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Area Profiles

2018

Contents

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 West Berkshire, as well as casualties and drivers involved in collisions anywhere in Britain who reside in the West Berkshire area.

1.1.2 Aims and Objectives

The aim of this document is to provide a comprehensive profile of road safety issues affecting both West Berkshire's **road network** and West Berkshire's **residents**, primarily using STATS19 collision data [1] 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 West Berkshire'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 West Berkshire's key road safety issues with those of comparator regions and national figures. The aim is to allow West Berkshire 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 West Berkshire'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 West Berkshire 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 West Berkshire'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 West Berkshire. 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 West Berkshire, 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 West Berkshire'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

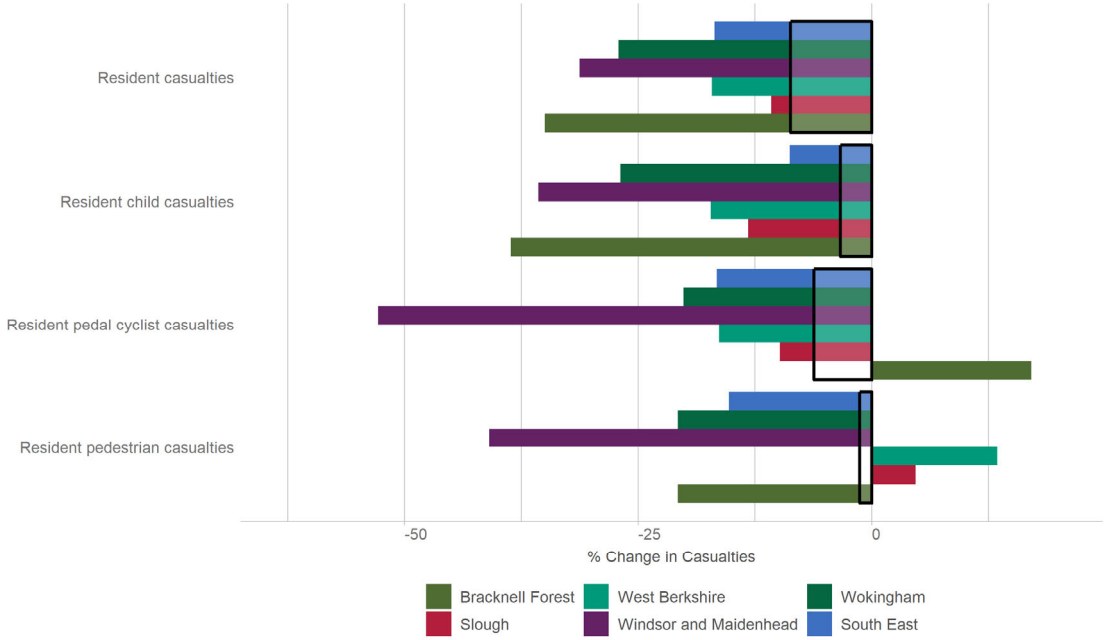
1.3.1 Summary

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 (West Berkshire compared to national and regional)

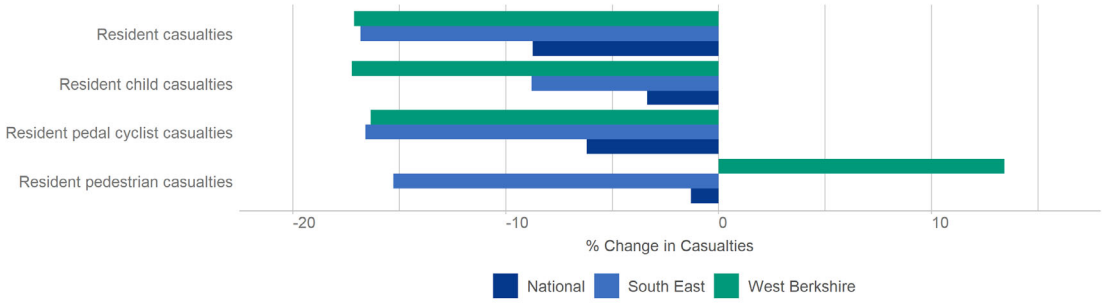
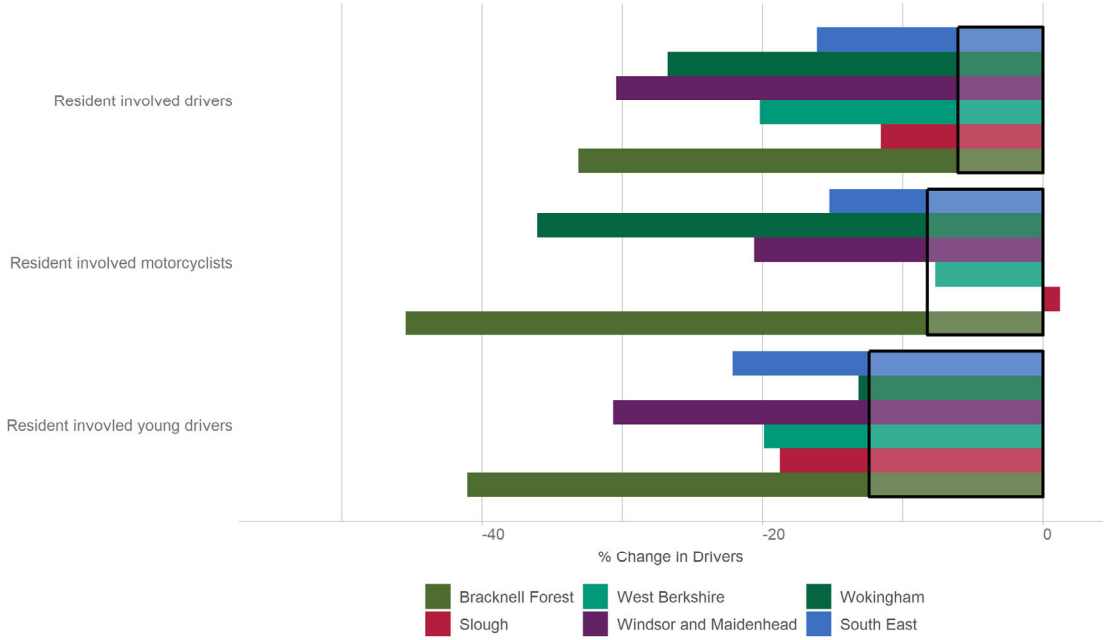


Figure 2 above illustrates that for West Berkshire, the annual resident pedal cyclist casualty numbers saw a 16% decrease between 2014-2016 and 2017, compared to the national trend of a 6% decrease but in line with the regional trend. Annual child resident casualties saw decreased by 17%, with a national reduction of only 3%. Resident pedestrian casualties, however, increased by 15% in West Berkshire in this period, despite a 1% decrease seen nationally.

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 (West Berkshire compared to national and regional)

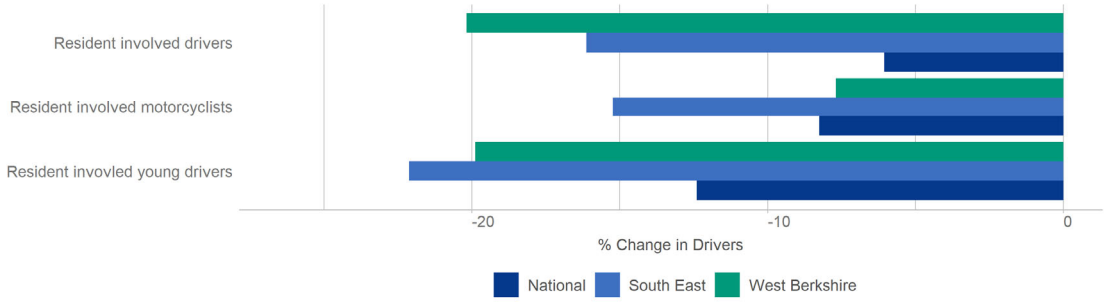
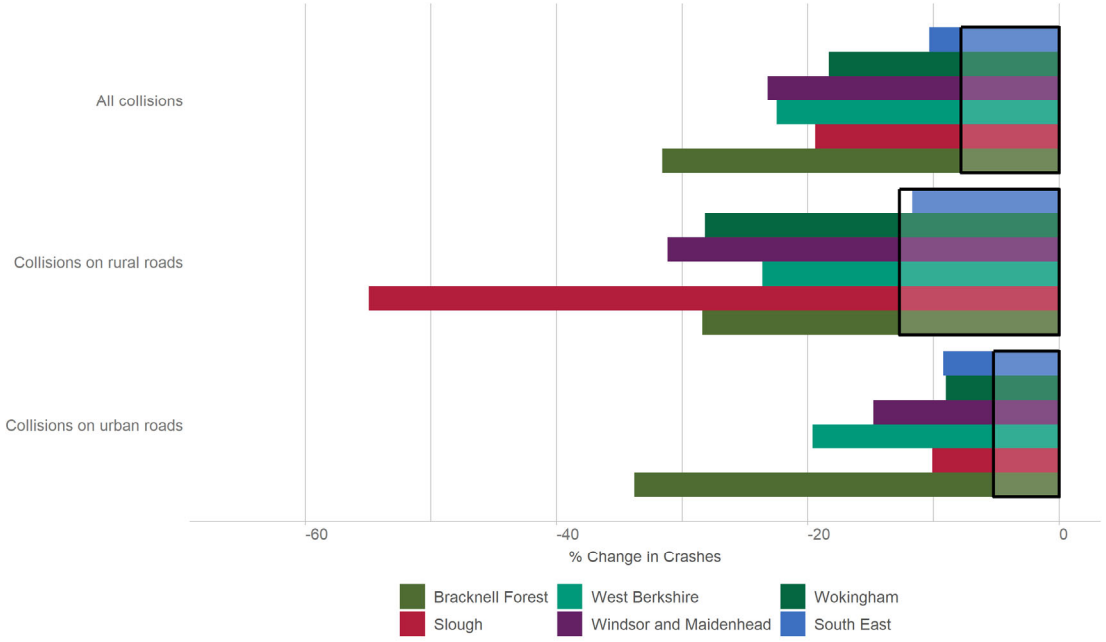


Figure 4 above illustrates that, for West Berkshire, annual involved resident motorcyclists reduced by 8% between 2014-2016 and 2017, in line with the nationally observed reduction of 8%. Annual involved resident young drivers, however, dropped by 20% between these two periods, whilst there was only a 12% reduction 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 (West Berkshire road network compared to national and regional)

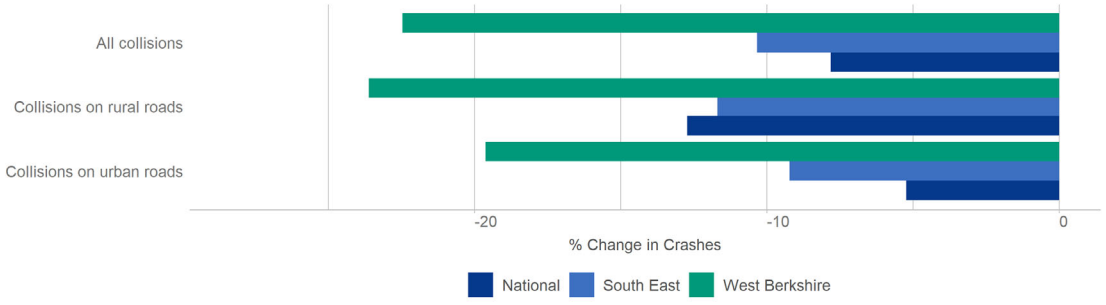


Figure 6 illustrates that, in West Berkshire, annual collisions on rural roads reduced by 24% between 2014-2016 and 2017, compared to the reduction seen nationally being only 13%. Annual collisions on urban roads dropped by 20% between these two periods, with only a 5% reduction nationally.

