City of Ryde

Crash Analysis Report

City of Ryde

2006 – 2010

Yolla Karnib

February 2012

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.

Each year, these understandings are sought from the Crash Analysis Data, provided to Council by the RTA. This data is analyzed by the Road and Community Safety Projects Officer to identity events and trends. These events and trends are then used to develop community-based local level actions to help make our roads safer.

This report and all data is forward to other sections of Council such as our Access and Traffic Team as well as our Enforcement teams.

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 the Access Team to the Community and Culture Team 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, is raising community awareness through enforcement, education and engineering 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 and some community consultation. 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.

Development, implementation and evaluation

The Road Safety Action Plan, based on this crash analysis report, is developed in consultation with the Road and Traffic Authority and the Community Safety Working Group. The Community Safety Working Group overseas and provides advice on the Road Safety Action Plan at key moments throughout the year.

The Community Safety Working Group is made of various government and non-government representatives, including Road and Traffic Authority, NSW Police, NSW Health Promotions, Youthsafe, Salvation Army, Putney Progress Association and Fire and Rescue NSW.

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.

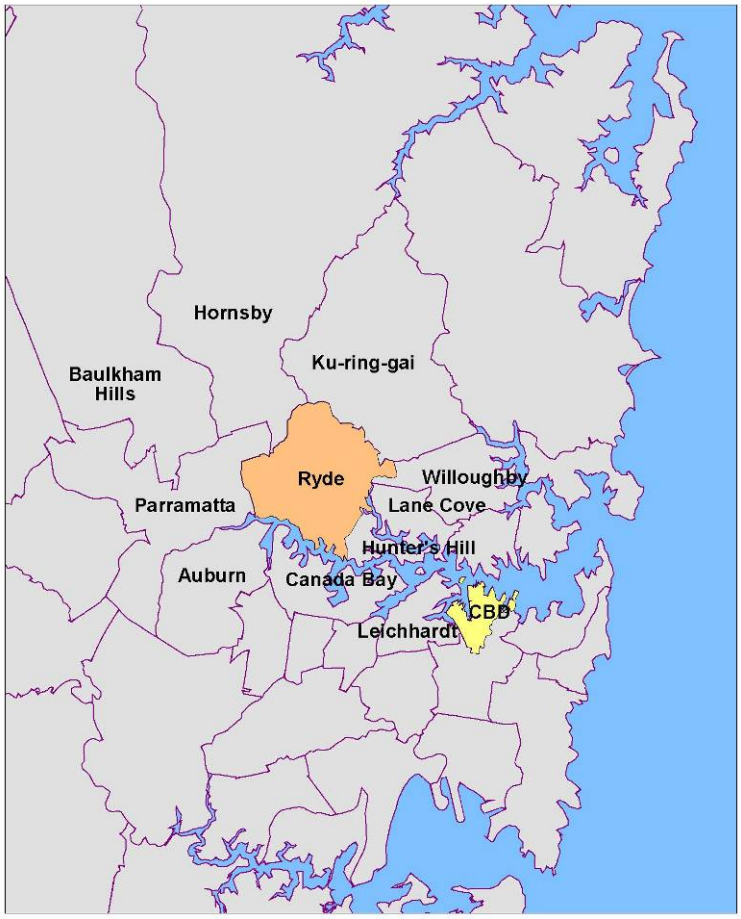


Figure 1: The location of the City of Ryde

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.

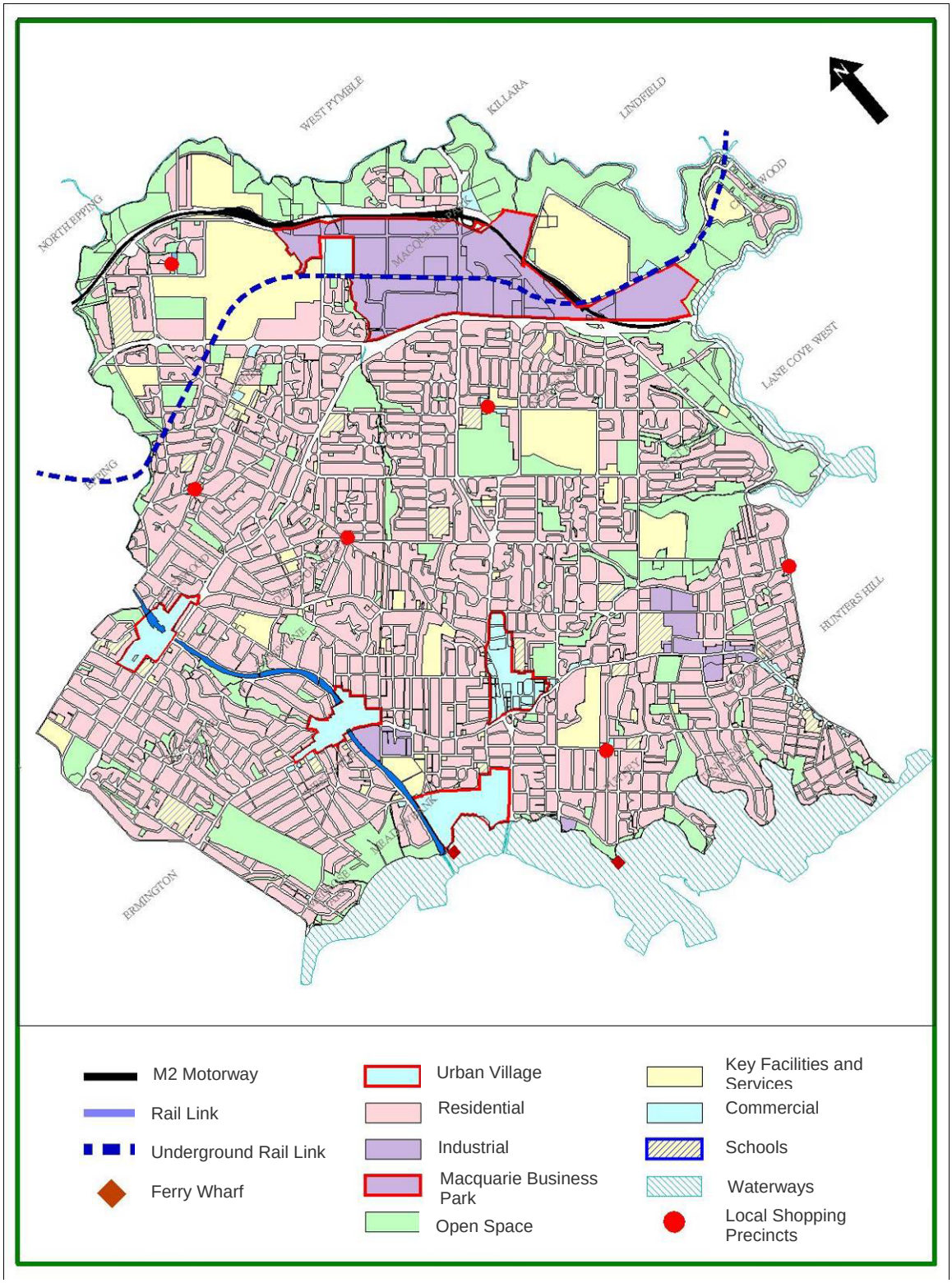


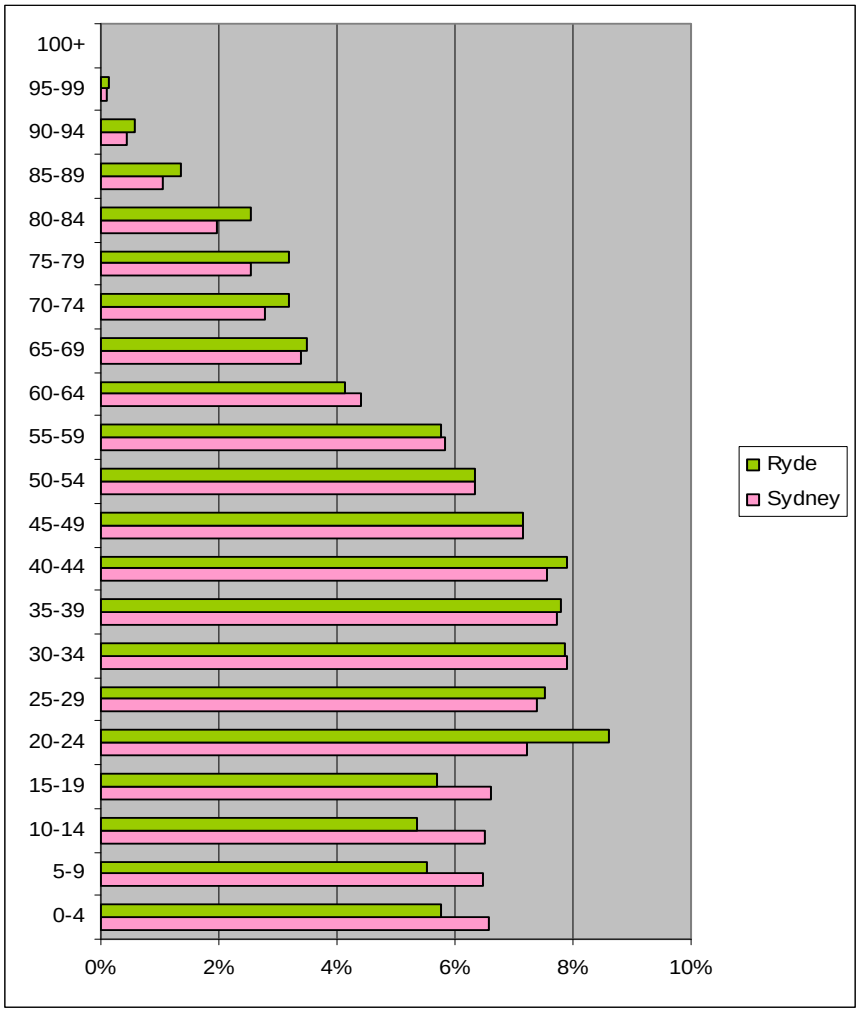
Figure 2: Structure Plan of the City of Ryde

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.

