



Crash Analysis Report

**Georges River LGA
2013 - 2017**

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PART 1

INTRODUCTION

Georges River Local Government Area (LGA) is committed to making its roads a safe environment for all road users. Better understanding of road safety issues and solutions is important in achieving our goal.

In Georges River LGA there are a number of main concerns when dealing with road safety. They are included but are not limited to Pedestrian safety, speeding, under the influence of alcohol while on the roads, driver/passenger safety and motorcycle safety. Promoting community-based action addresses these issues at the local level.

Georges River LGA commenced involvement with the NSW Local Government Program in (2019) with the employment of a full-time Road Safety Officer. This being due to the amalgamation of Hurstville and Kogarah councils, both these council participating in the program for a long time individually.

CHALLENGE

The challenge is to identify road safety issues within Georges River LGA, to address those issues and to make roads safer by raising community awareness through enforcement, education and engineering efforts.

OBJECTIVES

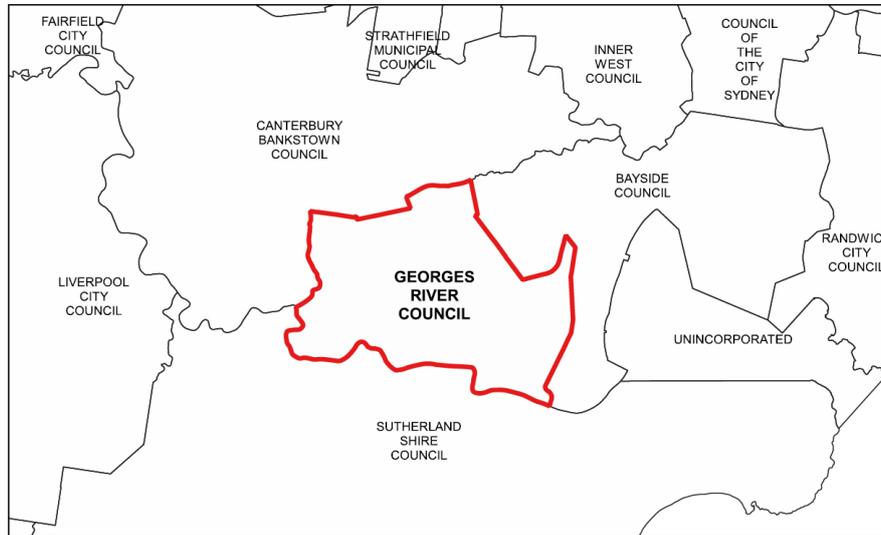
Road safety is an issue for all members of the Georges River community. Georges River LGA is committed to road safety and the Road Safety Action Plan will help to ensure our objectives are met. These objectives are stated in each road safety project initiative outlined in the Action Plan. They have been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

The actions outlined in the Plan reflect both the commitment of the State Government and that of Georges River LGA.

PART 2

GEORGES RIVER DEMOGRAPHIC DATA

Georges River LGA has an area of 38kms² and lies in the Southern part of the Sydney Metropolitan area, approximately 15-17kms from the center of Sydney. Figure 1 shows the location of Georges River LGA.

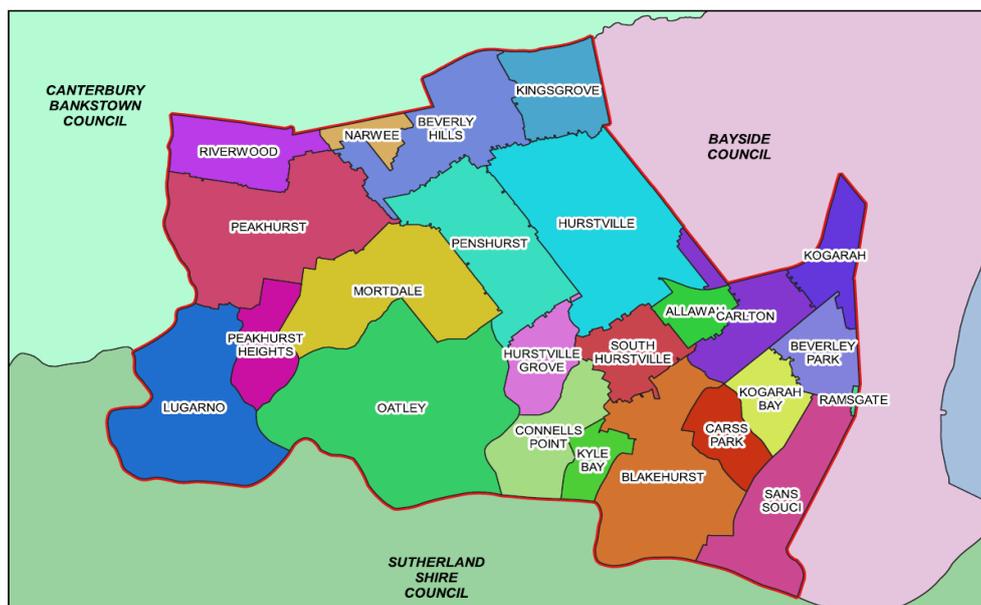


The Location of Georges River Council

Figure 1.

Georges River LGA occupies the southern suburbs of Sydney and are bounded by the City of Canterbury Bankstown in the North, the Bayside Council area in the East, the Georges River in the South and Salt Pan Creek in the West and has 24 suburbs within its boundaries.

The suburbs that make up Georges River LGA include Allawah, Beverly Park, Beverly Hills (part), Blakehurst, Carlton (part), Carss Park, Connells Point, Hurstville Grove, Hurstville, Kingsgrove (part), Kogarah (part), Kogarah Bay, Kyle Bay, Lugarno, Mortdale, Narwee (part), Oatley, Peakhurst, Peakhurst Heights, Penshurst, Ramsgate (part), Riverwood (part), Sans Souci (part) and South Hurstville. Figure 2 shows the location of suburbs mentioned.



The Suburbs of Georges River Council

Figure 2.

The traditional Aboriginal owners of the land are the Biddegel, Bidjigal and Bedegal clans of the Dharug tribe of the Eora Nation. Aboriginal sites in the LGA are predominantly located around the foreshores of the Georges River and Salt Pan Creek.

The People

The residential population for Georges River LGA, as at the 2016 Census, was estimated at 146 841. The largest age-group in the community is young adults to adults aged 20 – 59 years, who make up 56.5% of the population (Figure 3).

