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1 Introduction

1.1 Overview

1.1.1 Background

Area Profiles from Agilysis provide overviews of road safety performance within specific local areas. This profile delivers detailed analysis and insight on all injury collisions reported to the police in Wokingham, as well as casualties and drivers involved in collisions anywhere in Britain who reside in the Wokingham area.

1.1.2 Aims and Objectives

The aim of this document is to provide a comprehensive profile of road safety issues affecting both Wokingham's **road network** and Wokingham's **residents**, primarily using STATS19 collision data¹ and Mosaic socio-demographic classification. Annual trends are presented and analysed for key road user groups, predominantly based on data from the last five full years of available statistics but referring to older figures where appropriate.

RSA's analysis tool MAST Online has also been used to investigate trends for Wokingham's residents involved in road collisions anywhere in the country, including socio-demographic profiling of casualties and drivers. MAST has been used to allow comparison of Wokingham's key road safety issues with those of comparator regions and national figures. The aim is to allow Wokingham to assess its progress alongside other areas, and work together with neighbours to address common issues.

1.1.3 Analytical Techniques

The analytical techniques employed throughout this Area Profile are detailed in the **Analytical Techniques** section on page 59. Please refer to this section for information on the terminology and data sources used as well to understand methodologies utilised and the structure and scope of the report.

¹ For further information go to https://www.gov.uk/government/publications/road-accidents-and-safety-statistics-guidance

1.2 Profile Configuration

1.2.1 Structure

The Area Profile has been divided in to separate analysis of key road user groups. The aim is to allow each section to be used independently if required.

Section 2, starting on page 9, explores **Resident Risk**. Resident risk analysis includes examining all Wokingham's resident casualties and resident motor vehicle users in terms of rates; comparisons with other relevant authorities; residency by small area; trends and socio-demographic analysis. Specific road user groups will also be analysed against these measures. The focus of this section is on how the people of Wokingham are involved in collisions, rather than what happens on local roads.

Section 3, starting on page 39, provides analysis of **Road Network Risk**. It also examines rates; comparisons; location by small area; and trends on Wokingham's roads. Breakdowns by type of road are also included in this section.

Section 4, starting on page 59, includes **Appendices** detailing all Mosaic Types and the profile and distribution of specific Mosaic Types relevant to Wokingham. It also contains data tables for all analysis referred to in this Area Profile.

1.2.2 Scope

All figures included in this report are based on STATS 19 collision data. The residents section covers casualties and motor vehicle users involved in collisions who are residents of Wokingham, regardless of where in Britain the collision occurred. Resident analysis in this profile is based on the national STATS19 dataset as provided to RSA by the Department for Transport for publication in MAST Online over the five-year period between 2013 and 2017 inclusive. For a more complete explanation, please refer to 4.1.1.1 on methodology for calculating resident risk.

In contrast, the road network section covers collisions which occurred on Wokingham's roads, regardless of where those involved reside. Network analysis is also based on the national STATS19 dataset as provided to RSA by the Department for Transport for publication in MAST Online over the five-year period between 2013 and 2017 inclusive. For a more complete explanation, please refer to 4.1.1.2 on methodology for calculating network collision risk.



1.3 Underreporting in 2017 and gap analysis

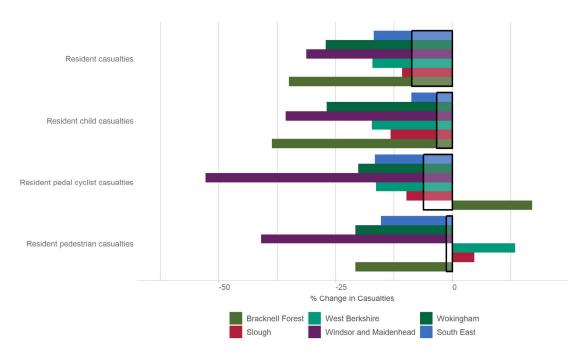
1.3.1 Summary

During 2017, a considerable number of STATS19 records for Berkshire were not correctly recorded, and so are missing from the 2017 data set. This has had an impact on the quality of the data and analysis included in this Area Profile, in particular the analyses of various trends. An analysis has been undertaken to quantify the extent of this under reporting across various statistics used in this report. Annual averages of data taken from 2014-2016 were compared to data from 2017 for each authority in Safer Roads Berkshire, and these changes were compared to the trends observed nationally. These comparisons are explored in detail in the following sections to ascertain which statistics and authorities are most affected and to what extent.

It is evident from the following analyses that Bracknell Forest and Windsor & Maidenhead were the most affected by underreporting. Slough appears to be the least affected by issued with reporting. There is also disparity in the extent to which different road user groups are affected. Child casualties appear to be more affected, as are pedestrian casualties in some authorities. Pedal cyclist casualties, in particular those in or from Bracknell Forest, are less affected.

1.3.2 Resident Casualties

Figure 1 - Percentage changes for 2017 in resident casualty numbers compared to reductions seen nationally and regionally



Average annual resident casualty numbers for 2014-2016 were compared to reported casualty numbers for 2017. Figure 1 above illustrates these changes for the five authorities of Safer Roads Berkshire, with the black outline demonstrating the reductions seen nationally, for comparison. Bracknell Forest and Windsor & Maidenhead saw the greatest disparity between their casualty reductions and those of the nation as a whole, with reductions of 26% and 23% below the observed national trend respectively. This is followed closely by Wokingham with a reduction of 18% below the national trend. Slough and West Berkshire were affected to a lesser extent, with respective reductions of 2% and 8% below the national trend.

Figure 2 - Percentage changes in 2017 (Wokingham compared to national and regional)

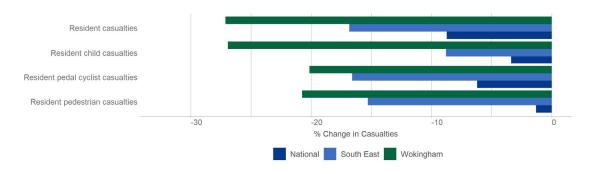
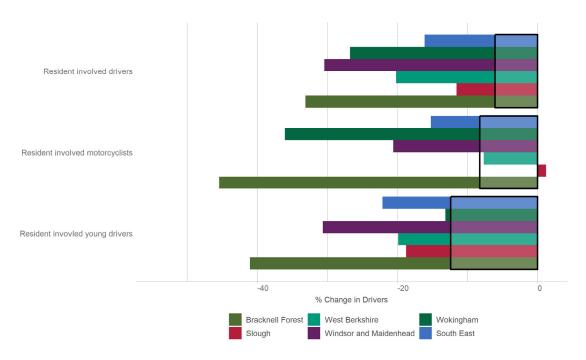


Figure 2 illustrates that for Wokingham, annual resident pedestrian casualties dropped by 21% between 2014-2016 and 2017, with the nationally observed reduction at only 1%. Annual resident pedal cyclist casualties dropped by 20% between the two periods, with only a 6% reduction seen nationally. Resident child casualties decreased by 27%, whilst the national trend was only a 3% decrease.

1.3.3 Resident Involved Drivers

Figure 3 – Percentage change in collision involved resident drivers compared to reductions seen nationally and regionally





Average annual numbers of collision involved resident drivers for 2014-2016 were compared to reported driver involvement numbers for 2017. Figure 3 above illustrates these changes for the five authorities of Safer Roads Berkshire, with the black outline demonstrating the reductions seen nationally, for comparison. Bracknell Forest saw the greatest disparity compared to reductions in driver involvement for the nation as a whole, with a reduction of 27% below the observed national trend, followed closely by Windsor & Maidenhead and Wokingham with respective reduction of 24% and 21% below the national trend. Slough and West Berkshire were affected to a lesser extent, with respective reductions of 6% and 14% below the national trend.

Figure 4 - Percentage changes in 2017 (Wokingham compared to national and regional)

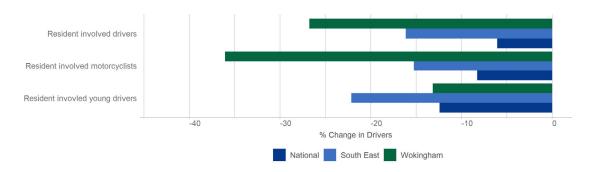
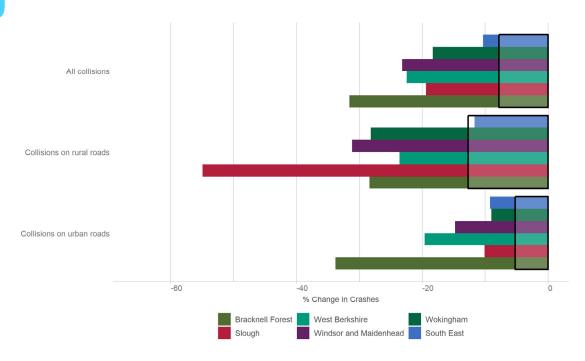


Figure 4 above illustrates that, for Wokingham, annual involved resident motorcyclists dropped by 36% between 2014-2016 and 2017, despite the nationally observed reduction being only 8%. Annual involved resident young drivers dropped by 13% between these two periods, in line with the 12% reduction seen nationally.

1.3.4 Collisions

Figure 5 - Percentage change in collisions on Berkshire's roads compared to reductions seen nationally and regionally



Average annual numbers of collisions in each authority for 2014-2016 were compared to reported collision numbers for 2017. Figure 5 above illustrates these changes for the five authorities of Safer Roads Berkshire, with the black outline demonstrating the reductions seen nationally, for comparison. Bracknell Forest saw the greatest disparity compared against casualty reduction for the nation as a whole, with a reduction of 24% below the observed national trend. The remaining four authorities were affected to a lesser extent, with reductions of between 11% and 15% below the national trend.

Figure 6 - Percentage changes of collisions in 2017 (Wokingham road network compared to national and regional)

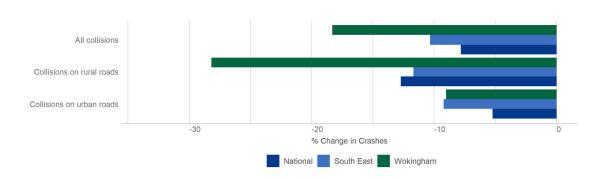




Figure 6 illustrates that, in Wokingham, annual collisions on rural roads reduced by 28% between 2014-2016 and 2017, despite a national reduction of only 13%. Annual collisions on urban roads dropped by 9% between these two periods, in line with the overall reduction seen in the South East, with a nationally observed reduction of only 5%.



2 Resident Risk

For information about the provenance and scope of data included in this section, please refer to **Scope** on page 2. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.1 on page 59.

2.1 Resident Casualties

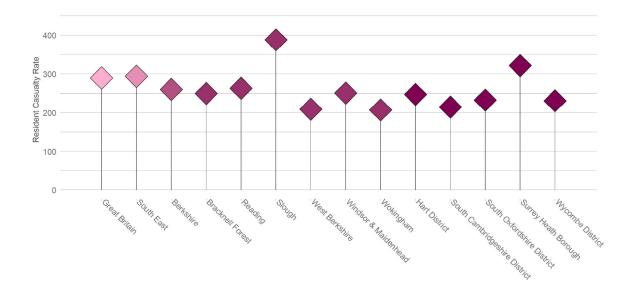
This section refers to casualties who were residents of Wokingham. For information about casualties on Wokingham's roads, please refer to 3.1.4 on page 43.

2.1.1 All Resident Casualties

2.1.1.1 Rates

Figure 7 shows Wokingham's resident casualty rate compared to the other Berkshire authorities, most similar comparator authorities and the national and regional rates. The resident casualty rate for Wokingham is 207.5 per 100,000 population.

Figure 7 - Annual average resident casualties (2013-2017) per 100,000 population



2.1.1.2 Comparisons

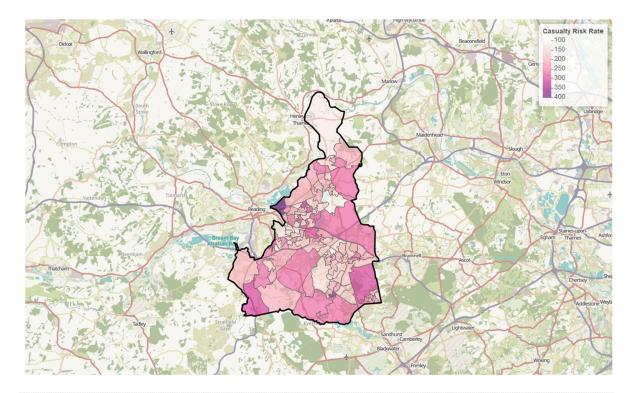
Wokingham's resident casualty rate is 28% below the national rate, 29% below the regional rate and 20% below the overall Berkshire rate. Within Berkshire, Wokingham has a similar resident casualty rate to that of West Berkshire,

lower than the rates of the other authorities of Berkshire. Wokingham has a similar resident casualty rate to the comparator authority of South Cambridgeshire. It is lower than Hart, South Oxfordshire, Surrey and Wycombe.