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

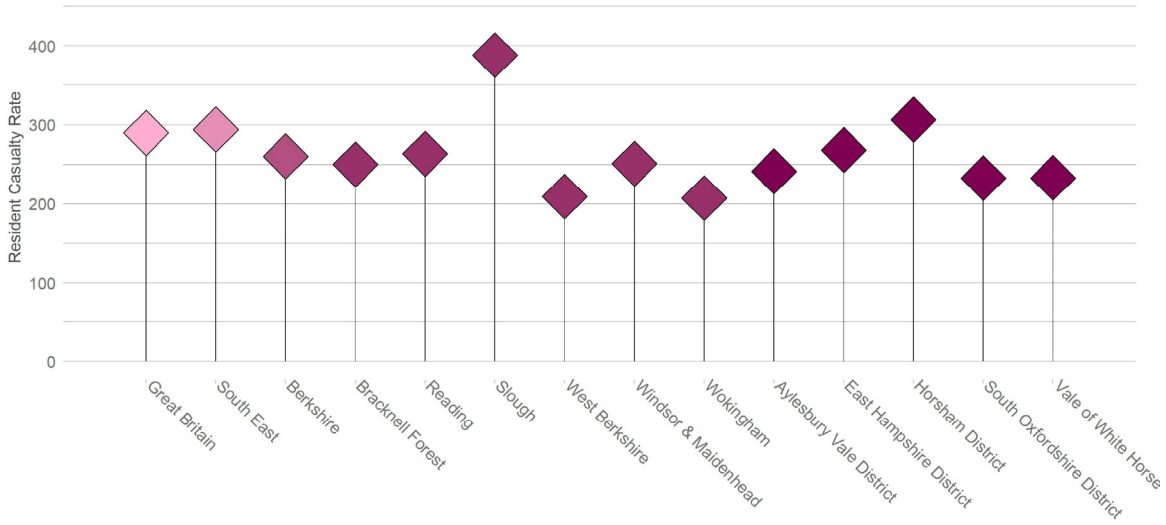
This section refers to casualties who were residents of West Berkshire. For information about casualties on West Berkshire's roads, please refer to 3.1.4 on page 43.

2.1.1 All Resident Casualties

2.1.1.1 Rates

Figure 7 shows West Berkshire'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 West Berkshire is 209.3 per 100,000 population.

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



2.1.1.2 Comparisons

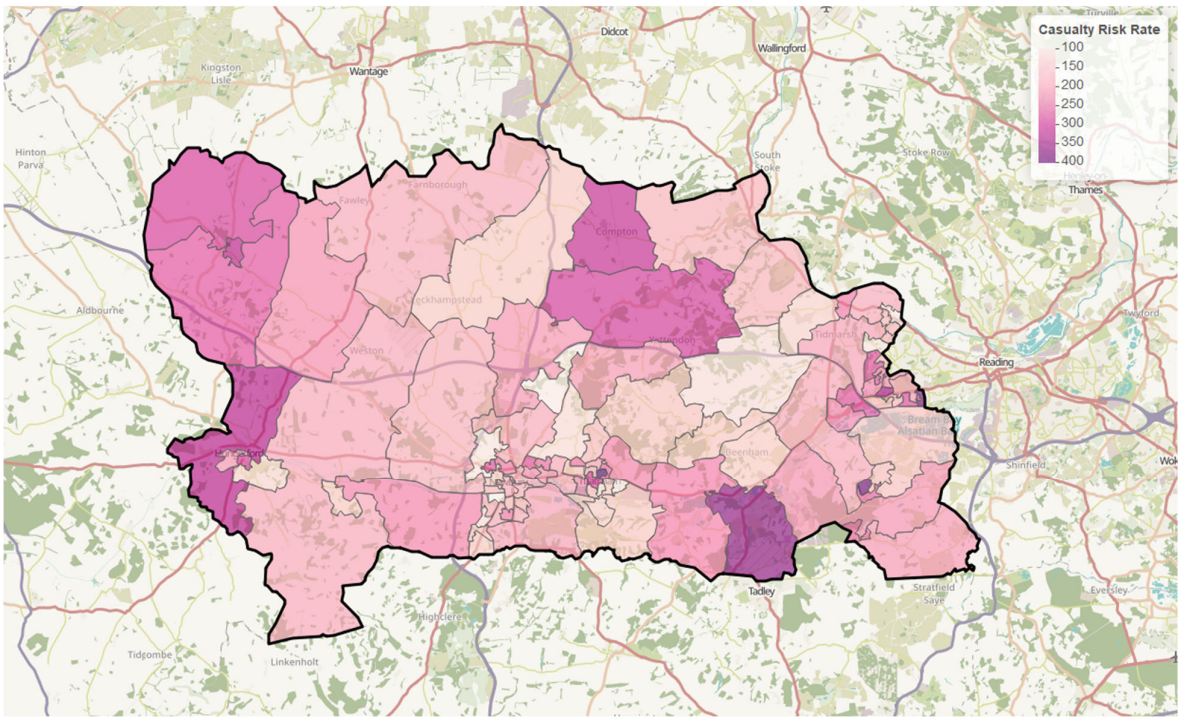
West Berkshire's resident casualty rate is 28% below the national rate, 29% below the regional rate and 20 below the overall Berkshire rate. Within Berkshire, West Berkshire has a similar resident casualty rate to that of Wokingham. It is noticeably lower than Slough, and lower than Bracknell Forest, Reading, and Windsor &

Maidenhead. West Berkshire has a lower resident casualty rate than all of the most similar comparator authorities of Aylesbury Vale.

Internal

Figure 8 shows the home location of West Berkshire'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 West Berkshire in areas such as Aldermaston, Thatcham, Burghfield Common, Ford's Farm, Hunderford, Compton, and Hampstead Norreys. Lower rates are found in Bradfield, Purely on Thames, and Ashmore Green.

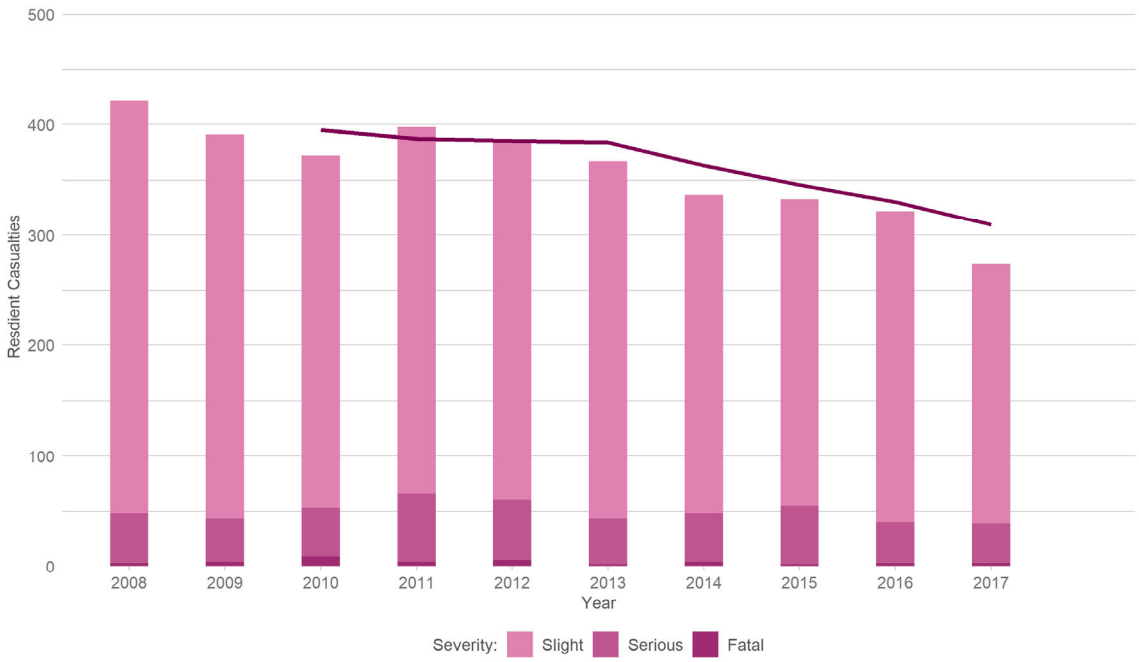
Figure 8 - Resident casualties home location by LSOA. Casualties per year per 100,000 population (2013-2017)



2.1.1.3 Trends

Figure 9 shows West Berkshire resident casualty numbers by severity. This includes West Berkshire residents injured anywhere in the country. Also shown is a 3-year moving average trend line. There has been a clear downward trend of casualty numbers over the past decade. In 2017 there were 274 resident casualties, down from 322 in 2016. Over the past five years, 14% of West Berkshire's resident casualties were either killed or seriously injured.

