City of Ryde

Crash Analysis Report

City of Ryde

2004-2008

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February 2010

PART 1

Introduction

The City of Ryde is committed to making its roads a safe environment to be. Better understanding of road safety issues and solutions is important in achieving our goal.

In the City of Ryde there are a number of concerns when dealing with road safety. Promoting community-based action underlies the issues that will emerge from this crash analysis report, at the local level.

The Challenge

The City of Ryde commenced involvement with the NSW Local Government Road Safety Program in 1999 with the employment of a full-time Road Safety Officer. Since 2004, the Road Safety Officer position has moved from Engineering to Community Services and the position was renamed to Road and Community Safety. The challenge is to address the road safety issues within the City of Ryde, in conjunction with community safety issues, by raising community awareness through enforcement, education and engineering efforts to make the roads a safer place to be.

Objectives of Action Plan

Road safety is an issue for all members of the City of Ryde community. The City of Ryde is committed to road safety and the Road Safety Action Plan will help to ensure our objectives are met. These objectives are stated in each road safety project initiative outlined in the Action Plan. They have been decided, based on the crash data evaluation of the City of Ryde. The activities of the Road Safety Action Plan aim to reduce the casualties on City of Ryde roads by educating the community and thereby changing driver and pedestrian behaviour.

The actions outlined in the Action Plan reflect both the commitment of the State Government and the City of Ryde Council.

PART 2 Ryde Demographic Data

The City of Ryde has an area of 40.651kms^2 and lies in the central northern part of the Sydney Metropolitan area, approximately 12kms from the centre of Sydney.

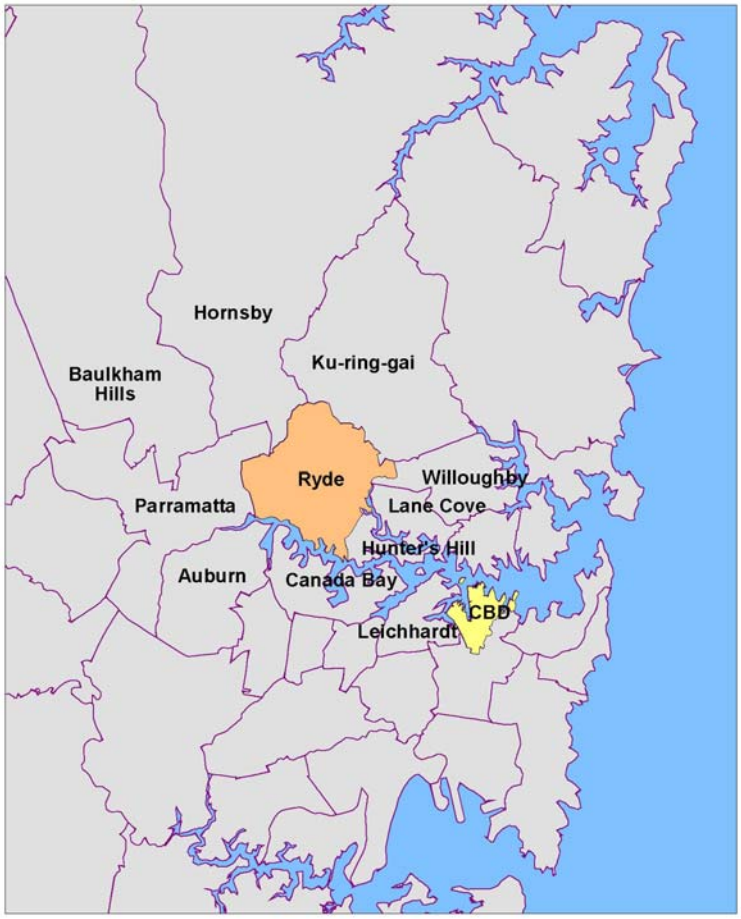


Figure 1: The location of the City of Ryde

The City occupies most of the divide between the Parramatta and Lane Cove rivers, and has 16 suburbs within its boundaries. The suburbs that make up the City of Ryde include Chatswood West, Denistone, Denistone East, Denistone West, East Ryde, Eastwood, Gladesville, Macquarie Park, Marsfield, Meadowbank, Melrose Park, North Ryde, Putney, Ryde, Tennyson Point, and West Ryde.

The traditional Aboriginal owners of the land are the Wallumedegal clan of the Dharug tribe. Aboriginal sites in the City are predominantly located around the foreshores of the Parramatta River and Lane Cove River.

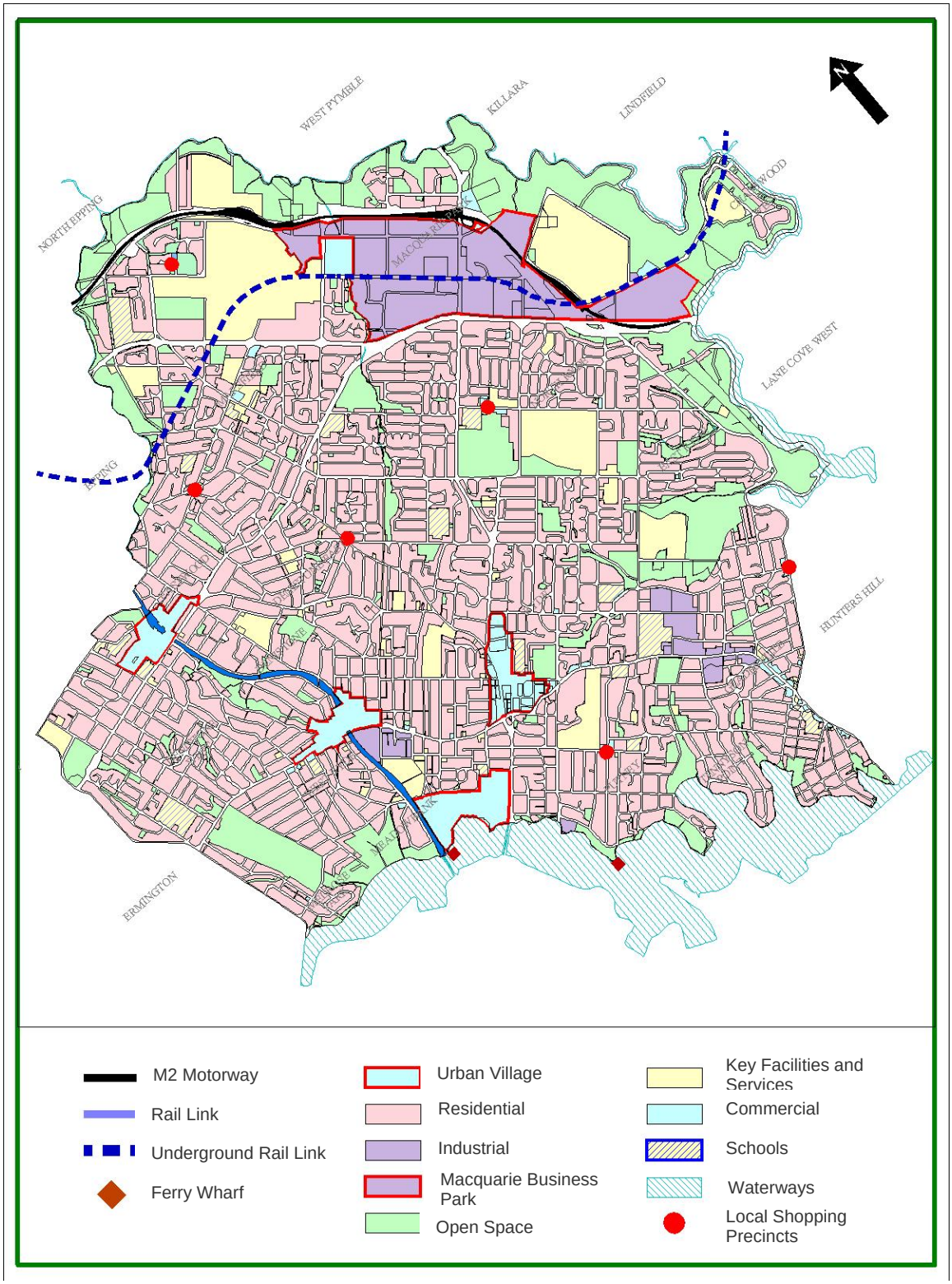


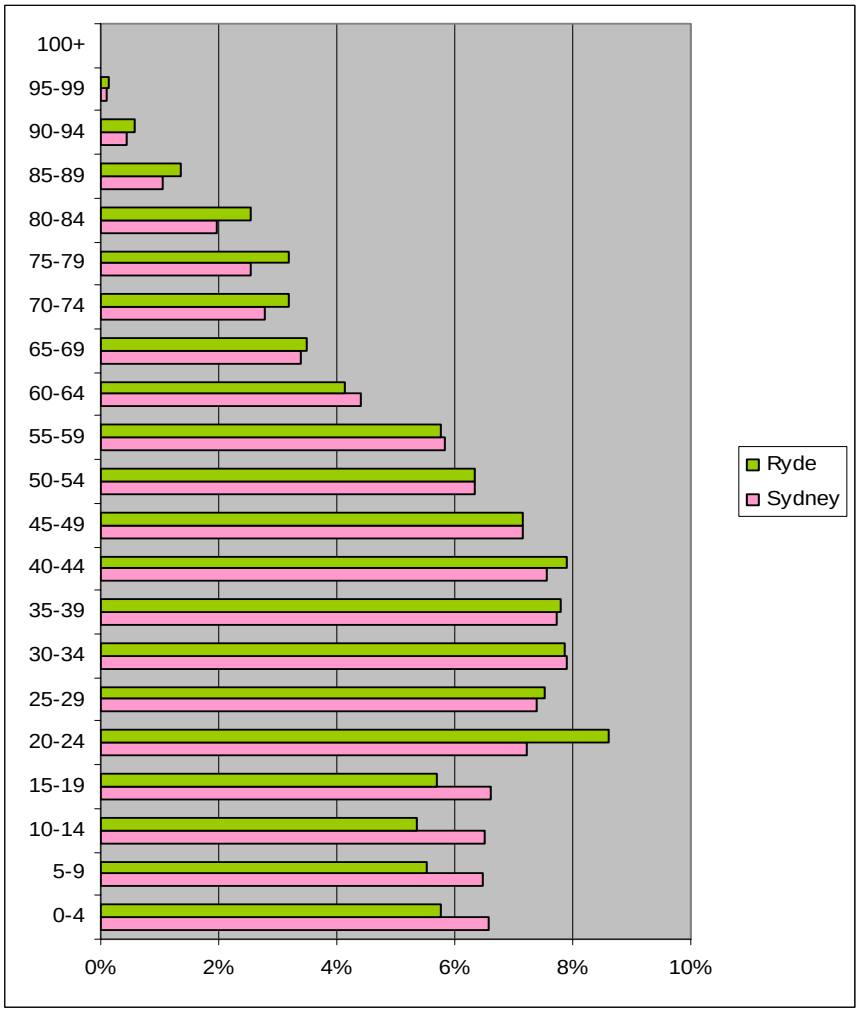
Figure 2: Structure Plan of the City of Ryde

The People

As at the 2006 Census, the residential population for the City of Ryde was estimated at 96 948. The largest age group in the community is adults aged from 25–54 years who make up 45% of the population.

In the City in 2006 there were 46 778 males and 50 170 females.

The City's Aboriginal and Torres Strait Islander population in 2006 was 267 persons.