Internal

Figure 8 shows the home location of Wokingham's resident casualties by LSOA. The thematic map is coloured by resident casualties per year per population of lower layer super output area (LSOA). Higher resident casualty rates are scattered throughout Wokingham in areas such as the north of Earley, Finchamstead, Riseley, Gardeners Green, and Woodley. Lower rates are in Whistley Green, Remenham Hill, and in parts of Woosehill.

Figure 8 - Resident casualties home location by LSOA. Casualties per year per 100,000 population (2013-2017)

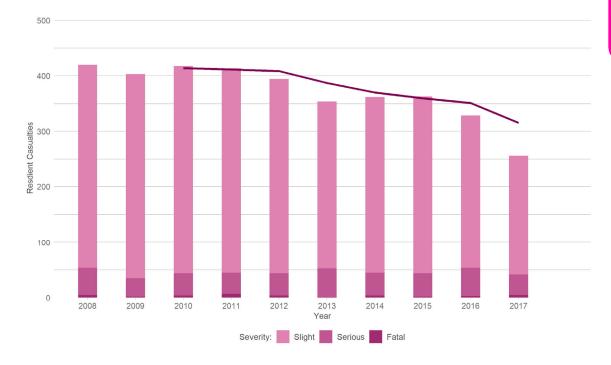


2.1.1.3 Trends

Figure 9 shows Wokingham resident casualty numbers by severity. This includes Wokingham residents injured anywhere in the country. Also shown is a 3-year moving average trend line. There has been a general downward trend of casualty numbers over the past decade, with a notable drop in 2017. In 2017 there were 256 resident casualties, down from 329 in 2016. Over the past five years, 14% of Wokingham's resident casualties were either killed or seriously injured.



Figure 9 - Wokingham resident casualties, by year (2008-2017)



Resident Casualties occurring in other areas

Almost half of Wokingham residents were involved in collisions on the roads of Wokingham. Forty-nine percent of Wokingham's resident casualties between 2013 and 2017 were injured in Wokingham. This is below the national average with 63% of residents involved in collisions in their home highway authority. Of the remaining 51% of Wokingham resident casualties, the majority are involved in collisions in nearby authorities including Reading (12%), Bracknell Forest (7%), Hampshire (5%), Windsor & Maidenhead (4%), and Surrey (4%).

2.1.1.4 Socio Demographic Analysis

Age

Figure 10 shows resident casualties by age group. The age group with the most resident casualties is the 16-24 group, followed by the 25-34 age group. The fewest resident casualties are aged 65 and over and aged under 16. Figure 11 shows resident casualty numbers by age group indexed by the population of those age groups in Wokingham. There is also a national index value for comparison. The chart shows that 16-24 year olds and 25-34 year olds are over-represented as casualties when indexing based on population. It also shows that Wokingham's 16-24 year olds and 25-34 year olds are over-represented compared to these age groups nationally. Residents in the and 35-44 age group are proportionately represented when taking population in to account, despite this age group being over-represented for the country as a whole. Residents aged under 16 and aged 55 and over are at a lower risk of being casualties, although risk for the latter age group is a little higher than the national norm.

Figure 10 - Wokingham resident casualties by age group (2013-2017)

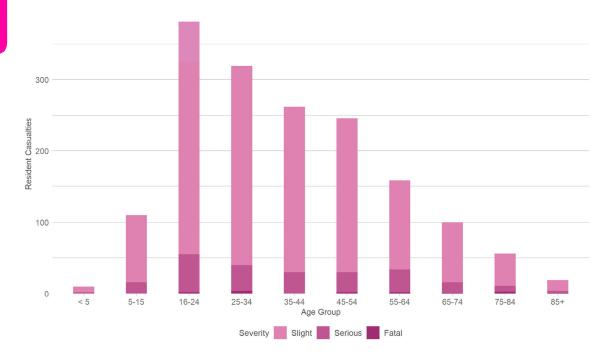
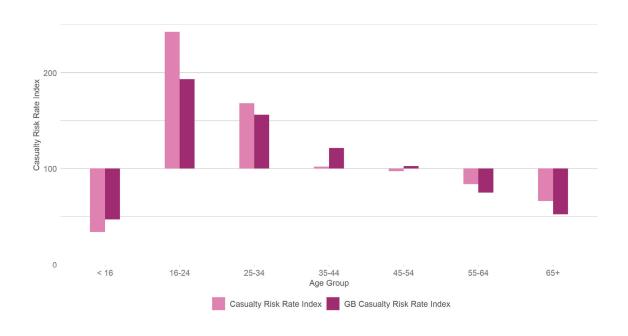


Figure 11 - Resident casualties by age group, indexed by population (2013-2017)





Segmentation

Analysis of the Mosaic communities in which Wokingham's resident casualties live provides an insight into those injured in collisions. For an explanation of Mosaic Public Sector and how to understand the following chart, please refer to 4.1.1.1 on page 59. For more information on Mosaic Public Sector, please refer to 4.2 on page 63.

Figure 12 - Wokingham resident casualties by Mosaic Type (2013-2017)

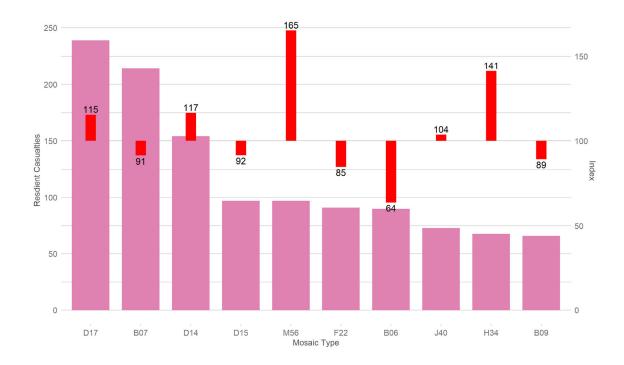


Figure 12 shows Wokingham's resident casualties by the Mosaic Type of the postcode they live in. The red bars show the index value based on the population of those Types living in Wokingham. The highest numbers of resident casualties come from *Well-qualified older singles with incomes from successful professional careers living in good quality housing* (Type D17). This Type is also over-represented based on population.

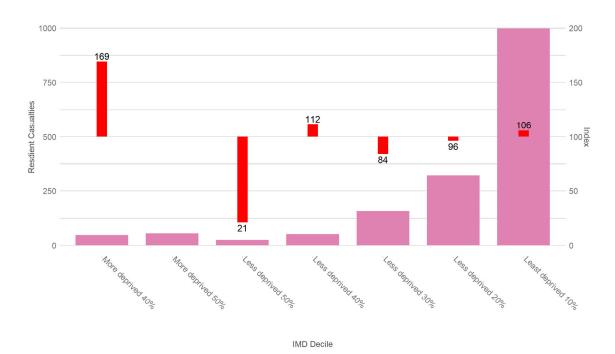
High-achieving families living fast-track lives, advancing careers, finances and their school-age children's development (Type B07) also have higher numbers of casualties, but are under-represented based on the population of this Type living in Wokingham. Affluent families with growing children living in upmarket housing in city environs (Type D14) have the next highest level of resident casualties, and are over-represented based on population.

Busy couples in modern detached homes balancing the demands of school-age children and careers (Type D15), Elders now mostly living alone in comfortable suburban homes on final salary pensions (Type F22) and Well-off families in upmarket suburban homes where grown-up children benefit from continued financial support (Type B06) contain fewer casualties and are under-represented; while Stable families with children renting better quality homes from social landlords (Type M56) contain a lower number of resident casualties but are considerably over-represented when population is taken in to account.

Further information on the characteristics of some of these Mosaic Types and a thematic map showing areas where these communities live can be found in 4.2.2 on page 65.

Figure 13 shows resident casualties by the IMD of the LSOA in which they reside. The chart shows that the largest numbers of resident casualties live in the least deprived 10% decile communities of Wokingham, however given the number of people living in these communities, residents are appropriately represented (shown by an index value of 106). There are no areas of Wokingham which are classified as the most deprived 30% of the country.

Figure 13 - Resident casualties by Index of Multiple Deprivation (2013-2017)





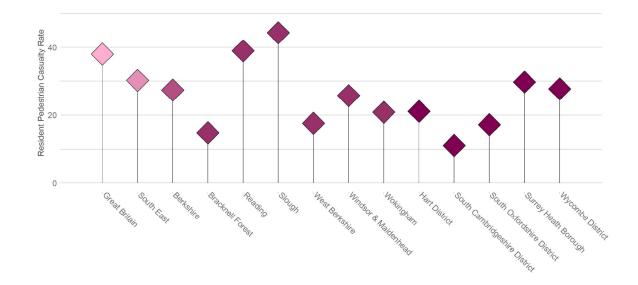
2.1.2 Resident Pedestrian Casualties

This section refers to pedestrian casualties who are residents of Wokingham. For information about pedestrian casualties on Wokingham's roads, please refer to 3.1.4.3 on page 44. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.1 on page 59.

2.1.2.1 Rates

Figure 14 shows Wokingham's pedestrian resident casualty rate compared to the other Berkshire authorities, most similar comparator authorities and the national and regional rates. Wokingham has a rate of 20.8 pedestrian casualties per year (2013-2017) per 100,000 population.

Figure 14 - Annual average resident pedestrian casualties per 100,000 population (2013-2017)



2.1.2.2 Comparisons

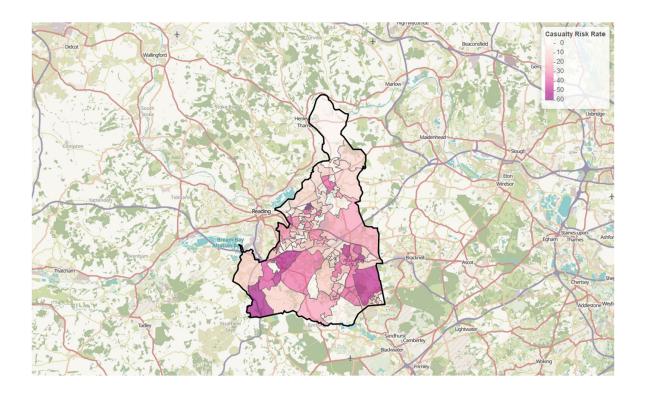
Wokingham's resident pedestrian casualty rate is 45% lower than the national rate. It is lower than both the South East rate (31% lower) and the overall Berkshire rate (24% lower). Out of the six Berkshire authorities, Wokingham has the third lowest rate, above Bracknell Forest and West Berkshire. Compared to the most similar authorities, Wokingham has a higher resident pedestrian casualty rate than South Cambridgeshire and South Oxfordshire, but is lower than that of Hart, Surrey Heath and Wycombe.

Internal

Figure 15 shows Wokingham's resident pedestrian casualties by lower layer super output area (LSOA). The map is colour coded by the number of pedestrian casualties resident in that area per year (2013-2017) per 100,000

population. There are higher rates of pedestrian casualties in and around Wokingham Town, Woodley, Shinfield, and Riseley.

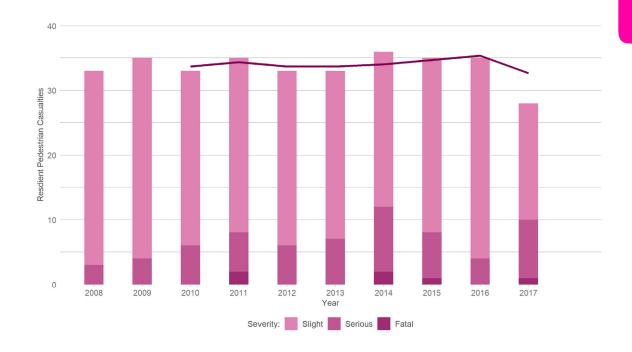
Figure 15 - Wokingham resident pedestrian casualties by LSOA. Average annual casualties (2013-2017) per 100,000 population



2.1.2.3 Trends

Resident pedestrian casualty numbers from Wokingham have remained generally constant over the past decade, with a drop in reported pedestrian casualties of 20% from 2016 to 2017, as shown in Figure 16. In 2017 there were 28 pedestrian casualties, including 9 that were seriously injured, compared to 35 in 2008. There was a pedestrian fatality in 2017. In the past five-year period, 25% of resident pedestrian casualties were either killed or seriously injured.