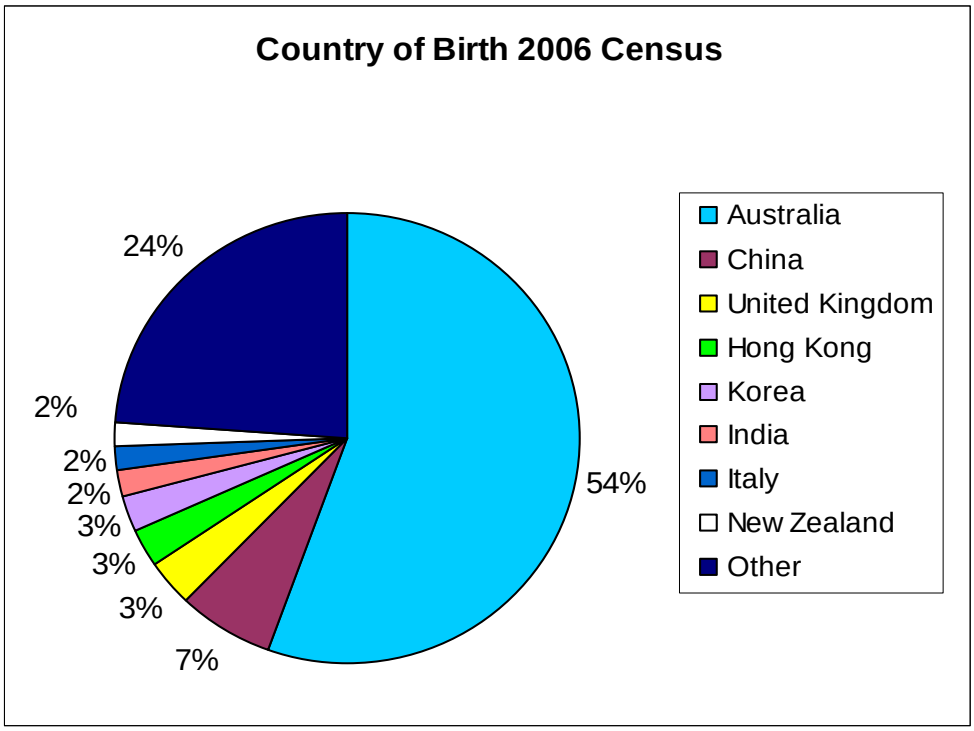


Graph 1: Relative size of age groups (ABS 2006 Census Population and Housing)

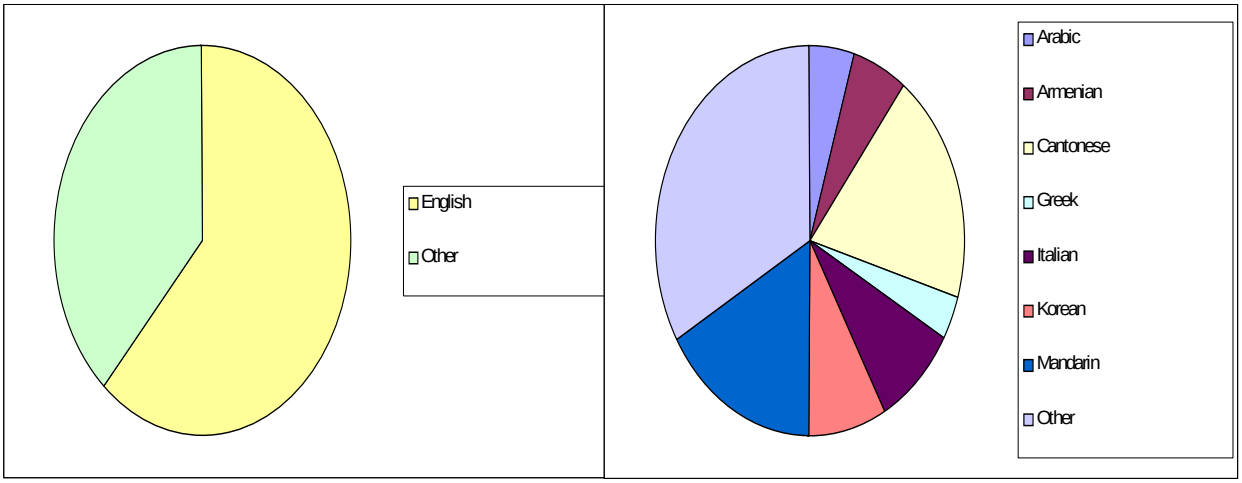
In 2006, some 62% of the City's people were born in Australia and 38% born overseas. The most common overseas birthplaces were China, U.K., Hong Kong and Korea.

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 (52,415) followed by off-road passenger vehicles (11,727). There has been a dramatic increase in off-road passenger vehicles from 2008 and Motorcycles continue to grow. There has been a large decrease from 2008 - 2009 in small buses.

Table A: Number of vehicles registered in the City of Ryde as at 30 June 2009 and 2010

	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
2009	52,415	11,727	190	451	31	1,402	5,061	346	30	45	14	3,136	1,204	1	77,347
2010	46,637	10,987	175	464	35	1,502	4,235	330	32	45	13	3,090	1,258	1	70,142

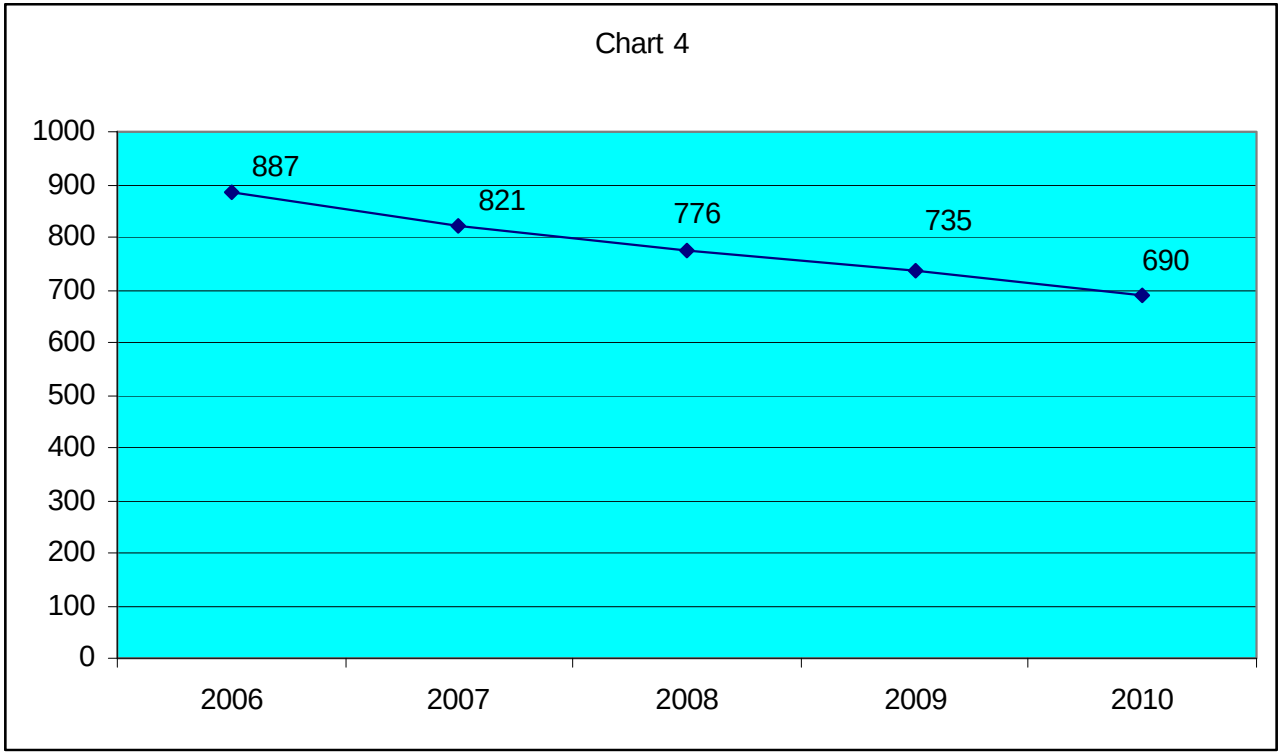
Table B: Licence holders in the City of Ryde by licence type as at 30 June 2009 and 2010

	Learner	P1	P2	Unrestricted	Total
2009	4,926	1,821	3,914	61,547	72,208
2010	4,432	1,975	3,706	62,265	72,378

Table B shows the number of licence holders in the City Ryde by licence type. There has been an increase in the number of licence holders and a decrease in P1 drivers in 2009.

City of Ryde Crash Analysis 2006-2010

The following information provides a statistical overview of the road crash data for the City of Ryde between 2006 and 2010. For definitions and explanatory notes please see Appendix 1.



Graph 4: Total Number of Crashes in the City of Ryde 2006-2010

1. CRASHES

Table 1 (below) and Graph 4 (above) identify the total number of crashes in the City of Ryde by fatal/injury/non-casualty classification between 2006 and 2010. The table illustrates that total crashes have decreased from 735 in 2009 to 690 (22% decrease) and the decrease was across all categories.

Table 1: City of Ryde number of crashes by fatal/injury/non-casualty classification 2006-2010

	2006	2007	2008	2009	2010	5 year average
Fatal Crashes	2	2	2	1	4	2
Injury Crashes	312	313	267	265	274	286
Non-Casualty Crashes	573	506	507	469	412	493
Total Crashes	887	821	776	735	690	782

2. CASUALTIES

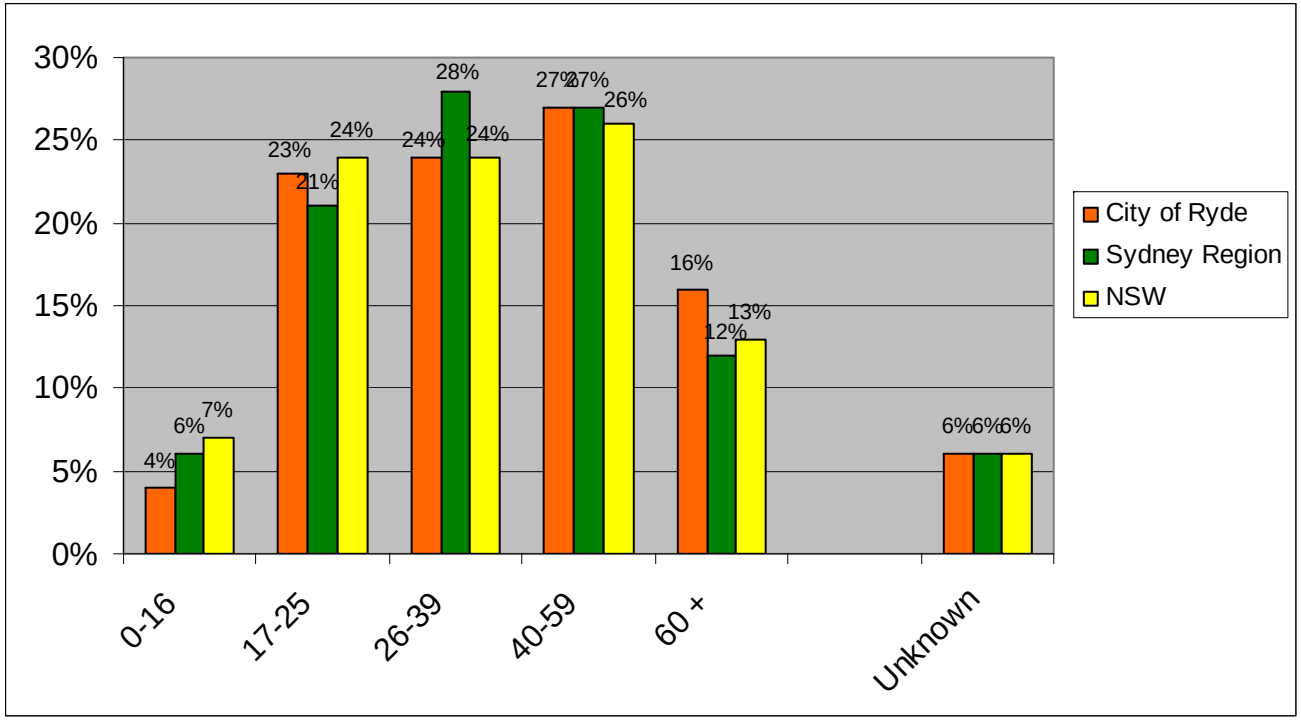
Table 2 shows the total number of casualties in the City of Ryde by killed/injured classification between 2006 and 2010. The total number of casualties killed in 2010 has increased to four in comparison to just one fatality in 2009 however the 5 year average remains steady at (two) 2. The number of injured casualties has also increased slightly from 265 in 2009 to 274 (9 causalities).

