889	854	918	994	963	884	877	869	898	918
Other	1	1	0	1	0	0	0	0	0	5
Total	12403	13059	14394	15259	15446	14556	14726	14591	15146	17631

Table 20: Annual trend data

Queensland 1992-2001

		1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Injuries by blood alcohol content of driver/rider											
	Tested	1479	1659	1873	1999	2158	2232	2653	3035	3678	4279
	Untested	4767	5017	5721	6127	6063	5582	5294	4939	4710	5644
	Total	6246	6676	7594	8126	8221	7814	7947	7974	8388	9923
	Nil	1039	1194	1352	1438	1560	1729	2175	2548	3168	3700
	0.01 - 0.04	21	28	32	41	30	33	42	34	45	49
	0.05 - 0.14	158	181	200	228	231	222	220	189	223	244
	0.15 - 0.24	206	215	253	251	302	222	191	230	222	257
	0.25 and over	55	41	36	41	35	26	25	34	20	29
	Total	1479	1659	1873	1999	2158	2232	2653	3035	3678	4279
Injuries by seatbelt usage											
	Not determined	1431	1381	1529	1702	1794	1874	1852	1737	1638	1884
	Restrained	7141	8019	9103	9685	9684	9047	9228	9428	9407	11114
	Unrestrained	499	552	508	534	517	482	478	441	561	652
	Total	9071	9952	11140	11921	11995	11403	11558	11606	11606	13650
Injuries by helmet usage											
	Not determined	173	75	100	108	129	136	154	133	142	190
	Worn	1600	1905	1876	1889	1939	1779	1766	1586	1577	1810
	Not worn	483	157	193	188	256	209	183	171	156	151
	Total	2256	2137	2169	2185	2324	2124	2103	1890	1875	2151
Crashes by severity											
	Fatal	363	357	368	408	338	321	257	273	275	296
	Hospitalisation	3232	3204	3612	3654	3559	3328	3518	3565	3818	4183
	Medical treatment	3967	4172	4471	4800	4936	4762	4611	4570	4779	5741
	Minor injury	2054	2170	2469	2800	2872	2697	2757	2627	2735	3324
	Property damage	9550	9667	9910	9602	9211	8235	8418	8504	8317	8195
	Total	19166	19570	20830	21264	20916	19343	19561	19539	19924	21739
Fatal crashes - crash nature											
	Hit object	82	101	93	105	93	95	80	65	79	89
	Hit pedestrian	73	44	73	88	55	55	46	47	37	47
	Head-on	67	55	62	70	46	48	23	47	47	44
	Angle	53	71	60	50	60	54	44	36	34	37
	Overturned	39	53	35	47	45	25	24	27	40	38
	Rear-end	17	7	11	16	10	8	8	12	6	10
	Fall from vehicle	20	9	10	11	13	11	8	12	12	8
	Sideswipe	9	7	10	10	9	16	11	19	13	17
	Hit parked vehicle	1	2	6	7	4	3	6	5	6	0
	Hit animal	2	7	4	3	3	5	6	1	0	4
	Other	0	1	4	1	0	1	1	2	1	2
	Total	363	357	368	408	338	321	257	273	275	296