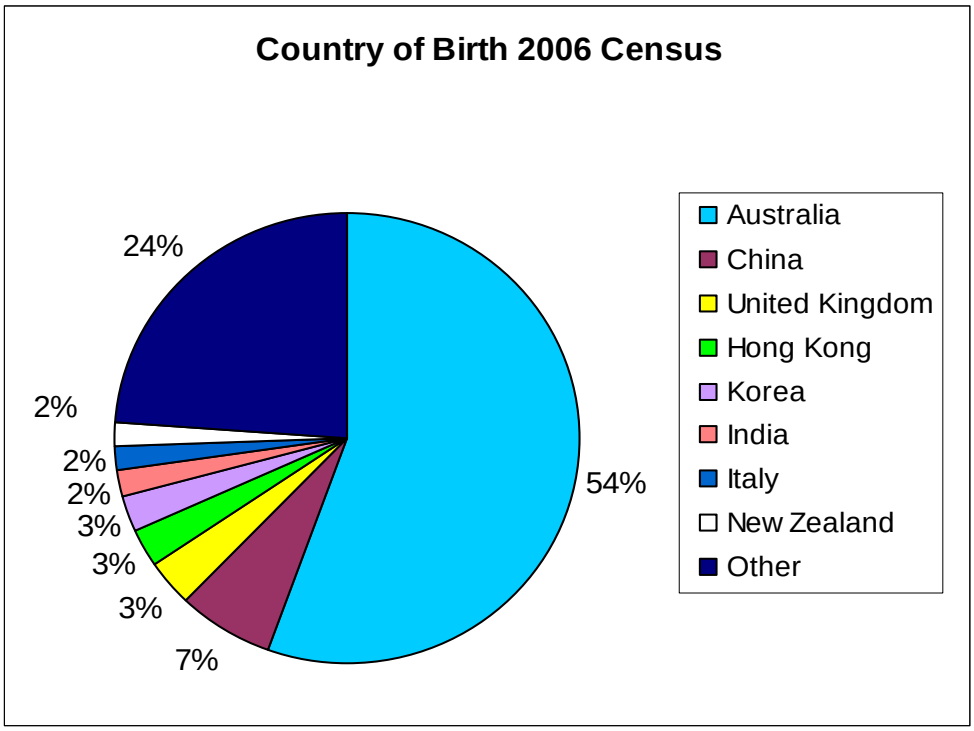


Graph 1: Relative size of age groups (ABS 2006 Census Population and Housing)

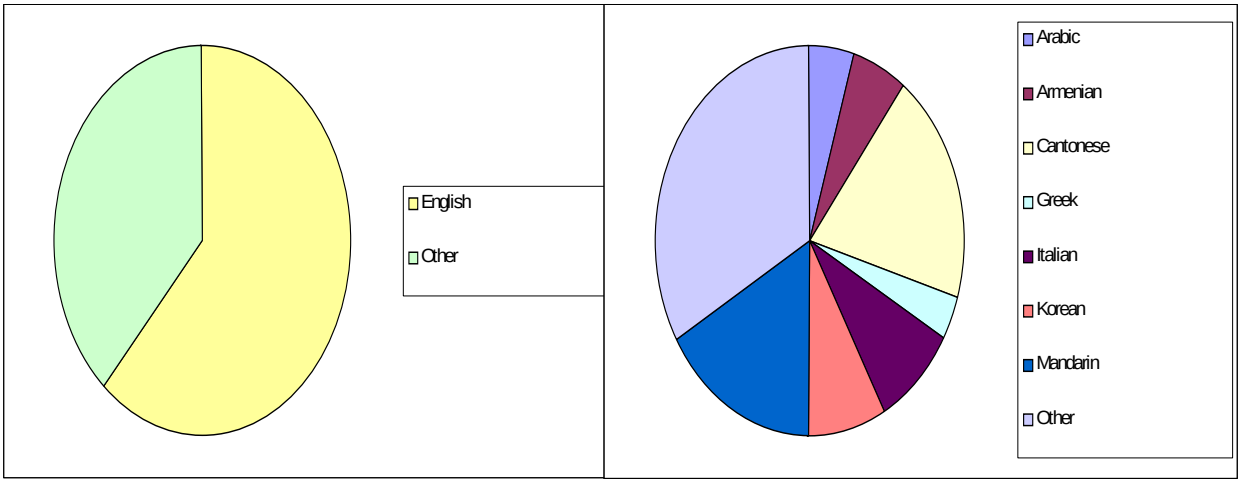
In 2006, some 62% of the City's people were born in Australia and 38% born overseas. The most common overseas birthplaces were China, U.K., Hong Kong and Korea.

People who spoke a language other than English at home made up 36% of the population. The most common of these languages were Cantonese, Mandarin, Italian, Korean and Armenian.

Graph 2: Country of birth (ABS 2006 Census Population and Housing)



Graph 3: Language spoken at home (ABS 2006 Census Population and Housing)



The Cars

Table A identifies the number of vehicles registered in the City of Ryde. The majority of the vehicles which are registered in the City of Ryde are passenger vehicles (69%) followed by off-road passenger vehicles (10%). There has been an increase in off-road passenger vehicles from 2007 and light trucks continue to grow. There has been a large decrease from 2007 to 2008 in small buses.

Table A: Number of vehicles registered in the City of Ryde as at 30 June 2006, 2007 and 2008

	Passenger Vehicles	Off-road Passenger Vehicles	Small Buses	Buses	Mobile Homes	Motor-cycles	Light Trucks	Heavy Trucks	Prime Movers	Light Plant	Heavy Plant	Small Trailers	Trailers	Other Vehicles	Size of Vehicle Fleet
2006	51568	8640	344	1366	42	1176	5863	371	18	73	25	3299	1034	5	73824
2007	54674	6139	348	419	37	1301	6728	358	15	60	28	3259	1123	5	74494
2008	53,719	7,939	195	452	30	1,534	7,496	348	30	61	N/A	N/A	4,349	N/A	77,465

Table B: Licence holders in Ryde by licence type as at 30 June 2007 and 2008

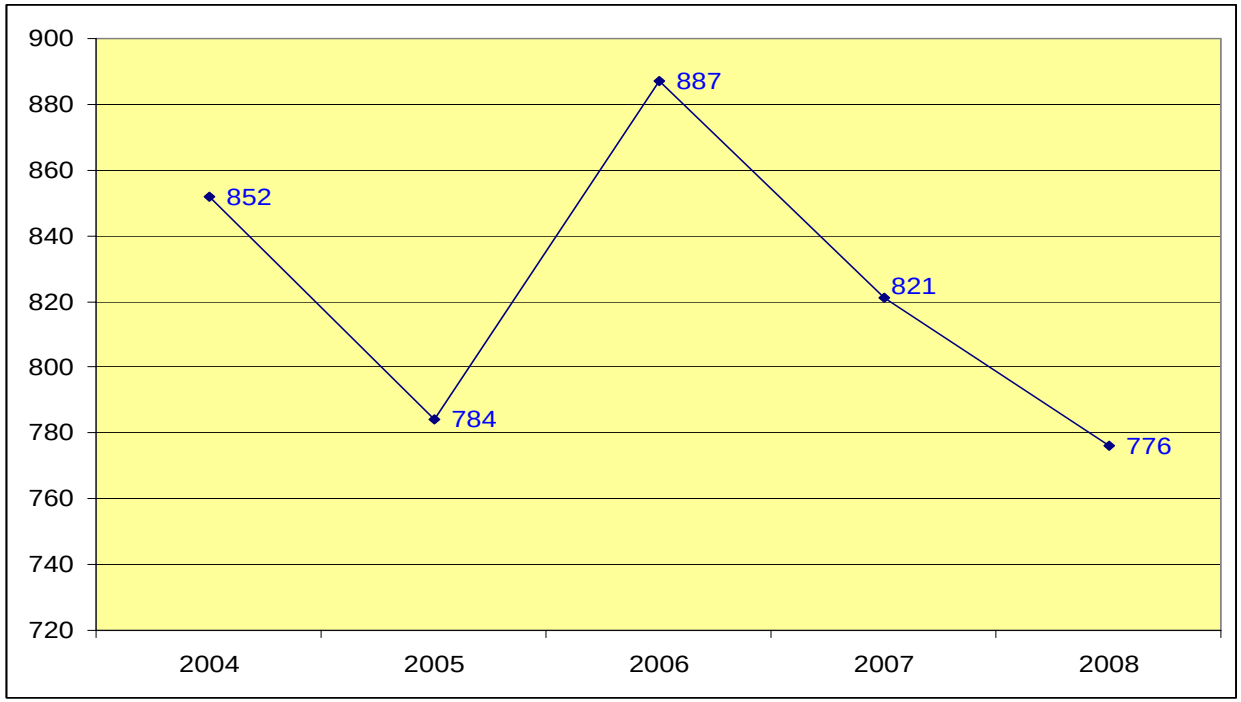
	Learner	P1	P2	Unrestricted	Total
2007	4907	2343	3479	59769	70498
2008	4890	2199	3657	60759	71505

Table B shows the number of licence holders in the City Ryde by licence type. There has been a small increase in the number of licence holders and a decrease in learner and P1 drivers.

PART 3

City of Ryde Crash Analysis 2004-2008

The following information provides a statistical overview of the road crash data for the City of Ryde between 2004 and 2008. For definitions and explanatory notes please see Appendix 1.



Graph 4: Total Number of Crashes in the City of Ryde 2004-2008

1. CRASHES

Table 1 and Graph 4 identify the total number of crashes in the City of Ryde by fatal/injury/non-casualty classification between 2004 and 2008. After a drastic increase in the number of total crashes from 2005 to 2006 (increase of 103 crashes), the number for 2007 and 2008 indicate the 2005 to 2006 was a one-off year and does not represent the trend. Despite the 2005 to 2006 bad year, the trend remains down. Fatalities and non-casualty crashes have remained stable and there has been a significant decrease in the number of injury crashes. Injury crashes are at the lowest point in five years.

Table 1: City of Ryde number of crashes by fatal/injury/non-casualty classification 2004-2008

	2004	2005	2006	2007	2008	5 year Av.
Fatal Crashes	4	7	2	2	2	3.4
Injury Crashes	309	268	312	313	267	293.8
Non-Casualty Crashes	539	509	573	506	507	526.8
Total Crashes	852	784	887	821	776	824