Table 2: City of Ryde number of casualties by killed/injured classification 2006-20010

	2006	2007	2008	2009	2010	5 year average
Killed	2	2	2	1	4	2
Injured	312	313	267	265	274	286
Total	314	315	269	266	278	288

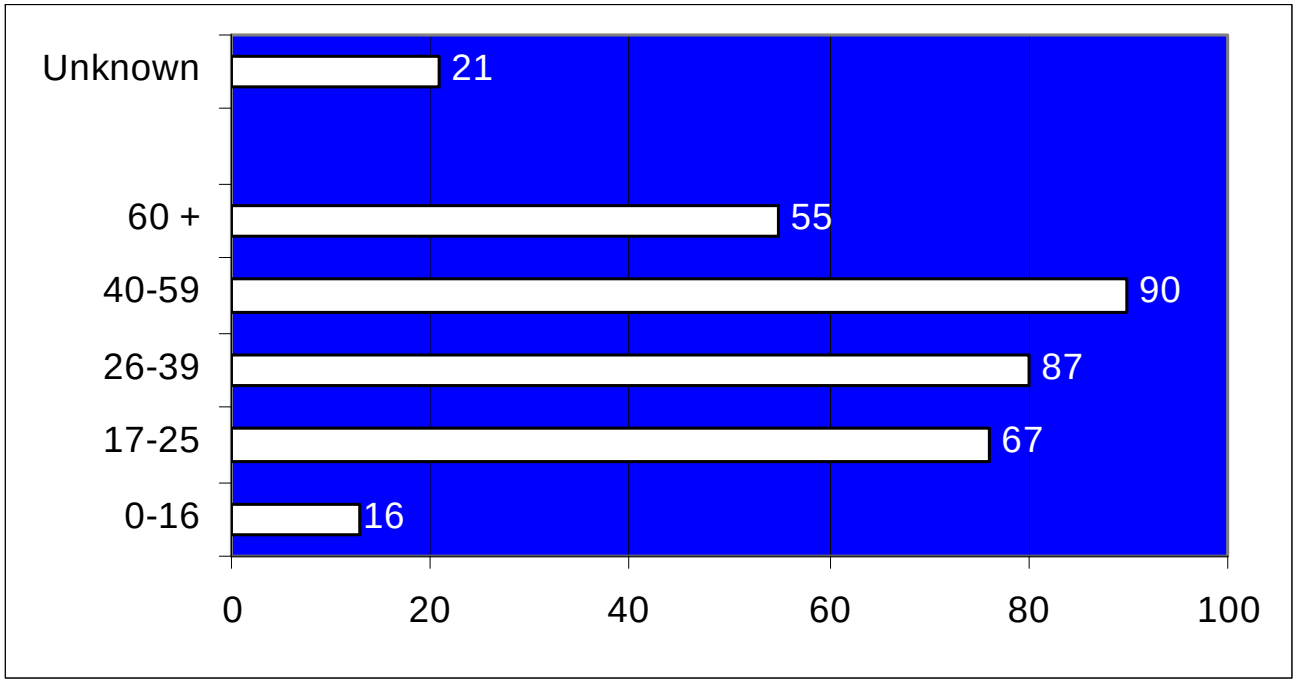
2a. Casualties by age group

Graph 5 shows the distribution of casualties by age group across the City of Ryde, Sydney and NSW for 2010. The City of Ryde has a higher percentage of casualties in 60+ age group than NSW and Sydney which peak at 16%, a 2% increase from 2009. The 40-59 is at 27% which is on average with the region but above average with the state by 1%. The 26-39 which peaked at 26% in 2009 has been reduced in 2010 by 2% and remained stable for the past two years along with the 17-25 age groups.



Graph 5: Distribution of casualties by age group and region 2010

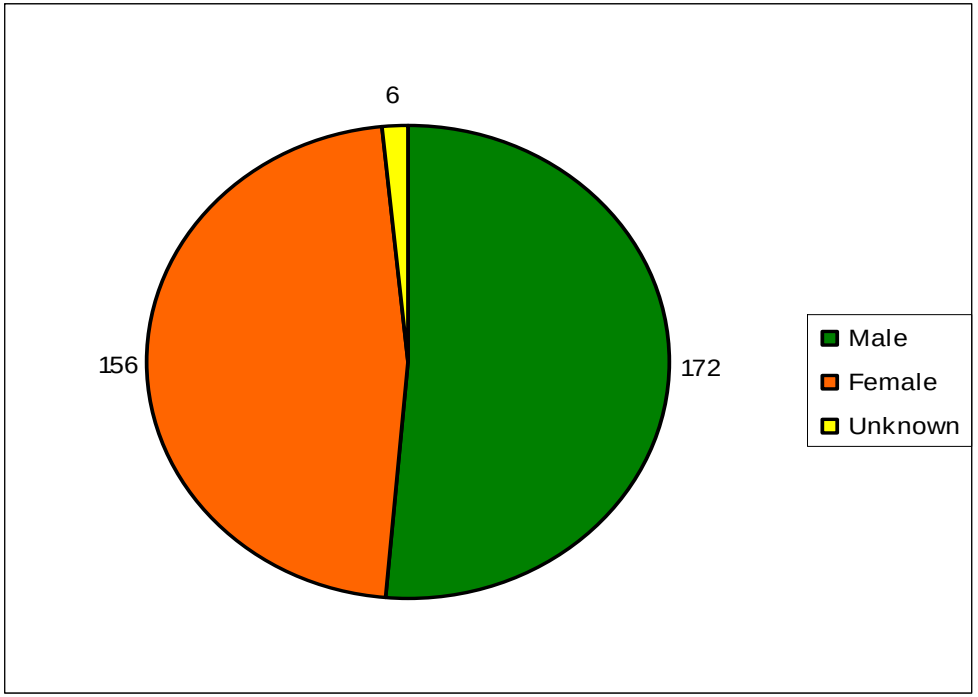
Graph 6 displays the number of casualties in the City of Ryde by age group in 2010. As in 2009 the majority of casualties in the City of Ryde occurred in the 40-59 year age group followed by the 26-39 year age group. Casualty rates for 0-16 year olds remained the same for both 2009 and 2010. However, there was an increased of 10 casualties for the 60+ age group in 2010 compared to 2009 casualty number.



Graph 6: Casualties in the City of Ryde by age group 2010

2b. Casualties by gender

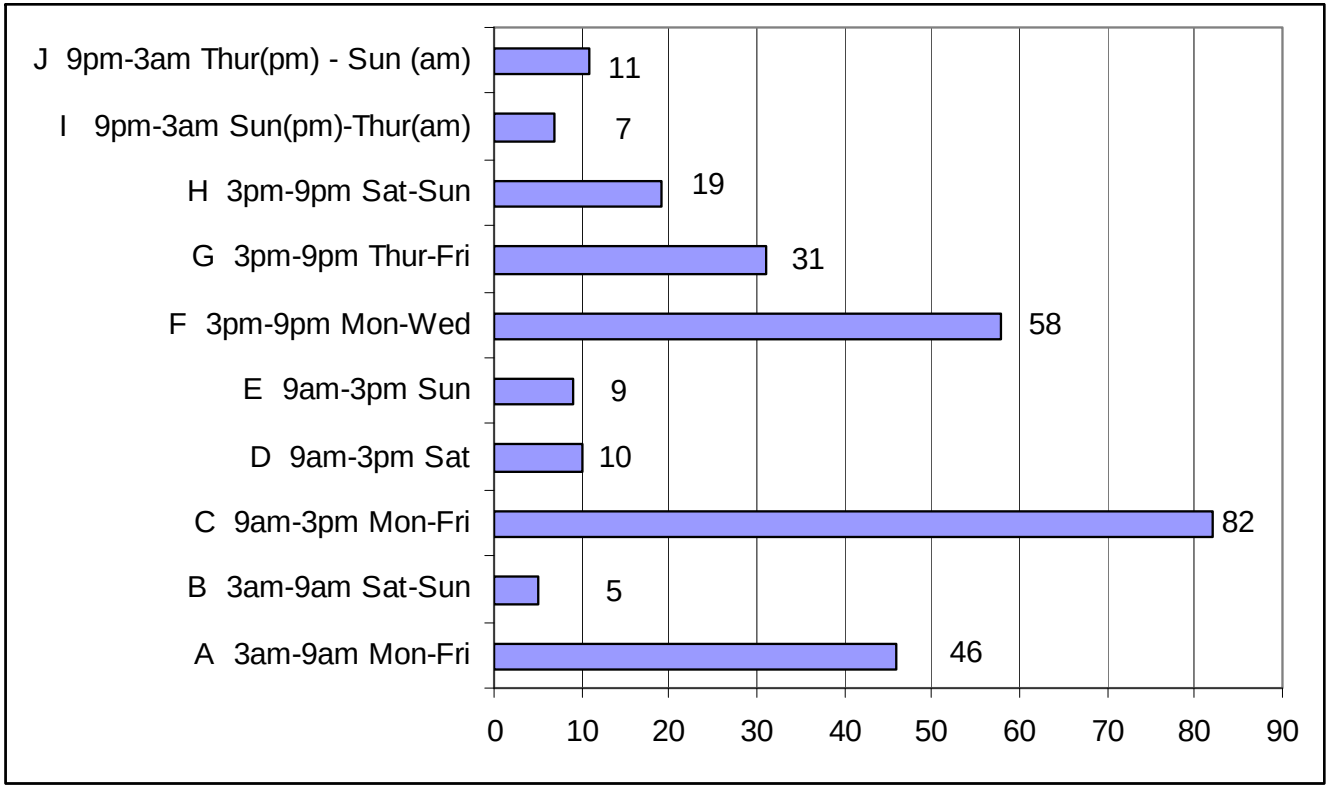
Table 2 shows that there were 334 casualties in the City of Ryde, of the 334 casualties, more than 50% were males and 47% were females, and 1% were unknown. The percentages for the City of Ryde are comparable with NSW and Sydney.



Graph 7: City of Ryde casualties by gender 2010

2c. Casualties by time period

Graph 8 describes the number of casualties in the City of Ryde by time periods in 2010. The greatest number of casualties occurred from Monday to Friday between 9am and 3pm which was consistent with past years. The numbers remain fairly stable from 2008.