Notable changes from the previous Census among service age groups are:

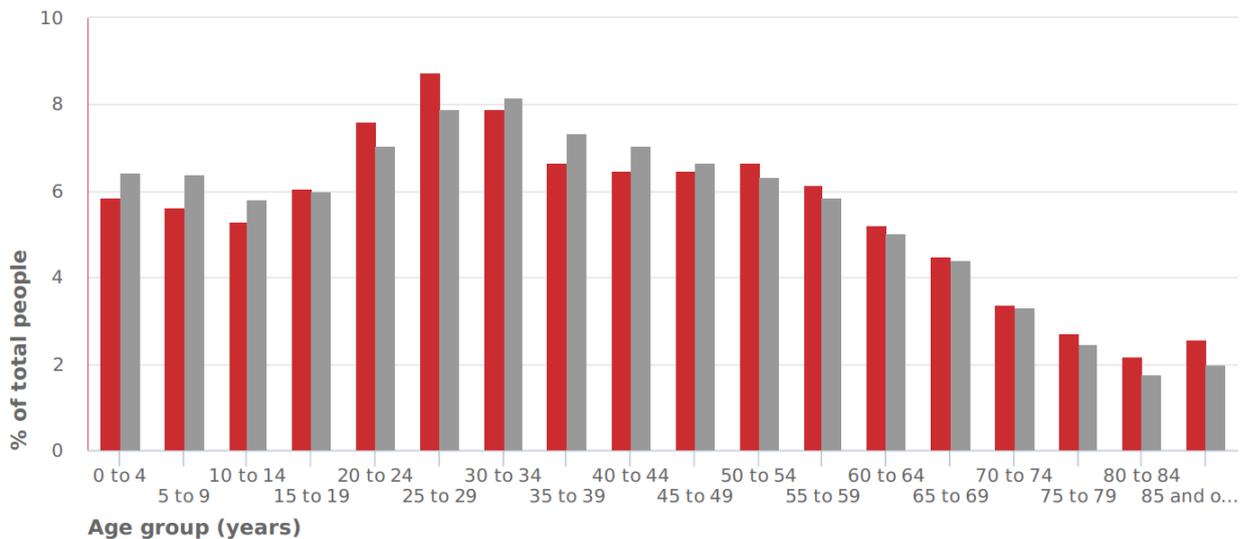
- The highest increase in age groups are for 25- 34 years had an addition of 4 088 people, followed by 60-69 years with an addition of 1 975 people, then 18-24 by 1 963 people and lastly 50-59 by 1 845 people.
- The age groups of 0-4, 5-11, 70-84 and 85 and over all increased steadily by having over 300 people more in each age group.
- The age group of 12-17 had an increase of over 100 people.
- The age group of 35-39 had a decrease of 6 people since the 2011 census.

Figure 3: Relative size of age groups (ABS 2016 Census Population and Housing)

Age structure - five year age groups, 2016

Total persons

Georges River Council area Greater Sydney



Of the population:

- 53.1% are married couples;
- 21.9% are dependent children under 15 years;
- 19.2% live alone

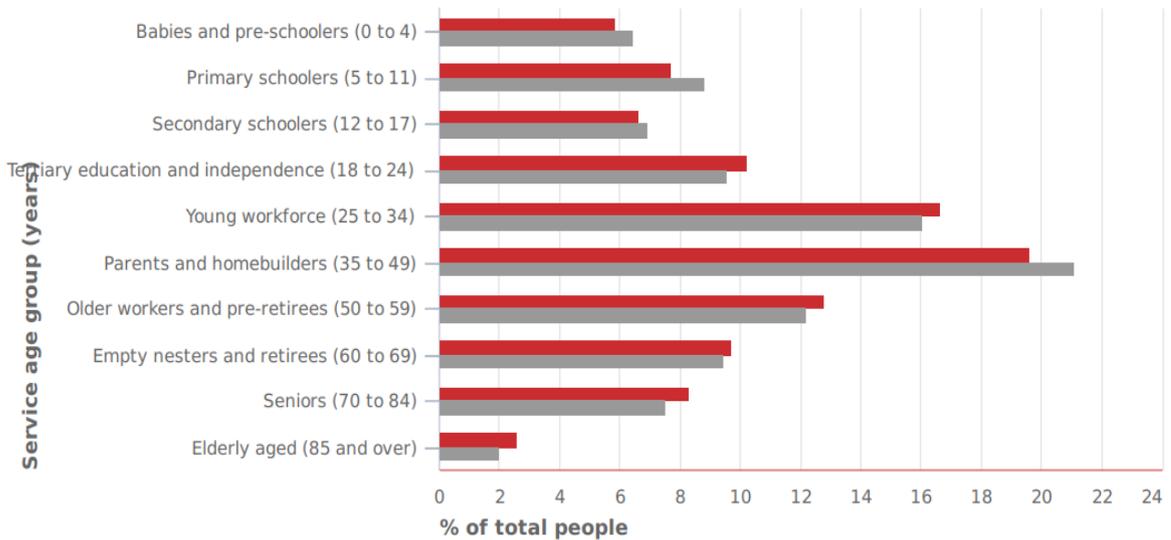
In the LGA in 2016, there were 71 755 males and 75 086 females.

Figure 4 Relative size of age groups (ABS 2016 Census Population and Housing)

Age structure - service age groups, 2016

Total persons

■ Georges River Council area ■ Greater Sydney



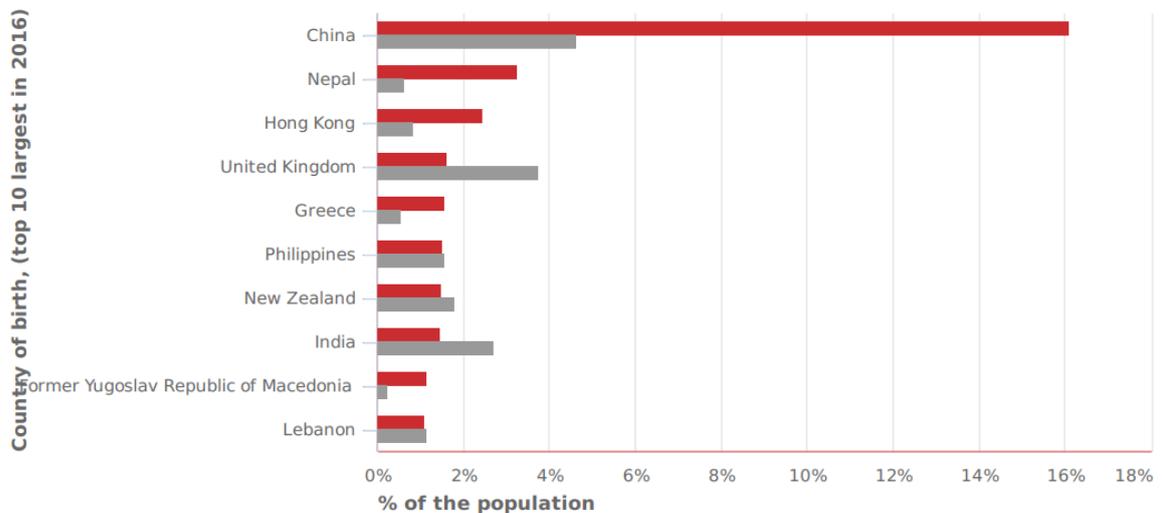
The LGA's Aboriginal and Torres Strait Islander population in 2016 was 798 persons.

In 2016, 49.7% of the LGA's people were born in Australia and 45.5% were born overseas. The most common overseas birthplaces are shown below (Figure 5).