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



Resident Casualties occurring in other areas

Over half of West Berkshire residents were involved in collisions on the roads of West Berkshire. Fifty-eight percent of West Berkshire's resident casualties between 2013 and 2017 were injured in West Berkshire. This is below the national average with 63% of residents involved in collisions in their home highway authority. Of the remaining 42% of West Berkshire resident casualties, the majority are involved in collisions in nearby authorities including Reading (10%), Hampshire (8%), Oxfordshire (5%) and Wiltshire (3%).

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. There is also a large number of casualties in the 45-54 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 West Berkshire. There is also a national index value for comparison. The chart shows that 16-24 year olds are over-represented as casualties when indexing based on population. It also shows that West Berkshire's 16-24 year olds are considerably over-represented compared to 16-24 year olds nationally. Residents in the 25-34 age group are also over-represented when taking population in to account but are less over-represented than 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 - West Berkshire resident casualties by age group (2013-2017)

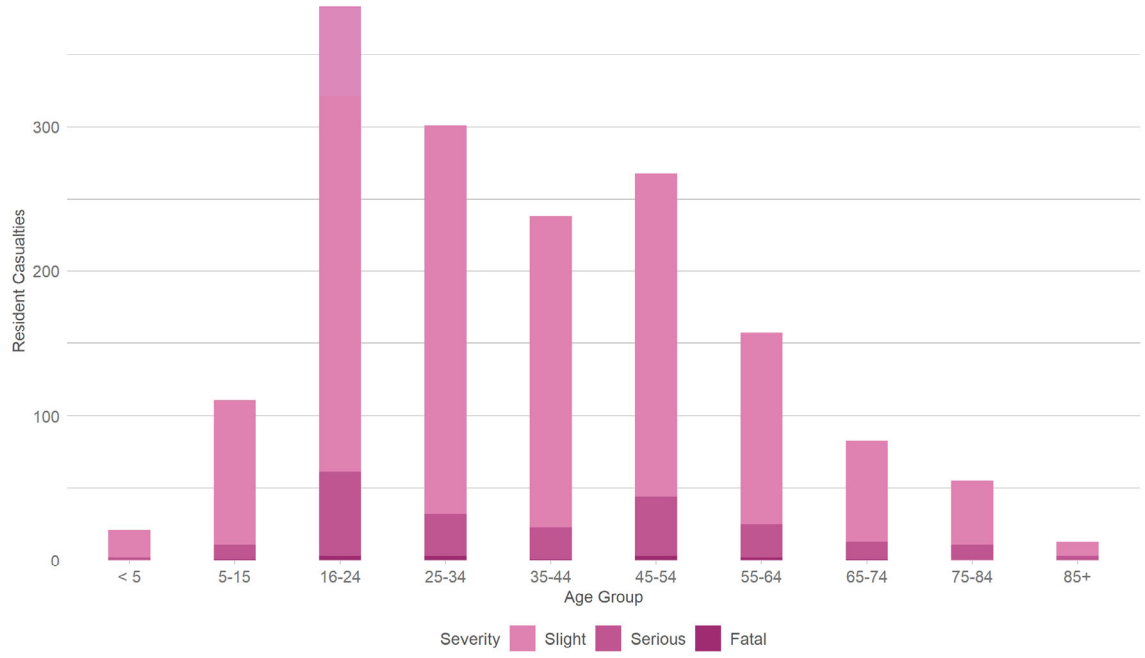
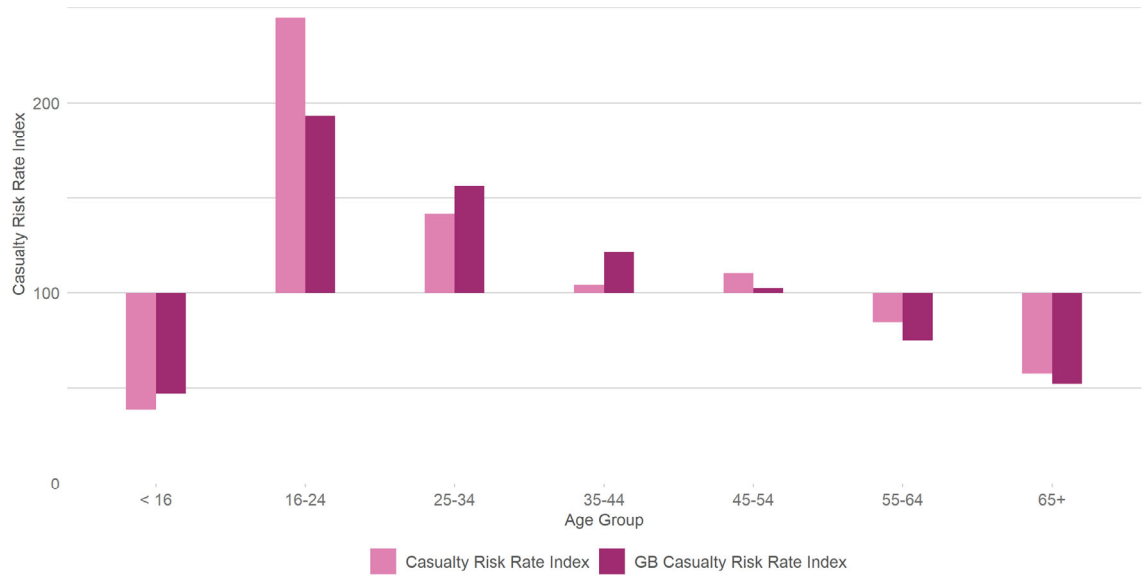


Figure 11 - Resident casualties by age group, indexed by population (2013-2017)



Segmentation

Analysis of the Mosaic communities in which West Berkshire'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 - West Berkshire resident casualties by Mosaic Type (2013-2017)

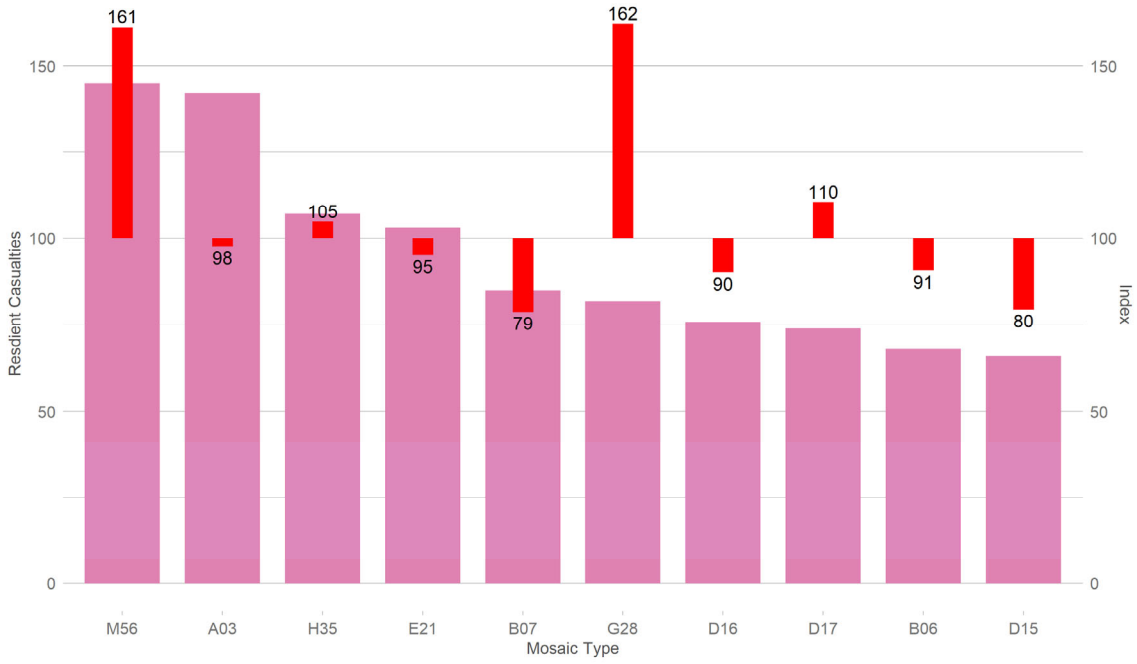


Figure 12 shows West Berkshire's resident casualties by the Mosaic Type of the postcode they live in. The red bars show the index value based on the population of those Types living in West Berkshire. The highest numbers of resident casualties come from *Stable families with children renting better quality homes from social landlords* (Type M56) and *Prosperous owners of country houses including the rural upper class, successful farmers and second-home owners* (Type A03). Type M56 is also considerably over-represented based on population.

Forward-thinking younger families who sought affordable homes in good suburbs which they may now be out-growing (Type H35) and *Active families with teenage and adult children whose prolonged support is eating up household resources* (Type E21) both have higher numbers of casualties, but are proportionally represented based on the population of these Types living in West Berkshire.

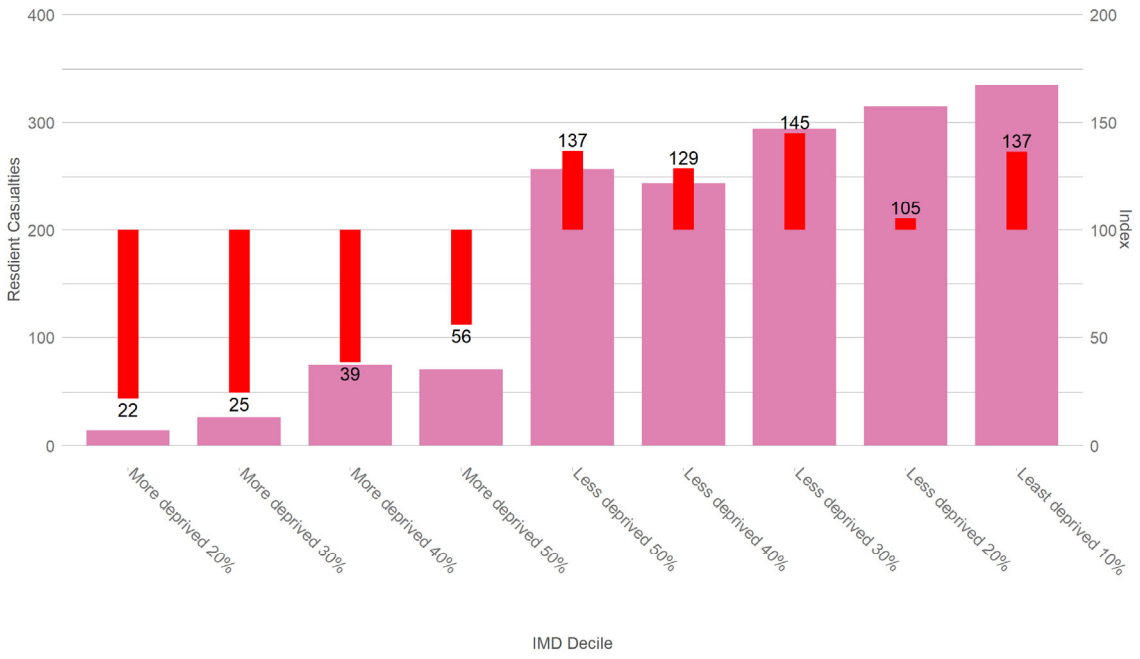
Rural families in affordable village homes who are reliant on the local economy for jobs (Type G28) contain fewer casualties but are noticeably over-represented.