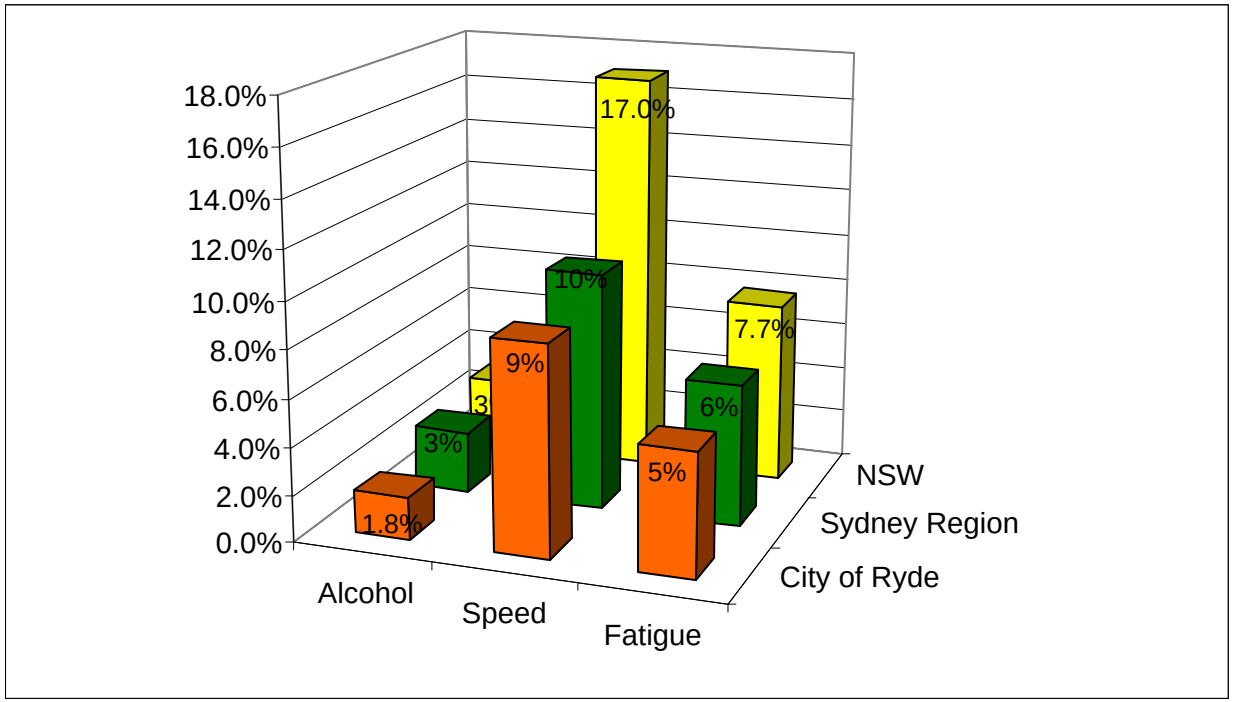
Graph 8: Number of casualties by time period in the City of Ryde 2010

3. CONTRIBUTING FACTORS

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

3a. Comparisons by region – crashes

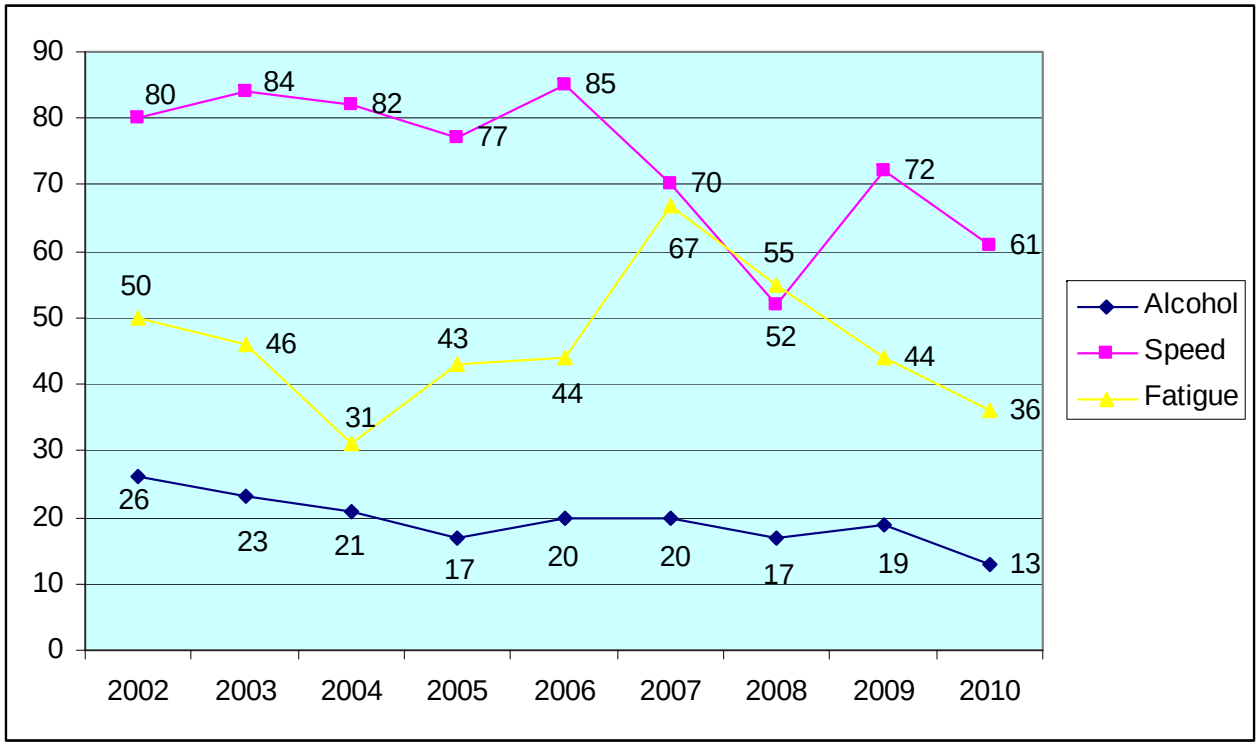
Graph 9 illustrates the percentage of all crashes in the City of Ryde, Sydney region and NSW according to contributing factors in 2010. NSW has the highest percentage of crashes with speed involvement, with 17% involving speed. Speed is also the highest contributing factor for Sydney and City of Ryde with 10% and 9% respectively. However, speeding as a contributing factor has decreased by 1% for the City of Ryde from 2009. Fatigue related crashes have reduced from the peak last year. Alcohol related crashes have also decreased significantly from 2.5% in 2009 to 1.8% in 2010.



Graph 9: Crash percentage and contributing factors between City of Ryde, Sydney region and NSW in 2010

3b. Comparisons within the City of Ryde 2002-2010 – crashes

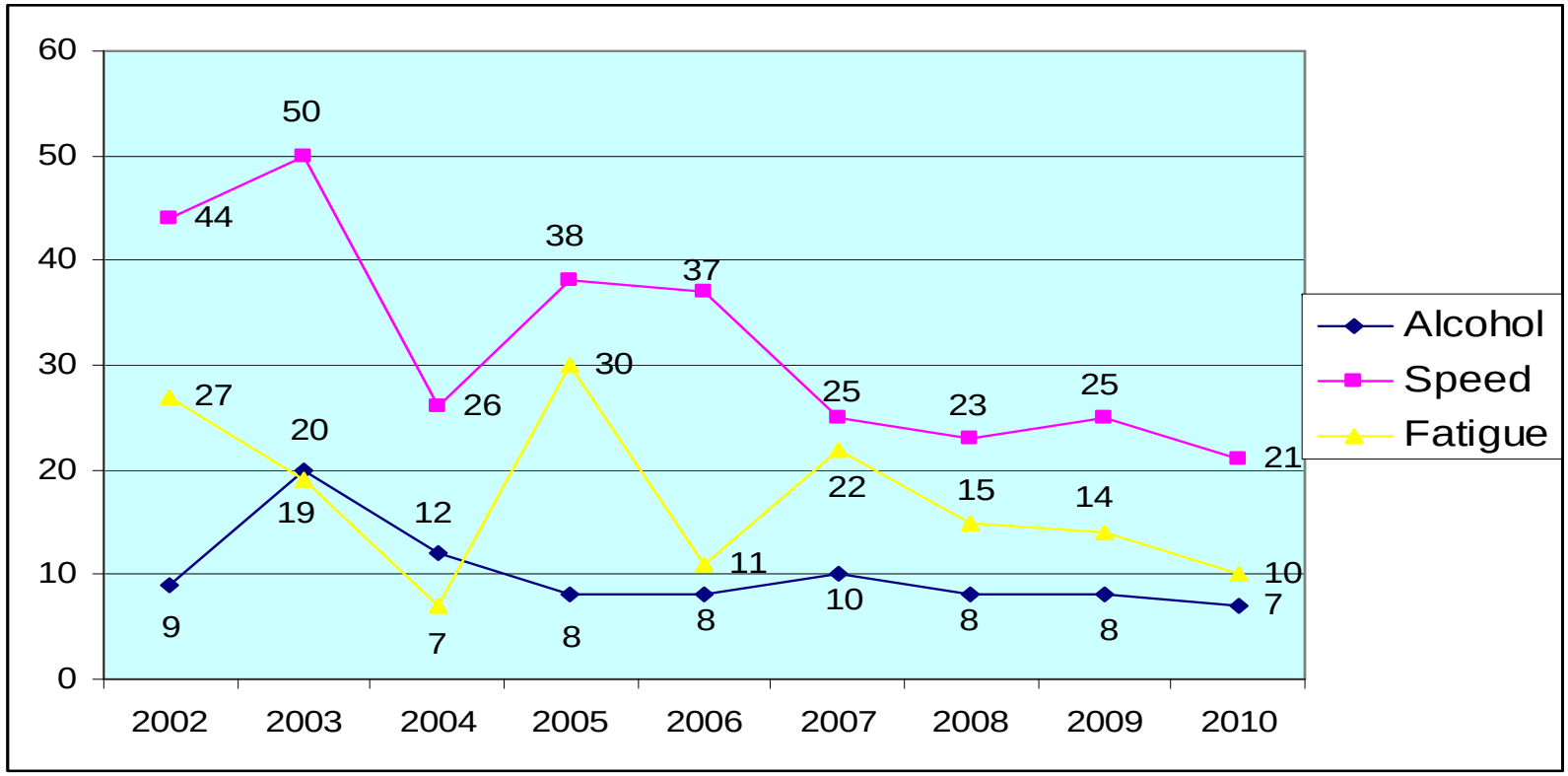
Graph 10 looks at the number of crashes with contributing factors between 2002 and 2010 in the City of Ryde and shows the difference between the number of speed, fatigue and alcohol crashes. The most noteworthy change in 2010 was speed related crashes have decreased significantly by 11% in 2010. Alcohol & fatigue have also decreased by 6% and fatigue related crashes by 8% in 2010. The long term trend of all contributing factors is down.