Figure 16 - Wokingham's resident pedestrian casualties by year (2008-2017)



Resident Pedestrian Casualties occurring in other areas

Between 2013 and 2017, 72% of Wokingham's resident pedestrian casualties were involved in collisions on Wokingham's roads. Outside of Wokingham, 12% of resident pedestrian casualties were injured in Reading, 2% were in Bracknell Forest, and a further 2% were in Hampshire.

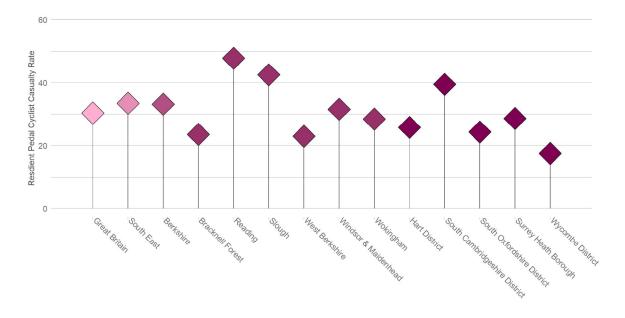
2.1.3 Resident Pedal Cyclist Casualties

This section refers to all pedal cyclist casualties who are residents of Wokingham. For information about all pedal cycle casualties on Wokingham's roads, please refer to 3.1.4.4 on page 46. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.1 on page 59.

2.1.3.1 Rates

Figure 17 shows resident pedal cycle user casualty rates for Wokingham, Berkshire highway authorities and Wokingham's comparator authorities. Also included for comparison are the national rate and the South East rate.

Figure 17 - Annual average resident pedal cycle user casualties (2013-2017) per 100,000 population



2.1.3.2 Comparisons

Wokingham's resident pedal cycle user casualty rate of 28.4 per year per 100,000 population is in line with the national average. It is 15% lower than the South East rate and 14% lower than the overall Berkshire rate. Within Berkshire, Wokingham has the third lowest resident child casualty rate, above Bracknell Forest and West Berkshire. Wokingham's resident pedal cycle user rate is similar to the comparator authority of Surrey Heath. It is higher than Hart, South Oxfordshire and Wycombe, but is lower than South Cambridgeshire.

Internal

Figure 18 shows Wokingham's resident pedal cycle user casualties by home LSOA. The map is colour coded by the rate of casualties from that LSOA per year per 100,000 population. Higher rates of resident pedal cycle user casualties are found Woodley, Hurst, and Wargrave.

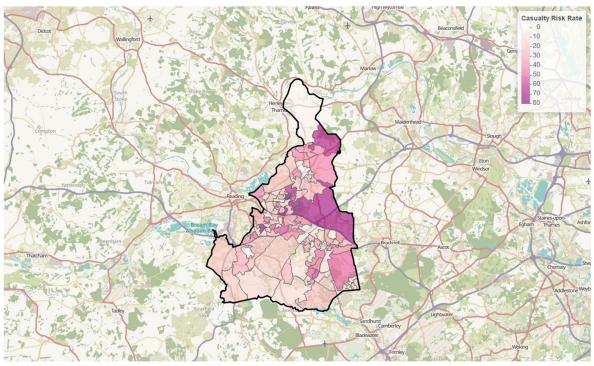


Figure 18 - Resident pedal cycle user casualties by LSOA. Annual average casualties (2013-2017) per 100,000 population

2.1.3.3 Trends

Figure 19 shows Wokingham's resident pedal cycle casualty numbers since 2008, by severity. There has been fluctuation in the number of resident pedal cycle casualties over the last decade, with a downward trend since 2012 despite a peak in 2016. In 2017 there were 37 pedal cycle user casualties from Wokingham, and one fatality. In the period 2013-2017, 19% of pedal cycle user casualties were either killed or seriously injured.

Figure 19 - Resident pedal cycle user casualties by year (2008-2017)





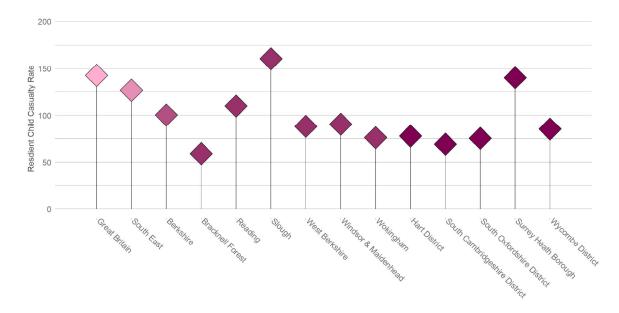
2.1.4 Child Resident Casualties

This section refers to all child casualties who are residents of Wokingham. For information about all child casualties on Wokingham's roads, please refer to 3.1.4.2 on page 43. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.1 on page 59.

2.1.4.1 Rates

Figure 20 shows resident child casualty rates for Wokingham, other Berkshire authorities and most similar comparator authorities. The rate is the annual average number of child resident casualties (2013-2017) per 100,000 population aged under 16.





2.1.4.2 Comparisons

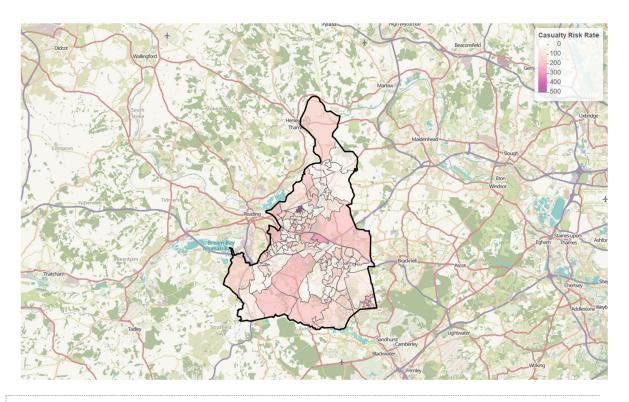
Wokingham's child resident casualty rate of 76.1 child casualties per year per 100,000 population (aged 0-15) is lower than the national rate (47% lower). It is also 40% lower than the South East rate and 24% lower than the overall Berkshire rate. Within Berkshire, Wokingham has the second lowest rate, above Bracknell Forest. Wokingham's child resident casualty rate is in line with that of the most similar authorities of Hart, South Cambridgeshire, South Oxfordshire and Wycombe, all of which have a considerably lower child resident casualty rate than Surry Heath.

Internal

Figure 21 shows Wokingham's resident child casualties by LSOA. The thematic map is colour coded by the rate of child resident casualties per year per 100,000 population of under 16 year olds. The data are from the period 2013

to 2017. Child resident casualty rates are highest around Butts Hill Road in Woodley. There are also high resident child casualty rates in areas such as Crowthorne, Winnersh and Earley.

Figure 21 – Child resident casualties by LSOA (2013-2017). Annual average child casualties per 100,000 child population

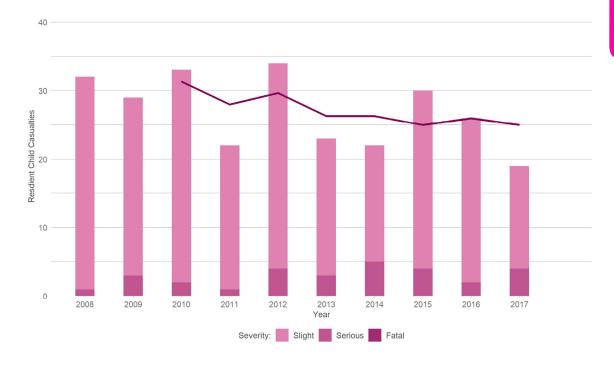


2.1.4.3 Trends

Figure 22 shows child resident casualties since 2008, by severity. Casualty numbers have fluctuated over recent years, although casualty numbers have been falling since 2015. There were 19 child casualties from Wokingham in 2017, including 4 seriously injured casualties. In the past five-year period (2013-2017) 15% of child casualties were seriously injured. There have been no child fatalities from Wokingham in the last decade.



Figure 22 - Child resident casualties by year 2008-2017



Child Resident Casualties occurring in other areas

Seventy-one percent of Wokingham's child resident casualties were injured on Wokingham's roads, with the rest injured mainly in nearby authorities including Bracknell Forest (8%), Reading (7%), Hampshire (4%), and Windsor & Maidenhead (3%).

2.2 Resident Motor Vehicle Users

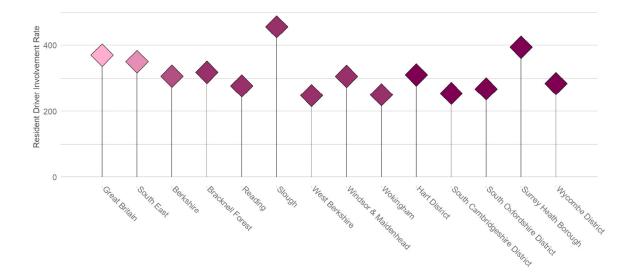
2.2.1 All Resident Drivers and Riders involved in Collisions

This section refers to all drivers and riders involved in collisions and who are residents of Wokingham. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.1 on page 59. Only adult drivers (aged 16 and over) of motorised vehicles are included in this section.

2.2.1.1 Rates

Figure 23 shows resident driver rates for Wokingham, comparator authorities and other Berkshire authorities. The rate is the annual average number of resident drivers involved in injury collisions per 100,000 adult population (aged 16 and over).

Figure 23 - Annual average resident drivers (2013-2017) per 100,000 adult population



2.2.1.2 Comparisons

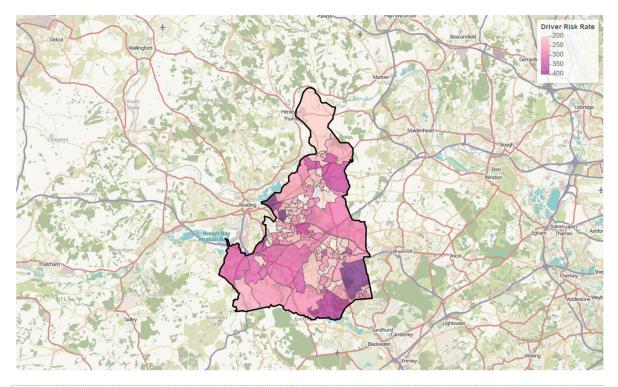
Wokingham's resident driver rate of 250.4 drivers per year per 100,000 adult population is 32% lower than the national rate. It is 29% lower than the South East rate and 18% lower than the overall Berkshire rate. Wokingham has a similar resident driver rate to West Berkshire, both of which are lower than the other Berkshire authorities. Surrey Heath has the highest rate of all the comparator authorities. Wokingham has a lower rate than Surrey, as well as all the other most similar comparator authorities.



Internal

Figure 24 shows Wokingham's resident collision involved drivers' home location by LSOA. The thematic map is colour coded by the driver rate, which is the average annual number of resident drivers per 100,000 adult population (aged 16 and over). Data are from the period 2013-2017. Higher rates of resident drivers involved in collisions are found around Earley, parts of Woodley, Gardeners Green, and The Ridges.

Figure 24 - Annual average resident drivers (2013-2017) per 100,000 adult population, by LSOA



2.2.1.3 Trends

Figure 25 shows Wokingham's annual resident motor vehicle driver numbers by severity. There has been a gradual reduction in numbers over the past decade. In 2017 there were 311 drivers from Wokingham involved in collisions, including 45 in collisions where there was a killed or seriously injured casualty. The total driver collision involvement number is a 41% reduction from 2008. In the most recent five-year period (2013-2017) 16% of Wokingham's resident drivers have been involved in a collision resulting in a killed or seriously injured casualty.

Figure 25 - Wokingham's resident drivers, by year (2008-2017)



Resident Driver crash involvement in other areas

Forty-three percent of Wokingham's resident drivers are involved in collisions on Wokingham's roads. Of the other authorities, 13% of resident drivers are involved in collisions in Reading, 6% in Bracknell Forest and 6% in Surrey.

2.2.1.4 Socio Demographic Analysis

Segmentation

Analysis of the Mosaic communities in which Wokingham's resident drivers and riders live provides an insight into those involved in collisions. For an explanation of Mosaic Public Sector and how to understand the following chart, please refer to 4.1.1.1 on page 59.

Figure 26 shows resident drivers by Mosaic Type. The red bars show the index value when resident driver numbers are indexed by the population of those Types.

As with the resident casualty Mosaic analysis, the highest driver numbers come from communities of *Well-qualified* older singles with incomes from successful professional careers living in good quality housing (Type D17). This Type is also over-represented when taking population into account. *High-achieving families living fast-track lives,* advancing careers, finances and their school-age children's development (Type B07) have the second highest level of driver involvement, but are proportionally represented based on population.