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.

Deprivation

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 communities of West Berkshire, and given the number of people living in these communities, residents are generally over-represented. Residents of communities in the most deprived decile are under-represented, and casualty numbers in these decile are very low. There are no areas of West Berkshire which are classified as the most deprived 10% of the country.

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



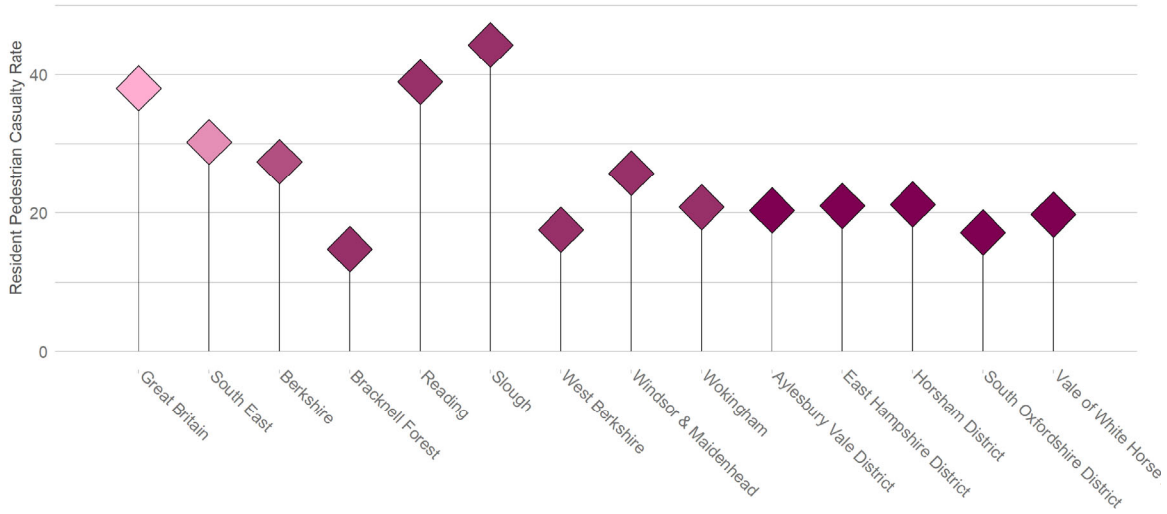
2.1.2 Resident Pedestrian Casualties

This section refers to pedestrian casualties who are residents of West Berkshire. For information about pedestrian casualties on West Berkshire'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 West Berkshire's pedestrian resident casualty rate compared to the other Berkshire authorities, most similar comparator authorities and the national and regional rates. West Berkshire has a rate of 17.6 pedestrian casualties per year (2013-2017) per 100,000 population.

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



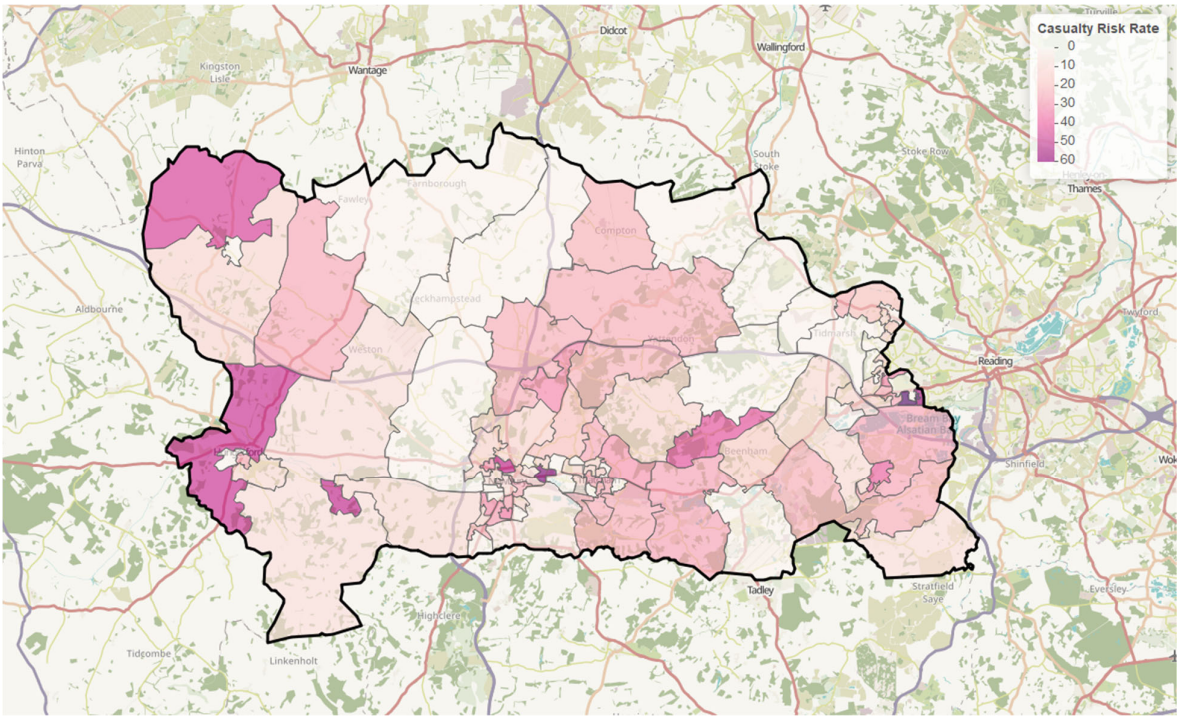
2.1.2.2 Comparisons

West Berkshire's resident pedestrian casualty rate is 54% lower than the national rate. It is lower than both the South East rate (42% lower) and the overall Berkshire rate (36% lower). Out of the six Berkshire authorities, West Berkshire has the second lowest rate with Bracknell Forest slightly below it. West Berkshire has a similar rate to South Oxfordshire, and a lower rate than all of the other most similar authorities.

Internal

Figure 15 shows West Berkshire's resident pedestrian casualties by middle layer super output area (MSOA). 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 Hungerford, Kintbury, Newbury, Holybrook, and Upper Lambourn.

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



2.1.2.3 Trends

Resident pedestrian casualty numbers from West Berkshire have shown a downward trend over the past decade until a recent rise over the past four years. Numbers in 2017 are down 9% from those in 2008, but are up 48% from a low of 21 in 2015, as shown in Figure 16. In 2017 there were 31 pedestrian casualties, including 7 that were seriously injured, compared to 34 in 2008. There were no pedestrian fatalities in 2017. In the past five-year period, 20% of resident pedestrian casualties were either killed or seriously injured.

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

Resident Pedestrian Casualties occurring in other areas

Between 2013 and 2017, 74% of West Berkshire's resident pedestrian casualties were involved in collisions on West Berkshire's roads. Outside of West Berkshire, 11% of resident pedestrian casualties were injured in Reading and a further 3% were in Hampshire.

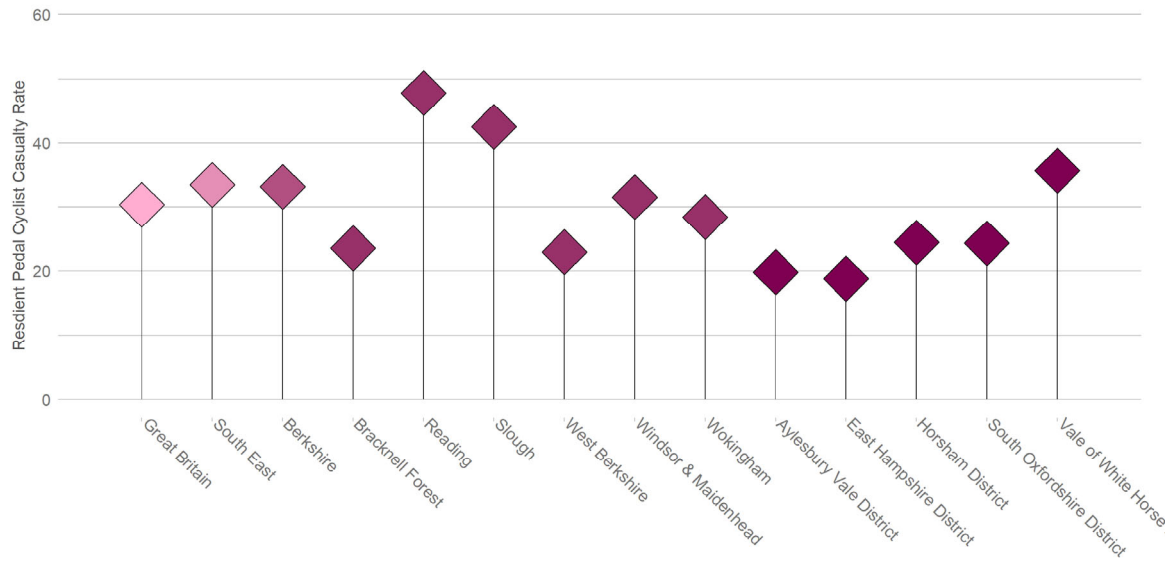
2.1.3 Resident Pedal Cyclist Casualties

This section refers to all pedal cyclist casualties who are residents of West Berkshire. For information about all pedal cycle casualties on West Berkshire'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 West Berkshire, Berkshire highway authorities and West Berkshire'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