2. CASUALTIES

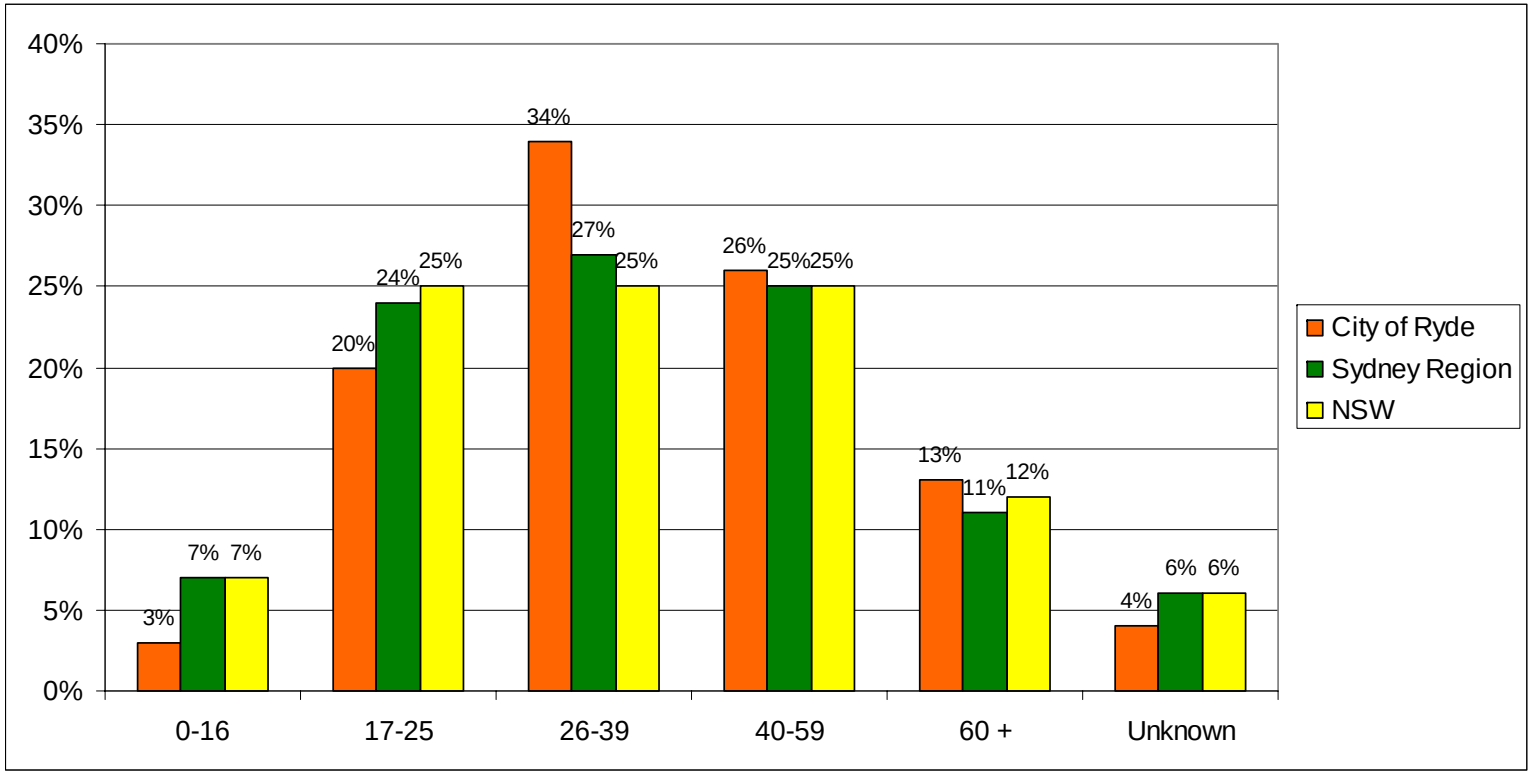
Table 2 shows the total number of casualties in the City of Ryde by killed/injured classification between 2004 and 2008. The total number of casualties killed for 2008 has not changed since 2006 and is still at its lowest since before 2002, where only two fatalities were recorded. The number of injured casualties has decreased from 372 in 2007 to 267 (-105 causalities) which is a significant decrease and has affected the five year average. The five year average for 2007 (2003-2007) was 362.8 and the current five year average (2004-2008) now stands at 356 (-5.6 causalities). The five year averages for number of casualties injured demonstrates a downward trend with fatalities remaining stable.

Table 2: City of Ryde number of casualties by killed/injured classification 2004-2008

	2004	2005	2006	2007	2008	5 yr Av.
Killed	4	7	2	2	2	3.4
Injured	355	334	380	372	322	293.8
Total	359	341	382	374	324	356

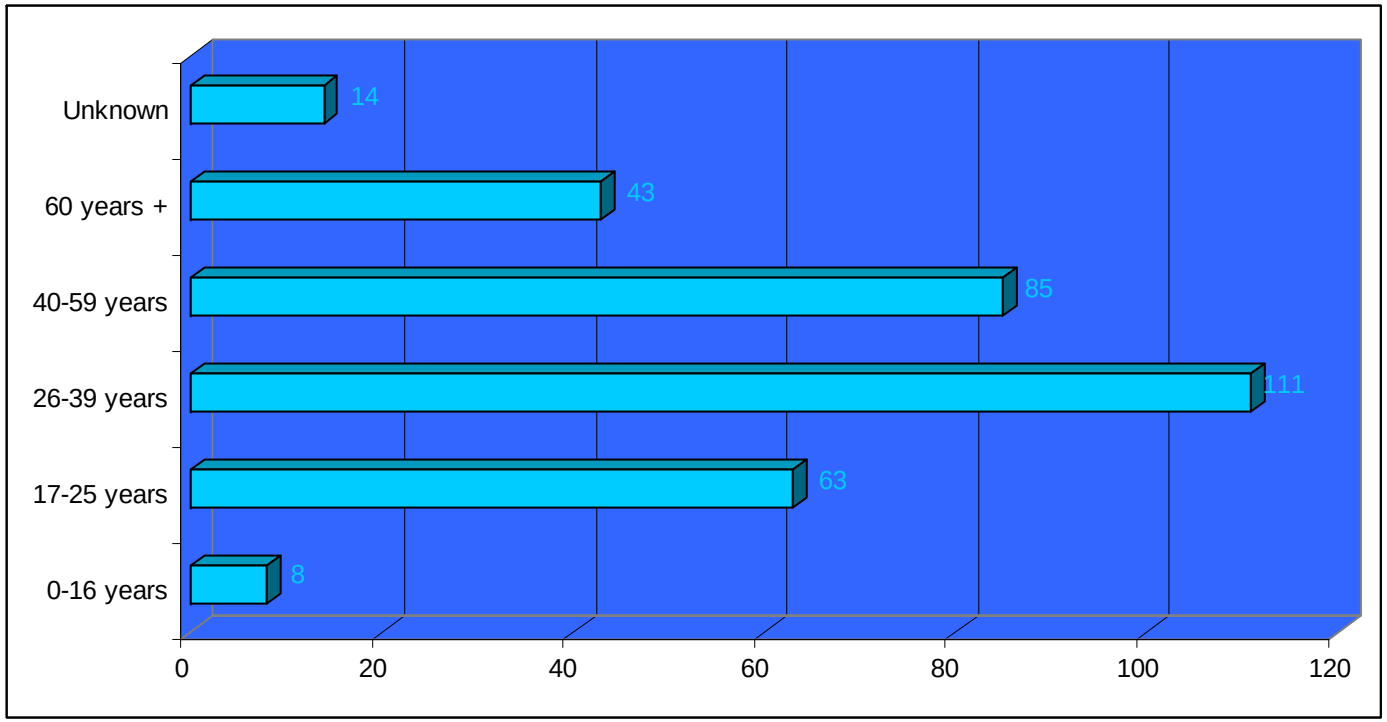
2a. Casualties by age group

Graph 5 shows the distribution of casualties by age group across the City of Ryde, Sydney and NSW for 2008. The City of Ryde has a higher percentage of casualties in both the 26-39, 40-59 and 60+ age groups than NSW and Sydney. The 26-39 and 60+ age groups have increased slightly while most other age groups have remained stable. The City of Ryde is out performing NSW and the Sydney region in the under 25 age groups, with considerably smaller percentages.



Graph 5: Distribution of casualties by age group and region 2008

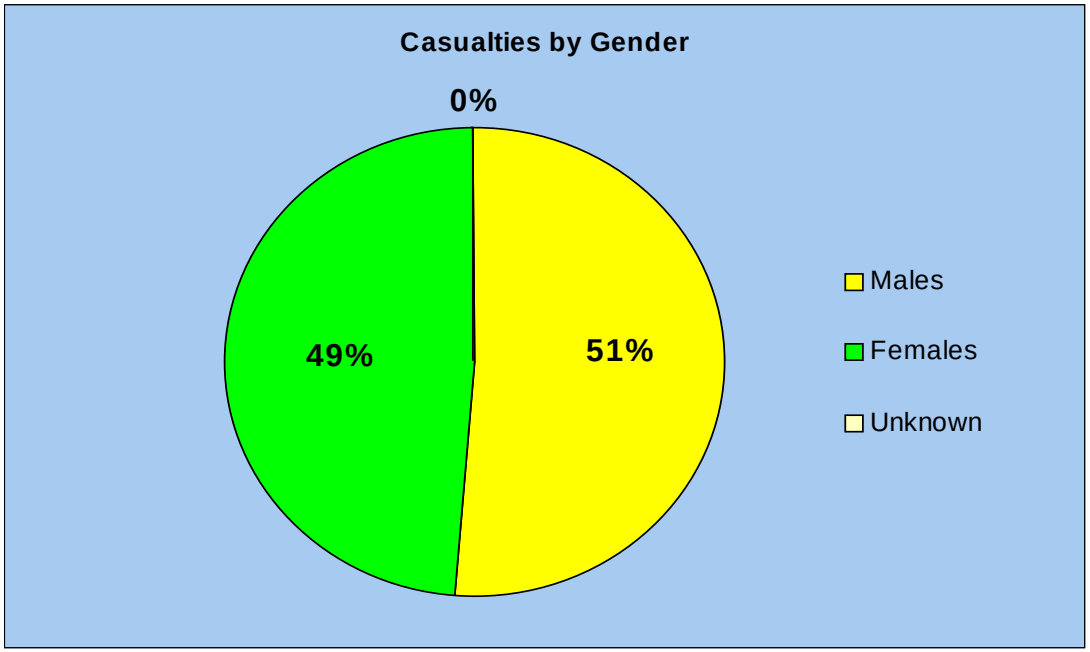
Graph 6 displays the number of casualties in the City of Ryde by age group in 2008. As in 2006 and 2007, the majority of casualties in the City of Ryde occurred in the 26-39 year age group followed by the 40-59 year age group. Casualty rates for 0-16 year olds halved from 2007 and there was also a drop of 20% in casualty rates for 17 – 25 year old. These drops accounted for most of the decrease indicated in Graph 1.



Graph 6: Casualties in the City of Ryde by age group 2008

2b. Casualties by gender

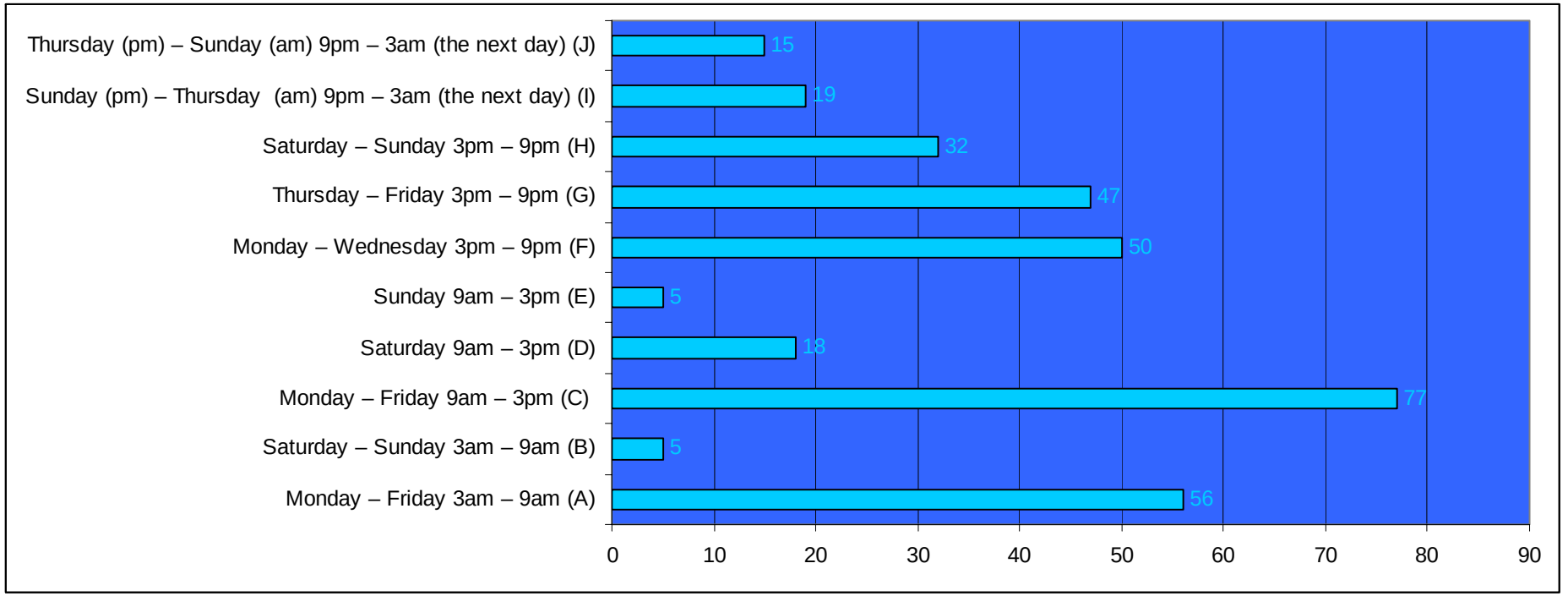
Table 2 shows that there were 324 casualties in the City of Ryde, of the 324 casualties, 51% were males and 49% were females. The percentages for the City of Ryde are comparable with NSW and Sydney.