Affluent families with growing children living in upmarket housing in city environs (Type D14) are involved in a high number of collisions as drivers, and are over-represented based on population.

Figure 26 - Wokingham resident drivers by Mosaic Type (2013-2017)

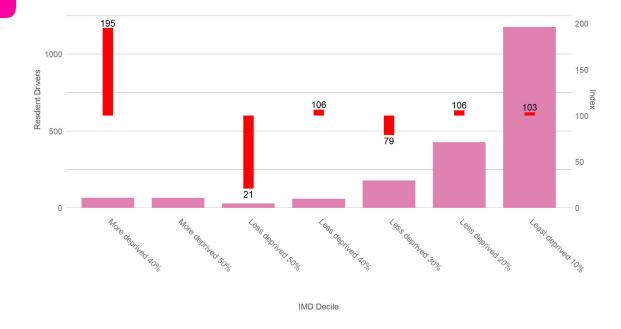


More information on the characteristics of the communities from some of these Mosaic Types and a thematic map showing the areas where they live can be found in 4.2.2 on page 65.

Deprivation

Figure 27 shows Wokingham's resident drivers by Index of Multiple Deprivation (IMD). The highest number of drivers are from the least deprived communities. These communities are generally represented as expected when the population of Wokingham is taken in to account, as shown by the red bars. Drivers from the more deprived communities are the most over-represented in collisions, but have much lower levels of driver invovlement.

Figure 27 - Resident drivers by IMD (2013-2017)





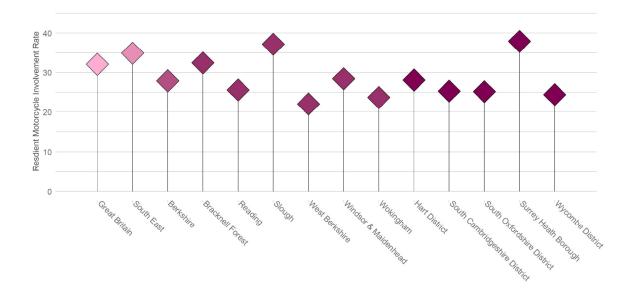
2.2.2 Resident Motorcyclists involved in Collisions

This section refers to motorcyclists involved in collisions and who are residents of Wokingham. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.1 on page 59.

2.2.2.1 Rates

Figure 28 shows the resident motorcycle rider collision involvement rate for Wokingham, Berkshire authorities and comparator authorities. National and regional rates are also included for comparison. The rate is the annual average number of motorcycle riders (2013-2017) per 100,000 adult population (aged 16 and over).

Figure 28 - Annual average resident motorcycle riders (2013-2017) per 100,000 adult population



2.2.2.2 Comparisons

Wokingham's resident motorcycle rider rate of 23.7 riders per year per 100,000 adult population is 26% below the national rate. It is below the South East rate (32% below) and the overall Berkshire rate (15% below). Within Berkshire, Wokingham has a similar resident motorcycle rider ride to Reading and West Berkshire, which is lower than the other Berkshire authorities. Wokingham also has the lowest rate of the most similar comparator authorities, which is similar to the rates of South Cambridgeshire, South Oxfordshire, and Wycombe.

Internal

Figure 29 shows Wokingham's collision involved motorcycle riders by home MSOA. The rate is the annual average number of riders per 100,000 adult population (aged 16 and over). The rates of resident motorcycle riders involved in collisions are higher around Winnersh, Wokingham Town, Earley, Arborfield, and Swallowfield. Lower rates are found around Sonning, Hurst, Wargrave, Sindlesham, and Barkham.

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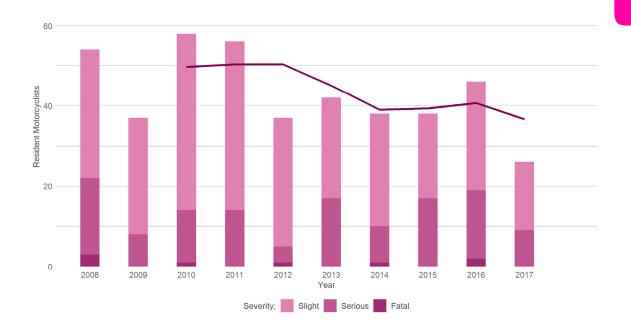
Figure 29 – Annual average resident motorcycle riders per 100,000 adult population, by MSOA (2013-2017)

2.2.2.3 Trends

Shown in Figure 30 are Wokingham's annual resident motorcycle rider numbers by severity. The number of resident motorcycle riders involved in collisions has fluctuated over the past decade, with an overall downward trend. Over the most recent five-year period (2013-2017) 38% of Wokingham's resident motorcycle riders were involved in injury collisions where one or more of the casualties was killed or seriously injured. This represents a high KSI ratio compared to other road user groups.



Figure 30 - Wokingham resident motorcycle riders, by year (2008-2017)



Resident Motorcyclist crash involvement in other areas

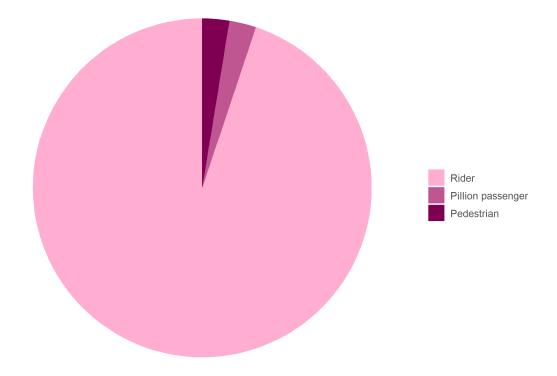
Forty-two percent of Wokingham's resident motorcycle riders were involved in collisions on Wokingham's roads. Fifteen percent were involved in collisions in Reading, 9% in Bracknell Forest, 6% in Surrey and 4% in Windsor & Maidenhead.

2.2.2.4 Related Casualties

Passenger and pedestrian casualties

The related casualties of Wokingham's resident motorcycle riders have been analysed in Figure 31. Related casualties can be the motorcycle rider themselves; an injured pillion passenger; or a pedestrian struck by the motorcycle rider. Injured drivers and passengers of other vehicles are not included in the analysis. For Wokingham's resident motorcycle riders, 95% of the casualties were the riders themselves. A further 3% were their pillion passengers and 3% were pedestrians who were injured after the motorcyclist hit them. It should be noted that the passenger and pedestrian casualties related to Wokingham's resident motorcycle riders could live anywhere in the country and have been injured anywhere.

Figure 31 – Wokingham's resident motorcycle riders - related casualties (2013-2017)





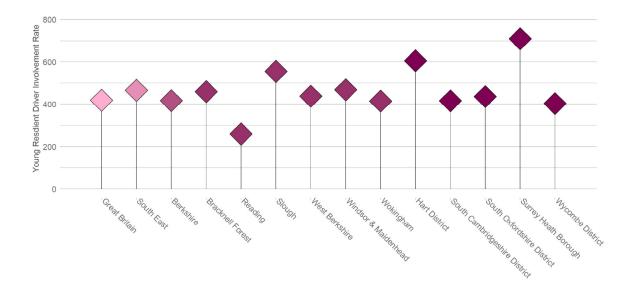
2.2.3 Young Resident Drivers involved in Collisions

This section refers to young drivers involved in collisions and who are residents of Wokingham. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.1 on page 59. Young drivers of all motor vehicles except motorcycles are included: motorcycle riders are not included as they are covered in section 2.2.2.

2.2.3.1 Rates

Figure 32 shows young resident drivers involved in injury collisions per year per 100,000 16-24 year old population. The data are from the period 2013-2017.

Figure 32 - Annual average young resident drivers (2013-2017) per 100,000 population (16-24 year olds)



2.2.3.2 Comparisons

Wokingham's young resident driver rate of 414.4 per year per 100,000 population of 16-24 year olds is similar to the national rate. It is lower than the South East rate (11% lower) but in line with the Berkshire rate. Within Berkshire, Wokingham has the second lowest young resident driver rate, above Reading. It is similar to the rates for Bracknell Forest and West Berkshire. Wokingham has a lower rate than all of the most similar comparator authorities, in line with South Cambridgeshire, South Oxfordshire, and Wycombe.

Internal

Figure 33 shows Wokingham's young resident collision involved drivers by home MSOA. The thematic map is colour coded by the rate of young drivers per year per 16-24 year old population. Higher young driver rates are found in

and around Wokingham Town, Remenham Hill, Three Mile Cross, Spencers Wood, Woodley, and Sindlesham. Lower rates are found in the areas around Woodley, Hurst, Earley, and Charvil.

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Total Property

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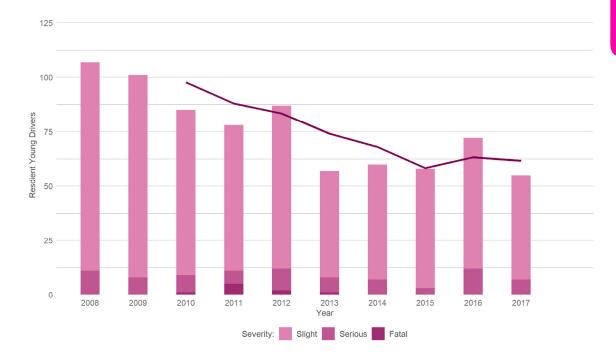
Figure 33 – Annual average young resident motor vehicle drivers per 100,000 16-24 year old population by MSOA (2013-2017)

2.2.3.3 Trends

Figure 34 shows Wokingham's annual resident young driver numbers, by severity, over the period 2008-2017. Since 2008 there has been a downward trend, although this has stalled in recent years. In 2017 there were 55 young drivers from Wokingham involved in injury collisions, a 49% reduction from 2008 and a 24% reduction from 2016. In 2017, 7 Wokingham resident young drivers were involved in collisions where there was a seriously injured casualty.



Figure 34 - Wokingham resident young driver collision involvement (2008-2017)



Young Resident Driver crash involvement in other areas

Forty-four percent of Wokingham's young resident drivers are involved in collisions on Wokingham's roads. Other authorities where Wokingham's young drivers are involved in collisions include Reading (14%), Hampshire (7%), Bracknell Forest (5%) and Surrey (5%).

2.2.3.4 Socio Demographic Analysis

Segmentation

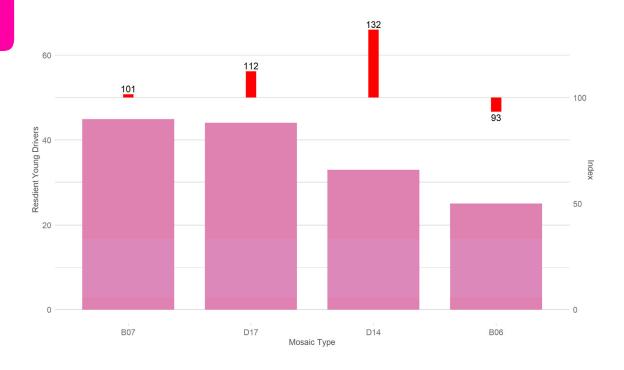
Analysis of the Mosaic communities in which Wokingham's young resident drivers live provides an insight into those involved in collisions. For an explanation of Mosaic Public Sector and how to understand the following chart, please refer to 4.1.1.1 on page 59.

Figure 35 shows Wokingham's young resident drivers by Mosaic Type.

The highest number of young drivers are from *High-achieving families living fast-track lives, advancing careers, finances and their school-age children's development* (Type B07), although this Type is represented in line with the population of that Type. *Well-qualified older singles with incomes from successful professional careers living in good quality housing* (Type D17) and *Affluent families with growing children living in upmarket housing in city environs* (Type D14) have high numbers of involved young drivers are over-represented when taking in to account the population of that group.

Well-off families in upmarket suburban homes where grown-up children benefit from continued financial support (Type B06) have a lower number of young drivers involved in injury collisions and are under-represented, based on population.

Figure 35 - Wokingham's young resident drivers by Mosaic Group (2013-2017)



Deprivation

Figure 36 - Wokingham young resident drivers by IMD (2013-2017)

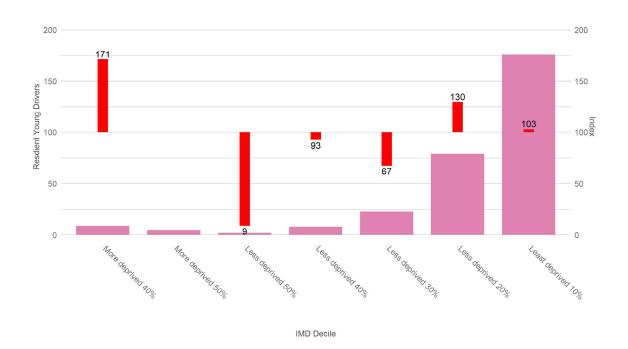




Figure 36 shows young drivers by IMD. The red bars represent the index value showing whether young drivers are over or under-represented based on the population of 16-24 year olds in each community. Higher young driver numbers come from the most affluent areas, and young drivers from these communities are over-represented relative to the population of Wokingham, in particular those from the less deprived 20% decile. The more deprived 50% and 40% deciles are over-represented, but represent very small numbers of resident involved young drivers.