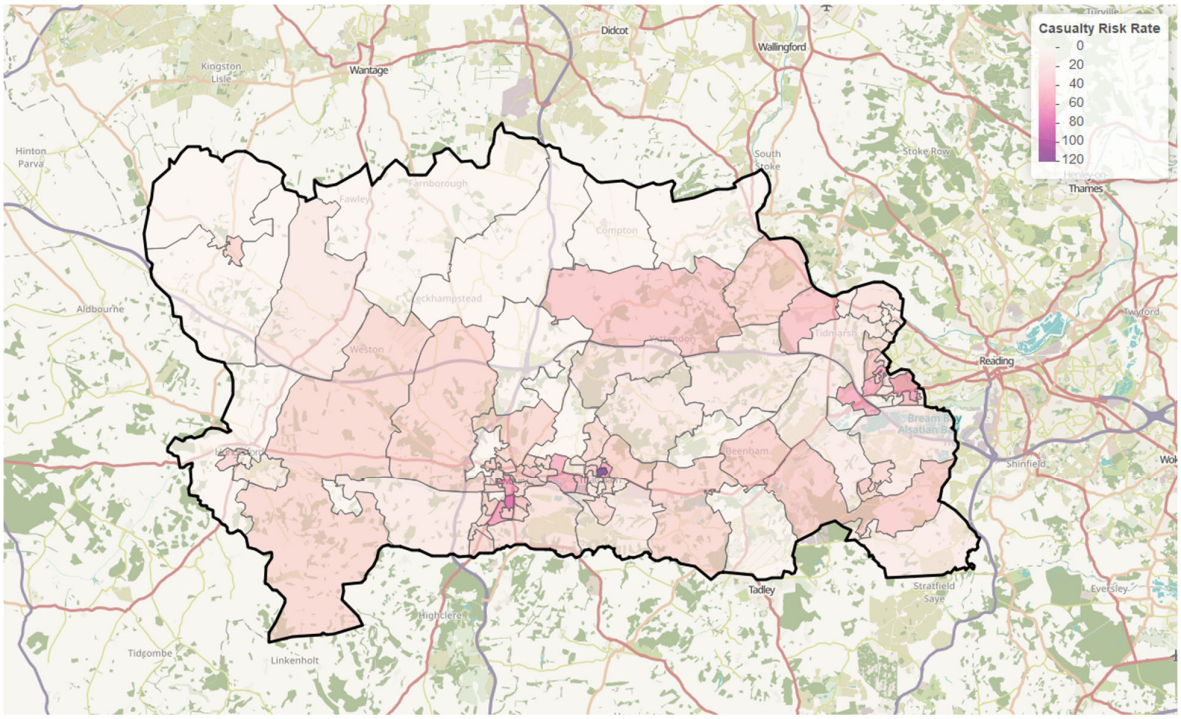
2.1.3.2 Comparisons

West Berkshire's resident pedal cycle user casualty rate of 22.9 per year per 100,000 population is 24% lower than the national average. It is 31% lower than the South East rate and 31% lower than the overall Berkshire rate. Within Berkshire, West Berkshire has a similar rate to Bracknell Forest but lower than the other authorities. West Berkshire's resident pedal cycle user rate is similar to the comparator authorities of Horsham and South Oxfordshire. It is slightly higher than Aylesbury and East Hampshire, but is lower than Vale of White Horse.

Internal

Figure 18 shows West Berkshire's resident pedal cycle user casualties by home MSOA. The map is colour coded by the rate of casualties from that MSOA per year per 100,000 population. Higher rates of resident pedal cycle user casualties are found in Thatcham and Newbury. There are also higher rates in Holybrook, Pangbourne, and Hampstead Norreys.

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 West Berkshire'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 slight downward trend since 2013. In 2017 there were 29 pedal cycle user casualties from West Berkshire, and no fatalities. In the period 2013-2017, 20% of pedal cycle user casualties were either killed or seriously injured.

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

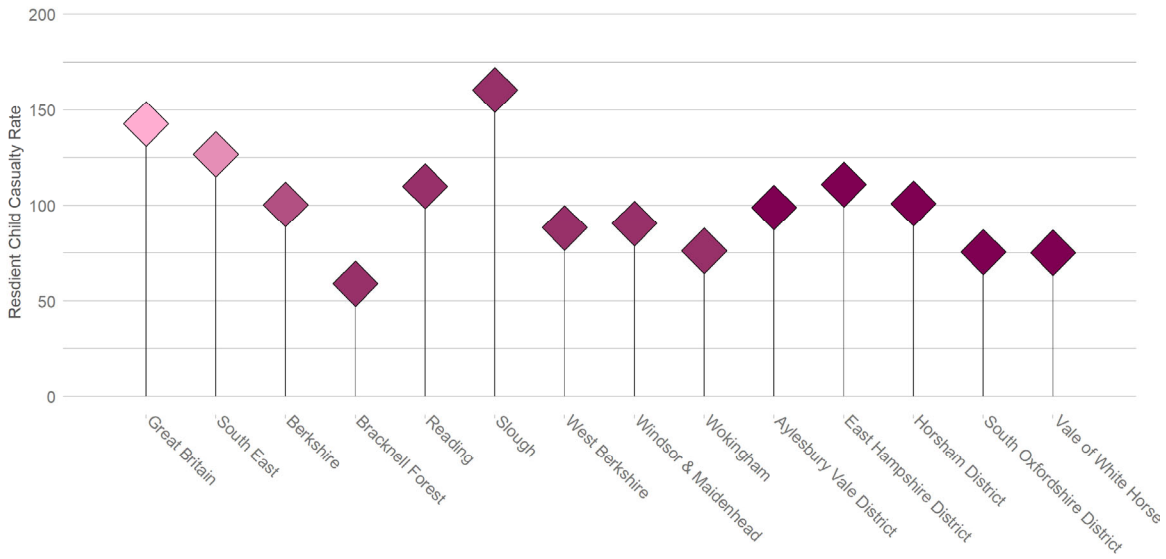
2.1.4 Child Resident Casualties

This section refers to all child casualties who are residents of West Berkshire. For information about all child casualties on West Berkshire'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 West Berkshire, 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.

Figure 20 – Annual average child resident casualty rate (2013-2017) per 100,000 population (aged under 16)



2.1.4.2 Comparisons

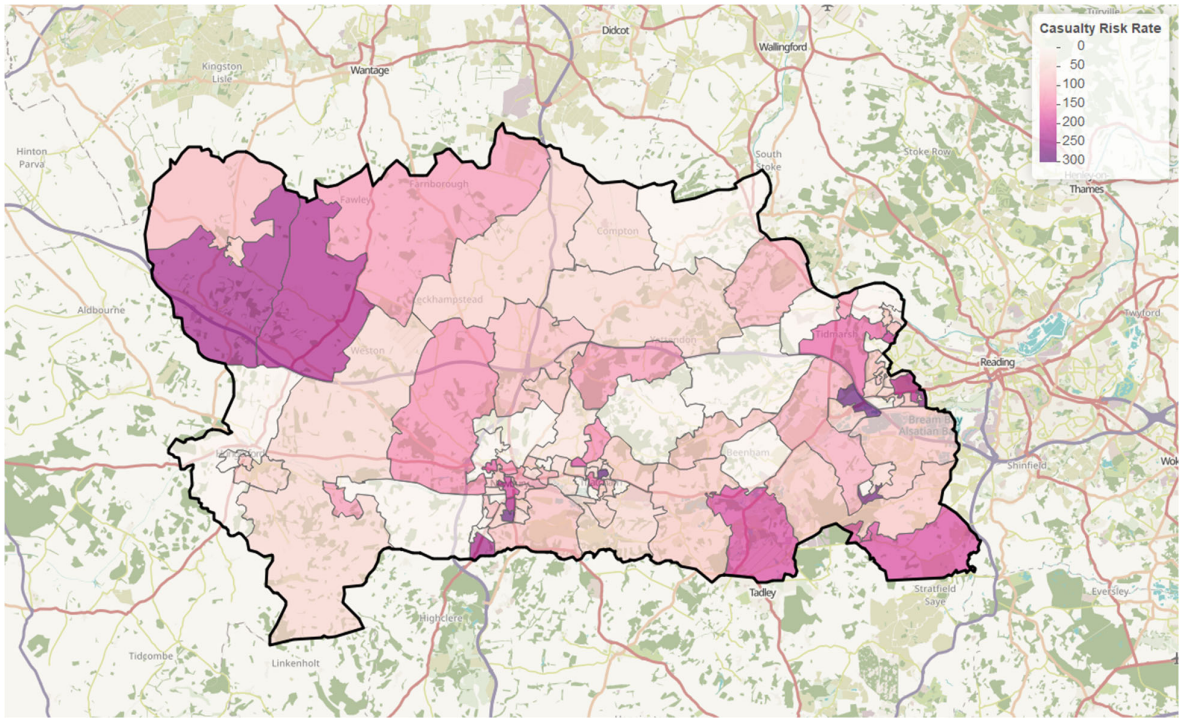
West Berkshire's child resident casualty rate of 88.2 child casualties per year per 100,000 population (aged 0-15) is lower than the national rate (38% lower). It is also 30% lower than the South East rate and 12% lower than the overall Berkshire rate. Within Berkshire, West Berkshire has a similar rate to Windsor & Maidenhead, a lower rate than Slough and Reading, but a higher rate than Bracknell Forest and Wokingham. West Berkshire's child resident casualty rate is lower than the comparator authorities of Aylesbury, East Hampshire and Horsham, but higher than South Oxfordshire and Wale of White Horse.

Internal

Figure 21 shows West Berkshire's resident child casualties by MSOA. 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 higher around Lambourn, Eastbury, Newbury, Thatcham, Enborne Row, Aldermaston, Burghfield Common, Theale, Holybrook, and Stratfield Mortimer.