Graph 7: City of Ryde casualties by gender 2008

2c. Casualties by time period

Graph 8 describes the number of casualties in the City of Ryde by time periods in 2008. The greatest number of casualties occurred from Monday to Friday between 9am and 3pm which was consistent with 2007. There were noteworthy declines from 2007 in Monday – Wednesday 3pm – 9pm time period down 32 causalities, Monday – Friday 9am – 3pm time period down 16 causalities and Saturday – Sunday 3am – 9am time period down 70%. There were small rises in most other time periods.



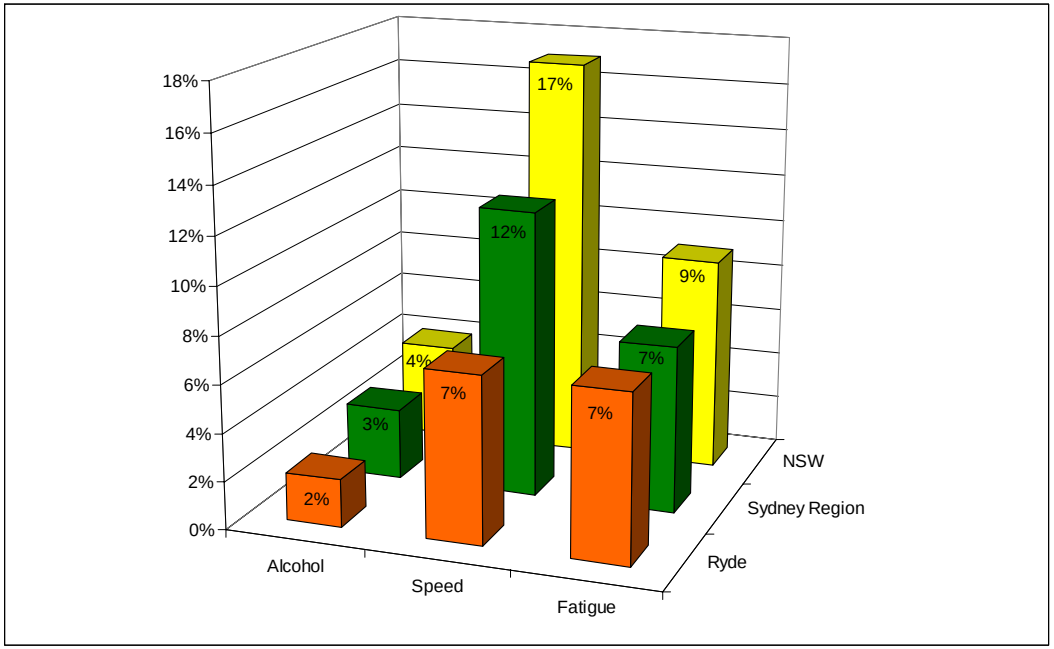
Graph 8: Number of casualties by time period in the City of Ryde 2008

3. CONTRIBUTING FACTORS

This section discusses crash statistics in relation to contributing factors, notably speed, alcohol and fatigue.

3a. Comparisons by region – crashes

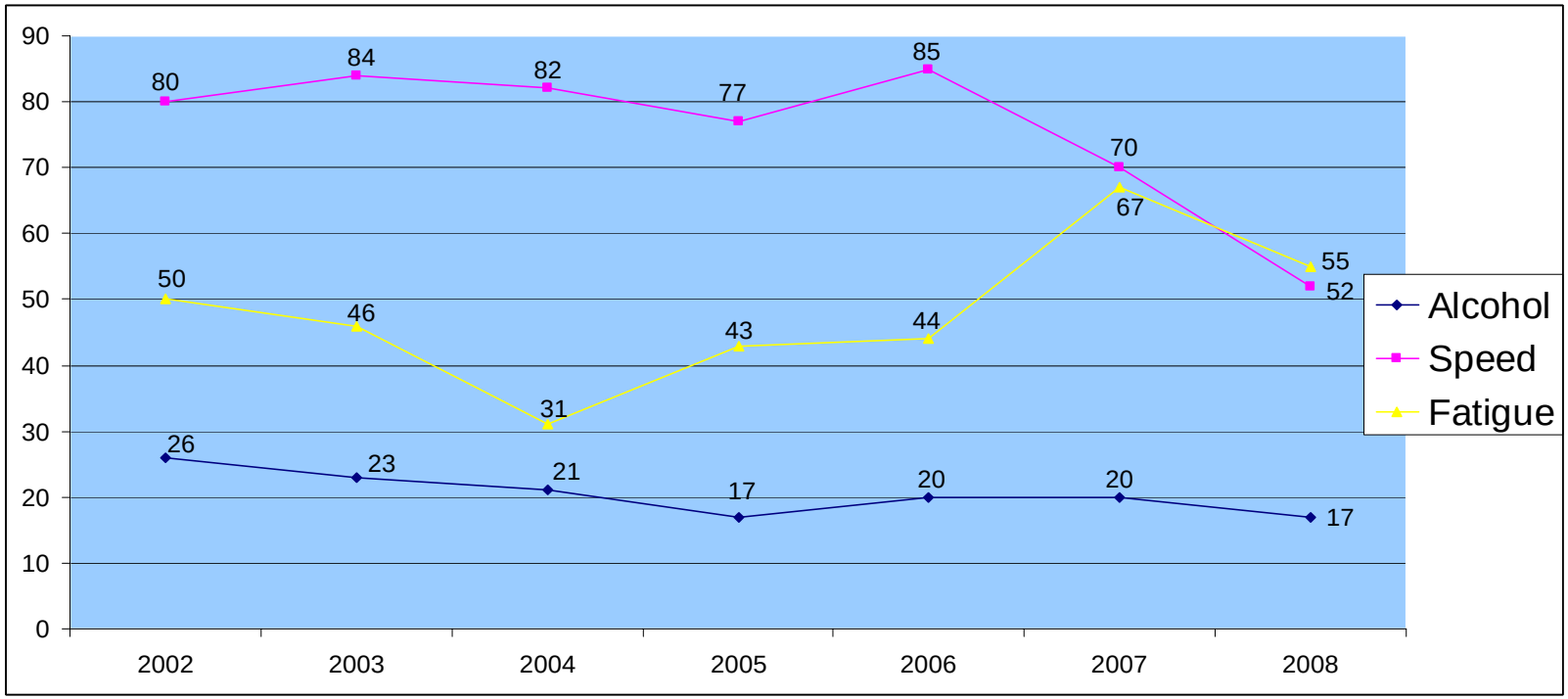
Graph 9 illustrates the percentage of all crashes in the City of Ryde, Sydney region and NSW according to contributing factors in 2008. NSW has the highest percentage of crashes with speed involvement, 17% of all crashes in NSW involved speed. Speed is also the highest contributing factor for Sydney with 12% and less in the City of Ryde with 7%. Fatigue related crashes have, for the first time in since at least 1999 equaled speed as a contributing factor. Continuing its upward trend from 5% in 2006 to 7% in 2008 and for the second year in a row matching the Sydney region. Alcohol related crashes have gone down from 3% in 2007 and remain very low at 2%.



Graph 9: Crash percentage and contributing factors between City of Ryde, Sydney region and NSW 2008

3b. Comparisons within the City of Ryde 2002-2008 – crashes

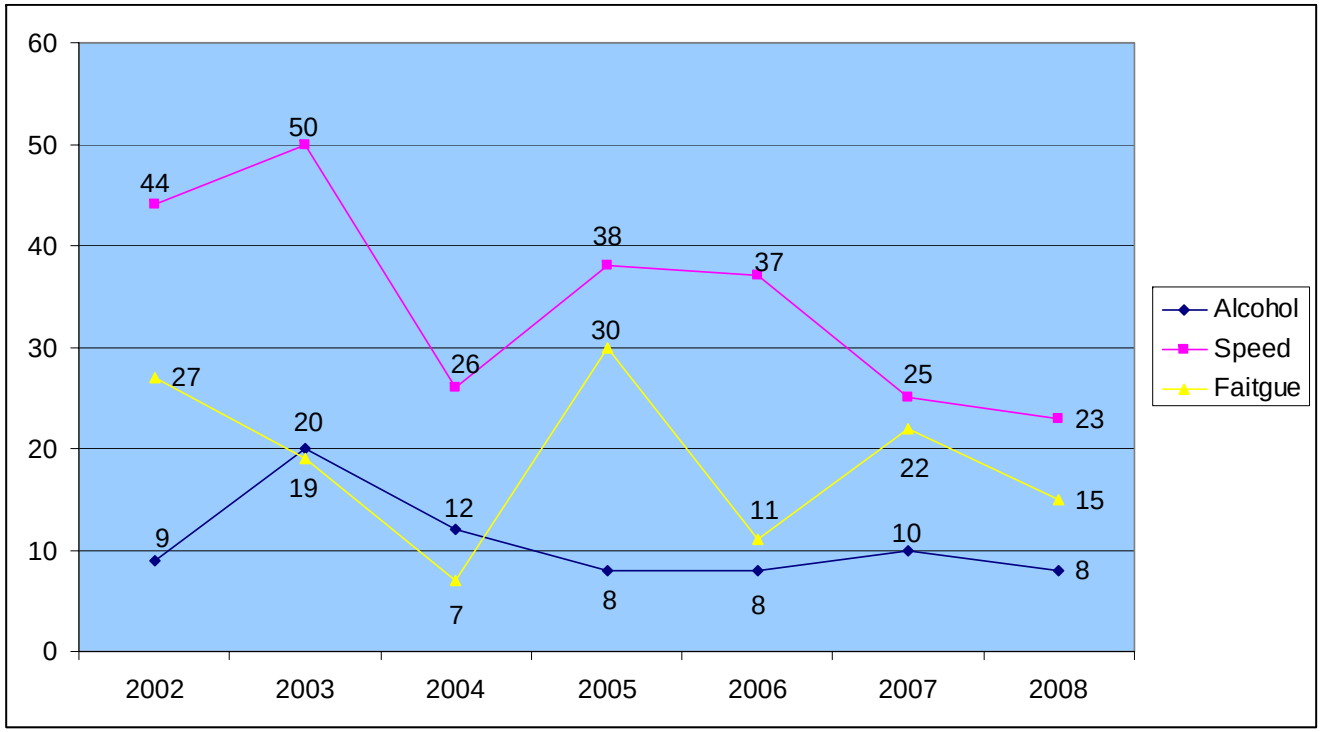
Graph 10 looks at the percentage of crashes with contributing factors between 2002 and 2008 in the City of Ryde and shows the difference between the number of speed, fatigue and alcohol crashes. The most noteworthy change in 2008 was fatigue related crashes overtaking speed as the highest contributing factor of crashes. While fatigue has dropped by 12 crashes, speed continues its dramatic decline from a relatively stable period between 2002 and 2006. Speed related crashes have continued to drop substantially with 2008 recording the biggest drop since 2002, a drop of 18 crashes which makes speed related crashes the lowest they have been since 2002. Alcohol related crashes has remained stable since 2004.