Table 20: Annual trend data

Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Fatal crashes - traffic control										
Police	1	1	1	0	0	0	0	0	0	0
Road/Rail worker	0	2	0	0	0	0	0	2	0	0
Operating traffic lights	19	14	26	24	23	10	12	13	20	17
Railway-lights only	2	2	2	1	0	1	0	0	1	0
Railway-lights & boom gate	3	0	2	1	0	1	2	0	1	0
Stop sign	9	13	5	9	10	16	9	8	4	6
Give way sign	12	14	14	17	14	10	12	14	11	14
Railway crossing sign	2	3	0	1	4	0	2	0	0	1
Pedestrian crossing sign	6	0	3	5	3	3	1	2	1	2
Miscellaneous	1	0	0	0	0	0	0	0	0	0
No traffic control	308	308	315	350	284	280	219	234	237	256
Fatal crashes - speed limit										
0-50 km/h	3	1	5	3	7	1	6	10	15	16
60 km/h	149	136	148	152	142	115	75	84	77	88
70-90 km/h	44	41	49	46	39	42	46	62	52	51
100km/h and over	167	179	166	207	150	163	130	117	131	141
Fatal crashes after dark										
Total	161	150	154	171	142	152	102	124	111	118
Fatal crashes - roadway feature										
Wet road	0	0	0	0	11	31	48	42	45	39
Crossroad	32	45	36	44	47	27	25	31	30	23
Roundabout	2	0	2	2	3	1	2	0	3	2
Other intersection	58	50	54	59	55	48	31	35	29	45
Bridge/causeway	10	9	12	16	7	12	11	3	8	6
Fatal crashes - day of week										
Monday	53	41	42	45	36	30	31	33	31	30
Tuesday	36	41	43	43	48	44	25	24	36	39
Wednesday	46	45	54	58	34	45	32	29	35	36
Thursday	44	45	50	52	46	42	36	35	41	42
Friday	69	59	65	74	53	56	39	57	46	46
Saturday	67	65	59	67	60	64	55	50	49	61
Sunday	48	61	55	69	61	40	39	45	37	42
Fatal crashes - location										
Brisbane City	56	50	53	58	50	39	34	39	35	39
Rest of BSD	57	50	60	43	42	49	29	40	38	41
Provincial cities	85	99	104	117	114	81	77	64	72	74
Rest of state	165	158	151	190	132	152	117	130	130	142
Total	363	357	368	408	338	321	257	273	275	296

Table 20: Annual trend data

Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Fatal crashes - contributing factors										
Disobeyed traffic rules	107	125	125	128	115	110	73	97	95	82
Alcohol/drugs	107	98	103	132	101	101	86	85	94	84
Inexperience	69	57	82	102	91	95	62	52	41	72
Speed	66	80	51	46	48	51	30	40	49	50
Other driver conditions	45	51	42	50	32	26	31	24	27	25
Age	54	35	36	41	30	28	25	28	33	24
Rain/wet road	47	25	35	41	22	16	29	10	14	13
Negligence	19	15	31	25	14	17	19	18	18	17
Inattention	25	15	24	41	26	26	28	47	38	50
Road conditions	32	35	23	29	26	9	14	15	13	10
Other	48	21	23	41	31	36	22	33	35	41
Vehicle defects	23	21	11	17	13	7	13	14	10	7
Fatigue	38	50	34	48	54	45	30	26	28	40
No street lighting	15	3	6	7	5	9	9	1	4	3
Fatal crashes - units involved										
Car	310	313	335	347	292	286	209	229	210	243
Utility/van	89	72	85	107	84	78	75	73	56	59
4-wheel drive	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	37	33
Rigid Truck	38	34	31	28	24	24	17	17	31	17
Articulated Truck	34	41	38	49	34	31	29	31	22	26
Road train/Bdouble	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8	6
Bus	4	7	7	6	6	2	7	12	5	4
Motorcycle	44	47	46	57	44	44	25	44	34	29
Tractor	3	5	5	7	7	6	3	5	3	4
Bicycle	18	10	12	10	11	12	10	10	6	16
Towed device	0	2	0	0	1	0	1	1	0	0
Pedestrian	79	56	86	96	59	61	48	52	43	65
Animal - ridden	1	1	0	0	0	0	2	0	0	1
Animal - stock	2	5	4	2	2	5	3	1	0	2
Animal - other	0	2	0	1	1	0	2	0	0	2
Railway stock	5	5	4	4	4	3	4	0	2	1
Other	2	0	0	2	0	3	2	5	0	2
Total	629	600	653	716	569	555	437	480	457	510
Fatal crashes - units towing										
Total	15	17	17	25	32	39	37	36	46	42
Fatal crashes - driver involvement by licence type										
Open	404	377	398	408	344	325	251	284	288	270
Provisional	42	59	79	91	64	74	46	57	50	70
Learner	17	7	9	16	14	14	14	14	10	15
Not licensed	50	68	55	69	57	50	43	49	47	54
Inappropriate/restricted	4	3	1	7	7	4	3	4	3	8
Total	517	514	542	591	486	467	357	408	398	417