Figure 5: Country of birth (ABS 2016 Census Population and Housing)

Birthplace, 2016

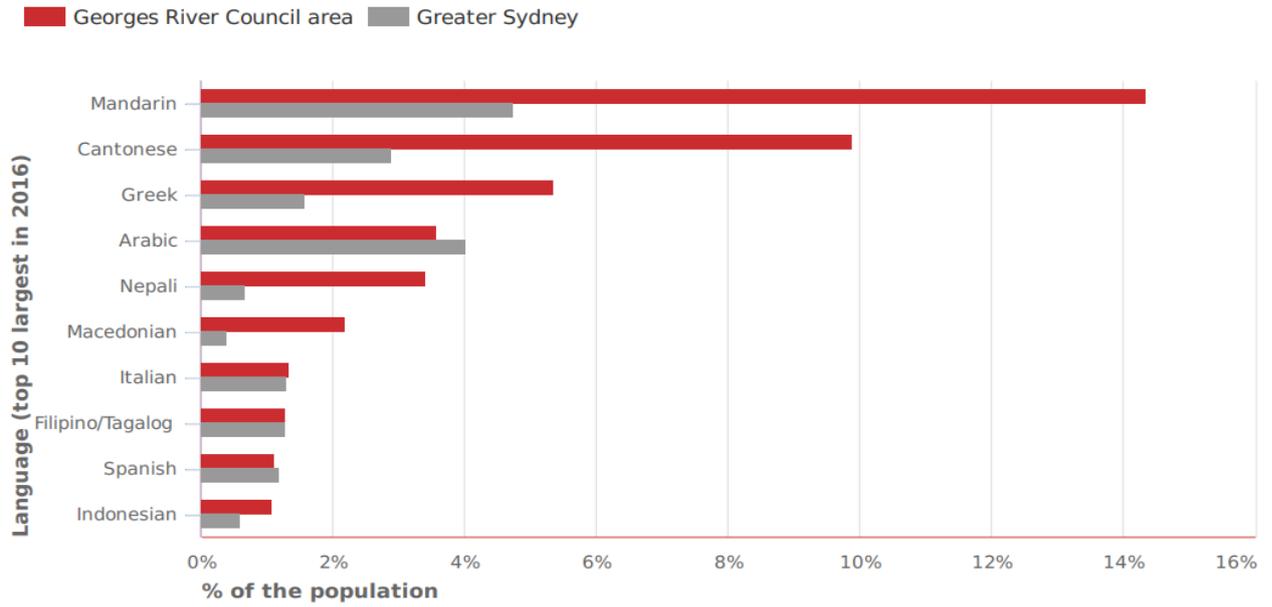
■ Georges River Council area ■ Greater Sydney



People who spoke a language other than English at home made up 53.5% of the population. The most common of these languages was Mandarin followed closely by Cantonese (Figure 6).

Figure 6: Language spoken at home (ABS 2016 Census Population and Housing)

Language spoken at home, 2016



PART 3

Georges River LGA Crash Analysis, 2013-2017

The following information provides a statistical overview of the road crash data for Georges River LGA for the period 2013 to 2017.

1. CRASHES

Table 1 identifies the total number of crashes in Georges River LGA by fatal/injury/non-casualty classification during the period 2013 to 2017.

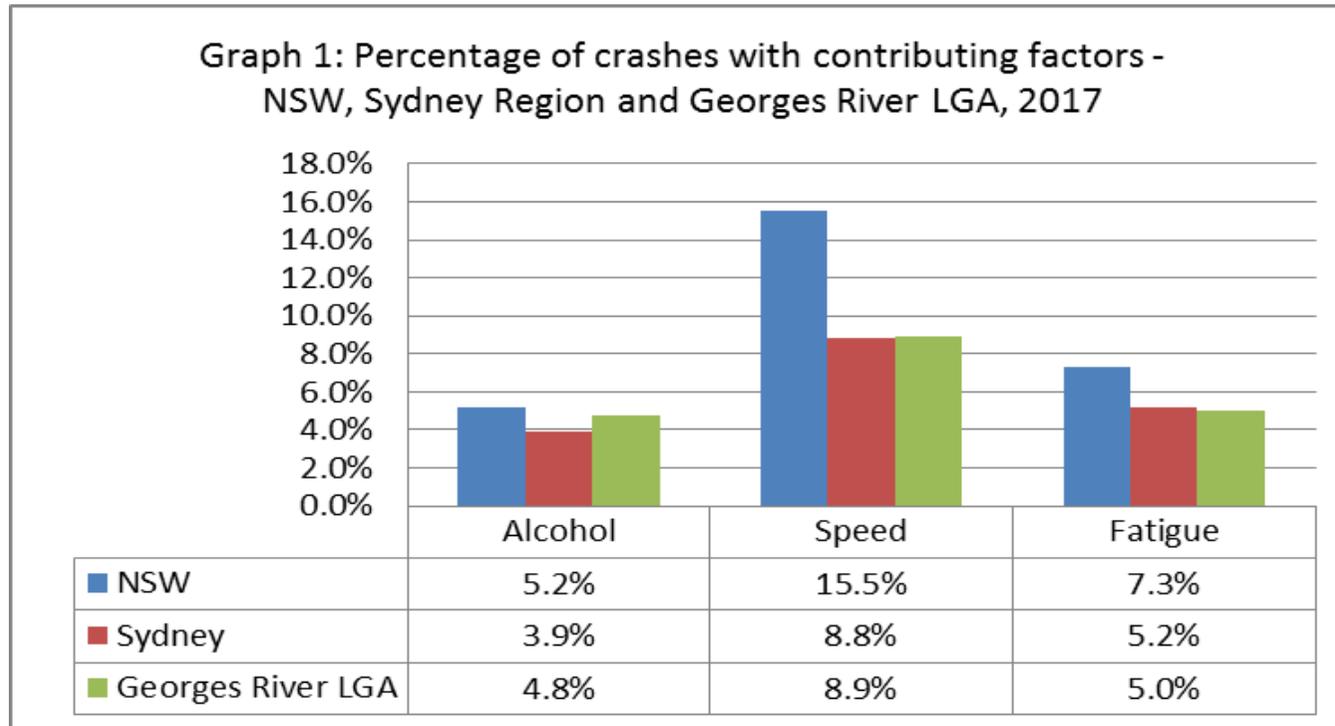
Table 1: Number of crashes by fatal/injury/non-casualty classification in Georges River LGA, 2013-2017

	2013	2014	2015	2016	2017	5 year average
Fatal Crashes	0	2	1	2	1	1.2
Injury Crashes	255	230	247	271	283	257.2
Non-casualty Crashes	343	272	170	136	133	210.8
Total Crashes	598	504	418	409	417	469.2

- The total number of crashes in 2017 (417) was higher than the number of crashes in 2016 (409) and lower than the 5-year average (469.2).
- The number of fatal crashes in 2017 (1) was lower than 2016 (2) and lower than the 5-year average (1.2).
- The number of injury crashes in 2017 (283) was Higher than 2016 (271) and higher than the 5-year average (257.2).
- The number of non-casualty crashes in 2017 (133) was lower than 2016 (136) and lower than the 5-year average (210.8).
- It can be noted that there is a gradual increase in injury crashes from 2014 to 2017.
- It is important to note that the non-causality crashes may be significantly less in 2015, 2016, and 2017 due to changes in reporting introduced in October 2014, which eliminated the need to report non-casualty crashes to Police.