2.2.3.5 Related Casualties

Passenger and pedestrian casualties

The related casualties of Wokingham's young resident drivers have been analysed. Related casualties can be the young driver themselves; an injured passenger; or a pedestrian struck by the young driver's vehicle. Consequently, injured drivers and passengers of other vehicles are not included in the analysis. For Wokingham's young resident drivers, 68% of the casualties were the drivers themselves. A further 24% were their passengers and 9% were pedestrians who were injured after the young driver's vehicle hit them. It should be noted that the related casualties of Wokingham's young resident drivers could live anywhere in the country and have been injured anywhere.

Figure 37 - Injured Passengers in Wokingham's young resident drivers' vehicles compared to all young drivers (2013-2017)

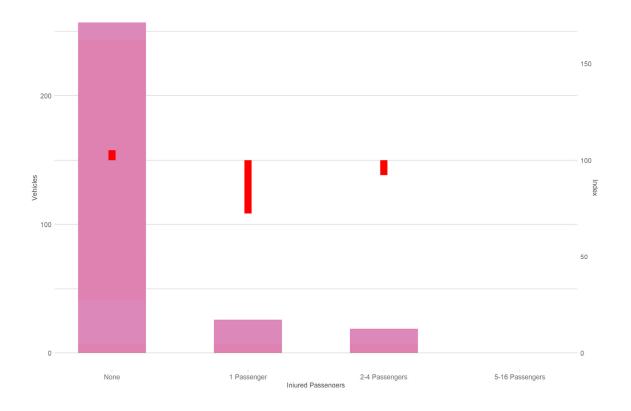


Figure 37 shows the number of young drivers by the presence and quantity of injured passengers in their vehicle. The red bars are indices comparing young drivers to the figures for injured passengers for all young drivers. It shows that most young drivers (85%) do not have injured passengers in their vehicle, and the red bars indicate that they are less likely to have one or more injured passengers than all young drivers nationally.



3 Road Network Risk

3.1 Collisions on all roads

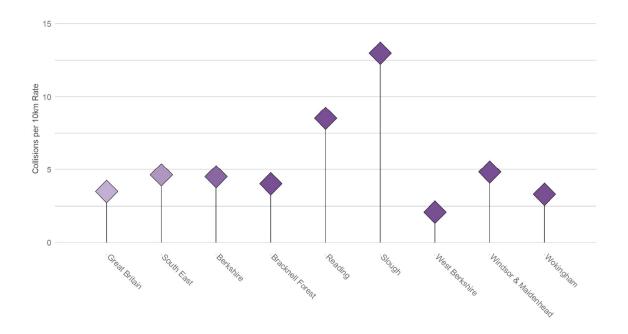
This section refers to all collisions which occurred on Wokingham's roads. For information on casualties who live in Wokingham, please refer to 2.1 on page 9 and for analysis involving Wokingham resident motor vehicle users, please refer to 2.2 on page 24. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1.2 on page 60.

3.1.1 Rates

3.1.1.1 Collisions per km of road

Figure 38 below shows the rate of average annual collisions between 2013 and 2017 per 10 km of road for Wokingham and other Berkshire authorities. Rates cannot be shown for comparator district authorities as the DfT only publish road length data at highway authority level.

Figure 38 - Annual average collisions (2013-2017) per 10km of road



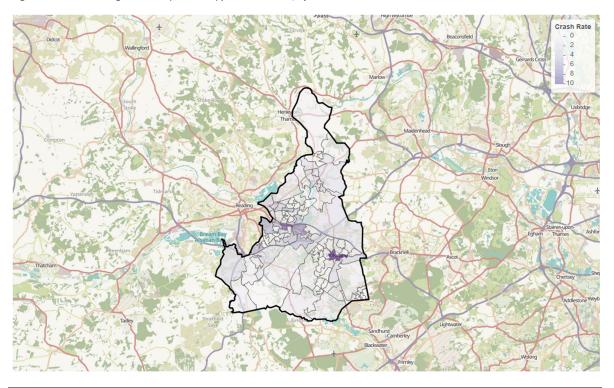
3.1.2 Comparisons

Wokingham's collisions per km rate is similar to the national rate. It is 29% lower than the South East rate and 26% lower than the Berkshire rate. Within Berkshire, Wokingham has the second lowest rate, above West Berkshire, with the major urban authorities of Slough and Reading having the highest rates. The lowest rates are in the more rural areas and those with long stretches of motorway.

Internal

The map (Figure 39) shows collisions on all roads in Wokingham, by LSOA. The thematic map is colour coded by the rate of annual average collisions per 10km of road. Higher collision rates can be found in and around the centre of Wokingham, and near Earley.

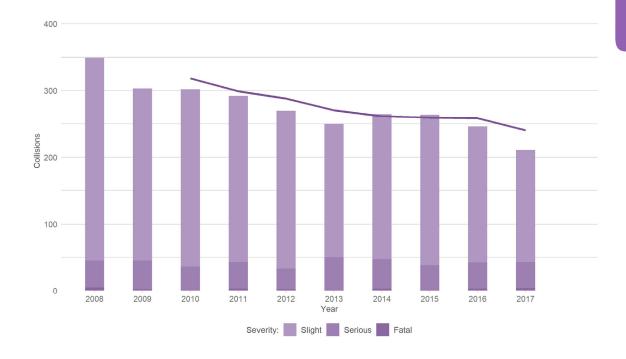
Figure 39 - Annual average collisions (2013-2017) per 10km of road, by LSOA



3.1.3 Trends

Figure 40 shows annual collisions on all of Wokingham's roads, including strategic roads, from 2008 to 2017. Collisions on Wokingham's roads have reduced by 40% from 2008 and there has been a general downward trend over the past decade. There were 211 collisions in Wokingham in 2017, down from 246 in 2016.

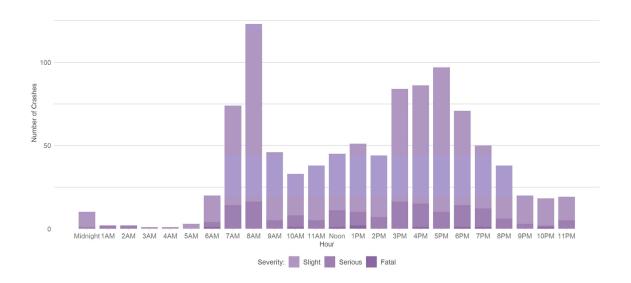
Figure 40 - Wokingham collisions, by year (2008-2017)



Collisions by hour of the day (Weekdays)

Figure 41 shows collisions on a week day by the hour of the day in which they occurred. There is a peak at 8am during the morning commute to work and a peak in the afternoon between 3pm and 7pm during the commute home from work.

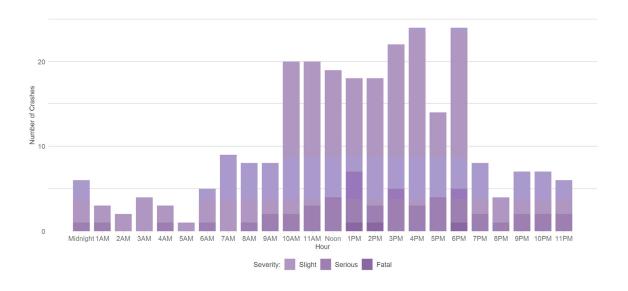
Figure 41 - Collisions on Wokingham's roads by hour of the day - Weekdays (2013-2017)



Collisions by hour of the day (Weekends)

Figure 42 shows collisions on a weekend by the hour of the day in which they occurred. Collisions are more spread throughout the day than weekdays. Collisions tend to occur between 10am and 5pm, with a second peak at 6pm.

Figure 42 - Collisions on Wokingham's roads by hour of the day - Weekends (2013-2017)



3.1.3.1 Collisions involving drivers who reside in other areas

Using the driver's home postcode from STATS19 enables analysis of where drivers involved in collisions in Wokingham reside. Fifty-one percent of drivers with known postcodes involved in collisions in Wokingham are from Wokingham. The rest are from areas including Reading (11%), Bracknell Forest (8%), Hampshire (5%) and Windsor & Maidenhead (4%).

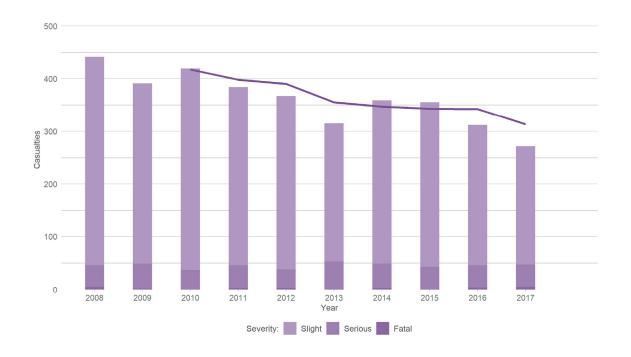


3.1.4 Casualty trends on all roads

3.1.4.1 All casualties

Figure 43 shows annual casualty numbers on Wokingham's roads. Casualties on Wokingham's roads have reduced over the past decade. In 2017 there were 272 casualties on Wokingham's roads, a reduction of 38% from 2008, and a decrease of 13% from 2016. The number of casualties who were killed or seriously injured on the roads of Wokingham have stayed at a similar level over recent years.

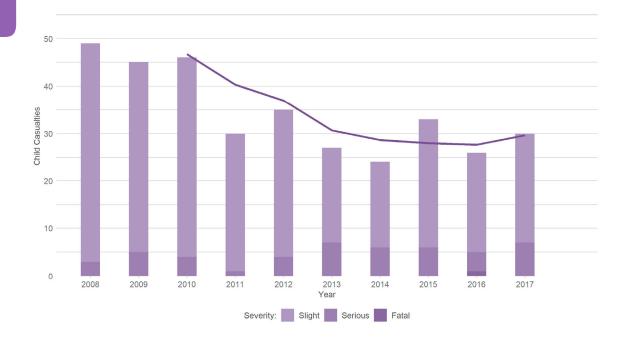
Figure 43 - Casualties on Wokingham's roads by year (2008-2017)



3.1.4.2 Child casualties

Figure 44 shows annual child casualty numbers on Wokingham's roads. The number of child casualties on Wokingham's roads has fluctuated over the last decade but numbers have reduced over that time and are low. In 2017 there were a total of 30 child casualties in Wokingham, seven of whom was seriously injured.

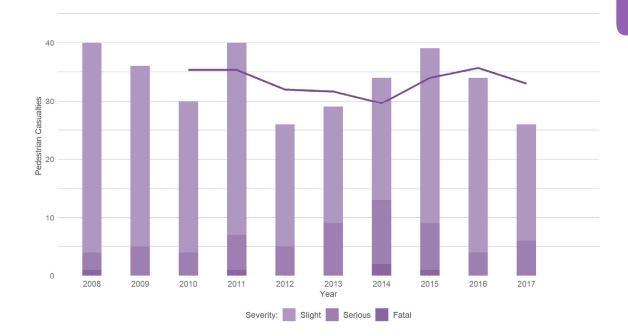
Figure 44 - Child casualties on Wokingham's roads by year (2008-2017)



3.1.4.3 Pedestrian casualties

Figure 45 shows annual pedestrian casualty numbers on Wokingham's roads. There have been fluctuations in pedestrian casualties, although numbers have fallen from a peak of 39 in 2015. In 2017, there were 26 pedestrian casualties including 6 seriously injured casualties.

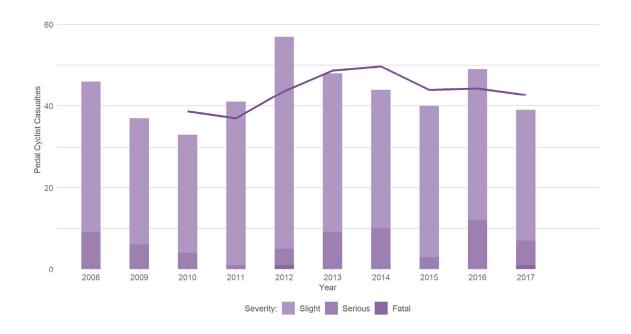
Figure 45 - Pedestrian casualties on Wokingham's roads by year (2008-2017)



3.1.4.4 Pedal cyclist casualties

Figure 46 shows annual pedal cycle user casualty numbers on Wokingham's roads. Pedal cycle user casualty numbers have fluctuated over the last 10 years. In 2017, there were 39 pedal cycle user casualties on the roads of Wokingham including 6 seriously injured casualties and one fatality.