* Disobeyed traffic rules does not include Alcohol/Drugs, Inexperience, Speed and Inattention

** Driver conditions do not include Inattention, Negligence, Inexperience, Fatigue, Age

Table 20: Annual trend data

Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Injury crashes - crash nature										
Hit object	1447	1723	1877	1951	2037	2064	2013	2056	2059	2303
Hit pedestrian	826	781	835	903	886	827	796	782	824	818
Head-on	379	371	392	473	452	299	321	317	262	269
Angle	3085	3155	3521	3723	3661	3570	3535	3445	3551	4062
Overturned	877	867	885	978	869	764	742	686	814	835
Rear-end	1490	1521	1844	1972	2119	2053	2186	2207	2563	3545
Fall from vehicle	324	285	292	252	323	271	282	268	289	346
Sideswipe	431	465	506	561	567	516	583	532	527	628
Hit parked vehicle	243	247	271	293	296	259	276	291	276	227
Hit animal	123	118	104	120	120	124	87	122	86	117
Other	28	13	25	28	37	40	65	57	82	119
Injury crashes - traffic control										
Police	20	15	14	16	9	2	9	5	11	5
Road/Rail worked	12	12	18	12	26	24	24	21	13	18
Supervised school xing	4	6	6	5	3	2	1	2	2	3
Operating traffic lights	1079	1136	1348	1479	1497	1502	1521	1586	1738	2124
Flashing amber lights	1	4	1	9	1	1	2	2	3	3
Railway-lights only	13	14	21	10	12	18	13	11	7	8
Railway-lights & boom gate	2	7	4	9	9	5	3	1	3	9
Stop sign	466	469	468	558	491	472	441	439	451	502
Give way sign	802	857	999	1139	1154	1058	1088	1020	1164	1420
Railway crossing sign	5	7	12	7	11	5	3	3	3	6
Pedestrian crossing sign	135	100	118	117	127	95	110	96	100	103
School crossing - flags	0	1	1	0	2	1	0	0	0	2
Miscellaneous	3	4	1	0	0	0	0	1	0	6
No traffic control	6711	6914	7541	7893	8025	7602	7671	7576	7838	9060
Injury crashes - speed limit										
0-50 km/h	107	105	133	162	164	174	205	877	1163	1308
60 km/h	6190	6398	7024	7644	7686	7335	7319	6250	6410	7728
70-90 km/h	822	882	1024	1016	1094	1019	1235	1432	1626	1877
100km/h and over	2134	2161	2371	2432	2423	2259	2127	2204	2134	2355
Injury crashes after dark										
Total	2568	2600	2909	3205	3228	2873	2886	2932	3004	3373
Injury crashes - roadway feature										
Wet road	0	0	0	1	489	1554	1786	1967	1882	1739
Crossroad	1946	1985	2201	2291	2228	2068	1997	2008	2077	2379
Roundabout	232	252	256	308	319	335	354	363	412	496
Other intersection	2182	2255	2520	2784	2853	2710	2722	2532	2747	3373
Bridge/causeway	161	150	166	207	200	120	170	155	167	221
Injury crashes - day of week										
Monday	1239	1308	1434	1529	1505	1405	1501	1478	1529	1772
Tuesday	1213	1318	1420	1486	1595	1513	1451	1438	1558	1893
Wednesday	1332	1354	1449	1590	1625	1665	1638	1528	1642	1967
Thursday	1435	1425	1588	1668	1701	1655	1695	1623	1769	1981
Friday	1606	1615	1794	1897	1906	1721	1847	1906	1838	2343
Saturday	1319	1421	1681	1675	1728	1590	1447	1569	1618	1856
Sunday	1109	1105	1186	1409	1307	1238	1307	1221	1379	1457