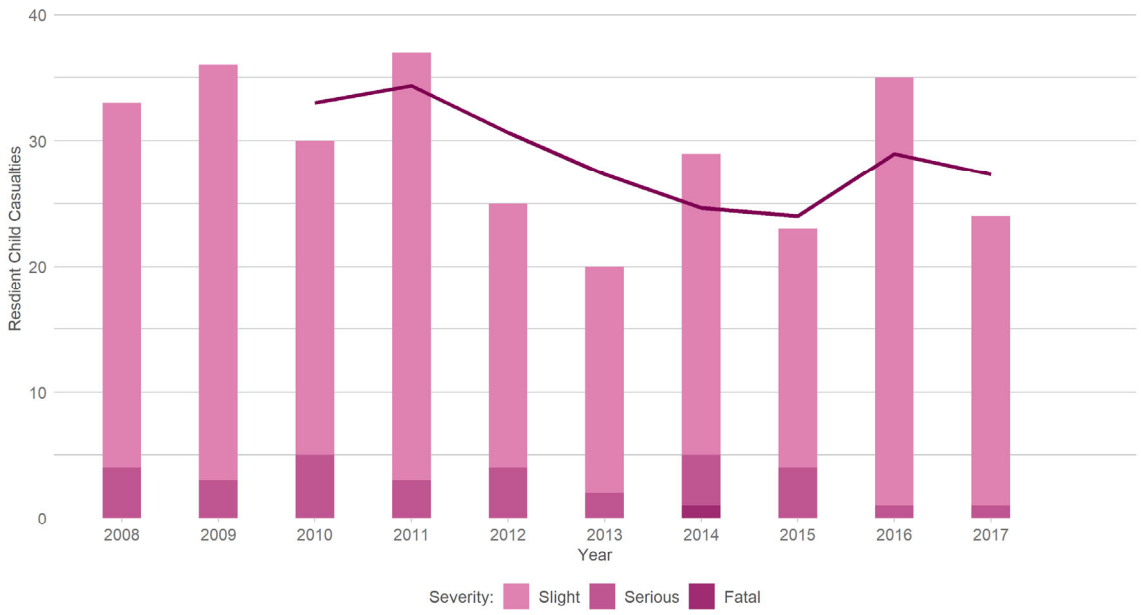
Figure 21 – Child resident casualties by MSOA (2013-2017). Annual average child casualties per 100,000 child population



2.1.4.3 Trends

Figure 22 shows child resident casualties since 2008, by severity. Casualty numbers have fluctuated over recent years with a peaks of 37 casualties in 2011 and 35 casualties in 2016. There were 24 child casualties from West Berkshire in 2017, including 1 seriously injured casualty. In the past five-year period (2013-2017) 10% of child casualties were seriously injured. There have been no child fatalities from West Berkshire since 2014.

Figure 22 – Child resident casualties by year 2008-2017



Child Resident Casualties occurring in other areas

Seventy-five percent of West Berkshire's child resident casualties were injured on West Berkshire's roads, with the rest injured mainly in nearby authorities including Reading (7%) and Hampshire (5%).

2.2 Resident Motor Vehicle Users

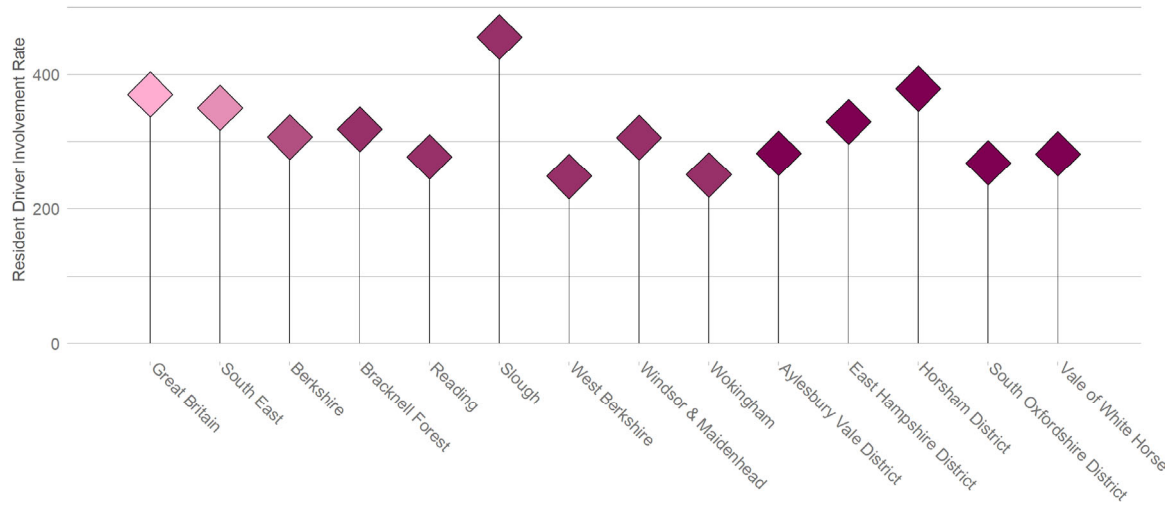
2.2.1 All Resident Drivers and Riders involved in Collisions

This section refers to all drivers and riders involved in collisions and who are residents of West Berkshire. 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 West Berkshire, 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

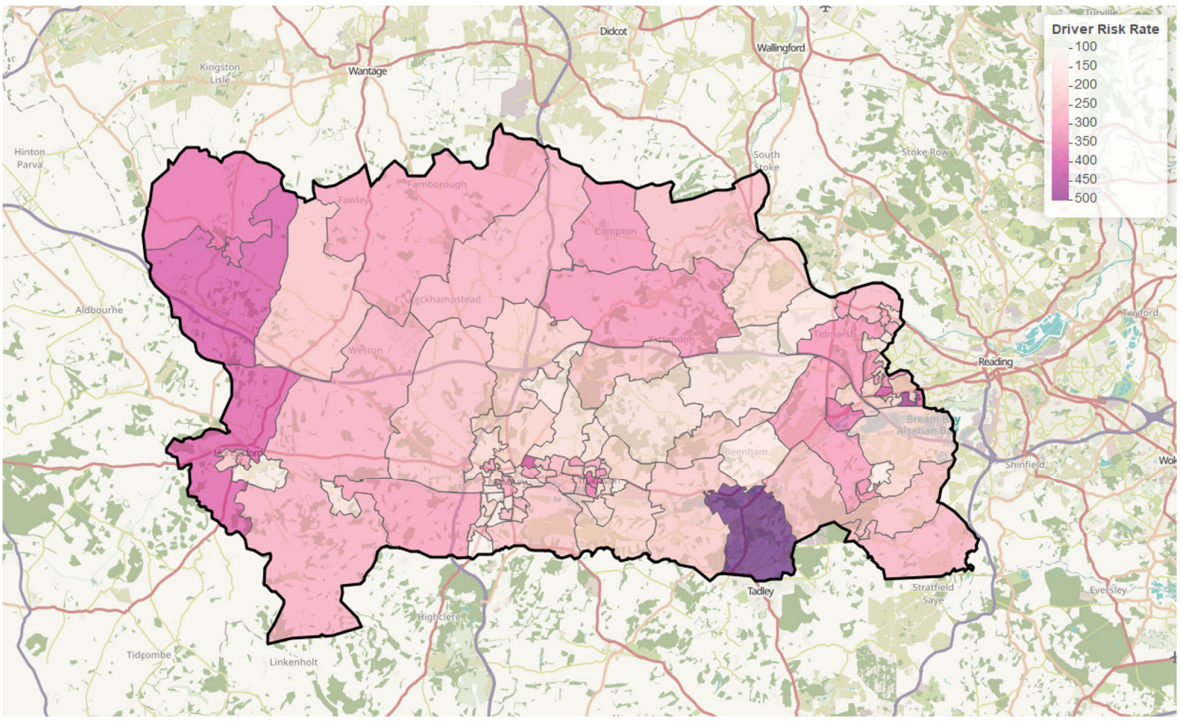


2.2.1.2 Comparisons

West Berkshire's resident driver rate of 248.2 drivers per year per 100,000 adult population is 33% lower than the national rate. It is 29% lower than the South East rate and 19% lower than the overall Berkshire rate. West Berkshire has the lowest rate of all of Berkshire's authorities, and a similar rate to that of Wokingham. West Berkshire also has the lower rate of all of the most similar comparator authorities.

Figure 24 shows West Berkshire'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 Aldermaston and Holybrook, as well as to the west of the borough around Hungerford, Eastbury, and Upper Lambourn.

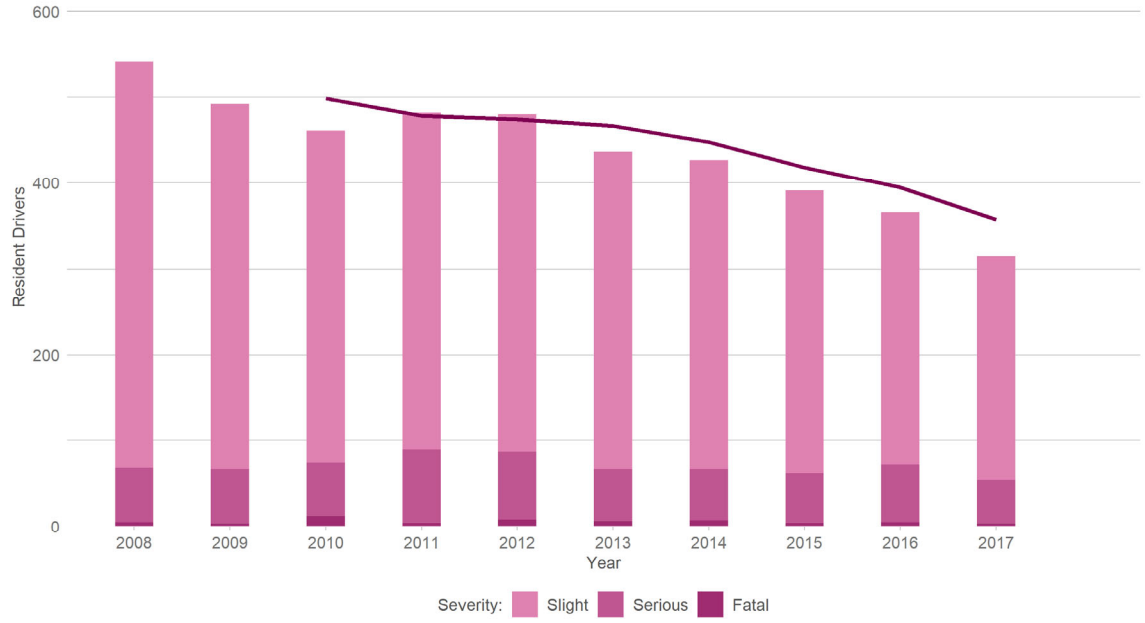
Figure 24 – Annual average resident drivers (2013-2017) per 100,000 adult population, by LSOA



2.2.1.3 Trends

Figure 25 shows West Berkshire's annual resident motor vehicle driver numbers by severity. There has been a clear reduction in numbers over the past decade. In 2017 there were 315 drivers from West Berkshire involved in collisions, including 54 in collisions where there was a killed or seriously injured casualty. The total driver collision involvement number is a 42% reduction from 2008. In the most recent five-year period (2013-2017) 17% of West Berkshire's resident drivers have been involved in a collision resulting in a killed or seriously injured casualty.