Figure 46 - Pedal cycle user casualties on Wokingham's roads, by year (2008-2017)





3.1.5 Contributory Factors

Each section below examines trends in reported collisions involving groups of related contributory factors (CFs). For each group, the total number of collisions in which any CF in the group was recorded has been determined. To provide comparative context, each chart also shows the three-year average of all police attended collisions with recorded CFs.

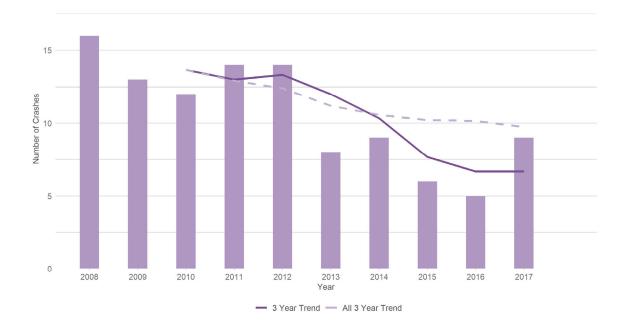
3.1.5.1 Impairment

This section examines collisions where at least one of the contributory factors 501 *Impaired by alcohol* and/or 502 *Impaired by drugs (illicit or medicinal)* was attributed to one or more drivers. This may include some instances where these factors were applied more than once in the same collision. This analysis excludes strategic roads.

Trends

Figure 47 shows annual collisions on Wokingham's roads where at least one of the impairment contributory factors were recorded. The darker shaded trend line shows the three-year moving average for impairment collisions. The lighter shaded dashed trend line shows a three-year average for all collisions where an officer attended and at least one CF was recorded, for comparison. The chart shows a general downward trend in impairment collisions and that numbers of these collisions are low. In the past five-year period (2013-2017) 27% of collisions where an impairment CF has been recorded have resulted in a killed or seriously injured casualty, compared to 20% for all officer attended, at least one CF recorded collisions.

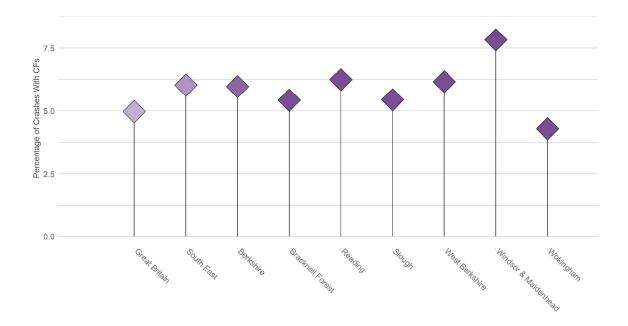
Figure 47 - Collisions on Wokingham's roads where CF501 and/or CF502 were recorded (2008-2017), excluding strategic roads



Comparisons

Figure 48 shows collisions on Wokingham's roads where at least one of the substance impairment contributory factors was recorded as a percentage of all officer attended collisions where at least one CF was recorded. Berkshire and the other Berkshire authorities are also included for comparison.

Figure 48 - Collisions where CF501 and/or CF502 were attributed (2013-2017), excluding strategic roads



Wokingham's percentage of substance impairment collisions is 14% lower than the national percentage, 29% lower than the regional percentage, and 28% lower than the overall Berkshire percentage. It is also lower than all of the authorities within Berkshire.

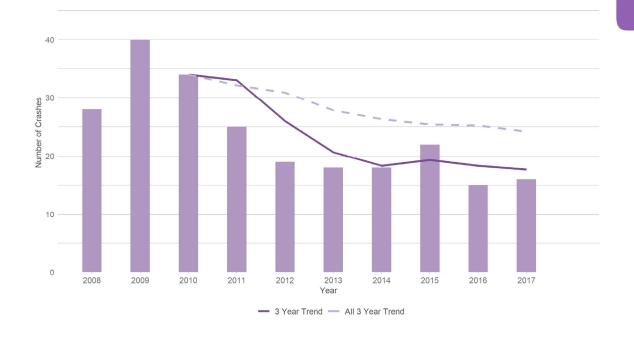
3.1.5.2 Speed Related

This section examines collisions, by severity, where at least one of the contributory factors 306 *Exceeding speed limit* and/or 307 *Travelling too fast for conditions* was attributed to one or more vehicles. This may include some instances where these factors were applied more than once in the same collision. This analysis excludes strategic roads.

Trends

Figure 49 shows annual collisions on Wokingham's roads where at least one of the speed related contributory factors were recorded. There has been a general downward trend since 2009, at as faster rate than collisions in general. In 2017 there were 16 collisions on the roads of Wokingham where a speed related CF was recorded, down 43% from 2008 and 60% from the peak in 2009. In the past five-year period (2013-2017) 19% of collisions where a speed related CF has been recorded have resulted in a killed or seriously injured casualty, lower than for all officer attended, at least one CF recorded collisions (20%).

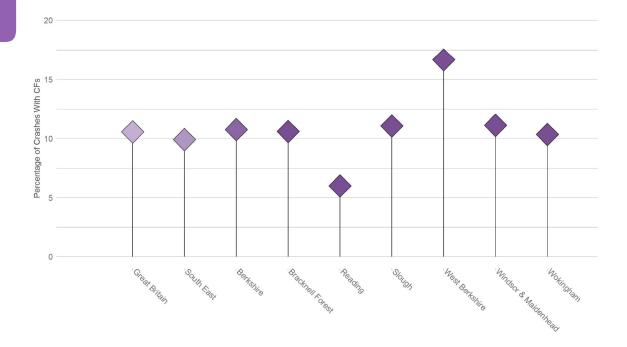
Figure 49 - Collisions on Wokingham's roads where CF306 and/or CF307 were recorded (2008-2017), excluding strategic roads



Comparisons

Figure 50 shows collisions on Wokingham's roads where at least one of the speed related contributory factors was recorded as a percentage of all officer attended collisions where at least one CF was recorded.

Figure 50 - Collisions where CF306 and/or CF307 were recorded (2013-2017), excluding strategic roads



Wokingham has a similar percentage of speed related collisions to Great Britain, the South East, and to Berkshire. It also has a similar percentage to Bracknell Forest, Slough, and Windsor & Maidenhead, which have higher percentages than Reading but lower than West Berkshire.

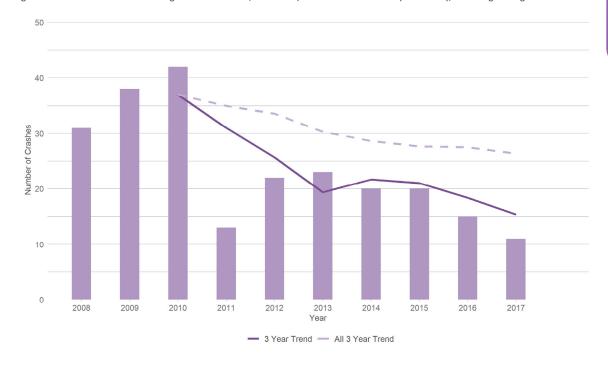
3.1.5.3 Road Surface

This section examines collisions where at least one of the contributory factors 101 *Poor or defective road surface*, 102 *Deposit on road (e.g. oil, mud, chippings)* and/or 103 *Slippery road (due to weather)* was attributed. This may include some instances where more than one of these factors were applied in the same collision. This analysis excludes strategic roads.

Trends

Figure 51 shows annual collisions on Wokingham's roads where the road surface contributory factors were attributed. There has been a general downward trend since 2013, at a faster rate than collisions in general. In 2017 there were 11 collisions where a road surface related CF was attributed, down from 15 in 2016.

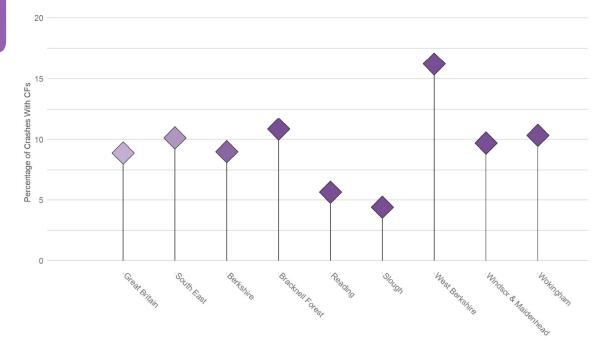
Figure 51 - Annual collisions in Wokingham where CF101, CF102 and/or CF103 was recorded (2008-2017), excluding strategic roads



Comparisons

Figure 52 shows collisions on Wokingham's roads where at least one of the road surface contributory factors were recorded as a percentage of all officer attended collisions where at least one CF was recorded. Berkshire and the other Berkshire authorities are also included for comparison.

Figure 52 - Collisions where CF101, CF102 and/or CF103 were recorded (2013-2017), excluding strategic roads



Wokingham has a lower percentage of road surface related collisions than West Berkshire, but a higher rate than the overall Berkshire percentage and the remaining Berkshire authorities. Reading and Slough have the lowest percentages of road surface related collisions.

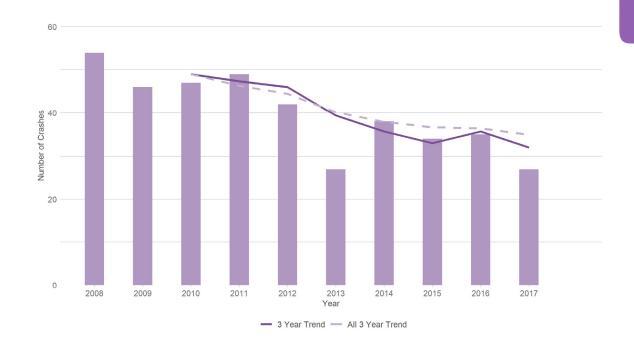
3.1.5.4 Unsafe Behaviour

This section examines collisions, by severity, where at least one of the contributory factors 601 *Aggressive driving* and/or 602 *Careless, reckless or in a hurry* was attributed. This may include some instances where more than one of these factors were applied in the same collision. This analysis excludes strategic roads.

Trends

Figure 53 shows annual collisions on Wokingham's roads where at least one of the unsafe behaviour contributory factors were recorded. Collisions where unsafe behaviour were recorded have reduced over the past decade in line with collisions overall, with casualty numbers down 50% since 2008. In 2017, there were 27 collisions where at least one of the unsafe behaviour contributory factors was recorded, including 1 fatal collision and 5 resulting in a seriously injured casualty.

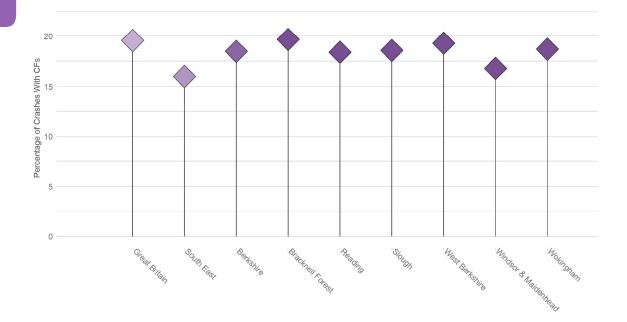
Figure 53 - Collisions on Wokingham's roads where CF601 and/or CF602 were recorded (2008-2017), excluding strategic roads



Comparisons

Figure 54 shows collisions on Wokingham's roads where at least one of the unsafe behaviour contributory factors were recorded as a percentage of all officer attended collisions where at least one CF was recorded.

Figure 54 - Collisions where CF601 and/or CF602 were recorded (2013-2017), excluding strategic roads



Wokingham's percentage of unsafe behaviour related collisions is in line with the national percentage and the overall Berkshire percentage. It is similar to the percentages of Bracknell Forest, Reading, Slough and West Berkshire, all of which have a higher percentage than Windsor & Maidenhead.

3.2 Collisions on roads by environment

For more information on the methodology used to analyse networks by road environment, see 4.1.1.2 on page 60.

