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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

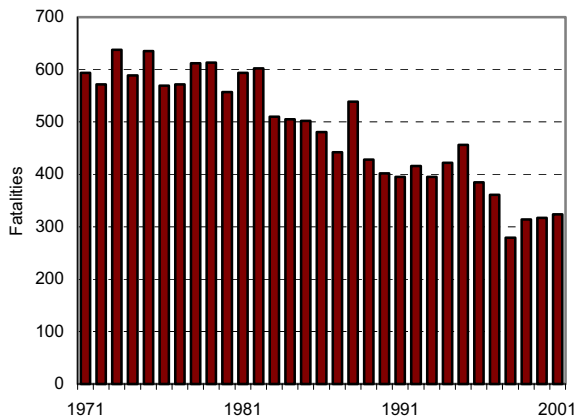
In this section, road traffic crashes for a range of severities in Queensland during 2001 are analysed. The analysis compares 2001 crashes (i) with past trends, (ii) with other states of Australia and (iii) in terms of population growth and economic activity. Finally, the key road safety initiatives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

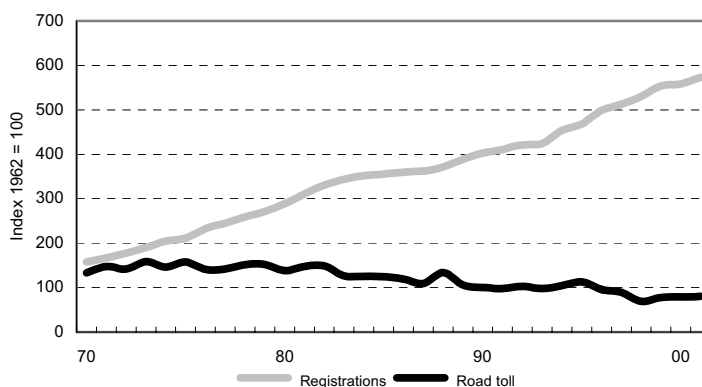
Figure 1.1 shows the longer-term trend in Queensland's road toll. Since the mid-1970s the road toll has been progressively declining. Particularly from 1988, the number of road fatalities has reverted to low levels not experienced since the early 1960s. Between 1989 and 1995 fatalities stabilised within the range of 456 (highest in 1995) and 395 (lowest in 1991). Since 1995, road tolls have declined with the 1998 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**

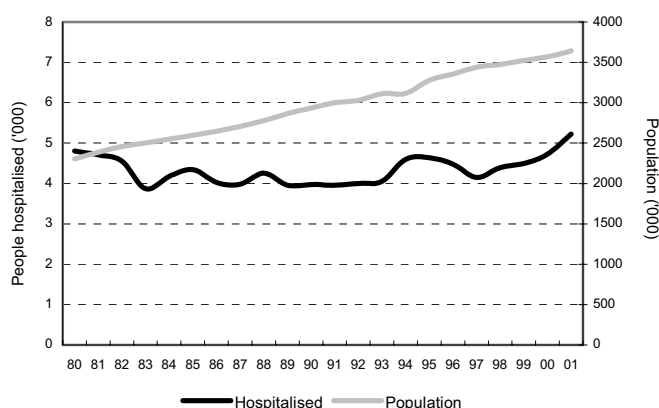
Severity	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Fatal	385	2%	360	2%	279	2%	314	2%	317	2%	324	2%
Hospitalisation	4481	28%	4146	28%	4397	29%	4501	30%	4786	31%	5225	29%
Medical treatment required	6836	43%	6483	43%	6323	42%	6250	42%	6429	42%	7595	43%
Other injury	4131	26%	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**

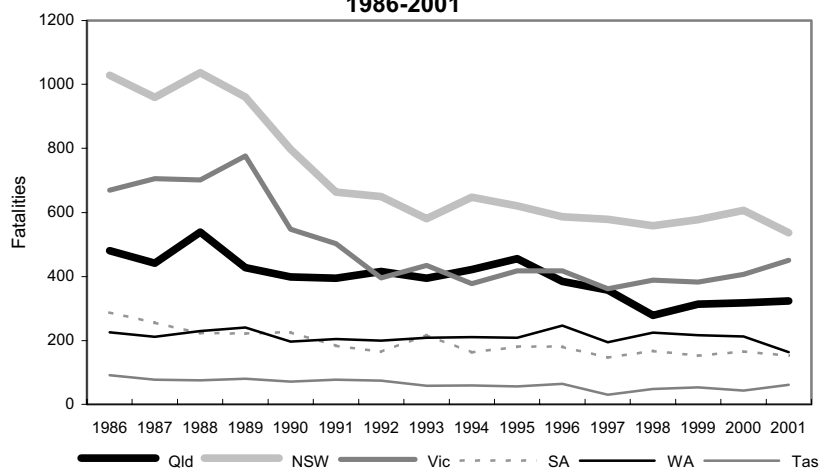
	Fatalities				Fatality rate	
	2001 No.	2000 No.	Variation No.	Variation per cent	per 100,000 population *	per 10,000 vehicles on register **
New South Wales	537	606	-69	-11%	8.22	1.43
Queensland	324	317	7	2%	8.93	1.38
Victoria	451	407	44	11%	9.34	1.36
Western Australia	164	213	-49	-23%	8.59	1.20
South 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**