Graph 10: Number of all crashes according to contributing factors in the City of Ryde 2002-2008

3c. Comparisons within the City of Ryde 2002-2008 – causalities

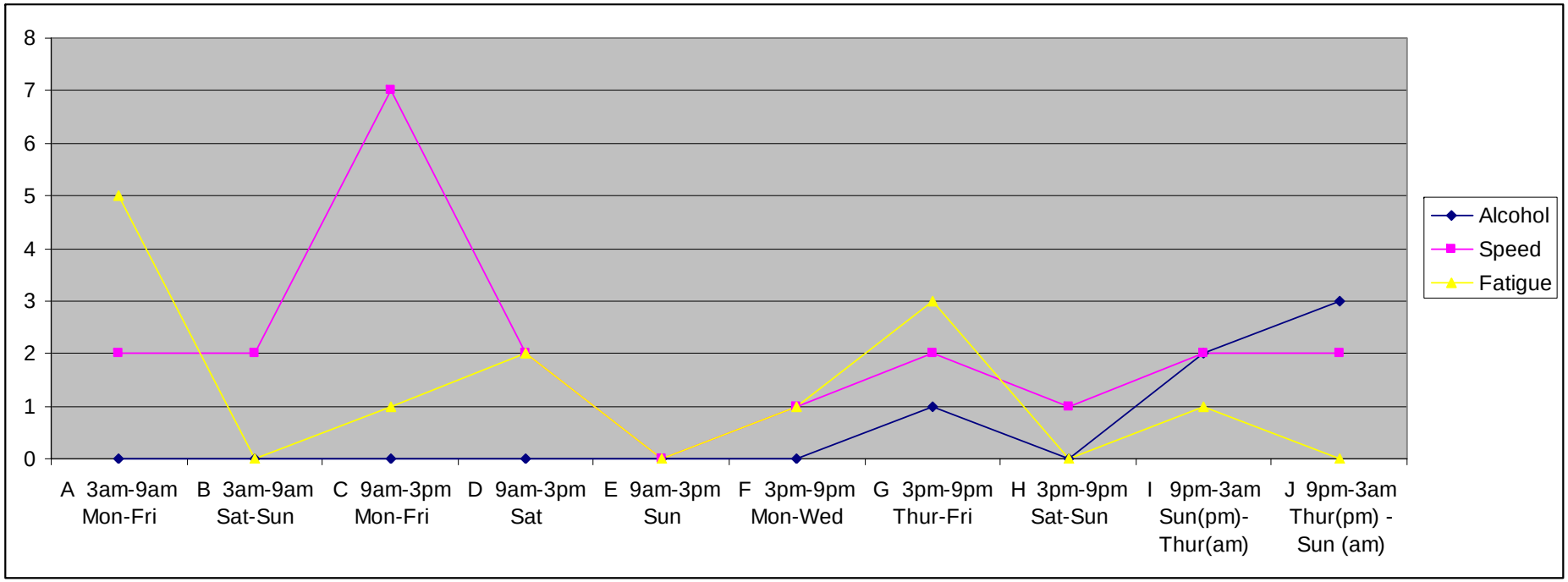
While fatigue related crashes have increased, fatigue related causalities, the number of people killed or injured, have declined after a spike in 2005 and 2007. Speed related causalities have also decreased, although not as fast as fatigue related casualties. However, speed related causalities have halved over the last five years. Alcohol related causalities remains constant. The graph demonstrates that while more crashes occur with fatigue as a contributing factor, the severity of crashes is far worse when speed is the contributing factor.



Graph 11: Number of causalities according to contributing factors in the City of Ryde 2002-2008

3d. Comparisons in the City of Ryde by time period and contributing factor

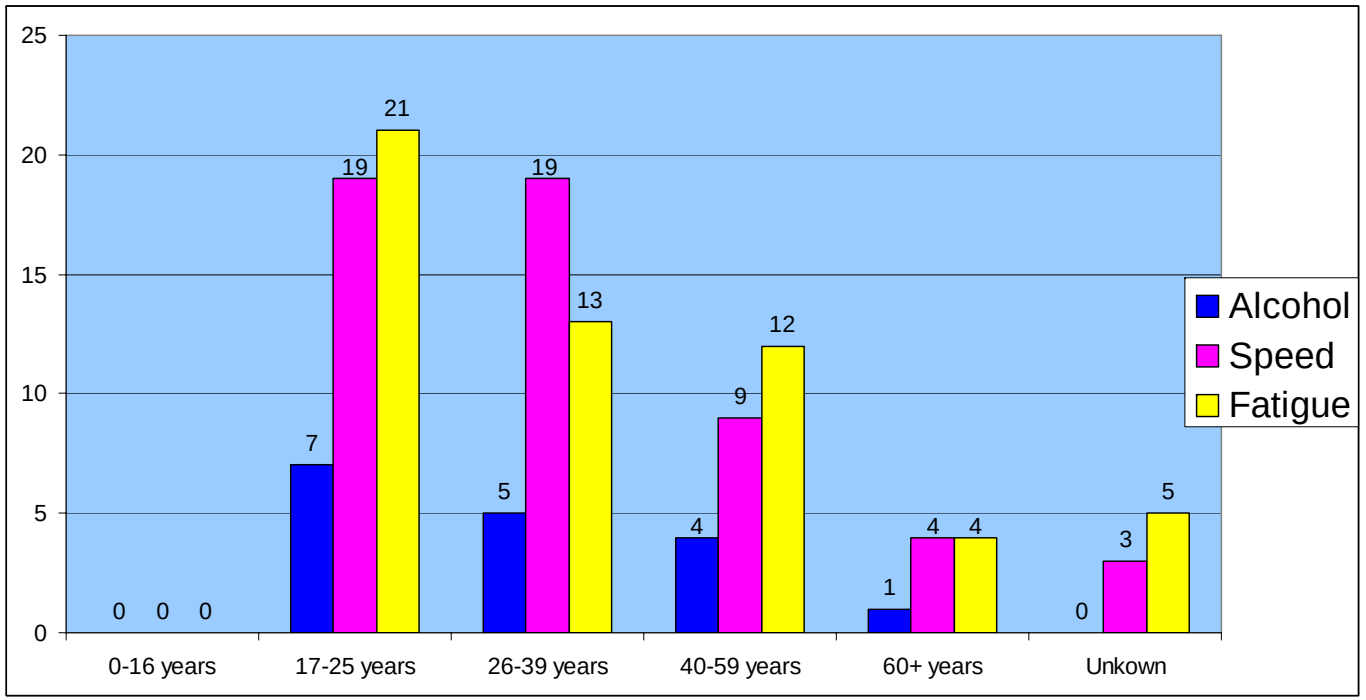
Graph 12 shows the fatal or injury crashes by contributing factor and time period in the City of Ryde in 2008. The time periods are specified in the table according to McLean Time Periods. Fatigue related crashes are particularly prevalent in the early morning while speed related crashes are prevalent during the day, Monday to Friday. Fatigue, speed and alcohol all increase from 3pm each day.



Graph 12: Fatal or injury crashes by contributing factor and time period for the City of Ryde 2008

3e. Comparisons in the City of Ryde by age and contributing factor

Graph 13 shows the number of motor vehicle controllers involved in crashes in the City of Ryde according to contributing factors and age group for 2008. The number of speed related crashes for the 17-25 age group has continued to decline, down five from 2007. In 2007, speed as a contributing factor in this age group decreased significantly by 16 crashes, however fatigue related crashes for this age group have increased by six crashes. Fatigue was up again in 2008, increasing by five crashes. This age group has the greatest number of alcohol and fatigue related crashes out of any age group which is a significant concern. For speed, 17-25 and 26-39 age groups share the highest number of crashes. There has been a dramatic decline for speed as a contributing factor for 40-59 years age group, halving since 2007. While fatigue related crashes increased dramatically in 2007 in the over 60 year old category, speed related crashes have almost halved in 2008 from 2007 numbers.



Graph 13: Number of motor vehicle controllers involved in crashes by contributing factor and age group in the City of Ryde 2008

3f. Crashes involving speed

In 2008, there were 54 crashes involving speed in the City of Ryde (down 16 crashes from last year), 21 of which were injury crashes, the same number as in 2007. This may represent a flattening of the injury crashes trend after a large decrease in 2007. However it is concerning that while the number of crashes is decreasing, the number of injuries remains almost the same.

As in 2006 and 2007, the majority of casualty crashes involving speed occurred during the week, Monday to Friday between 9am and 3pm (see Graph 12). The 17-25 year and 26 – 39 age groups had the highest number of speeding crashes by motor vehicle controller which has continued the trend of a narrowing gap between the 17-25 year age group and other age groups. Breaking tradition, speeding was not the highest number for motor vehicle controllers in crashes by contributing factors although it remains the highest number of casualties (see Graph 11).

3g. Crashes involving alcohol

The number of alcohol related crashes have decreased slighting from 2007, alcohol was a factor in 17 crashes, and the causality numbers have remained stable since 2005. Alcohol contributed to approximately 2% of the total number of fatal or injury crashes in the City of Ryde, and as with previous years, the time period for when most of the casualty crashes took place were between the hours of 9pm and 3am from Thursday to Sunday (see Graph 12). There may be more drink driving incidences in the late evenings on weekends because of licensed premises being opened until late and an increased number of patrons at these premises. Like speed and fatigue the 17-25 age group were the biggest offenders for alcohol related crashes but dropped by three crashes in 2008. All other age groups remained stable in 2008.