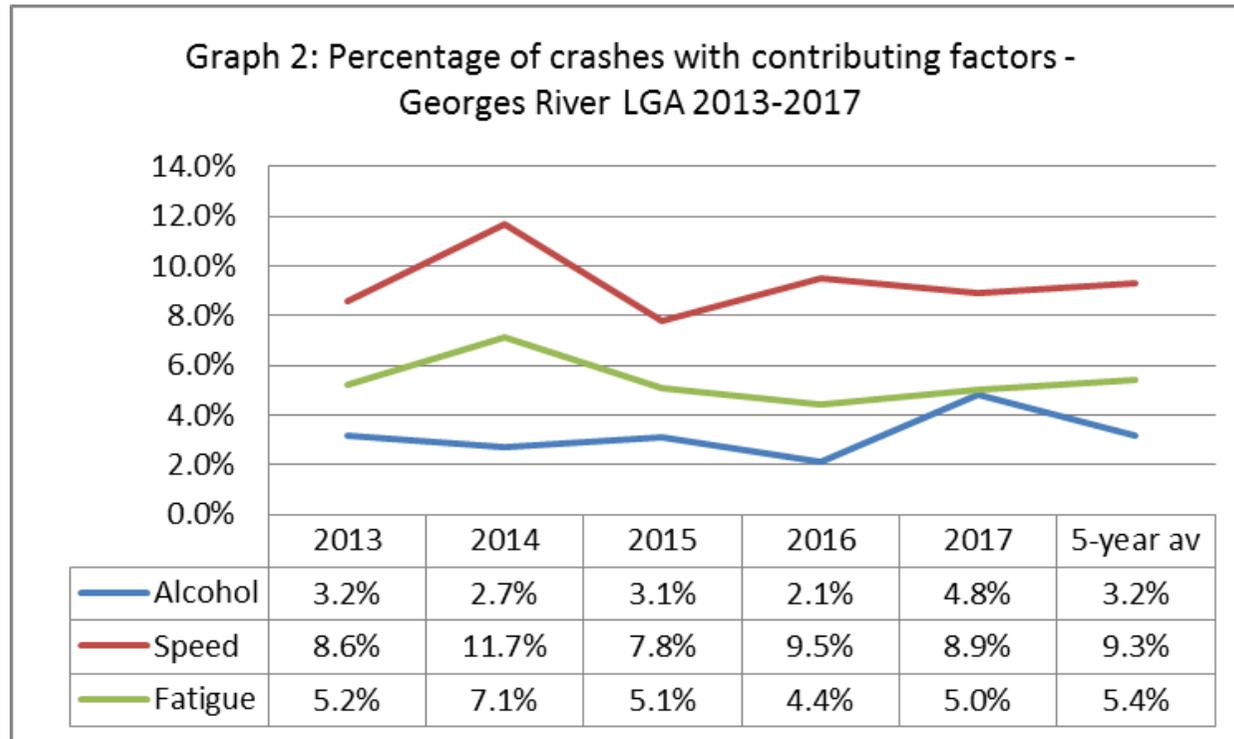
2. CONTRIBUTING FACTORS IN CRASHES

Graph 1 shows the percentage of crashes with contributing factors in NSW, Sydney Region and Georges River LGA during 2017.



- Georges River's percentage of crashes where alcohol was a contributing factor (4.8%) is higher than Sydney Region (3.9%) and lower than NSW (5.2%).
- Georges River's percentage of crashes where speed was a contributing factor (8.9%) is higher than Sydney Region (8.8%) and lower than NSW (15.5%).
- Georges River's percentage of crashes where fatigue was a contributing factor (5.0%) is lower than Sydney Region (5.2%) and lower than NSW (7.3%).
- It can be noted that Fatigue as a contributing factor within Georges River is lower than both Sydney and NSW.

Graph 2 shows the percentage of crashes with contributing factors in Georges River LGA during the period 2013 to 2017



- The percentage of crashes in 2017 where alcohol was a contributing factor (4.8%) was higher than 2016 (2.1%) and higher than the 5-year average (3.2%).
- The percentage of crashes in 2017 where speed was a contributing factor (8.9%) was lower than 2016 (9.5%) and lower than the 5-year average (9.3%).
- The percentage of crashes in 2017 where fatigue was a contributing factor (5.0%) was higher than 2016 (4.4%) and lower than the 5-year average (5.4%).
- It can be noted that speed as contributing factor to crashes in 2017 is the lowest it has been since 2014.
- It can be noted that alcohol as a contributing factor in crashes in 2017 is the highest it has been in the time period of 2013-2017.

3. CASUALTIES

Table 2 shows the total number of casualties in Georges River LGA by killed/injured classification during the period 2013 to 2017.

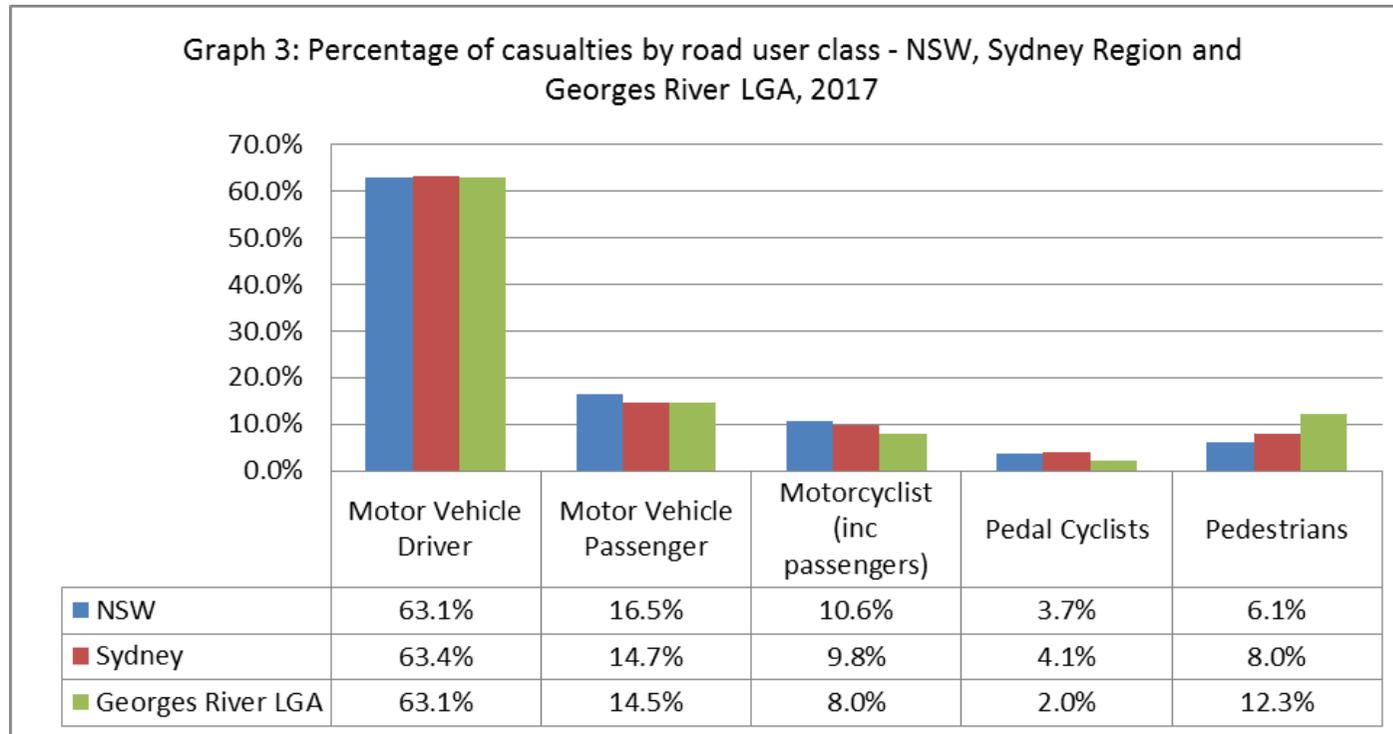
Table 2: Number of casualties by killed/injured classification in Georges River LGA, 2013-2017

	2013	2014	2015	2016	2017	5 year Av.
Killed	0	2	1	2	1	1.2
Injured	365	324	318	362	349	343.6
Total	365	326	319	364	350	344.8

- The average casualty rate for the 5-year period 2013-2017 was 344.8 casualties.
- The number of people killed in 2017 (1) was lower than 2016 (2) and lower than the 5-year average (1.2).
- The number of people injured in 2017 (349) was lower than 2016 (362) and higher than the 5-year average (343.6).
- It can be noted that casualties injured have stayed above 300 the past 5 years.