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



Resident Driver crash involvement in other areas

Fifty percent of West Berkshire's resident drivers are involved in collisions on West Berkshire's roads. Of the other authorities, 11% of resident drivers are involved in collisions in Reading, 10% in Hampshire and 5% in Oxfordshire.

2.2.1.4 Socio Demographic Analysis

Segmentation

Analysis of the Mosaic communities in which West Berkshire'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.

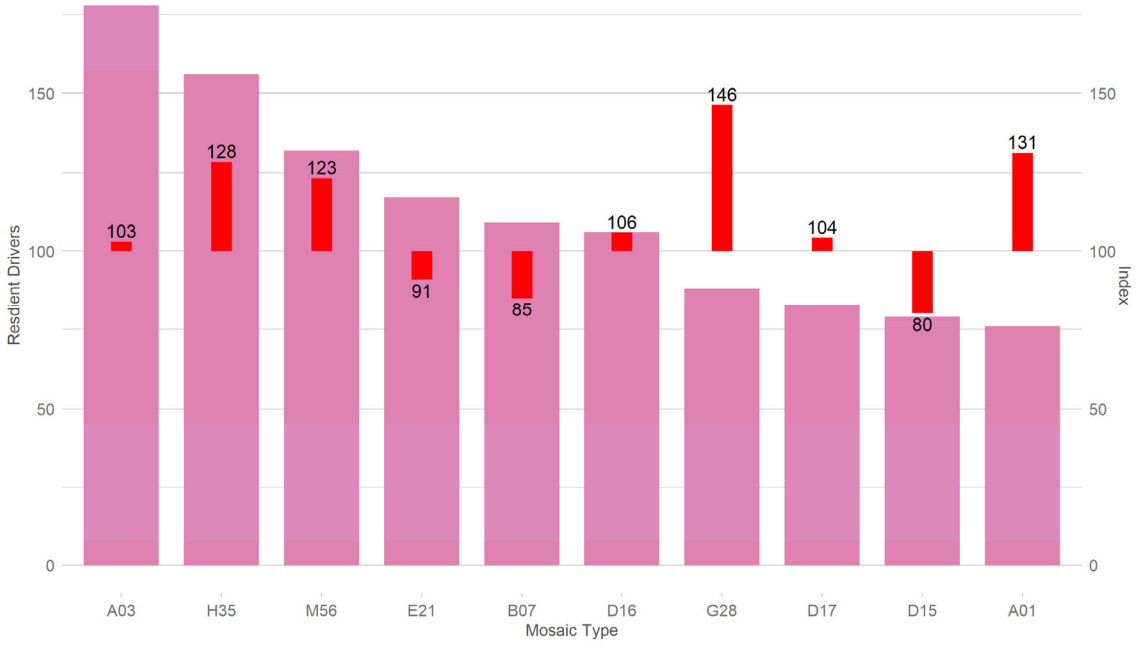
As with the resident casualty Mosaic analysis, the highest driver numbers come from communities of *Prosperous owners of country houses including the rural upper class, successful farmers and second-home owners* (Type A03), however this Type is also appropriately represented when taking population into account.

Forward-thinking younger families who sought affordable homes in good suburbs which they may now be out-growing (Type H35) and *Stable families with children renting better quality homes from social landlords* (Type M56) are involved in a high number of collisions as drivers, and both Types are over-represented based on population.

Active families with teenage and adult children whose prolonged support is eating up household resources (Type E21) and *High-achieving families living fast-track lives, advancing careers, finances and their school-age children's*

development (Type B07) also have high numbers of involved resident drivers, but are under-represented when population is taken into account. Whereas *Rural families in affordable village homes who are reliant on the local economy for jobs* (Type G28) and *Country-loving families pursuing a rural idyll in comfortable village homes while commuting some distance to work* (Type A01) represent lower numbers of involved resident drivers but are significantly over-represented based on population.

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

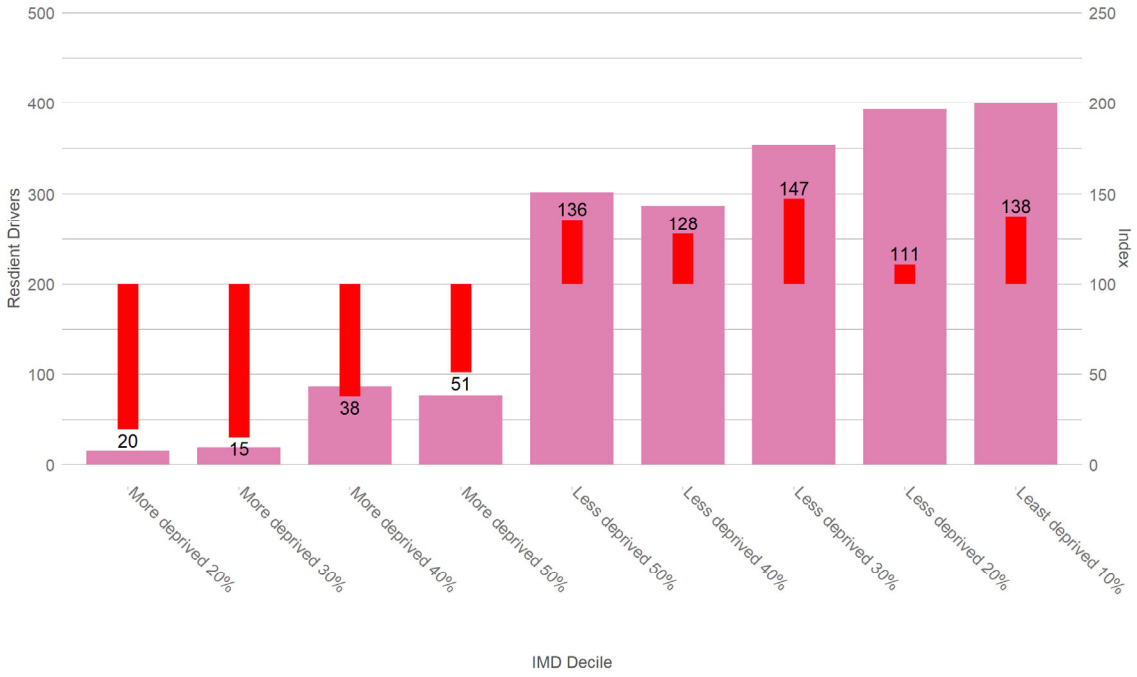


More information on the characteristics of the communities from some of these Mosaic Types and a thematic map showing the areas where they live can be found in 4.2.2 on page 65.

Deprivation

Figure 27 shows West Berkshire's resident drivers by Index of Multiple Deprivation (IMD). The highest number of drivers are from the least deprived communities. These communities are also over-represented when the population of West Berkshire is taken in to account, as shown by the red bars. From the more deprived communities have lower levels of collision involvement, and are under-represented based on population.

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



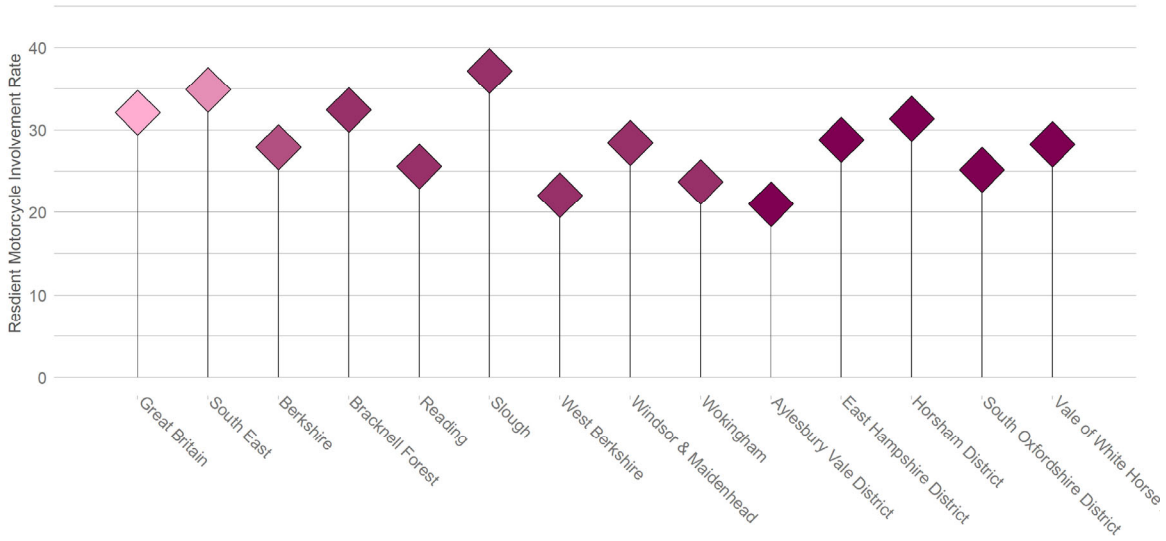
2.2.2 Resident Motorcyclists involved in Collisions

This section refers to motorcyclists involved in collisions and who are residents of West Berkshire. 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 West Berkshire, 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