3h. Crashes involving fatigue

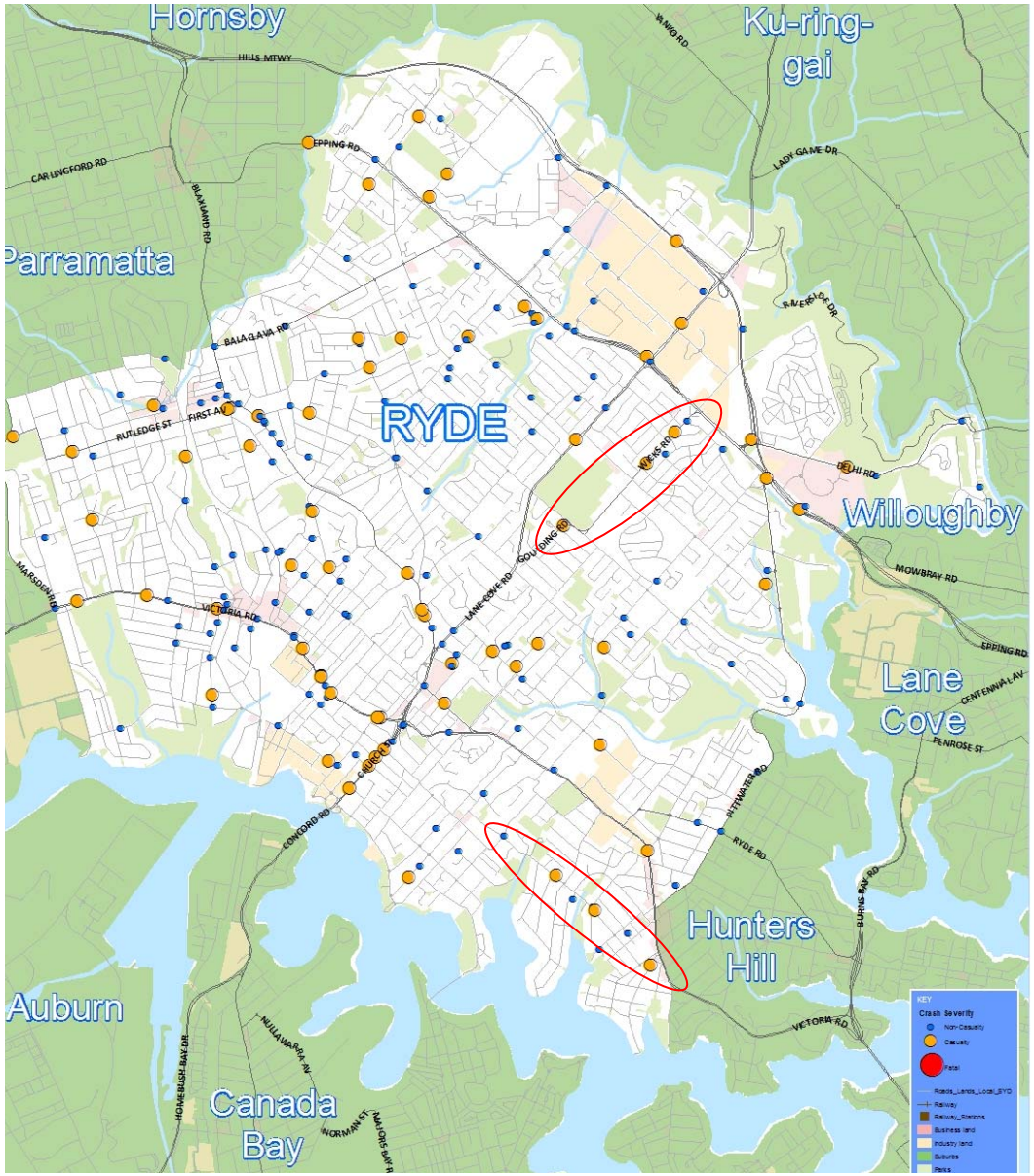
Fatigue as a contributing factor is the big mover in this report, with fatigue related crashes over taking speed related crashes in 2008. There were 55 crashes resulting in 15 casualties in the City of Ryde, none of which were fatalities. However the number of crashes and casualties were lower than in 2007.

The majority of fatigue related injury crashes in 2008 occurred in the early morning and afternoon/evening between 3pm and 9pm mid week (see Graph 12). In 2007 and 2008, unlike previous years the 17-25 age group had the highest number of motor vehicle controllers involved in fatigue related crashes, at 21 crashes, followed by the 26 – 39 and 40-59 age groups (see Graph 13).

The map to the right identifies the driver fatigue related crashes in the City of Ryde between 2004 and 2008. Fatigue related crash locations in the City of Ryde are fairly evenly distributed throughout the City and therefore there is no particular pattern. However West Ryde has more causalities then other suburbs. Unlike speed, most fatigue related crashes occurred on local streets. This may indicate that fatigue related crashes occur when drivers are close to home and their concentration is wavering. Wicks Road and Morrison Road were the local Council streets with the highest number of fatigue related casualties, as indicated by the red circles.

Not surprisingly, all main roads in the City have considerably more crashes than other streets, including Victoria Road, Blaxland Road, Lane Cove Road and Epping Road.

It must be noted that there may be discrepancies in police recordings of what constitutes a fatigue related crash and therefore figures may not be a true and accurate recording of this factor.



4. ROAD USER TYPE

This section examines crash statistics and road user type.

Table 3 summarises the percentage of casualties by road user class, as a total of all casualties, between 2004 – 2008, for NSW, Sydney region and the City of Ryde. The following is representative of the five year average and 2008 data (five year average data is shown).

- The City of Ryde has a growing higher percentage of motor vehicle driver casualties (65.6%) compared to Sydney region (55.9%) and NSW (55.7%) for the 5 year average. However 2008 had a considerably better year for the City of Ryde, decreasing almost 3% on Sydney region and NSW.
- There has been a 3% decrease in the percentage of motor vehicle passenger casualties for 2008 (13%) in the City of Ryde on top of a 4% decrease in 2007. Both the 2008 percentage and the 5 year average for the City of Ryde (18% and 13% respectively) are still well below the 2008 percentages and 5 year averages for the Sydney regions (20.3% and 18.6% respectively) and NSW (22.1% and 20.6% respectively).
- Motorcyclist casualties have remained stable, decreasing slight to 8% in 2008 from 10% in 2007.
- Pedestrian casualties for the City of Ryde 5 year average (12%) is still on par with the Sydney region (10.8%). This is higher than NSW (8.6%).
- Followed by the percentage of motor vehicle driver and motor vehicle passenger casualties (65.4% and 53%), pedestrians and motorcycles are equal third highest casualty group in the City of Ryde, at 8%.

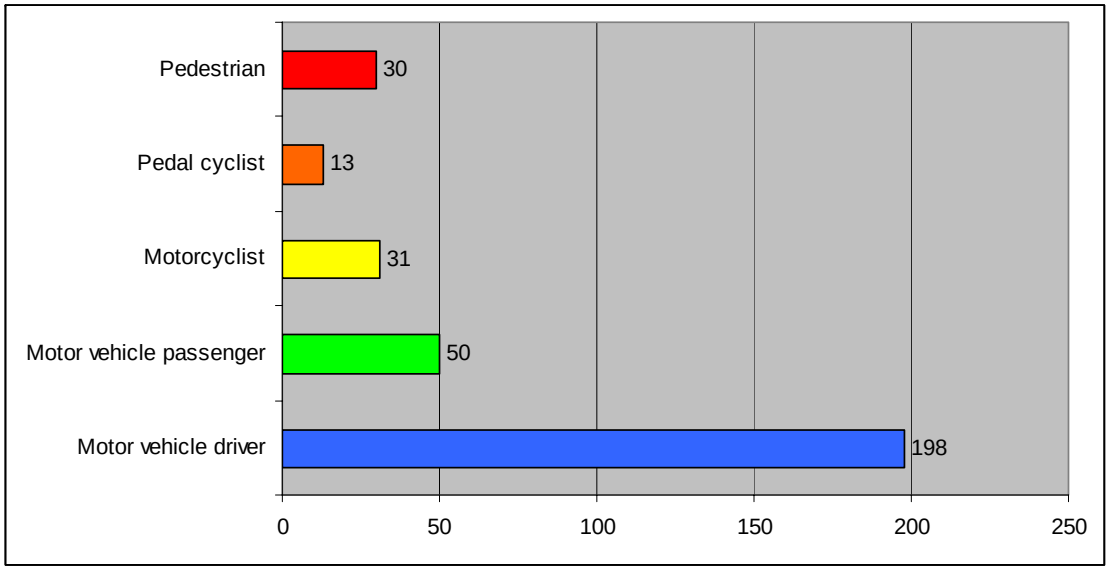
Table 3: Percentage of casualties by road user class 2004-2008 average, and 2008

	NSW		Sydney Region		City of Ryde	
	5 yr avg	2008	5 yr avg	2008	5 yr avg	2008
Motor Vehicle Driver	55.7%	55.8%	55.9%	55.9%	**65.6%**	53%
Motor Vehicle Passenger	22.1%	20.6%	20.3%	18.6%	**18.0%**	13%
Motorcyclist	8.9%	10.2%	8.3%	9.7%	**10.4%**	8%
Pedal Cyclist	4.9%	4.5%	4.6%	4.8%	**4.5%**	3%
Pedestrian	8.6%	8.7%	10.8%	10.9%	**12.0%**	8%

Table 4 examines the total number of casualties by road user class from 2004 to 2008. 2008 saw a decrease across the all road user class categories. The City of Ryde has also moved below the five year average in all categories, a major achievement as the City was above all the average for all categories in 2007 with the exception of motorcyclists.

Table 4: Number of casualties by road user class 2004-2008 City of Ryde

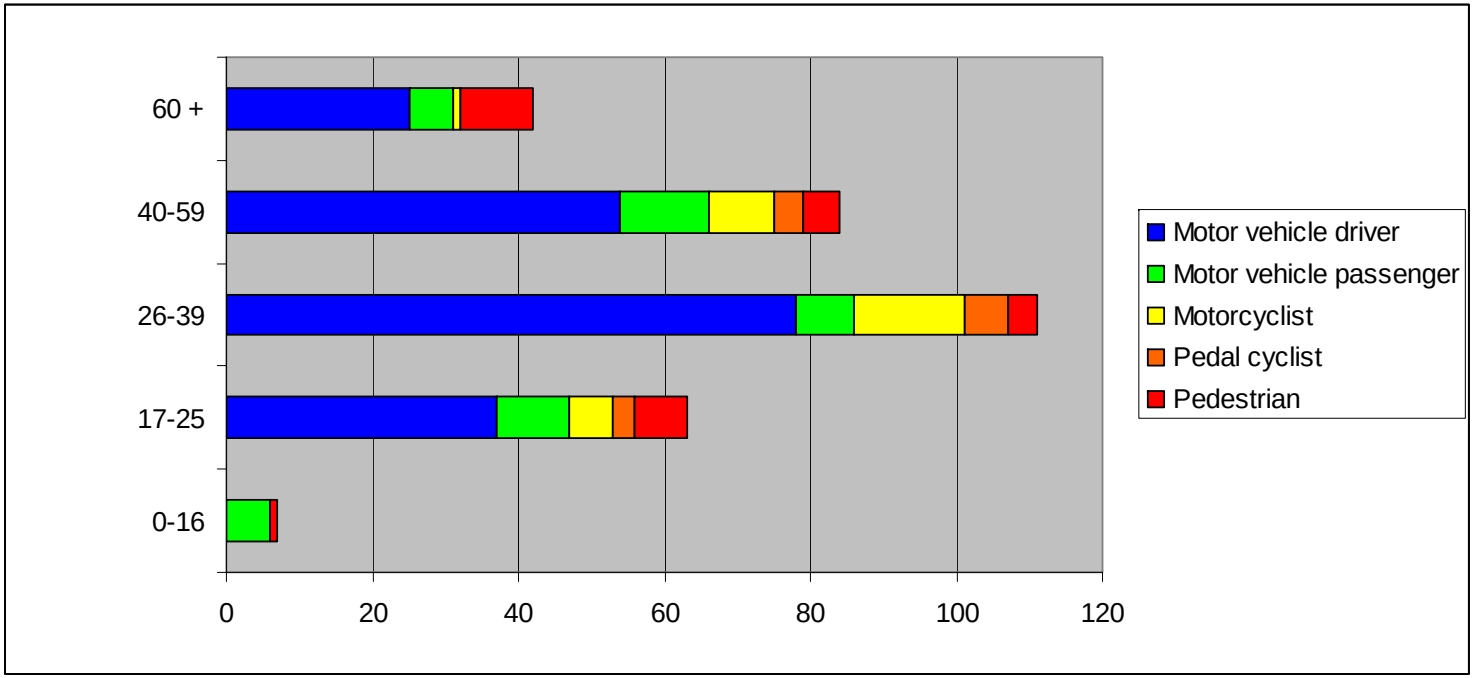
	2004	2005	2006	2007	2008	5 Yr. Average
Motor Vehicle Drivers	219	198	219	222	198	211
Motor Vehicle Passengers	40	61	77	61	50	58
Motorcyclists	38	28	31	39	31	33
Pedal Cyclists	14	13	17	16	13	15
Pedestrians	48	41	38	36	30	39