Graph 10: Number of all crashes according to contributing factors in the City of Ryde 2002-2010

3c. Comparisons within the City of Ryde 2002-2010 – casualties

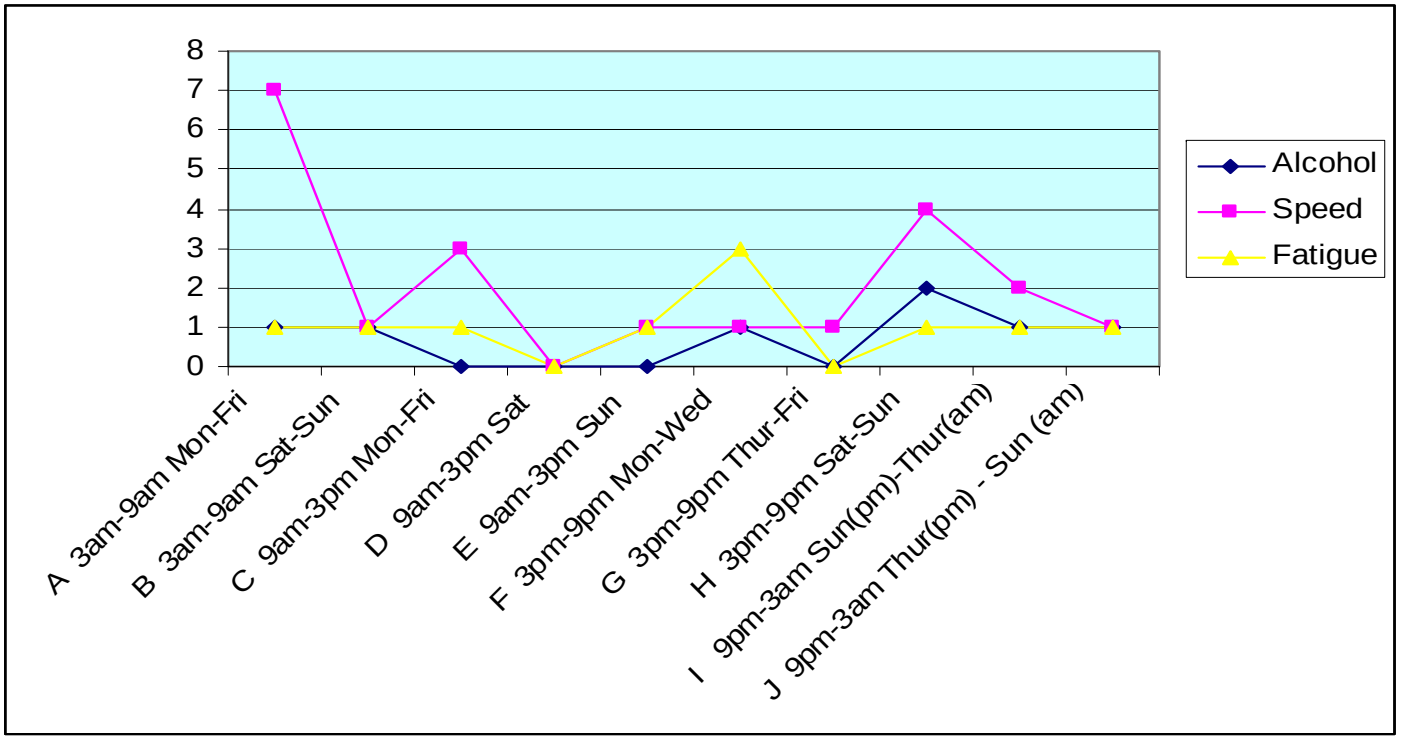
Graph 11 demonstrated that the trend of speed, alcohol and fatigue related crashes are going down on at a steady rate since 2007 in the City of Ryde.



Graph 11: Number of casualties according to contributing factors in the City of Ryde 2002-2010

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

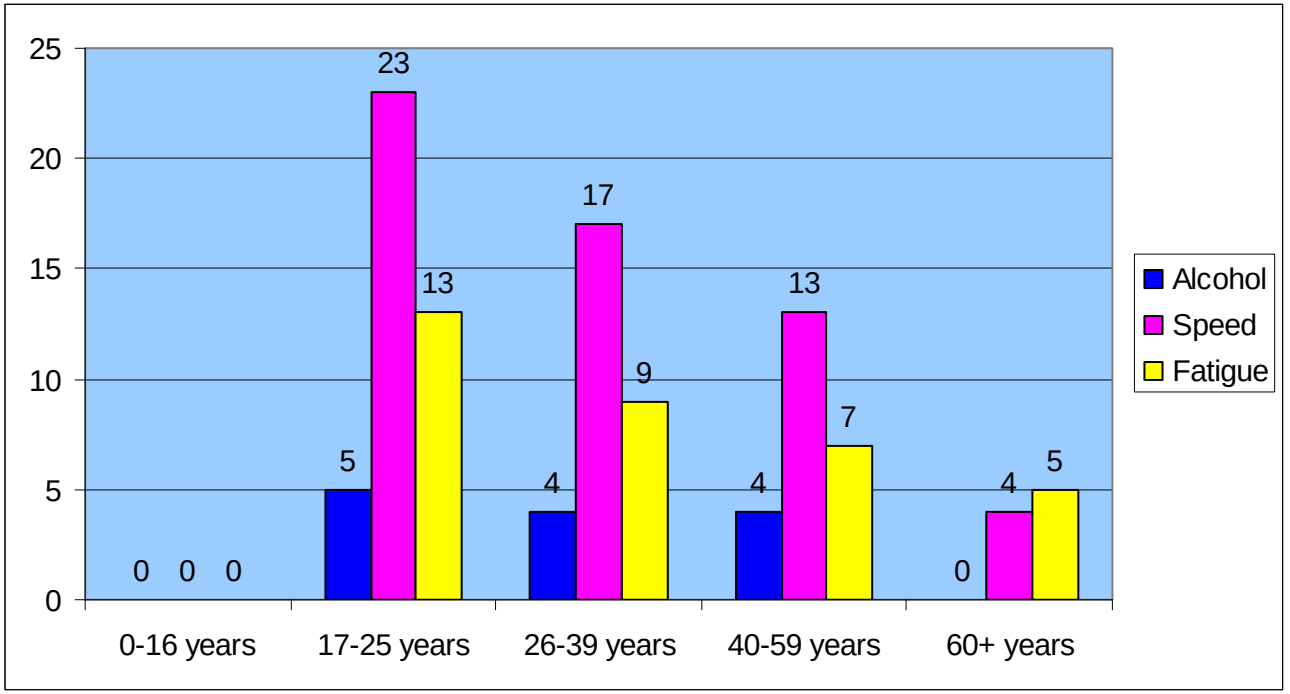
Graph 12 shows the fatal or injury crashes by contributing factor and time period in the City of Ryde in 2010. The time periods are specified in the table according to McLean Time Periods. Speed casualties were at peak in the morning from 3am to 9am Monday to Friday and slightly higher from 3pm to 9pm on Saturday and Sunday.



Graph 12: Fatal or injury crashes by contributing factor and time period for the City of Ryde 2010

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 2010. The number of speed and fatigue related crashes for the 17-25 age group higher then all other age groups. However, there is a significance decreased to speed related crushes in the 17 – 25 age group from 35 casualties in 2009 to 23 casualties in 2010.



Graph 13: Number of motor vehicle controllers involved in crashes by contributing factor and age group in the City of Ryde in 2010

3f. Crashes involving speed

In 2010, there were 57 crashes involving speed, a significant decreased from 72 crashes in 2009.

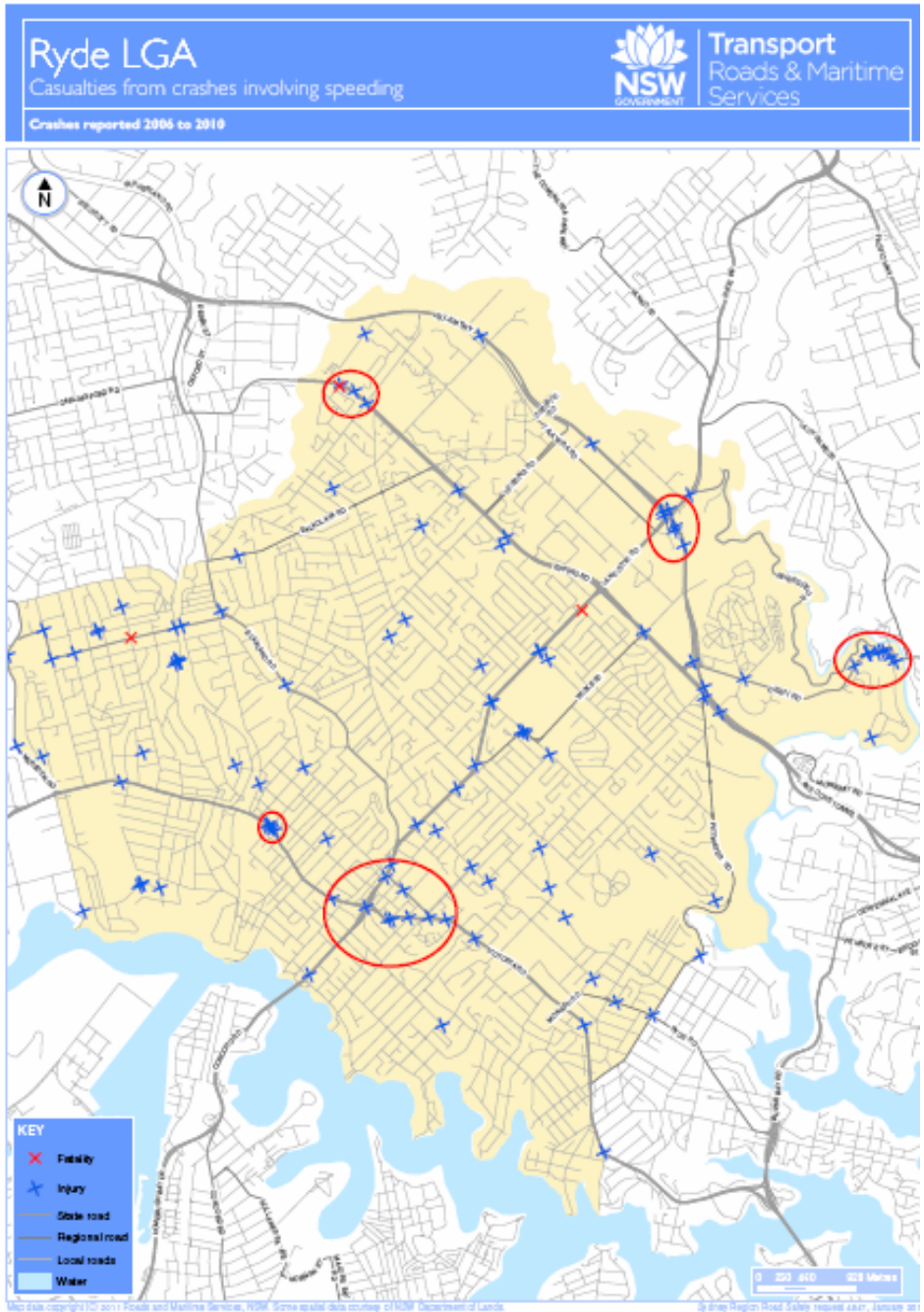
As in previous years, the majority of casualty crashes involving speed occurred during the week, Monday to Friday between 9am and 3pm (see Graph 12). The 17-25 year age group had the highest number of speeding crashes by motor vehicle controller, although the number returned to trend. This age group accounts for almost half of all speed related crashes and this is a concern.