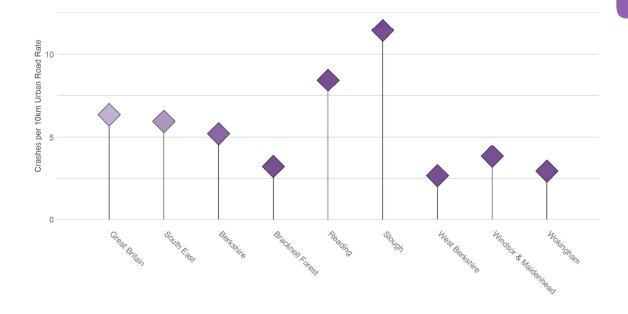
3.2.1 Urban Roads

This section includes all roads in urban areas of Wokingham, including strategic roads.

3.2.1.1 Rates

Figure 55 shows the rate of average annual collisions on urban roads per 10 km of urban road. Berkshire and the other Berkshire authorities are included for comparison.

Figure 55 - Average annual collisions on urban roads per 10 km of urban road (2013-2017)



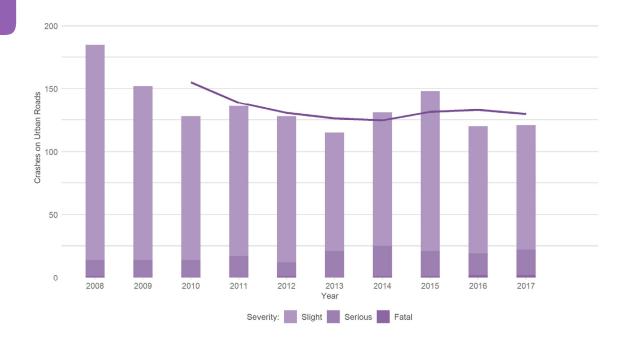
3.2.1.2 Comparisons

Wokingham's urban road collision rate of 2.9 per year per 10 km is lower than the national, South East and Berkshire rates. It is also lower than the urban authorities of Slough and Reading but higher than West Berkshire.

3.2.1.3 Trends

Figure 56 shows the annual numbers of collisions on Wokingham's urban roads, by severity, between 2008 and 2017. There has been an overall general downward trend in collisions on urban roads over the past decade, although this has stagnated in recent years. In 2017 there were 121 collisions on Wokingham's urban roads, including 2 involving one or more fatalities and 20 where there were one or more seriously injured casualties.

Figure 56 - Collisions on Wokingham's urban roads by year (2008-2017)



3.2.2 Rural Roads

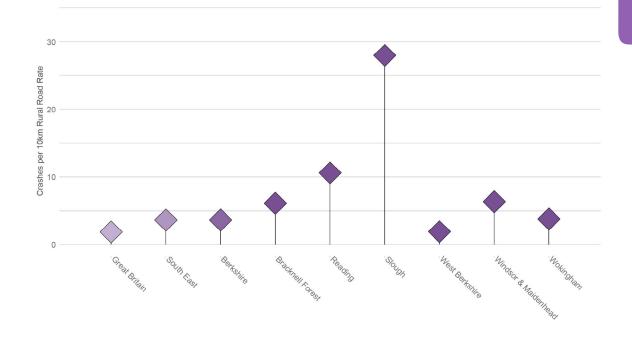
This section includes all roads in rural areas of Wokingham, including strategic roads.

3.2.2.1 Rates

Collisions per km of road

Figure 57 shows the rate of average annual collisions on rural roads per 10 km of rural road. Berkshire and the other Berkshire authorities are included for comparison.

Figure 57 - Average annual collisions on rural roads per 10 km of rural road (2013-2017)



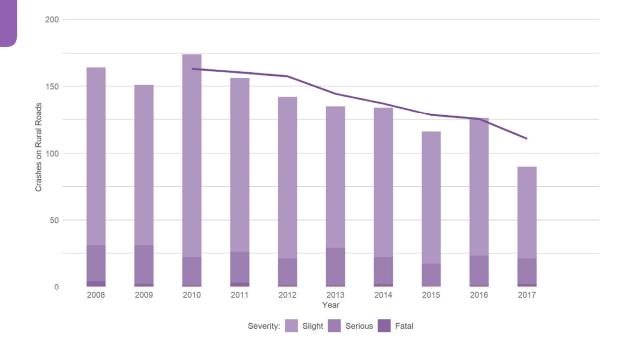
3.2.2.2 Comparisons

Wokingham has a considerably higher rural road collision rate than the national rate (103% higher) but is in line with the South East and Berkshire rates. Of the six Berkshire authorities Slough has the highest rural collision rate although this is skewed by the extreme rarity of rural roads in the area which is reflected in the chart. West Berkshire has the lowest rate of all the Berkshire authorities, skewed by the prevalence of such roads in the area.

3.2.2.3 Trends

Figure 58 shows Wokingham's collisions on rural roads, by year from 2008 to 2017. Collisions on rural roads have shown a distinct downward trend over the past ten years. In 2017 there were 90 collisions on Wokingham's rural roads, a reduction of 45% from 2008. There were 2 collisions where there were one or more fatalities and 19 collisions where there were one or more seriously injured casualties.

Figure 58 - Wokingham's collisions on rural roads by year (2008-2017)





4 Appendices

4.1 Analytical Techniques

4.1.1.1 Resident road users

Casualty and driver postcodes in STATS 19 make it possible to identify where casualties from Wokingham reside. Thematic maps are used to illustrate the number of casualties per head of population from each small area in Wokingham. Areas on maps are progressively coloured, indicating annual average rates relative to the population of that area.

The geographical units used for this analysis are based on similar populations, which enables meaningful comparative analysis within and between authorities. In England and Wales the areas used are super output areas as defined by the Office of National Statistics. Where appropriate, lower level small areas are employed: for England and Wales these are lower layer super output areas (LSOAs) of around 1,600 residents on average. In some cases, larger groupings are used, as is the case in MAST Online: for England and Wales these are middle layer super output areas (MSOAs) with an average of nearly 8,000 residents each.

MAST Online has been used to determine the casualty figures for Wokingham's residents injured in road collisions anywhere in Britain. Using national population figures (by age where appropriate), casualty and driver/rider involvement rates per head of population have been calculated. Charts have been devised which compare the local rates with the equivalent figures for Great Britain and for selected comparators. Trend analysis examines resident road user collision involvement over time and by severity, and additional trends are explored depending on road user type.

Where appropriate, socio-demographic analysis is conducted to provide insight into the backgrounds of people from Wokingham who are involved in collisions, either as casualties or motor vehicle users. Socio-demographic profiling examines age and gender breakdowns, and for some road user groups includes analysis using Mosaic Public Sector segmentation, deprivation and/or rurality. More information on Mosaic is provided later in this section.

Mosaic Public Sector

Insight into the lifestyles of Wokingham resident road casualties and motor vehicle users can be provided through socio demographic analysis. RSA Mosaic profiling uses Experian's Mosaic Public Sector cross-channel classification system², which is assigned uniquely for each casualty and vehicle user based on individual postcodes in STATS 19 records. Typically, nearly 85% of casualty and driver STATS19 records can be matched to Mosaic Types, so residency analysis is based on about five out of six Wokingham residents involved in reported injury collisions.

Mosaic is intended to provide an accurate and comprehensive view of citizens and their needs by describing them in terms of demographics, lifestyle, culture and behaviour. The system was devised under the direction of Professor Richard Webber, a leading authority on consumer segmentation, using data from a wide range of public and private sources. It is used to inform policy decisions, communications activity and resource strategies across the public sector.

² See Appendix B below, or go to http://www.experian.co.uk/marketing-services/products/mosaic-uk.html

Mosaic presently classifies the community represented by each UK postcode into one of 15 **Groups** and 66 **Types**. Each Group embraces between 3 and 6 Types. A complete list of Mosaic Types is provided in 4.2.1 on page 63 whilst profiles and distribution for the Mosaic Types identified in this Area Profile as providing insight on Wokingham's residents are detailed in 4.2.2 on page 65.

This profile displays Mosaic analysis as a column chart, to facilitate quick and easy insight into residents and relative risk. In these charts, the background columns denote the absolute number of Wokingham resident casualties or drivers in each Mosaic Type, corresponding to the value axis to the left of the chart. The columns in the foreground provide an **index** for each Mosaic Type. These indices are 100 based, where a value of 100 indicates the number of casualties or drivers shown by the corresponding point in the area is exactly in proportion to the population of communities in Wokingham where that Type predominates. Indices over 100 indicate **over representation** of that Type among casualties or motor vehicle users relative to the population: for example, a value of 200 would signify that people resident in communities of that Type were involved in collisions at twice the expected rate. Conversely, indices below 100 suggest **under representation**, so an index of 50 would imply half the expected rate. Inevitably, index values become less significant as numbers of involved residents decrease, because increased random fluctuations tend to decrease levels of confidence.

Deprivation

Deprivation levels are examined using UK Index of Multiple Deprivation (IMD) values. IMD is calculated by the Office of National Statistics (ONS) and the Scottish Government and the Welsh Government, and uses a range of economic, social and housing data to generate a single deprivation score for each small area in the country. This profile uses deciles, which are ten groups of equal frequency ranging from the 10% most deprived areas to the 10% least deprived. It should be remembered that indices of multiple deprivation include income, employment, health, education, access to services and living environment and are not merely about relative wealth.

In order to interpret deprivation more accurately at local level, this profile includes indexed IMD charts. Indices in these charts show risk relative to the predominance of each IMD decile in the population of Wokingham, and can be interpreted in the same way as indices on Mosaic charts as explained in the preceding section.

Rurality

National rurality classification systems have also been developed to define the rurality of small area geographies. Each of these small areas was defined as either 'Urban' (defined as settlements with over 10,000 residents), 'Rural', or 'Town' (a sub-class of 'Rural' for settlements under 10,000 residents). STATS19 postcodes for resident road users from Wokingham have been used to determine the rurality of residents.

4.1.1.2 Collisions

MAST Online has been used to determine annual average road injury collision levels for Wokingham and relevant comparator areas. Dividing this annual rate by road length in each area generates an annual crash rate per kilometre of road, which allows direct comparisons to be made between authorities. Road length data have been taken from central government figures. Charts have been devised which compare local rates with the equivalent figures for Great Britain. Most similar comparators at district level cannot be included, as road length data is only available at highway authority level.

Trend analysis examines numbers of collisions on Wokingham's roads over time and by severity, with additional trends explored depending on road type. In order to determine the distribution of collisions within Wokingham, maps show the number of collisions in each small area, divided by the total road length (in kilometres) within that small area.



Contrasting kinds of road network

Road networks vary considerably across the country. It is often useful to analyse and compare collision rates between authorities on certain kinds of road. Ideally such comparisons would take traffic flow into account, so collision rates per vehicle distance travelled could be calculated. However, traffic flow data for different kinds of road network are not available, so this profile can only calculate collision rates using road length. Road length data by kind of road network has been taken from DfT figures where possible. As with all collisions, trend charts are provided in addition to rate comparison charts.

Environment - urban and rural roads

STATS 19 data provided by the Department for Transport and published in MAST Online includes the rurality of the road in which a collision occurred on. Annual average collisions by rurality and total network urban and rural road lengths have been used to generate annual collision rates per kilometre of road, which facilitates direct comparisons between areas.

4.1.1.3 Comparators

In order to put the figures for Wokingham into context, comparisons with other areas have been made. This section details the types of comparators which might be used in this Area Profile.

Regional

All of the other Berkshire authorities have been analysed to show how resident road user and collision rates differ between authority areas within the county.

Socio Demographic

It is not always appropriate to compare an authority solely against its neighbours, especially when the authority has unique characteristics in terms of socio-demographic composition and/or road network. In this Area Profile Wokingham's most similar authorities have been selected using Mosaic classification. Because of the size of Wokingham only district authorities have been selected for comparison. The chosen five districts are:

Table 1 - Comparator Authorities for Wokingham

Local Authority District
Hart District
South Cambridgeshire District
South Oxfordshire District
Surrey Heath Borough
Wycombe District

4.1.1.4 Contributory factors

Police officers who attended the scene of an injury collision may choose to record certain contributory factors (CFs) which in the officer's view were likely to be related to the incident. Up to six CFs can be recorded for each collision. CFs reflect the officer's opinion at the time of reporting, but may not be the result of extensive investigation. Consequently, CFs should be regarded only as a general guide for identifying factors as possible concerns.

In all CF analysis, only collisions which were both attended by a police officer and for which at least one factor was recorded are included. Since multiple CFs can be recorded for a single collision, the same incidents may be included in analysis of more than one CF.

For ease of analysis and interpretation RSA often organises CFs into groupings. A complete list of all CFs and their groupings may be found in section 4.4.



4.2 Mosaic Public Sector

This section provides information on all Mosaic Types and more detailed analysis of the specific Types identified as being of interest to Wokingham. More information on what Mosaic is can be found in 4.1.1.1 on page 59.