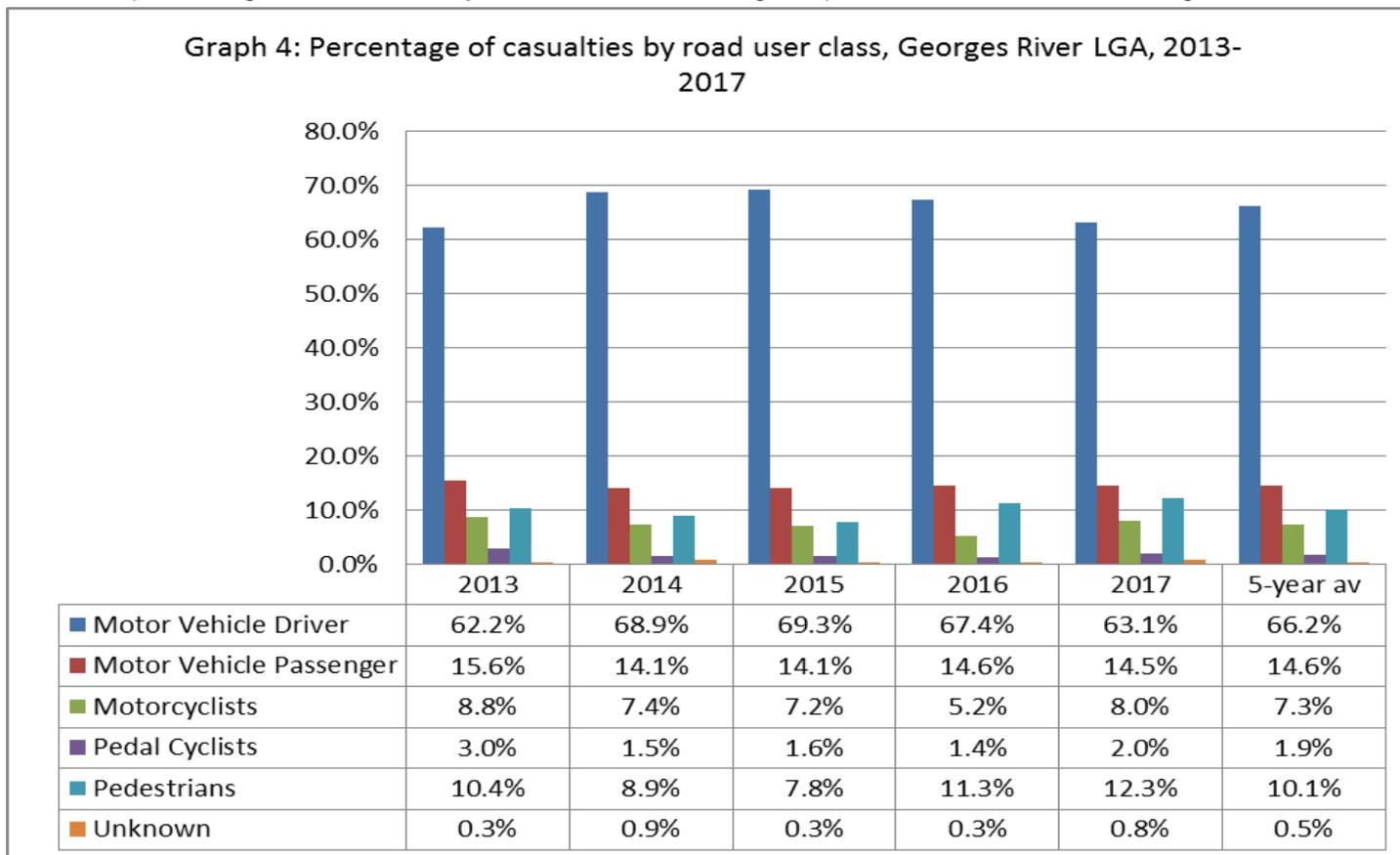
4. ROAD USER TYPE

Graph 3 shows the percentage of casualties by road user class in 2017 for NSW, Sydney Region and Georges River LGA.



- Sydney has the highest percentage of casualties amongst motor vehicle drivers (63.4%), followed by both NSW and Georges River LGA as they are both equal (63.1%).
- NSW has the highest percentage of casualties amongst motor vehicle passengers (16.5%), followed by Sydney (14.7%) and then Georges River LGA (14.5%).
- NSW has the highest percentage of casualties amongst motorcyclists (10.6%), followed by Sydney (9.8%) and then Georges River LGA (8.0%).
- Sydney has the highest percentage of casualties amongst pedal cyclists (4.1%), followed by NSW (3.7%) and then Georges River LGA (2.0%).
- Georges River LGA has the highest percentage of casualties amongst pedestrians (12.3%), followed by Sydney (8.0%) and then NSW (6.1%).
- It can be noted that Georges River LGA's percentage of casualties by road user groups of Motor Vehicle Passenger, Motorcyclist and Pedal Cyclist are lower than both Sydney and NSW.

Graph 4 shows the percentage of casualties by road user class during the period 2013 to 2017 in Georges River LGA.



4a. Motor Vehicle Driver Casualties

- The percentage of motor vehicle driver casualties in 2017 (63.1%) was lower than 2016 (67.4%) and lower than the 5 year average (66.2%).
- It can be noted that motor vehicle driver casualties in 2017 are the lowest they have been since 2013.
- It can be noted there was nearly a 5% drop in casualties from 2016 to 2017.
- It should be noted that the 2017 percentage of casualties is also lower than the 5 year average.

4b. Motor Vehicle Passenger Casualties

- The percentage of motor vehicle passenger casualties in 2017 (14.5%) was lower than 2016 (14.6%) and lower than the 5 year average (14.6%).
- It can be noted that motor vehicle passenger casualties is only (0.1%) lower than 2016 and 5 year average.
- It can be noted from 2014 to 2017 the percentage of casualties has stayed above (14%).

4c. Motorcyclist Casualties

- The percentage of motorcyclist casualties in 2017 (8.0%) is higher than 2016 (5.2%) and higher than the 5 year average (7.3%).
- It can be noted that motorcyclist casualties have increased by close to 3% from 2016 to 2017.
- It can also be noted that 2016 is the lowest percentage of casualties for the 5 year period of 2013-2017.

4d. Pedal Cyclist Casualties

- The percentage of pedal cyclist casualties in 2017 (2.0%) is higher than 2016 (1.4%) and higher than 5 year average (1.9%).
- It can be noted that percentage of casualties for 2017 is only slightly higher than the 5 year average.
- It can be noted that percentage of casualties stayed at a steady rate from 2014 to 2016.