3g. Crashes involving alcohol

The number of alcohol related crashes has remained stable since 2005. Alcohol contributed to approximately 1.8% of the total number of crashes in the City of Ryde. The time period peak for alcohol-related crashes was between the hours of 3pm and 9pm on Saturday and Sunday (see Graph 12). There may be more drink driving incidences in the evenings on weekends because of licensed premises being opened until late and an increased number of patrons at these premises. Alcohol related crashes as a whole have also decreased significantly from 2.5% in 2009 to 1.8% in 2010 with our main concern being 26-39 age group which increased by 1% from 2009. The 17-25 age group has decreased by 2% whilst the 40-59 age group has also shown a significant decrease by 5% since 2009. The 60+ age group has remained stable since 2008.

3h. Crashes involving fatigue

After a significant number of fatigue related crashes in 2007, fatigue as a contributing factor continues to reduce. There were 34 crashes (down 4 from 2009) resulting in 10 casualties (down 4 from 2009) in the City of Ryde, none of which were fatalities. The majority of fatigue related injury crashes in 2010 occurred in the afternoon/evening between 3pm and 9pm mid week (see Graph 12) and in the early hours of the morning, which is consistent with what we know about when fatigue related crashes are more likely to occur. The 40-59 year old age group significantly reduced the number of fatigue related crashes, down 7 crashes which is half. Fatigue crashes were lower or stable in the other age groups.



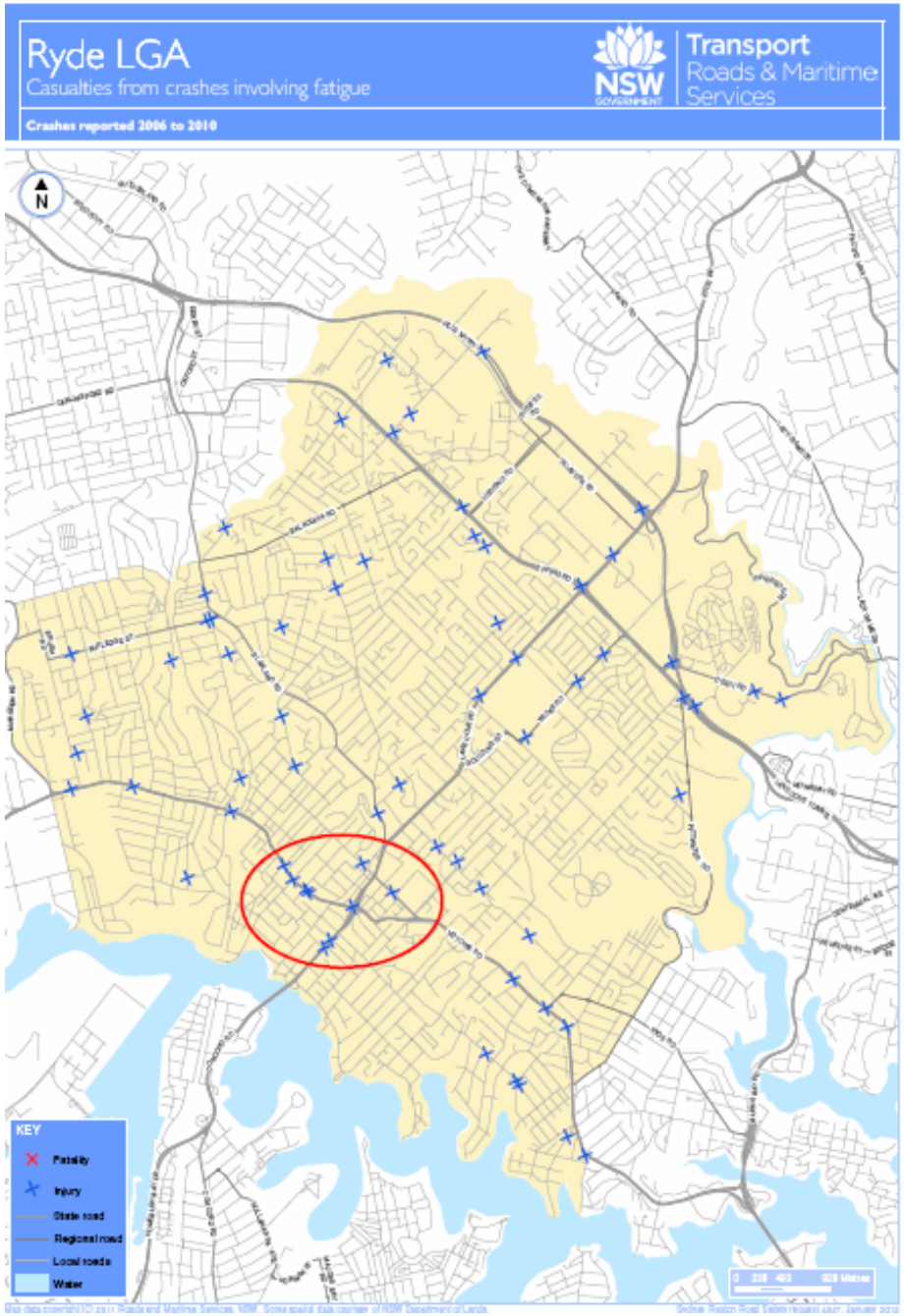
Casualties involving speed

The map to the left identifies where casualties involving speed occurred over the last five years.

There are seven key areas where casualties are occurring in cluster groups over the past five years. Four of these areas are on state roads and one is on a local roads.

Delhi Street is known to the Highway Patrol and Council as a place where people speed hence the number of injuries. Delhi Road and Blaxland Road are known to Council as the geography of the area contributes greatly to the crash and casualty rates.

In 2010 we had four (4) fatalities all of which were on state roads.



Casualties involving fatigue

The map to the left identifies the driver fatigue related crashes in the City of Ryde between 2006 and 2010. Fatigue related crash locations in the City of Ryde are fairly evenly distributed throughout the City and therefore there is no particular pattern.

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.

Victoria Road around Ryde had considerably more crashes than other streets. The area has recently received a new Safety Camera which may bring down crashes.

It must be noted that there may be subjectivities 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 2006– 2010, for NSW, Sydney region and the City of Ryde. The following is representative of the five year average and 2010 data (five year average data is shown).

- The City of Ryde has a growing higher percentage of motor vehicle driver casualties (60%) compared to Sydney region (55%) and NSW (56%) for the 5 year average. While NSW and Sydney region remained stable in 2010, the City of Ryde rose 2%.
- There has been no increase in the percentage of motor vehicle passenger casualties for 2010 (16%) in the City of Ryde, which remains stable. Both the 2010 percentage and the 5 year average for the City of Ryde (16% respectively) are still well below the 2010 percentages and 5 year averages for the Sydney regions (20% and 18% respectively) and NSW (21.% respectively).
- Motorcyclist casualties for the City of Ryde 5 year average have remained stable. The pedal cyclist casualties for 2010 have shown an increase to 5% compared to 2% in 2009 which is of concern. However the 5 year average still remains stable and is still below both the Sydney and NSW region.
- Pedestrian casualties for the City of Ryde 5 year average (10%) illustrates the same 5 year average of the Sydney Region. This is higher than NSW (8%).
- Following by the percentage of motor vehicle driver and motor vehicle passenger casualties (56% and 16%), pedestrians are the third highest casualty group in the City of Ryde, at 10%.

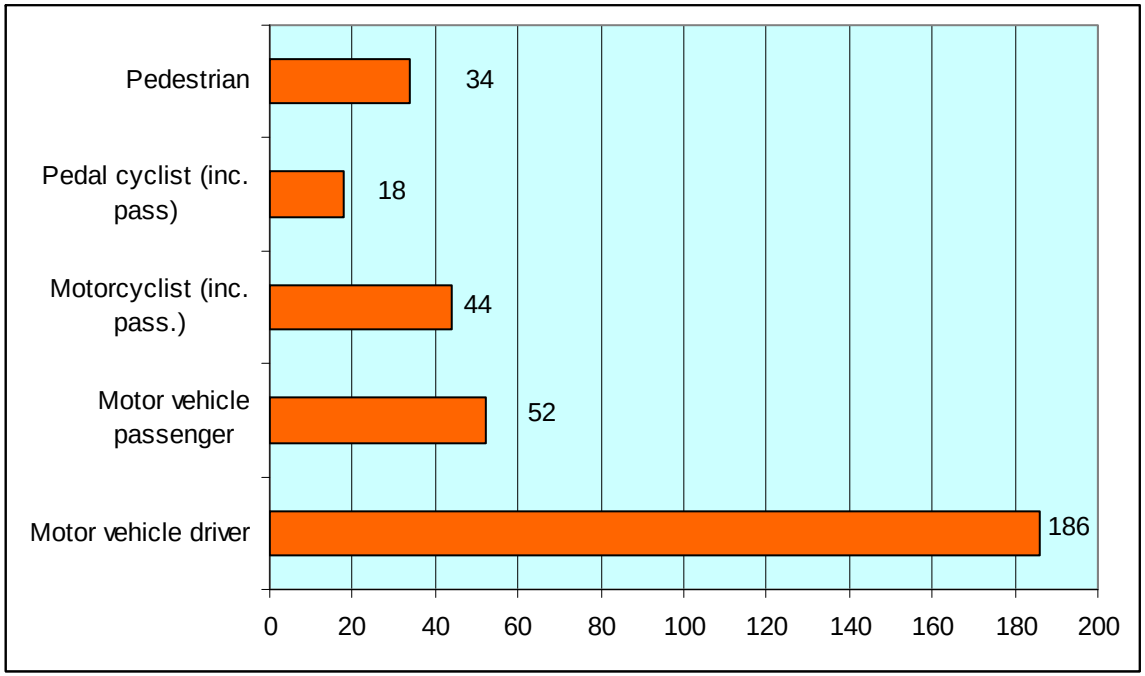
Table 3: Percentage of casualties by road user class 2006-2010 average, and 2010

	NSW		Sydney Region		City of Ryde	
	5 year average	**2010**	**5 year average**	**2010**	**5 year average**	**2010**
Motor Vehicle Driver	56%	56%	56%	57%	60%	56%
Motor Vehicle Passenger	21%	21%	20%	18%	16%	16%
Motorcyclist	10%	10%	9%	10%	10%	13%
Pedal Cyclist	5%	5%	5%	5%	4%	5%
Pedestrian	8%	8%	10%	10%	10%	10%

Table 4 examines the total number of casualties by road user class from 2006 to 2010. 2010 saw mixed results. There were small increases in passengers and motorcyclists casualties and a small decrease in pedestrians, which has had no major effect on the 5 year downward trend. There were reductions in drivers and an increase in pedal cyclists casualties. Despite the mixed results, the City of Ryde in 2010 is on or lower then both NSW and Sydney Region in all areas.