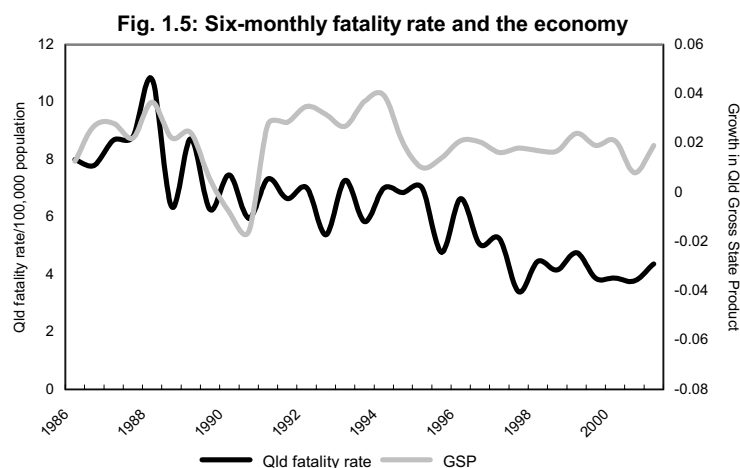
The figure shows that:

- 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).



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**

Age group	Male			Female		
	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**

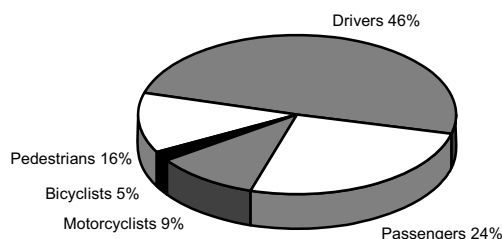
Road user type	1996		1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Drivers	174	45%	158	44%	121	43%	128	41%	157	50%	150	46%
Passengers	105	27%	88	24%	75	27%	87	28%	82	26%	78	24%
Motorcyclists	41	11%	43	12%	25	9%	41	13%	33	10%	29	9%
Bicyclists	10	3%	12	3%	9	3%	9	3%	6	2%	15	5%
Pedestrians	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		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:

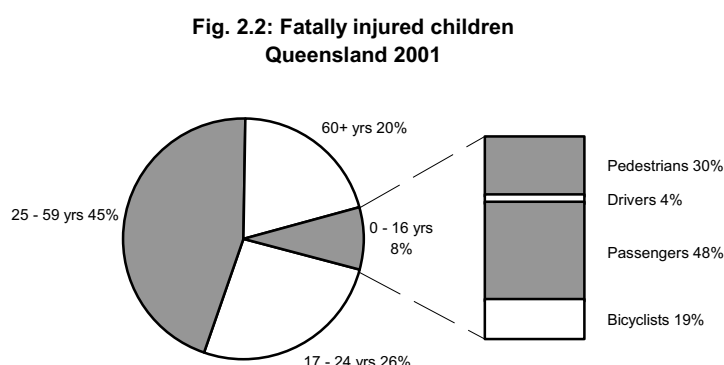
- pedestrians make a higher proportion of fatalities (16%) than hospitalised (8%); and
- the proportions of most other road user categories are similar.

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.



**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:

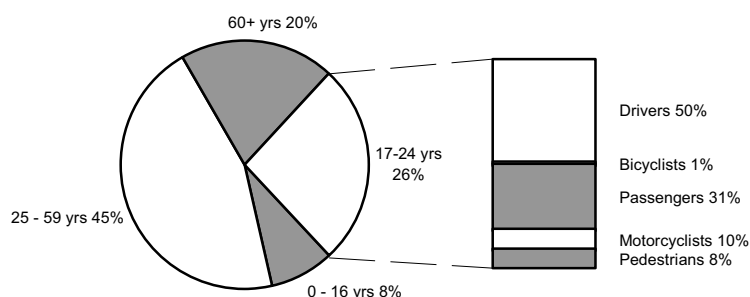
- half of child fatalities in 2001 occurred between 8am and 4pm;
- three (11 per cent) of the fatally injured children were involved in crashes occurring between 6pm and midnight; and
- eight (30 per cent) of the child fatalities died as a result of crashes occurring after dark.

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).