4.2.1 Complete list of Mosaic Types

Below is a complete list of all the Mosaic Types, with descriptions, shown in the Mosaic Group to which they belong.

Group	Description	Туре	Description
Α	Country Living	A01	Rural Vogue
		A02	Scattered Homesteads
		A03	Wealthy Landowners
		A04	Village Retirement
В	Prestige Positions	B05	Empty-Nest Adventure
		B06	Bank of Mum and Dad
		B07	Alpha Families
		B08	Premium Fortunes
		В09	Diamond Days
С	City Prosperity	C10	World-Class Wealth
		C11	Penthouse Chic
		C12	Metro High-Flyers
		C13	Uptown Elite
D	Domestic Success	D14	Cafes and Catchments
		D15 D16	Modern Parents Mid Carpor Convention
		D16	Mid-Career Convention
E	Suburban Stability	E18	Thriving Independence Dependable Me
Ŀ	Suburban Stability	E19	Fledgling Free
		E20	Boomerang Boarders
		E21	Family Ties
F	Senior Security	F22	Legacy Elders
	Comer coccure,	F23	Solo Retirees
		F24	Bungalow Heaven
		F25	Classic Grandparents
G	Rural Reality	G26	Far-Flung Outposts
		G27	Outlying Seniors
		G28	Local Focus
		G29	Satellite Settlers
Н	Aspiring Homemakers	H30	Affordable Fringe
		H31	First-Rung Futures
		H32	Flying Solo
		H33	New Foundations
		H34	Contemporary Starts
		H35	Primary Ambitions
1	Urban Cohesion	136	Cultural Comfort
		137	Community Elders
		138	Asian Heritage
	Rental Hubs	139	Ageing Access Career Builders
J	Rental Hubs	J40 J41	Career Builders Central Pulse
		J41 J42	Learners & Earners
		J42 J43	Student Scene
		J43 J44	Flexible Workforce
		J44 J45	Bus-Route Renters
К	Modest Traditions	K46	Self Supporters
- 1	WIOUCST Traditions	N T U	och oupporters

		K47	Offspring Overspill
		K48	Down-to-Earth Owners
L	Transient Renters	L49	Disconnected Youth
		L50	Renting a Room
		L51	Make Do & Move On
		L52	Midlife Stopgap
М	Family Basics	M53	Budget Generations
		M54	Childcare Squeeze
		M55	Families with Needs
		M56	Solid Economy
N	Vintage Value	N57	Seasoned Survivors
		N58	Aided Elderly
		N59	Pocket Pensions
		N60	Dependent Greys
		N61	Estate Veterans
0	Municipal Challenge	062	Low Income Workers
		O63	Streetwise Singles
		O64	High Rise Residents
		O65	Crowded Kaleidoscope
		O66	Inner City Stalwarts



4.2.2 Profile and distribution for selected Mosaic Types

The table below shows the Mosaic Types identified in the Mosaic analysis section of the resident casualties and resident drivers' sections of the report with some of the main characteristics of these Types. These can be used to create a picture of the target audience in terms of economic and educational position; family life and transport preferences (including mileage and car ownership). This information is invaluable for understanding target audiences and knowing how to communicate with them.

B07 Alpha Families	D14 Cafés and Catchments	D17 Thriving Independence
These high-achieving married couples living fast-track lives advancing their careers, their financial security and the progress of their school-age children. Levels of car ownership are high and there are higher levels of bicycle ownership. Average annual mileage driven is high amongst these communities. They prefer to be contacted via landline, SMS or email.	These communities often consist of professional couples with kids (most likely to be aged between 12 and 17 years old). They have good incomes and live in pleasant family homes. This Type live in attractive city suburbs, close to jobs and entertainment.	These family neighbourhoods consist of singles and cohabitees who tend to be over 36 years old. They often work as middle managers and earn a comfortable income. Inhabitants of these communities often have a large outstanding mortgage. They have a moderate use of the internet.

Figure 59 shows Wokingham's LSOAs colour coded by dominant Mosaic Type. High-achieving families living fast-track lives, advancing careers, finances and their school-age children's development (Type B07) are dominant across large areas of the borough including Charvil, Whistley Green, Apencers Wood, Emmbrook, Barkham, Gardeners Green, Finchamstead and parts of Eastheath. Affluent families with growing children living in upmarket housing in city environs (Type D14) are dominant across parts of Woodley and Earley. Well-qualified older singles with incomes from successful professional careers living in good quality housing (Type D17) dominate in parts of Twyford, Woodley, Winnersh, Sidlesham and Shinfield, as well as on the outskirts of Wokingham Town.

Dominant Mosaic Type

B07
D14
D17

Figure 59 - Bracknell Forest's dominant Mosaic Types by LSOA.



4.3 Data Tables

All Casualties - Wokingham Roads (3.1.4.1)

	<u> </u>	(SI	KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	1	52	53	262	315
2014	3	46	49	310	359
2015	1	42	43	312	355
2016	4	42	46	266	312
2017	5	42	47	225	272
Overall Total	14	224	238	1375	1613

Child Casualties – Wokingham Roads (3.1.4.2)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	7	7	20	27
2014	0	6	6	18	24
2015	0	6	6	27	33
2016	1	4	5	21	26
2017	0	7	7	23	30
Overall Total	1	30	31	109	140

Pedestrian Casualties - Wokingham Roads (3.1.4.3)

	ŀ	KSI			Overall Total
Year	Fatal	Serious		Slight	
2013	0	9	9	20	29
2014	2	11	13	21	34
2015	1	8	9	30	39
2016	0	4	4	30	34
2017	0	6	6	20	26
Overall Total	3	38	41	121	162

Pedal Cycle User Casualties – Wokingham Roads (3.1.4.4)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	9	9	39	48
2014	0	10	10	34	44
2015	0	3	3	37	40
2016	0	12	12	37	49
2017	1	6	7	32	39
Overall Total	1	40	41	179	220

All Collisions – Wokingham Roads (3.1.3)

		KSI			Overall Total
Year	Fatal	Serious		Slight	
2013	1	49	50	200	250
2014	3	44	47	218	265
2015	1	37	38	226	264
2016	3	39	42	204	246
2017	4	39	43	168	211
Overall Total	12	208	220	1016	1236

Collisions by hour of the day (Weekdays) 2013-2017 – Wokingham roads (3.1.3)

		KSI	KSI Total		Overall Total
Hour	Fatal	Serious		Slight	
Midnight	0	1	1	9	10
1AM	0	2	2	0	2
2AM	0	2	2	0	2
3AM	0	0	0	1	1
4AM	0	0	0	1	1
5AM	0	0	0	3	3
6AM	1	3	4	16	20
7AM	0	14	14	60	74
8AM	0	16	16	107	123
9AM	0	5	5	41	46
10AM	1	7	8	25	33
11AM	0	5	5	33	38
Noon	1	10	11	34	45
1PM	2	8	10	41	51
2PM	0	7	7	37	44
3PM	0	16	16	68	84
4PM	1	14	15	71	86
5PM	0	10	10	87	97
6PM	1	13	14	57	71
7PM	1	11	12	38	50
8PM	0	6	6	32	38
9PM	0	3	3	17	20
10PM	1	1	2	16	18
11PM	0	5	5	14	19
Overall Total	9	159	168	808	976



Collisions by hour of the day (Weekends) 2013-2017 – Wokingham roads (3.1.3)

	KSI		KSI Total		Overall Total
Hour	Fatal	Serious		Slight	
Midnight	0	1	1	5	6
1AM	0	1	1	2	3
2AM	0	0	0	2	2
3AM	0	0	0	4	4
4AM	0	1	1	2	3
5AM	0	0	0	1	1
6AM	0	1	1	4	5
7AM	0	0	0	9	9
8AM	0	1	1	7	8
9AM	0	2	2	6	8
10AM	0	2	2	18	20
11AM	0	3	3	17	20
Noon	0	4	4	15	19
1PM	1	6	7	11	18
2PM	1	2	3	15	18
3PM	0	5	5	17	22
4PM	0	3	3	21	24
5PM	0	4	4	10	14
6PM	1	4	5	19	24
7PM	0	2	2	6	8
8PM	0	1	1	3	4
9PM	0	2	2	5	7
10PM	0	2	2	5	7
11PM	0	2	2	4	6
Overall Total	3	49	52	208	260

Collisions on urban roads in Wokingham (3.2.1.3)

	l l	(SI	KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	21	21	94	115
2014	1	24	25	106	131
2015	1	20	21	127	148
2016	2	17	19	101	120
2017	2	20	22	99	121
Overall Total	6	102	108	527	635

	ŀ	(SI	KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	1	28	29	106	135
2014	2	20	22	112	134
2015	0	17	17	99	116
2016	1	22	23	103	126
2017	2	19	21	69	90
Overall Total	6	106	112	489	601

Collisions involving factors 501 and/or 502 (impairment) - Wokingham roads (3.1.5.1) excluding strategic roads

	ı	(SI	KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	3	3	5	8
2014	0	3	3	6	9
2015	0	1	1	5	6
2016	0	0	0	5	5
2017	1	2	3	6	9
Overall Total	1	9	10	27	37

Collisions involving factors 306 and/or 307 (speed related) - Wokingham roads (3.1.5.2) excluding strategic roads

	ŀ	(SI	KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	4	4	14	18
2014	0	1	1	17	18
2015	0	5	5	17	22
2016	0	1	1	14	15
2017	2	4	6	10	16
Overall Total	2	15	15	72	89

Collisions involving factors 101, 102 and/or 103 (road surface) - Wokingham roads (3.1.5.3) excluding strategic roads

	ŀ	(SI	KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	4	4	19	23
2014	0	2	2	18	20
2015	0	5	5	15	20
2016	0	1	1	14	15
2017	0	0	0	11	11
Overall Total	0	12	12	77	89



Collisions involving factors 601 and/or 602 (unsafe behaviour) - Wokingham roads (3.1.5.4) excluding strategic roads

	ŀ	(SI	KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	5	5	22	27
2014	0	6	6	32	38
2015	0	7	7	27	34
2016	0	8	8	27	35
2017	1	5	6	21	27
Overall Total	1	31	32	129	161

4.4 Contributory Factor Groupings

Injudicious Action	Driver Errors or Reactions	Driver Impairment or Distraction	Behaviour or Inexperience	Other
Traffic Contraventions	Manoeuvre Errors	Substance Impairments	Nervous Behaviour	Vehicle Defects
Disobeyed automatic traffic signal Disobeyed double white lines Disobeyed 'Give way' or 'Stop' signs or markings	Poor turn or manoeuvre Failed to signal or misleading signal Passing too close to cyclist, horse rider or	Impaired by alcohol Impaired by drugs (illicit or medicinal)	Nervous, uncertain or panic Learner or inexperienced driver/rider Inexperience of driving on the left	Tyres illegal, defective or under-inflated Defective lights or indicators Defective brakes
Disobeyed pedestrian crossing facility Illegal turn or direction of travel	pedestrian		Unfamiliar with model of vehicle	Defective steering or suspension Defective or missing mirrors Overloaded or poorly loaded vehicle or trailer
Speed Choices	Control Errors	Distraction	Unsafe Behaviour	Road Surface
Exceeding speed limit Travelling too fast for	Sudden braking Swerved	Driver using mobile phone Distraction in vehicle	Aggressive driving Careless, reckless or in a	Poor or defective road surface Deposit on road (e.g. oil,
conditions	Loss of control	Distraction outside vehicle	hurry	mud, chippings) Slippery road (due to weather)
Close Following	Observation Error	Health Impairments	Pedal Cycle Behaviour	Affected Vision
Following too close	Failed to look properly Failed to judge other person's path or speed	Uncorrected, defective eyesight Illness or disability, mental or physical	Vehicle travelling along pavement Cyclist entering road from pavement Not displaying lights at night or in poor visibility Cyclist wearing dark clothing at night	Stationary or parked vehicle(s) Vegetation Road layout (e.g. bend, winding road, hill crest) Buildings, road signs, street furniture Dazzling headlights
	Junction Errors	Fatigue Impairment	Pedestrian Behaviour	Dazzling sun
	Junction overshoot Junction restart (moving off at junction)	Fatigue	Crossing road masked by stationary or parked vehicle Failed to look properly Failed to judge vehicle's path or speed Wrong use of pedestrian crossing facility Dangerous action in carriageway (e.g. playing) Careless, reckless or in a hurry Impaired by alcohol Impaired by drugs (illicit or medicinal) Pedestrian wearing dark clothing at night Disability or illness, mental or physical	Rain, sleet, snow or fog Spray from other vehicles Visor or windscreen dirty or scratched Vehicle blind spot



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