Table 4: Number of casualties by road user class 2006-2010 City of Ryde

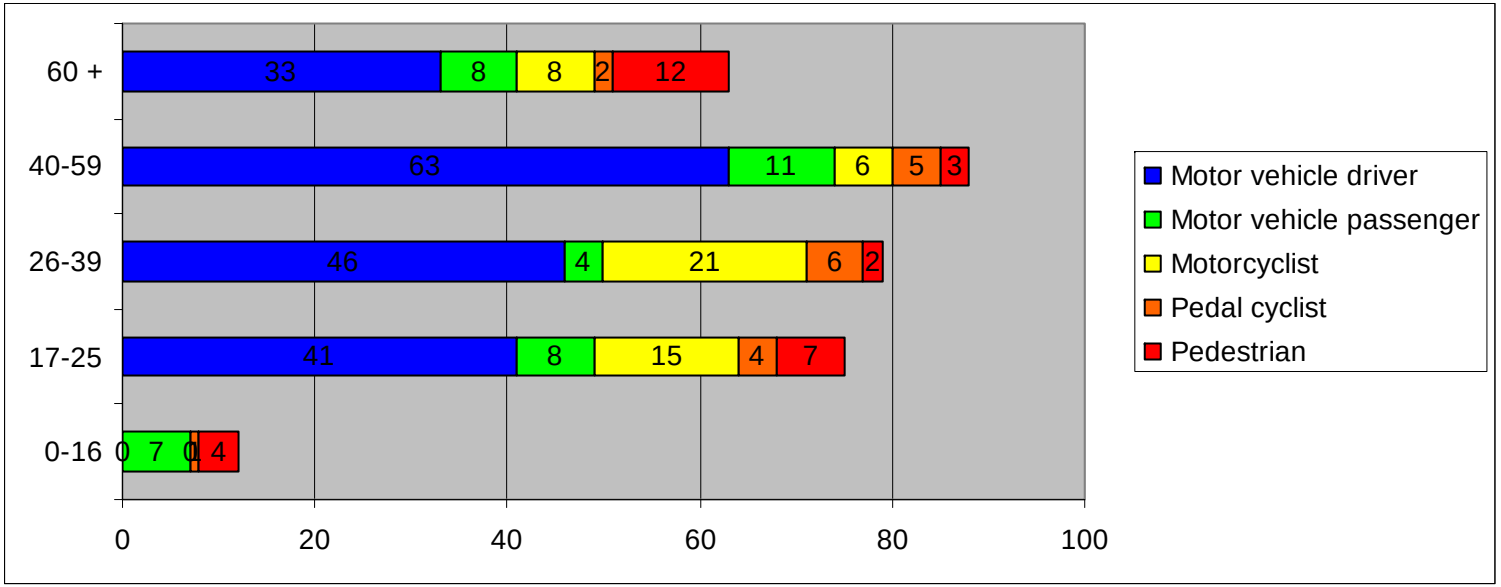
	2006	2007	2008	2009	2010	5 Yr. Average
Motor Vehicle Drivers	219	222	198	192	186	203
Motor Vehicle Passengers	77	61	50	54	52	59
Motorcyclists	31	39	31	35	44	36
Pedal Cyclists	17	16	13	5	18	14
Pedestrians	38	36	30	42	34	36



Graph 14: Casualties in the City of Ryde by road user group 2010

Table 5: City of Ryde casualties by age, gender and road user class in 2010

	0-16		17-25		26-39		40-59		60+			
	M	F	M	F	M	F	M	F	M	F	Unknown	Total
Motor Vehicle Drivers	0	0	19	22	21	25	31	33	20	13	2	186
Motor Vehicle Passengers	4	3	4	4	1	3	2	9	2	6	14	52
Motorcyclists	0	0	12	3	18	4	6	0	0	0	1	44
Pedal Cyclists	1	0	3	1	5	1	5	0	2	0	0	18
Pedestrians	1	3	3	5	0	2	3	1	4	8	4	34



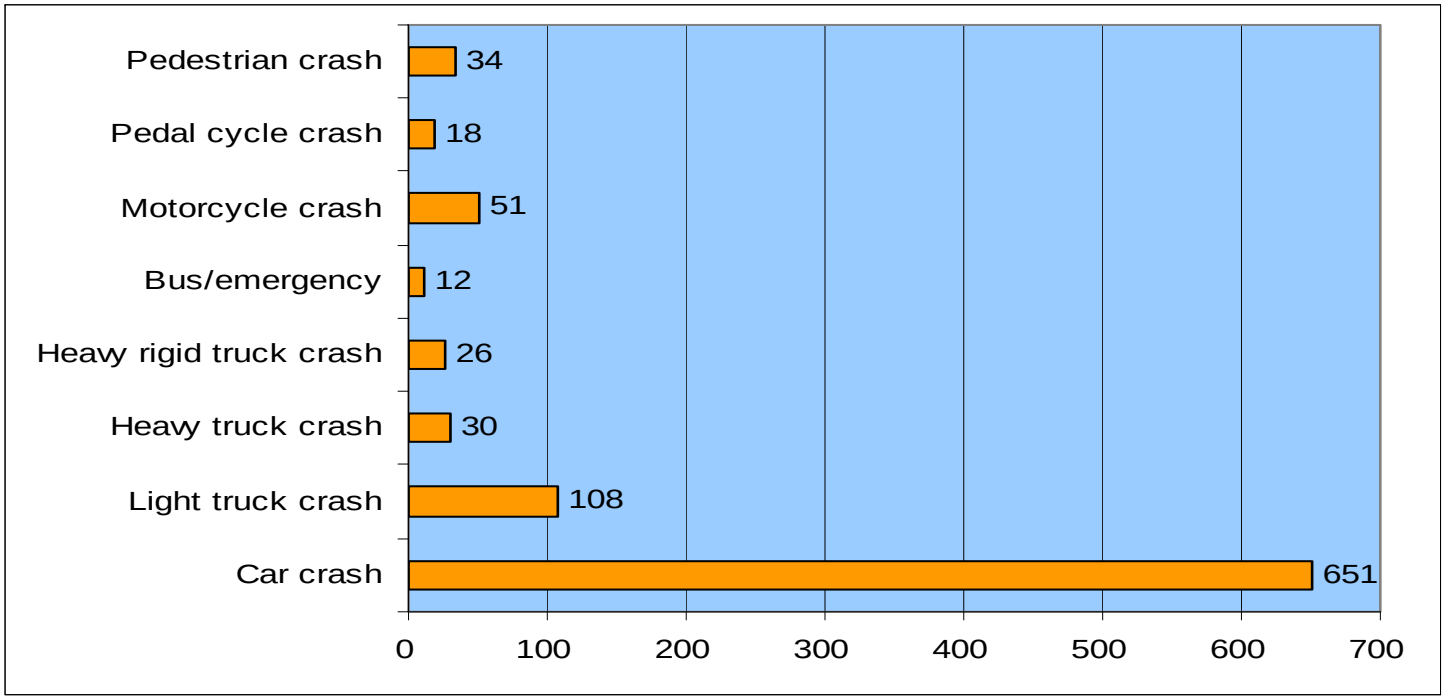
Graph 15: Casualties by road user class and age in the City of Ryde in 2010

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 2010. Motor vehicle driver casualties account for 62.1% of all casualties in the City of Ryde for 2010. This is a small increase from 58.5% in 2009. 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). Female drivers were involved in more crashes than male drivers, particularly in the 40-49 year old age group. This challenges the notion that male drivers are more likely to be involved in a crash.

Graph 16 displays the total number of crashes in the City of Ryde by crash type for 2010. 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 930 vehicles involved in a crash (down 20 crashes from 2009), 651 crashes involved cars, with almost 93% of all crashes involving at least one car. This is followed by light trucks (108) motor cycle crash (51),pedestrians (34), and heavy truck (30), The increase in motor cycle crashes is very concerning.



Graph 16: Crash types in the City of Ryde in 2010

4aiii. Occupant Restraints

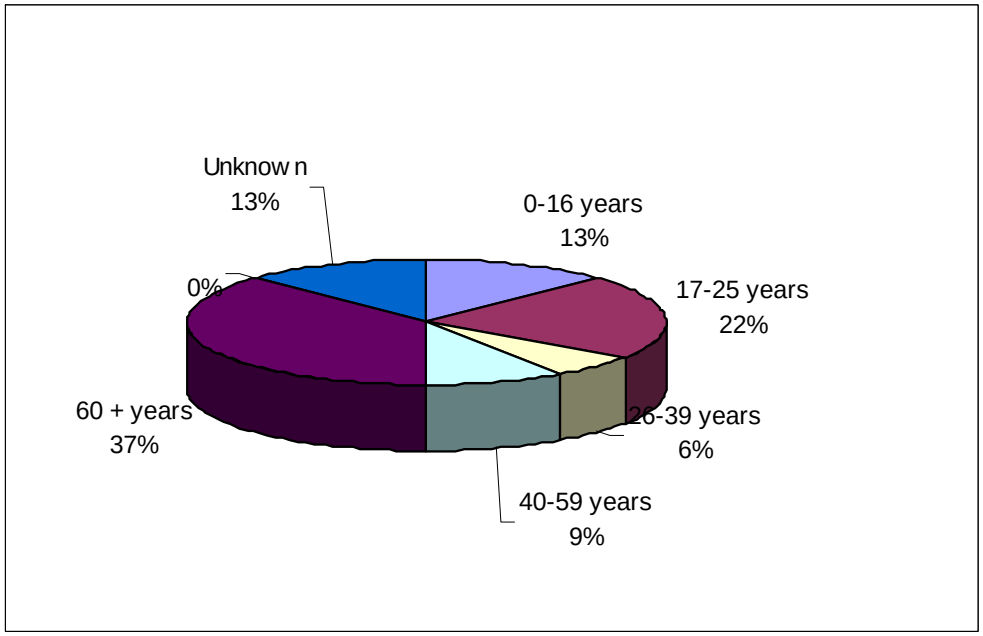
It is important to examine occupant restraints as it relates to motor vehicle drivers and passengers. Table 6 shows the percentage of casualties who had restraints fitted in the vehicle but did not wear them in NSW, Sydney region and in the City of Ryde in 2010. There was no casualties who had restraints fitted in the vehicle and did not wear them.

Table 6: Use of Restraints in the City of Ryde in 2009

	NSW		**Sydney Region**		**Ryde**	
All Motor Vehicle Driver Casualties Restraint fitted but not worn (as a percentage of the total number of driver casualties)	203	**1.4%**	**93**	**1.2%**	6	**3%**
	NSW		**Sydney Region**		**Ryde**	
All Motor Vehicle Passenger Casualties Restraint fitted but not worn (as a percentage of the total number of passenger casualties)	117	**2%**	44	**2%**	0	**0%**

4c. Pedestrians

Graph 17 shows the percentage of pedestrian casualties in the City of Ryde in 2009 and 2010 by age group, there have been both large and minor changes from 2009 to 2010. The 0-16 and the 26-39 year old age groups have decreased dramatically while the 60+ age group has increased dramatically. The other groups remain stable. Large variances are common among pedestrian casualties and there is no common patterns.