Table 20: Annual trend data

Queensland 1992-2001

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Injury crashes - location										
Brisbane City	2567	2603	3005	3198	3146	2987	3027	2946	3222	4096
Rest of BSD	1513	1638	1768	1929	1943	1821	1961	1806	2007	2306
Provincial cities	1995	2019	2230	2335	2341	2241	2205	2104	2189	2428
Rest of state	3175	3280	3542	3790	3937	3737	3693	3904	3912	4313
Injury crashes - contributing factors										
Disobeyed traffic rules	3659	3865	4350	4578	4604	4316	4394	4268	4283	4874
Alcohol/drugs	826	858	934	1045	1035	979	938	880	965	1295
Inexperience	1288	1851	2437	2726	2823	2818	2601	2299	2450	2604
Speed	441	369	438	451	436	405	448	421	496	575
Other driver conditions	880	951	869	889	1023	912	844	638	757	767
Age	448	420	456	522	580	611	670	535	545	739
Rain/wet road	874	1038	1163	1317	1146	781	1011	937	757	855
Negligence	266	187	242	209	177	214	297	391	337	371
Inattention	2416	2290	2812	2657	2701	2850	3339	3559	3620	4491
Road conditions	713	681	709	909	857	586	594	567	504	571
Other	988	897	923	1136	1400	1565	1435	1363	1489	1796
Vehicle defects	435	412	460	450	425	418	421	372	318	337
Fatigue	614	594	683	681	704	678	616	640	642	678
No street lighting	94	63	77	83	69	42	63	54	54	52
Injury crashes - units involved										
Car	10918	11407	13103	14091	14130	13566	13825	13631	13904	16709
Utility/van	2061	2252	2447	2672	2659	2450	2474	2470	2258	2632
4-wheel drive	0	0	0	0	0	0	0	111	1101	1340
Rigid Truck	454	451	546	559	490	474	454	480	508	502
Articulated Truck	314	299	370	369	377	344	377	388	290	316
Road train/Bdouble	0	0	0	0	0	0	0	4	57	84
Bus	152	116	122	150	169	177	159	182	201	243
Motorcycle	1287	1318	1361	1347	1383	1194	1191	1122	1070	1281
Tractor	51	57	73	63	77	91	94	100	92	124
Bicycle	1009	823	811	840	944	945	899	797	807	885
Towed device	10	11	17	10	5	3	9	11	8	12
Pedestrian	965	906	998	1090	1022	945	929	923	940	970
Animal - ridden	11	5	4	2	6	4	4	1	6	3
Animal - stock	79	69	65	84	79	91	64	89	44	65
Animal - other	40	54	42	39	39	38	27	34	41	55
Railway stock	22	27	30	22	25	19	18	20	8	13
Other	34	29	39	34	55	33	34	42	26	39
Total	17407	17824	20028	21372	21460	20374	20558	20405	21361	25273
Injury crashes - units towing										
Total	249	269	330	376	470	530	554	554	558	656
Injury crashes - driver involvement by licence type										
Open	11734	11575	12721	13472	13818	13186	13322	13253	14009	16832
Provisional	1390	2179	2914	3079	2829	2546	2661	2587	2847	3402
Learner	276	323	287	321	357	375	431	433	458	573
Not licensed	995	996	1202	1356	1377	1357	1431	1430	1369	1643
Inappropriate/restricted	55	58	54	83	65	48	47	40	53	63
Total	14450	15131	17178	18311	18446	17512	17892	17743	18736	22513

* Disobeyed traffic rules does not include Alcohol/Drugs, Inexperience, Speed and Inattention

** Driver conditions do not include Inattention, Negligence, Inexperience, Fatigue, Age