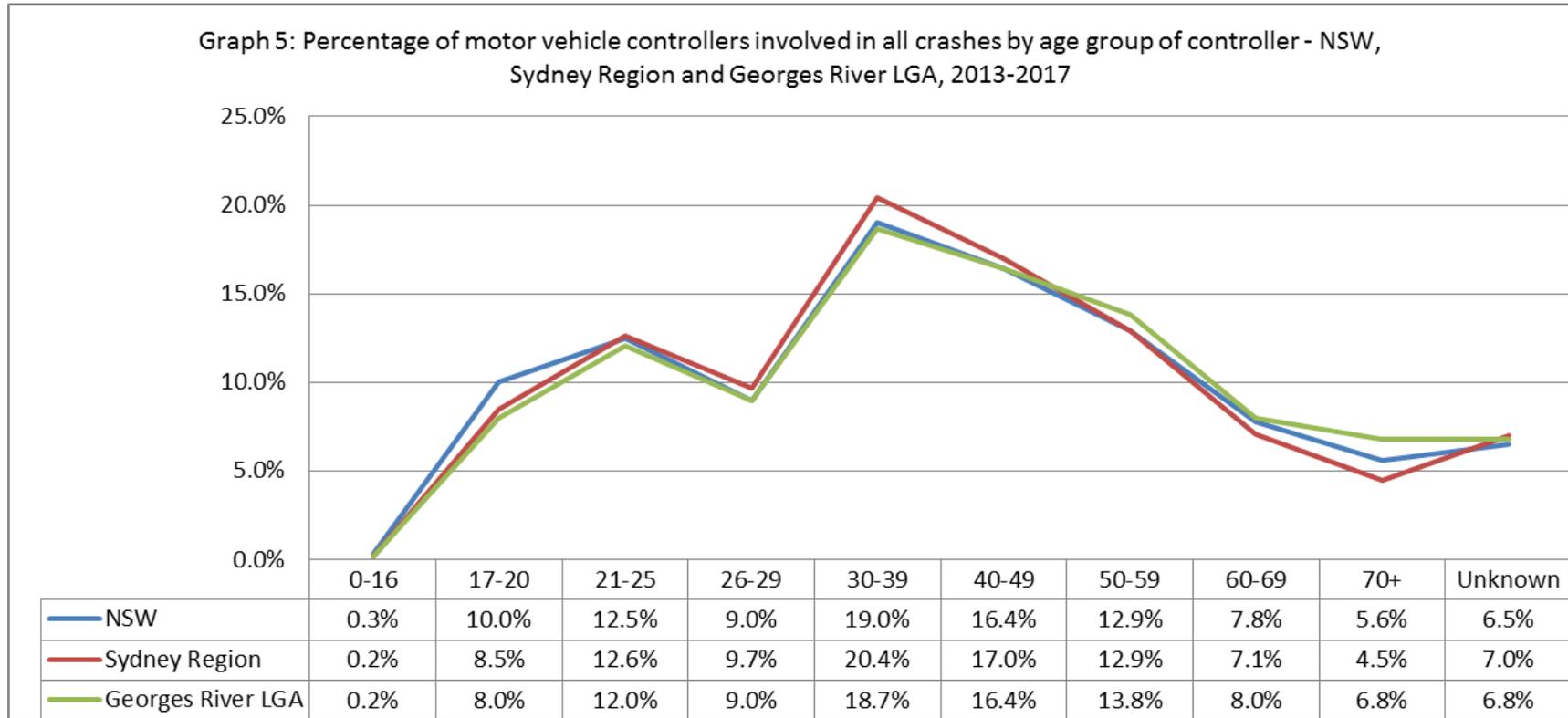
4e. Pedestrian Casualties

- The percentage of pedestrian casualties in 2017 (12.3%) is higher than 2016 (11.3%) and higher than the 5 year average (10.1%).
- It can be noted that there was a significant increase in causality percentage from 2016 onwards with an increase of about (5%) from 2014.
- During the period of 2016 and 2017 the causality percentage is higher than the five year average of (10.1%) indicating that pedestrian safety is a high priority within Georges River LGA.

5. AGE GROUPS AND GENDER

5a. Crashes by Age Group of Motor Vehicle Controller

Graph 5 shows the percentage of Motor Vehicle Controllers involved in all crashes by age group of controller for NSW, Sydney Region and Georges River LGA during the period 2013 to 2017.



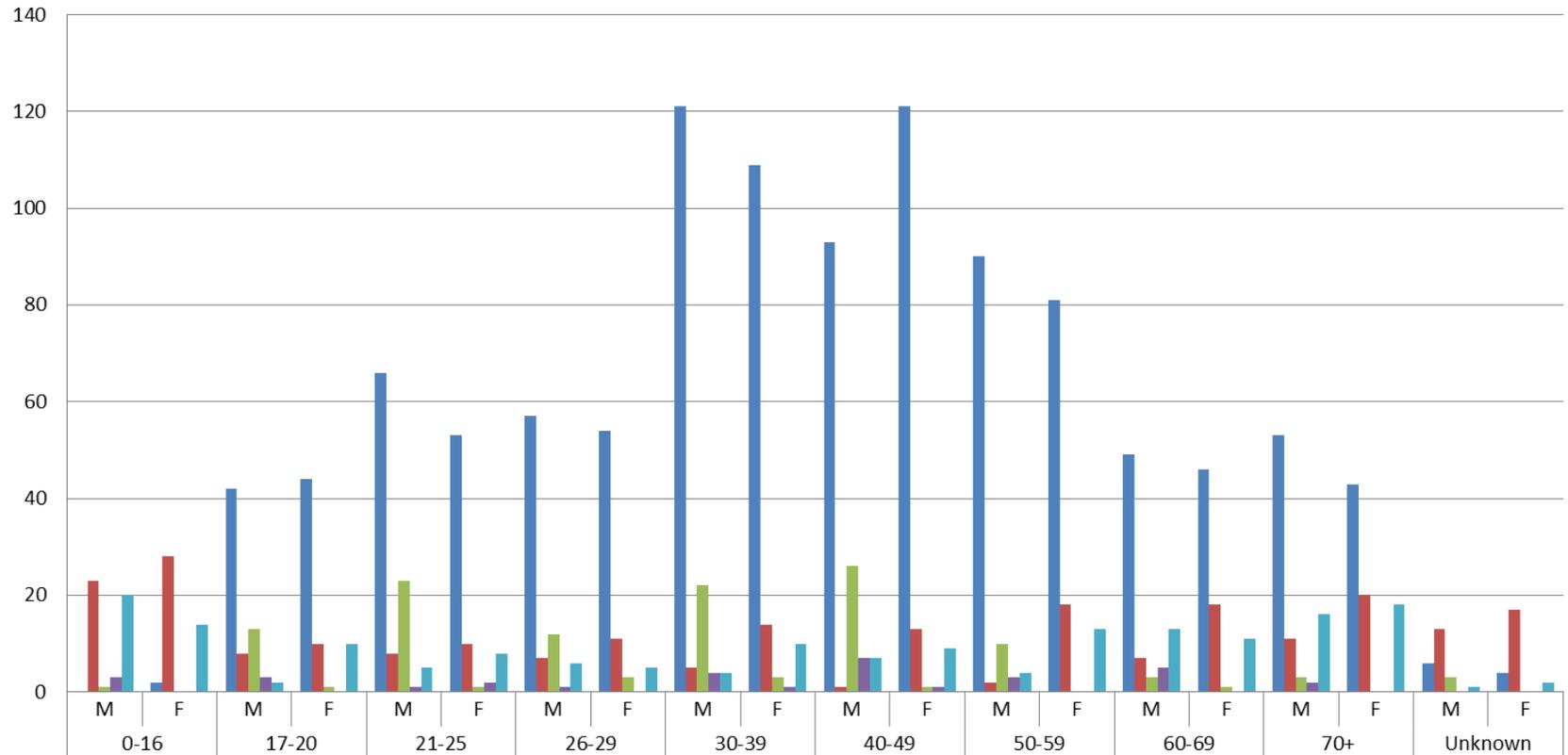
Graph 5 indicates:

- The highest percentage of crashes for Georges River occurred in the age group of 30-39 years (18.7%), which was lower than both NSW (19.0%) and Sydney (20.4%).
- The average percentage of crashes within Georges River were lower or equal to NSW and Sydney region within the age groups of 17-20 (8.0%), 21-25 (12.0%), 26-29 (9.0%) and 40-49 (16.4%).
- The lowest average of crashes within Georges River occurred in the age group 70+ (6.8%).
- The crash percentages within Georges River that were higher than the NSW and Sydney Region were the age groups of 50-59 (13.8%), 60-69 (8.0%) and 70+ (6.8%).