Graph 14: Casualties in the City of Ryde by road user group 2008

Table 5: 2008 City of Ryde casualties by age, gender and road user class

	0-16		17-25		26-39		40-59		60+		Unknown	Total
	M	F	M	F	M	F	M	F	M	F		
Motor Vehicle Drivers	0	0	19	18	33	45	24	30	15	10	4	198
Motor Vehicle Passengers	2	4	2	8	3	5	3	9	1	5	5	47
Motorcyclists	0	0	6	0	12	3	8	1	1	0	0	31
Pedal Cyclists	0	0	3	0	6	0	4	0	0	0	0	13
Pedestrians	1	0	5	2	1	3	2	3	5	5	2	30



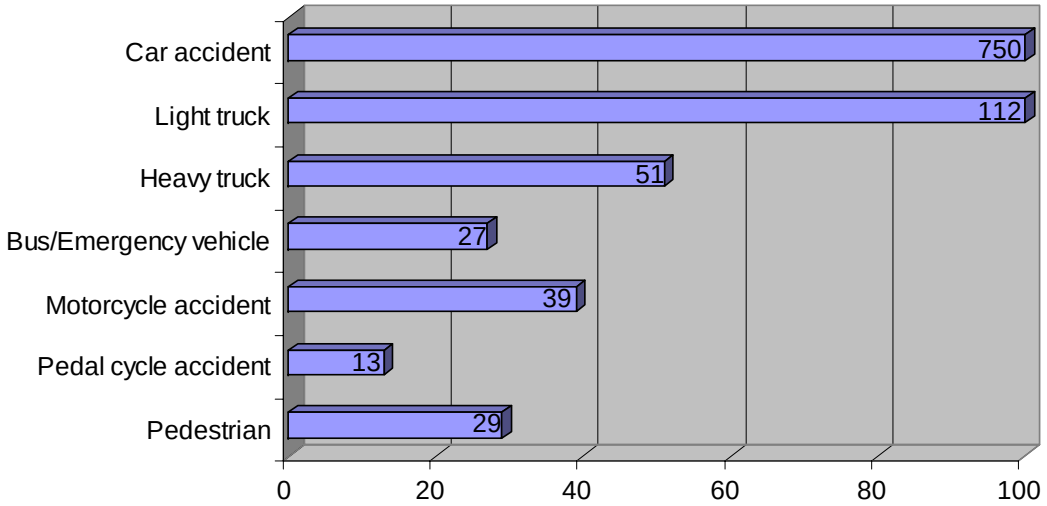
Graph 15: Casualties by road user class and age in the City of Ryde 2008

The following section addresses casualties and crashes in the City of Ryde according to age and road user class. The following has been identified from the RTA data, and graphs and tables above.

4ai. Motor Vehicle Drivers

Graph 14 shows the total number of casualties for each road user type in the City of Ryde in 2008. Motor vehicle driver casualties account for 61.5% (198 from 322) of all casualties in the City of Ryde for 2008. This is a small increase from 57% in 2006 and 59% in 2007. Graph 15 shows the City of Ryde casualties by age and road user class whilst Table 5 breaks this down further to include gender (note the shaded sections of the table highlights the gender discrepancies within each road user class). The largest gender discrepancy for motor vehicle driver casualties were females, accounting for 30% more casualties then their male counterparts in the 26-39 year age group. This is particularly concerning as Graph 15 shows the majority of motor vehicle driver casualties were aged between 26 and 39 years of age.

Graph 15 displays the total number of crashes in the City of Ryde by crash type for 2008. It should be noted that the displayed accident types are not mutually exclusive and therefore should not be added together. For example an accident involving a car and a motorcycle would be included in the “car” and “motorcycle” crash type categories. From a total of 776 crashes, 750 crashes involved cars, with almost 96.5% of all crashes involving at least one car. This is followed by light trucks (112) and heavy trucks (51). Motorcycle and pedestrian crashes have decreased. No fatalities were recorded in trucks, bus/emergency, motorcyclist or bicycles, fatalities were only recoded in car and pedestrian crashes.



Graph 16: Crash types in the City of Ryde 2008

4aii. Motor Vehicle Passengers

2008 had the lowest number of motor vehicle passenger casualties (50) since 2004 which had the five year low of 40 motor vehicle passenger casualties. This is a great sign, following from the high of 77 in 2006. From last year, the number of casualties has decrease by 11. The 40-59 year age group have the highest number of the known age groups (12), followed closely by the 17-25 age group with 10 casualties. This year in all age groups, female motor vehicle passengers have more casualties than male motor vehicle passengers (Table 5).

4aiii. Occupant Restraints

It is important to examine occupant restraints as it relates to motor vehicle drivers and passengers. Table 6 shows the percentage of casualties who had restraints fitted in the vehicle but did not wear them in NSW, Sydney region and in the City of Ryde in 2008. There were no casualties who had restraints fitted in the vehicle and did not wear them. However, there was one child aged 0-4 years and four children aged 5-12 years who were injured while wearing an adult seat belt, not a child restraint.

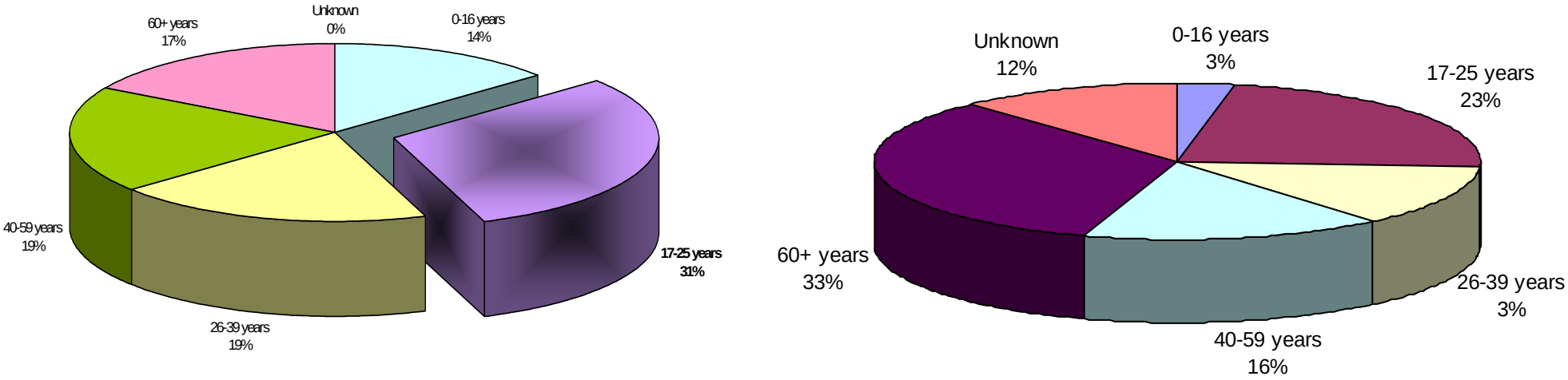
Table 6: Use of Restraints in the City of Ryde in 2008

	NSW		Sydney Region		Ryde	
All Motor Vehicle Driver Casualties Restraint fitted but not worn (as a percentage of the total number of driver casualties)	264	**1.9%**	130	**1.5%**	0	**-**
	NSW		**Sydney Region**		**Ryde**	
All Motor Vehicle Passenger Casualties Restraint fitted but not worn (as a percentage of the total number of passenger casualties)	101	**2.0%**	43	**1.5%**	0	**-**

4c. Pedestrians

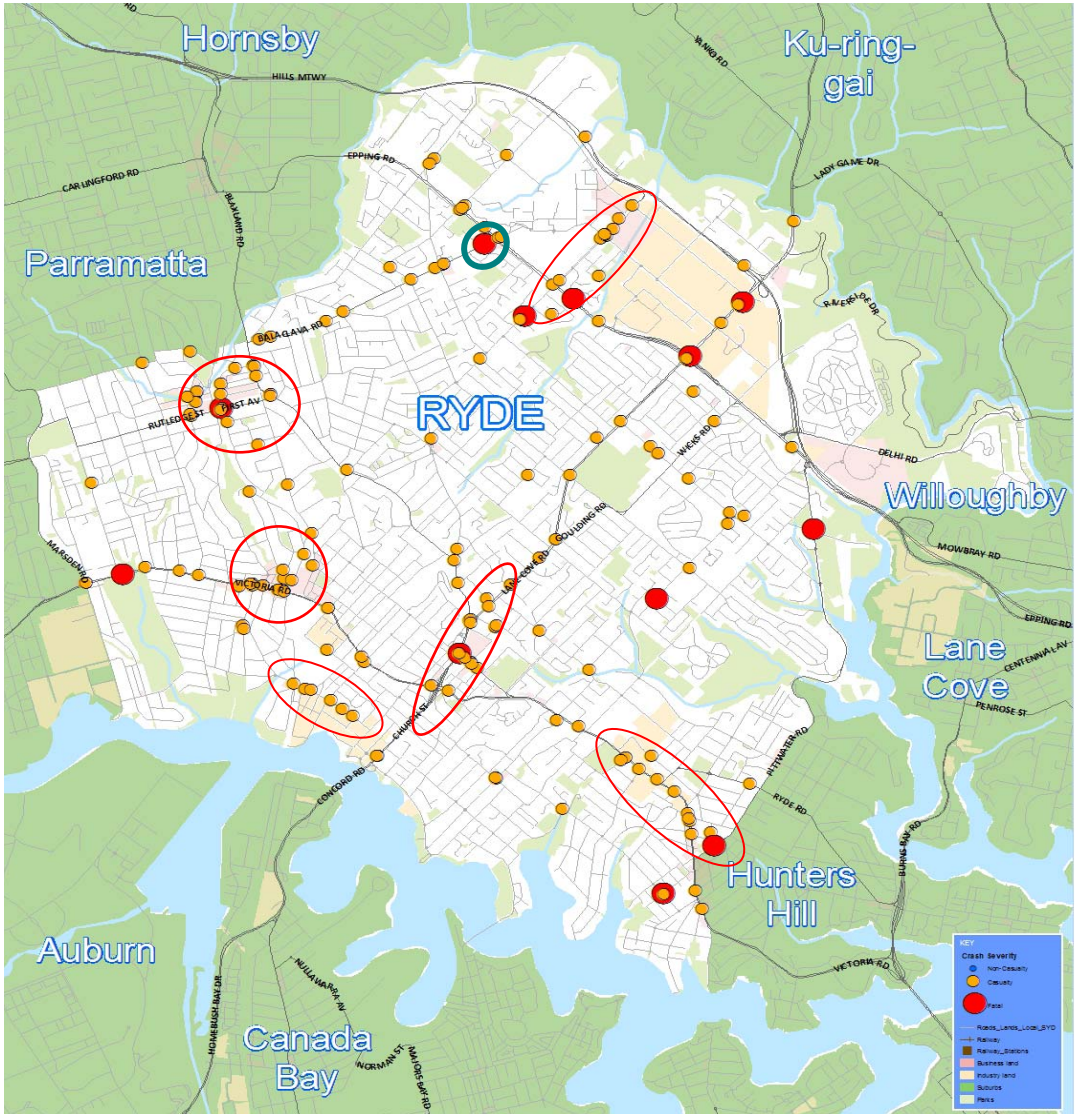
In 2005 the pedestrian casualties number decreased substantially from 48 in 2004 to 41, this trend of pedestrian casualties decreasing has continued into 2006 (38) and 2007 (36). Pedestrian casualties are now at a 5 year low of 30 in 2008, which is well below the 5 year average of 39 (see Table 5).

Graph 17 shows the percentage of pedestrian casualties in the City of Ryde in 2007 and 2008 by age group, there have been both large and minor changes from 2007 to 2008. The 0-16 year old and 26-39 year old categories have decreased dramatically. The 26-39 year old category is lower than in 2006 which had 5%. 60+ has almost doubled after not changing significantly for many years.