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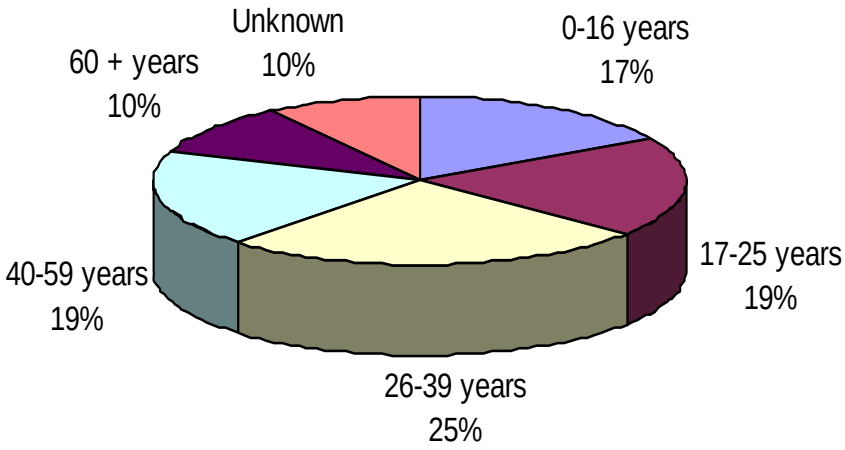
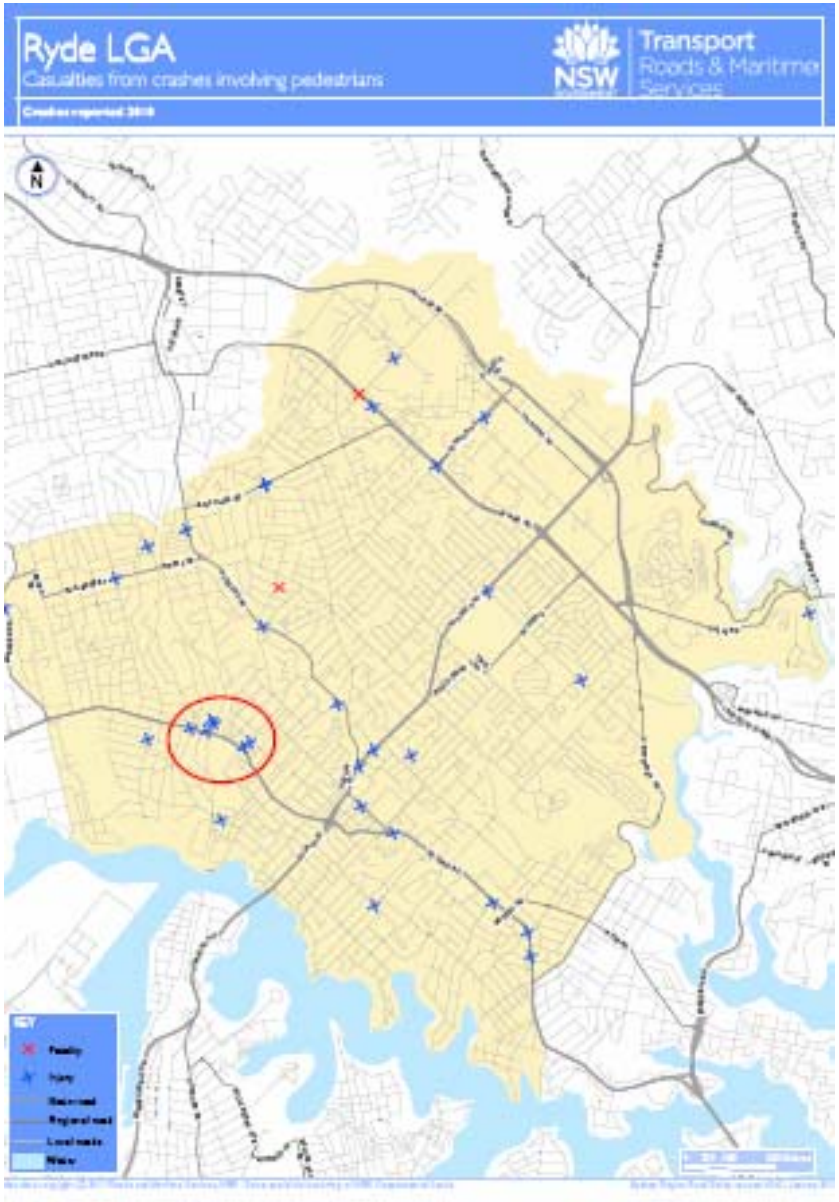


2009

Graph 17: Pedestrian casualties by age group in the City of Ryde in 2009 and 2010



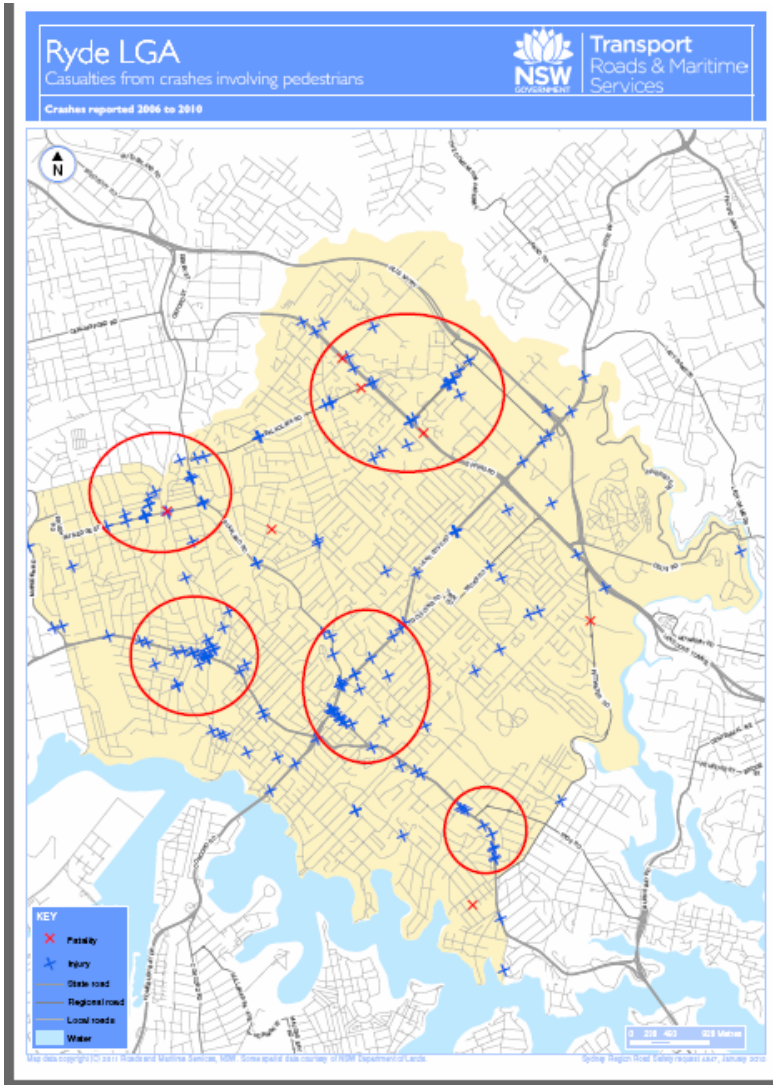
Casualties involving pedestrian

The number of pedestrian casualties increased substantially this year. The increases were in the traditional areas for pedestrian crashes, high pedestrian zones around transport hubs and shopping centers.

The map to the left displays each pedestrian casualty in the City of Ryde between 2006 and 2010. Like last year, there are clusters of pedestrian causalities in Ryde, at Devlin St,. There are no other major clusters compared to last year where which illustrated clusters in West Ryde and Eastwood (which recorded one fatality) and around Macquarie Park, (which recorded four fatalities). There were only 2 recorded fatalities, one near blaxland road and the other on Epping Road.

The intersection on Devlin St and Blaxland Road has two pedestrian bridges where all pedestrians are directed and there is no pedestrian access at the intersection. The 2010 map (insert) demonstrates that the bridge has reduced the casualty rates for the intersection of Devlin St and Blaxland Road, with 2010 recording zero casualties compared to four and one fatality over the past five years. There continues to be issues in the surrounding area, however they are less severe in comparison to previous years.

In addition, this year shows a concentration of casualty injuries on the main roads of Macquarie Park. This area has a high number of pedestrians with business and education centers close by.


Ryde LGA
Casualties from crashes involving pedestrians
Crashes reported 2006 to 2010
Transport
Roads & Maritime
Services
N
KEY
Fatality
Injury
State road
Regional road
Local roads
Water

4b. Motorcyclists

Motorcyclists accounted for 13% of all casualties in 2010, 2% higher then 2009.

As in previous years, the 26-39 year age dominate in the highest number of motorcyclists casualties, with 18 and 4 casualties respectively. Males make up the majority of motorcyclist casualties in 2010, 4 out of the 23 motorcyclist casualties were females.

Of the 23 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 increased to 18 in 2010 from 5 in 2009 in the City of ryde, with 2 pedal cycle fatalities. Pedal Cyclists make up 5% of the total percentage of casualties by road user class. From the 18 casualties there were only 2 female causalities, maintaining the downward trend after a large decrease in 2006 data where five female pedal cyclist casualties. City of Ryde pedal cyclist casualties hold the same total percentage of casualties compared to both the Sydney region (5%) and NSW (5%). Despite the results there is no major effect on the 5 year downward trend.

5. SUMMARY

In summary, there are issues which have been identified and now must be addressed in the City of Ryde for 2012/3. The issues identified will in turn aid in developing road safety initiatives for the City of Ryde over the 2012-2013 period.

- In 2010, there were 57 crashes involving speed and the number of crashes has decreased significantly from 72 crashes in 2009.
- The 17-25 age group had the highest number of any age group for motor vehicle controllers involved in speed, fatigue and alcohol related crashes.
- Alcohol related crashes as a whole have decreased significantly from 2.5% in 2009 to 1.8% in 2010. The 17-25 age group has decreased by 2% whilst the 40-59 age group has also shown a significant decrease by 5% since 2009.
- Speed is also the highest contributing factor for City of Ryde with 9% respectively. However, speeding as a contributing factor has decreased by 1% for the City of Ryde from 2009. Fatigue related crashes have reduced from the peak last 2009.
- Speed related crashes in 2010 have decreased significantly by 11% in 2010. Alcohol & fatigue have also decreased by 6% and fatigue related crashes by 8% in 2010. The long term trend of all contributing factors is down.

7. SOURCES

- Sydney Profile (Census 2006)
- 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