5b. Casualties by Age Group, Gender and Road User Class

This section addresses casualties in Georges River LGA according to age and road user class. Graph 6 shows the average number of casualties by age group and road user class in Georges River LGA during the period 2013-2017.

Graph 6 - Average number of casualties by age, gender and road user class, Georges River LGA, 2013-2017



Motor Vehicle Driver	0	2	42	44	66	53	57	54	121	109	93	121	90	81	49	46	53	43	6	4
Motor Vehicle Passenger	23	28	8	10	8	10	7	11	5	14	1	13	2	18	7	18	11	20	13	17
Motorcyclists	1	0	13	1	23	1	12	3	22	3	26	1	10	0	3	1	3	0	3	0
Pedal Cyclists	3	0	3	0	1	2	1	0	4	1	7	1	3	0	5	0	2	0	0	0
Pedestrians	20	14	2	10	5	8	6	5	4	10	7	9	4	13	13	11	16	18	1	2

The following has been identified from the data:

5bi. Motor Vehicle Driver Casualties

- On average during the period of 2013-2017 within Georges River motor vehicle driver casualties had the highest amount compared to all other road user groups, indicating its lead over these groups.
- The highest average rate of casualties for motor vehicle drivers fell under the age group of 30-39 with a total of (230), males (121) having a higher rate than females (109).
- Groups that followed closely with high averages of casualties are 40-49 years old with a total of (total 214) and 50-59 years old with a total of (total 171).
- The age groups 17-20 and 21-25 had total number casualties of more than 75.
- The age groups 26-29, 60-69 and 70+ had total number casualties of 95 or more.
- The age group 0-16 had 2 casualties; this may due to most drivers within this age group still being at the beginning stages of driving (L plates) and are supervised by an experienced full licensed driver.

5bii. Motor Vehicle Passenger Casualties

- Motor vehicle passengers had the highest average of casualties in the age group of 0-16 (51), females made up majority of the casualties (28) and males have (23) casualties.
- This followed by the age group of 70+ with the total average of casualties of (31). Females made up majority of the casualties (20) and males making up (11) of the casualties.
- The age groups of 50-59 and 60-69 had a total of (20) or more casualties. Females making up majority of casualties in both age groups.
- The age groups of 17-20, 21-25, 26-29 and 30-39 had a total of (18) or more casualties. Females making up majority of casualties.
- The lowest amount of casualties was 40-49 with a total average of (14). Females making up majority of casualties.
- It can be noted that motor vehicle passenger casualties in all groups females had a higher rate of casualties compared to males.

5biii. Motorcyclist Casualties

- Motorcycle casualties' highest total falls within the age group of 40-49 with a total of (27). This closely followed by 30-39 with a total of (25) and 21-25 with a total of (24). In all these age groups males make up majority of casualties.
- The age groups of 50-59, 17-20 and 26-29 had a total of (10) or more casualties. In all groups males make up majority of casualties.
- The lowest amounts of casualties fell under the age group of 0-16 with a total of (1). This is closely followed by 70+ with a total of (3) and 60-69 with a total of (4).
- Motorcycle casualties were significantly made up of males and a very small number of females for all age groups.
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5biv. Pedal Cyclist Casualties

- The highest amount of pedal cyclists casualties fell in the age group of 40-49 with total average of (8) casualties. This was closely followed by 30-39 and 60-69 both having total of (5) casualties over a five year period.

- The lowest amount of pedal cyclists casualties fell under the age group of 26-29 with have (1) casualty. This was closely followed by 70+ having (2) casualties.
- The age groups of 0-16, 17-20, 21-25 and 50-59 all had a casualty rate of (3).
- The majority of pedal cyclist casualties were males; only a small minority were female.

5bv. Pedestrian Casualties

- The highest amount of casualties for pedestrians fell within the age groups of 0-16 and 70+ both having an average of (34) casualty. For the age group 0-16 males made up majority of casualties and for the age 70+ females made up majority of the casualties.
- This being followed by the age group 60-69 with a total of (24) casualties, majority casualties being male.
- The age groups of 21-25, 30-39, 40-49 and 50-59 all having casualties under (20). Majority of pedestrian casualties within these age groups were female.
- The lowest pedestrian casualties fell under the age group of 26-29 with a total of (11). This being closely followed by 17-20 with a total of (12).
- Pedestrian casualties for the five year period I relatively high especially in the younger and elderly population.

5c. Age Group and Contributing Factors

Graph 7 shows the average number of motor vehicle controllers involved in crashes by age and contributing factor in Georges River LGA 2013-2017.

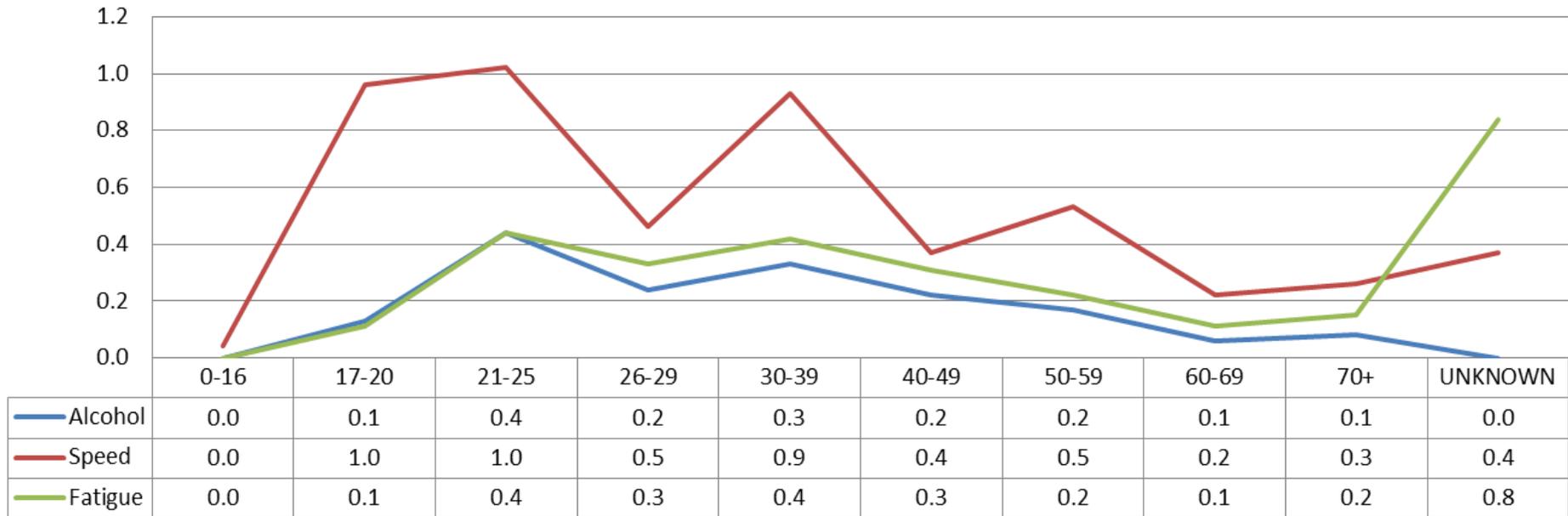
On average speed as a contributing factor between the years of 2013-2017 was the highest contributing factor to crashes in Georges River LGA. The age groups which had the highest average of crashes due to speed were 17-20 and 21-25 both with an average of (1.0). Followed closely by the age group of 30-39 with an average of (0.9) crashes due to speed as contributing factor. The lowest age group is 60-69 with an average of (0.2) crashes involving speed.