2007 **2008**

Graph 17: Pedestrian casualties by age group in the City of Ryde in 2007 and 2008



The number of pedestrian casualties for females and males was 15 and 16 respectively. Unlike last year, the male and female causalities were spread evenly over the age groups. The highest number of pedestrian casualties for both males and females was the 60+ age group. Four out of six of the pedestrian fatalities from 2006 – 2008 have also been in this age group. Males were also considerably higher in the 17-25 year old category. 2007 also recorded the 17-25 year old category as the highest number of pedestrian casualties.

The map to the left displays each pedestrian causality in the City of Ryde between 2004 and 2008. Like last year, there are clusters of pedestrian causalities in Ryde, at Delvin St, particularly both of the intersections of Blaxland Road, around West Ryde and Eastwood (which recorded one fatality) train stations and on Victoria Rd at Gladesville. The intersection on Delvin St and Blaxland Road now has a pedestrian bridge where all pedestrians are directed and there is no pedestrian access at the intersection.

In addition, this year shows a concentration of casualties on Constitution Road, Meadowbank and at the crossing points between Macquarie University and the Macquarie Centre. Both areas are high pedestrian areas with education centers close by.

In 2008 there was a total of 29 pedestrian crashes, down from 36 in 2007. Like last year, there were also two fatal crashes involving pedestrians, with one pedestrian suffering a fatal injury. The green circle shows the pedestrian fatalities for 2008.

4b. Motorcyclists

Motorcyclists accounted for 9.5% of all casualties in 2008, steady on the 2007 figure. The number of motorcycle crashes has returned to 2006 figures (39) after a high of 46 in 2007 resulting in 39 casualties which was a five year high.

As in 2006 and 2007, the 26-39 age group still dominates in the highest number of motorcyclists casualties, with 15 (12 males, 3 female) casualties being recorded, 2008 has rebuked the trend with the 40-59 year age group following in second place for motorcyclist casualties with 8 (all of which were male) followed by 17-25 age group with 6 (all male). Males make up the majority of motorcyclist casualties in 2008, 4 out of the 31 motorcyclist casualties were females, all aged between 26 and 59.

Of the 31 motorcycle casualties in the City of Ryde there were no known motorcyclists who were not wearing a helmet.

4c. Pedal Cyclists

Pedal cyclist casualties have decreased from 16 in 2007 in City of Ryde to 13 in 2008, with no pedal cycle fatalities. Pedal Cyclists make up 4% of the total percentage of casualties by road user class. From the 13 casualties there were no female causalities, a large decrease from the 2006 data where all but one age group had female pedal cyclist casualties totaling five female pedal cyclist casualties. The 26-39 year age group had the most pedal cyclist casualties at 6, followed by the 40-59 year age group on 4, identical to 2007. City of Ryde pedal cyclist casualties are lower in the total percentage of casualties than the Sydney region (4.8%) and NSW (4.5%). Two pedal cyclists casualties were known to have not worn a helmet.

5. SUMMARY

In summary, there are issues which need to be identified and addressed in the City of Ryde for 2008. The issues identified will in turn aid in developing road safety initiatives for the City of Ryde over the 2009-2010 period.

- 2008 had the lowest number of causalities and crashes over the past five years.
- Fatigue for the first time overtook speed as the main contributing cause of crashes (55 crashes), causing 15 casualties.
- Speed as a contributing factor continues to decline rapidly (52 crashes) although the severity of these crashes is worse than fatigue, speed causing 23 causalities.
- Alcohol related crashes have made no substantial change.
- The total number of crashes (776) is well below the 5-year average (824). Although fatal crashes stayed the same from 2007 to 2008, injury crashes decreased by 46 to 267 crashes and non-casualty crashes remained stable after the large decreased in 2007.
- Most motor vehicle controller casualties occurred in the 26-39 year age group.
- The 17-25 age group had the highest number of any age group for motor vehicle controllers involved in alcohol and fatigue related crashes and equal highest for speed with the 26-39 year age group.
- 2008 has bucked the trend by decreasing the number of motor vehicle driver casualties (198), and is now below the 5 year average (211). Motor vehicle driver casualties accounted for 53% of all casualties, lower then both the Sydney region (55.9%) and NSW (55.8%).
- One fatal crash in the City of Ryde involved a pedestrian being struck by a car. Pedestrian fatalities are an issue that needs to be addressed, particularly older pedestrians. From 2006 to 2008 four out of the six fatalities in the City of Ryde were older pedestrians being struck by cars. Young pedestrians are also an increasing worry with an increase to 27% of pedestrian casualties being in the 17-25 year age group.
- Alcohol related crashes have made no substantial change.
- The majority of fatal or injury crashes occurred from Monday to Friday 9am to 3pm.
- West Ryde shopping strip and Eastwood shopping precinct continue to be hotspots for both pedestrian and fatigue related crashes.
- Road Safety in the City of Ryde needs to mainly focus on fatigue related projects for people aged 17-39 years and pedestrian safety for both older and younger people.

7. SOURCES

- Sydney Profile
- RTA Crash Data
- Maps provided by the RTA

Appendix 1

DEFINITIONS AND EXPLANATORY NOTES

Animal rider: A person sitting on/riding a horse or other animal.

Articulated truck: Comprised of articulated tanker, semi-trailer, low loader, road train and B-double.

Bicycle rider: See *Pedal cycle rider.*

Bus: Includes 'State Transit Authority' bus and long distance/tourist coach.

Car: Includes sedan, station wagon, utility (based on car design), panel van (based on car design), coupe, hatchback, fastback, sports car, taxi-cab, passenger van and four wheel drive vehicle.

Carriageway: That part of the road improved or designed and/or ordinarily used for vehicular movement. When a road has two or more of these portions, divided by a median strip or other physical separation, each of these is a separate carriageway.

Casualty: Any person killed or injured as a result of a crash.

Controller: A person occupying the controlling position of a road vehicle.

Crash: Any apparently unpremeditated event reported to the police and resulting in death, injury or property damage attributable to the movement of a road vehicle on a road.

Driver: A controller of a motor vehicle other than a motorcycle.

Emergency vehicle: Includes ambulance, fire brigade vehicle, police patrol car (or van) and tow truck.

Fatal crash: A crash for which there is at least one fatality.

Fatality: A person who dies within 30 days of a crash as a result of injuries received in that crash.

Footpath: That part of the road which is ordinarily reserved for pedestrian movement as a matter of right or custom.

Heavy truck: Comprised of heavy rigid truck and articulated truck.

Heavy rigid truck: Comprised of rigid lorry and rigid tanker with a tare weight in excess of 4.5 tonnes.

Injured: A person who is injured as a result of a crash, and who does not die as a result of those injuries within 30 days of the crash.

Injury crash: A non-fatal crash for which at least one person is injured.

Intersection crash: A crash for which the first impact occurs at or within 10 metres of an intersection.

Killed: See Fatality.

Light truck: Includes panel van (not based on car design), utility (not based on car design) and mobile vending vehicle.

Motor vehicle: Any road vehicle which is mechanically or electrically powered but not operated on rails.

Motorcycle: Any mechanically or electrically propelled two or three-wheeled machine with or without side-car. Includes solo motorcycle, motorcycle with sidecar, motor scooter, mini-bike, three-wheeled special mobility vehicle and moped (motorized 'pedal cycle').

Motorcycle passenger: A person on but not controlling a motorcycle.

Motorcycle rider: A person occupying the controlling position of a motorcycle.

Newcastle Metropolitan Area: Comprised of the following local government areas: Newcastle and Lake Macquarie cities.

Non-casualty crash: A crash for which at least one vehicle is towed away but there is no fatality or person injured.

Passenger: Any person, other than the controller, who is in, on, boarding, entering, alighting or falling from a road vehicle at the time of the crash, provided a portion of the person is in/on the road vehicle.

Pedal cycle: Any two or three-wheeled device operated solely by pedals and propelled by human power except toy vehicles or other pedestrian conveyances. Includes bicycles with side-car, trailer or training wheels attached.

Pedal cycle passenger: A person on but not controlling a pedal cycle.

Pedal cycle rider: A person occupying the controlling position of a pedal cycle.

Pedestrian: Any person who is not in, on, boarding, entering, alighting or falling from a road vehicle at the time of the crash.

Pedestrian conveyance: Any device, ordinarily operated on the footpath, by which a pedestrian may move, or by which a pedestrian may move another pedestrian or goods. Includes non-motorized scooter, pedal car, skateboard, roller skates, in-line skates, toy tricycle, unicycle, push cart, sled, trolley, non-motorized go-cart, billycart, pram, wheelbarrow, handbarrow, non-motorized wheelchair or any other toy device used as a means of mobility.

Road: The area devoted to public travel within a surveyed road reserve. Includes a footpath and cycle path inside the road reserve and a median strip or traffic island.

Road vehicle: Any device (except pedestrian conveyance) upon which or by which any person or property may be transported or drawn on a road.

Sydney Metropolitan Area: Comprised of the following local government areas: City of Sydney, Bankstown, Blacktown, Botany Bay, Campbelltown, Canada Bay, Canterbury, Fairfield, Holroyd, Hurstville, Liverpool, Parramatta, Penrith, Randwick, Rockdale, Ryde, South Sydney and Willoughby cities, Ashfield, Auburn, Baulkham Hills, Burwood, Camden, Hornsby, Hunters Hill, Kogarah, Ku-ring-gai, Lane Cove, Leichhardt, Manly, Marrickville, Mosman, North Sydney, Pittwater, Strathfield, Sutherland, Warringah, Waverley and Woollahra.

Wollongong Metropolitan Area: Comprised of the following local government areas: Wollongong and Shellharbour cities.

CRITERIA FOR DETERMINING SPEEDING AND FATIGUE INVOLVEMENT

Speeding

The identification of speeding (excessive speed for the prevailing conditions) as a contributing factor in road crashes cannot always be determined directly from police reports of those crashes. Certain circumstances, however, suggest the involvement of speeding. The Roads and Traffic Authority has therefore drawn up criteria for determining whether or not a crash is to be considered as having involved speeding as a contributing factor.

Speeding is considered to have been a contributing factor to a road crash if that crash involved at least one *speeding* motor vehicle.

A motor vehicle is assessed as having been *speeding* if it satisfies the conditions described below under (a) or (b) or both.

(a) The vehicle's controller (driver or rider) was charged with a speeding offence; or

the vehicle was described by police as travelling at excessive speed; or

the stated speed of the vehicle was in excess of the speed limit.

(b) The vehicle was performing a manoeuvre characteristic of excessive speed, that is:

while on a curve the vehicle jack-knifed, skidded, slid or the controller lost control; or

the vehicle ran off the road while negotiating a bend or turning a corner and the controller was not distracted by something or disadvantaged by drowsiness or sudden illness and was not swerving to avoid another vehicle, animal or object and the vehicle did not suffer equipment failure.

Fatigue

The identification of fatigue as a contributing factor in road crashes similarly cannot always be determined directly from police reports of those crashes and the following criteria are used to assess its involvement. Fatigue is considered to have been involved as a contributing factor to a road crash if that crash involved at least one *fatigued* motor vehicle controller.

A motor vehicle controller is assessed as having been *fatigued* if the conditions described under (c) or (d) are satisfied together or separately.

(c) The vehicle's controller was described by police as being asleep, drowsy or fatigued.

(d) The vehicle performed a manoeuvre which suggested loss of concentration of the controller due to fatigue, that is

the vehicle travelled onto the incorrect side of a straight road and was involved in a head-on collision (and was not overtaking another vehicle and no other relevant factor was identified); or

the vehicle ran off a straight road or off the road to the outside of a curve and the vehicle was not directly identified as travelling at excessive speed and there was no other relevant factor identified for the manoeuvre.

Roads and Traffic Authority (2004) Road Traffic Crashes in NSW – 2003 Statistical Statement