Fatigue as a contributing factor to crashes within Georges River LGA can be considered to be of a low problematic area with the highest age groups being 21-25 and 30-39 with a total average (0.4) contributing to crashes. This being closely followed by the age groups of 26-29 and 40-49 with a total of (0.3) contributing crashes. The lowest averages fell in the age groups of 17-20 and 60-69 with a total average of (0.1) contributing to crashes.

Alcohol over the five year period of 2013-2017 is slightly lower than fatigue, but when broken down by years it is considered to a problematic area within Georges River LGA. The highest age group contributing to crashes involving alcohol is 21-25 with a total average of (0.4) crashes. The lowest age groups contributing to crashes that involve alcohol are 17-20, 60-69 and 70+ all with a total average of (0.1) crashes.

It should be noted that for alcohol, speed and fatigue the age group of 21-25 had high average rates, followed closely by the age group of 30-39.

Graph 7: Average number of motor vehicle controllers involved in crashes by age and contributing factor, Georges River LGA, 2013-2017



6. OCCUPANT RESTRAINTS

Table 3 shows the use of restraints over a 5 year average for the years 2013-2017. Within Georges River LGA motor vehicle driver compliance with wearing restraints is high with over 95% of the LGA wearing restraints and only (0.7%) of drivers having a restraint fitted but not wearing it. This is lower than NSW (1.2%) but higher than the Sydney Region (0.6%).

In comparison, motor vehicle passengers have a higher rate of having restraints fitted but not wearing them, for Georges River LGA the percentage of passengers not wearing a restraint is (2.7%). This is higher than NSW (2.1%) and higher than the Sydney Region at (1.5%). It should be noted that motor vehicle drivers are responsible for ensuring that all passengers are wearing restraints before driving or using the roads.

Table 3: Use of Restraints, 2013-2017 Average

	NSW	Sydney Region	Georges River LGA
All Motor Vehicle Driver Casualties	15,226 (5 year average)	8,882 (5 year average)	223 (5 year average)
Restraint fitted but not worn	880 (1.2%)	296 (0.6%)	8 (0.7%)
Not known	5,287	2,773	79
	NSW	Sydney Region	Georges River LGA
All Motor Vehicle Passenger Casualties	3,795 (5 year average)	1,971 (5 year average)	50.4 (5 year average)
Restraint fitted but not worn	407(2.1%)	150 (1.5%)	7 (2.7%)
Not known	4,192	2,118	64

7. HELMET USE

Table 4 shows helmet use for motorcyclists and pedal cyclists over a five year period for the years of 2013-2017. It can be noted that the total average of motorcycle casualties for the five year period is 126, in this time there has been one casualty not wearing a helmet (0.8%). The average for NSW percentage of people not wearing a helmet is (2.8%) and for the Sydney Region (1.9%). This showing that Georges River LGA percentage is lower than NSW and Sydney Region, as well as indicating the significantly high rate of people wearing helmets.

Over the past 5 years the average casualties for pedal cyclists within Georges River LGA are 33, of this 4 (12.1%) were not wearing a helmet. It can be seen that Georges River percentage being lower than the NSW average of (12.9%) and higher than the Sydney Region (10.9%). It can be noted that there is a small number of pedal cyclists' casualties over a five year period, and that majority are wearing helmets

Table 4: Helmet use, 2013-2017 Average

	NSW	Sydney Region	Georges River LGA
All Motorcyclist Casualties	2,455 (5 year average)	1,362 (5 year average)	25.2 (5 year average)
<i>Helmet not worn</i>	346 (2.8%)	133 (1.9%)	1(0.8%)
Not known	1,002	593	8
	NSW	Sydney Region	Georges River LGA
All Pedal Cyclist Casualties	868 (5 year average)	555 (5 year average)	6.6 (5 year average)
Helmet not worn	558 (12.9%)	303 (10.9%)	4 (12.1%)
Not Known	595	407	3

8. SUMMARY

- **Speed** – Speed is considered to be an issue within Georges River LGA as it is the leading contributing factor to crashes within the LGA for the past 5 years (2013-2017). Speeding as contributing factor has dropped in 2017 (8.9%) compared to 2016 (9.5%) but is still higher than the Sydney region at (8.8%) but only slightly. Speed as a contributing factor is still a relatively high for Georges River, indicating that speed awareness is an issue that needs to address within the LGA. The high percentage also indicating the attention needed to target local roads and there speed limits as well as high pedestrian areas and school areas.
- **Pedestrian** – In Georges River pedestrian casualties percentage for 2017 is at (12.3%) this being higher than 2016 at (11.3%). Pedestrian casualties within Georges River LGA have slowly increased over the five year period of (2013-2017) and are the highest it has been for the past five years. Georges River LGA pedestrian casualties are significantly higher than NSW (6.1%) and Sydney Region (8.0%) indicating the need to target this area due to high rates of casualties within the LGA especially in the age groups 0-16 and 70+. It can be noted that there is education and work that needs to be done within Georges River LGA to help improve the casualty rates. Working together with schools in the area will help address child pedestrian safety, as well as working closely with the community through workshops to help educate and improve pedestrian safety. Pedestrian casualties are more likely to occur in high dense areas such as shopping malls, train stations and bus interchanges/bus stops. This highlights the importance of pedestrian safety in high dense area due to the large numbers of people passing through and the attraction to these areas.
- **Motor Vehicle Driver** – For the 5 year period Georges River LGA average percentage of casualties in regards to motor vehicle drivers is (66.2%) this being significantly high, although it the 2017 average is (63.1%) being lower than the five year average. This high percentage indicating that motor vehicle drivers are the leading road user when it comes to casualties. It can be noted that education through workshops and increase the knowledge of the community of appropriate road safety behavior.
- **Motor Vehicle Passenger** – Motor Vehicle passenger casualties make up (14.5%) of the casualties and of this (2.7%) had restraints fitted but did not wear them, this indicating that passenger safety to be an issue in which needs to be targeted. This showing the importance of using restraints and using them correctly, to get this information across it could be done through workshops within the community and campaigns targeting this issue. It is important to highlight that motor vehicle drivers are responsible for ensuring passengers are wearing restraints and safe in the vehicle.
- **Alcohol** – Alcohol is considered to be an issue within Georges River LGA as it is a contributing factor to all motor vehicle operators' casualties. Alcohol as a contributing factor has increased in 2017 to (4.8%) from 2016 (2.1%) this a significant increase as well as being higher than the Sydney Region average (3.9%). This indicating the need to target alcohol as contributing factor within the LGA and educate people about the risks that come with drink driving.

What issues need to be addressed in 2019/2020?

- Speed
- Alcohol
- Pedestrians
- Driver Behavior

9. SOURCES

- ABS LGA Profile
- RMS Crash Data