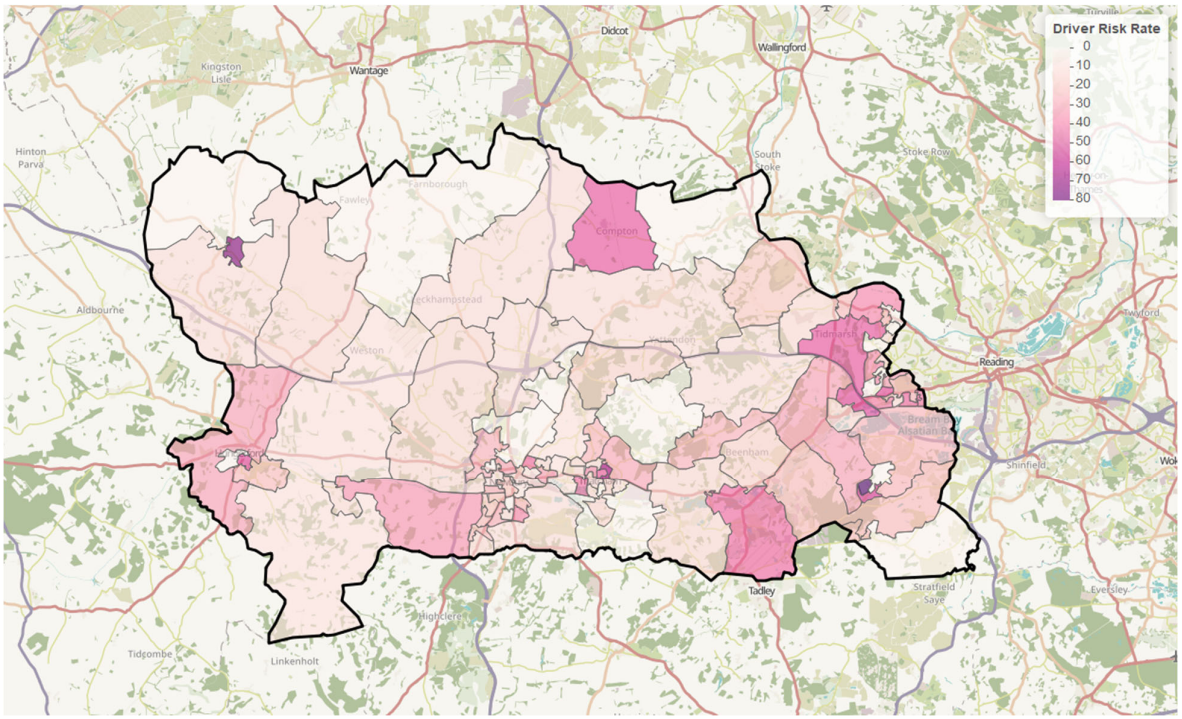
2.2.2.2 Comparisons

West Berkshire's resident motorcycle rider rate of 22 riders per year per 100,000 adult population is 31% below the national rate. It is 37% below the South East rate and 21% below than the overall Berkshire rate. Within Berkshire, West Berkshire has the lowest resident motorcycle involvement rate. West Berkshire has a similar rate to Aylesbury Vale, and a lower rate than the other comparator authorities.

Internal

Figure 29 shows West Berkshire'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 in Lambourn, Burghfield Common, Thatcham, Holybrook, Hungerford, and Compton. Lower rates are found around Farnborough, Upper Lambourn, Streatley, Bucklebury, and Stratfield Mortimer.

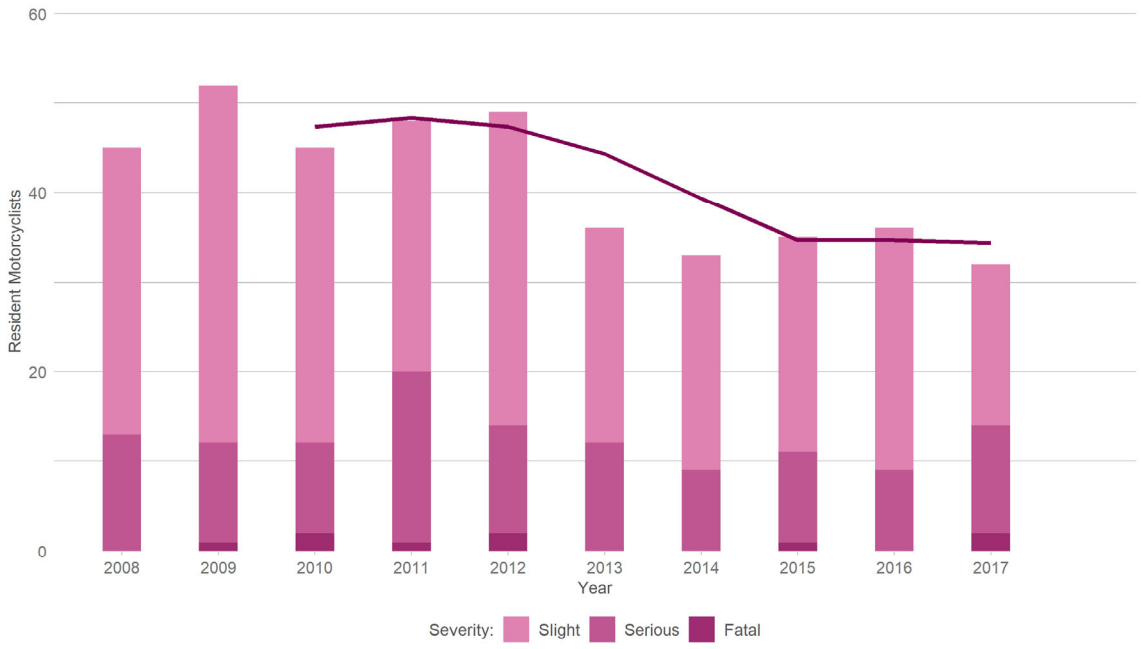
Figure 29 – Annual average resident motorcycle riders per 100,000 adult population, by MSOA (2013-2017)



2.2.2.3 Trends

Shown in Figure 30 are West Berkshire's annual resident motorcycle rider numbers by severity. The number of resident motorcycle riders involved in collisions has decreased since 2008, but has remained reasonably constant since 2013. Over the most recent five-year period (2013-2017) 32% of West Berkshire'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 - West Berkshire resident motorcycle riders, by year (2008-2017)



Resident Motorcyclist crash involvement in other areas

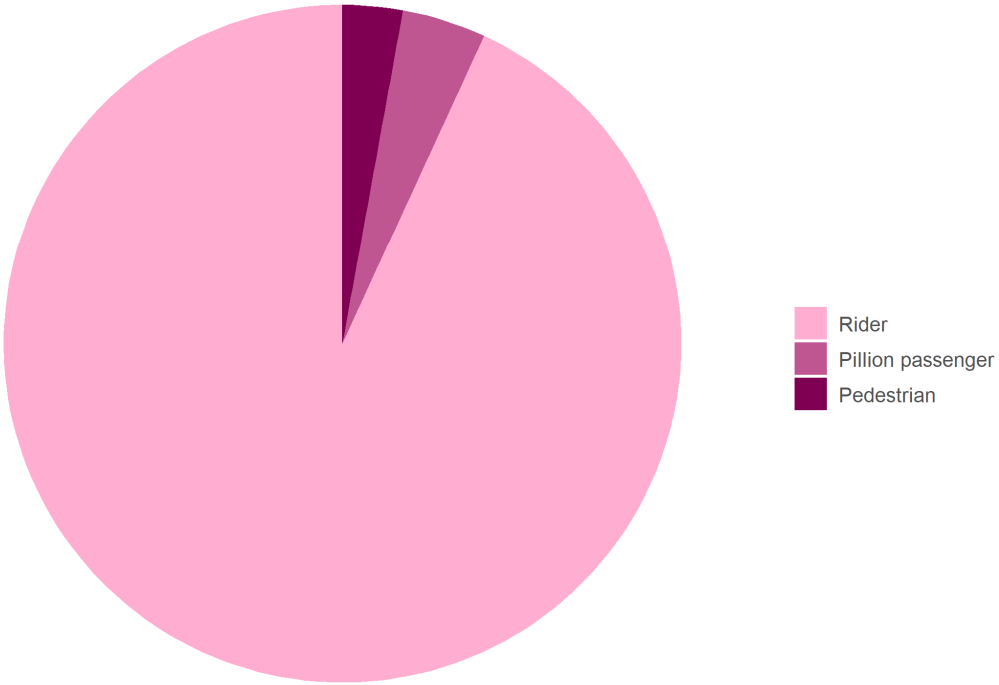
Sixty-two percent of West Berkshire's resident motorcycle riders were involved in collisions on West Berkshire's roads. Twelve percent were involved in collisions in Reading, 9% in Hampshire, and 5% in Oxfordshire.

2.2.2.4 Related Casualties

Passenger and pedestrian casualties

The related casualties of West Berkshire'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 West Berkshire's resident motorcycle riders, 93% of the casualties were the riders themselves. A further 4% 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 West Berkshire's resident motorcycle riders could live anywhere in the country and have been injured anywhere.

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



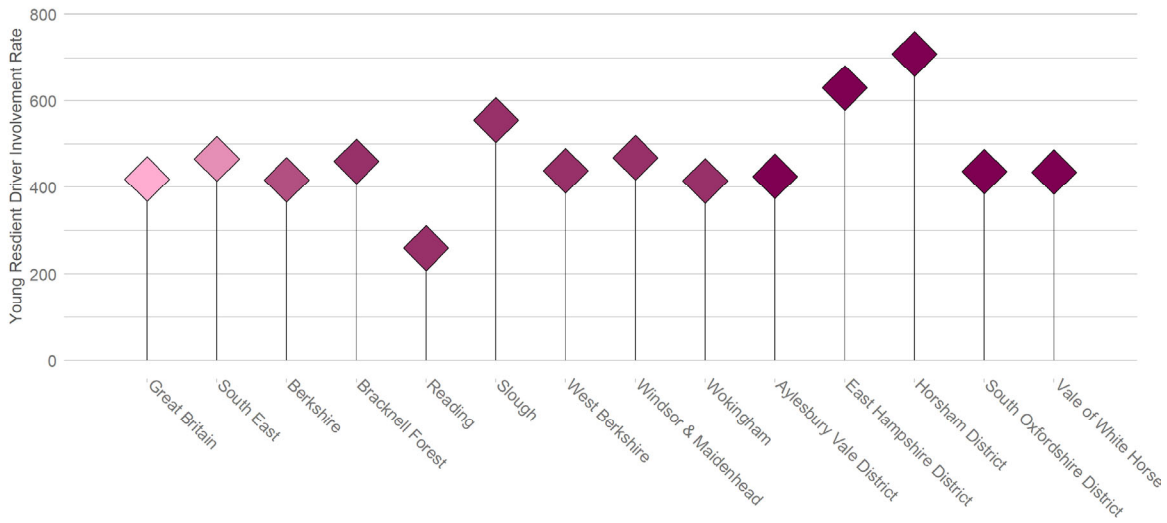
2.2.3 Young Resident Drivers involved in Collisions

This section refers to young drivers involved in collisions and who are residents of West Berkshire. 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

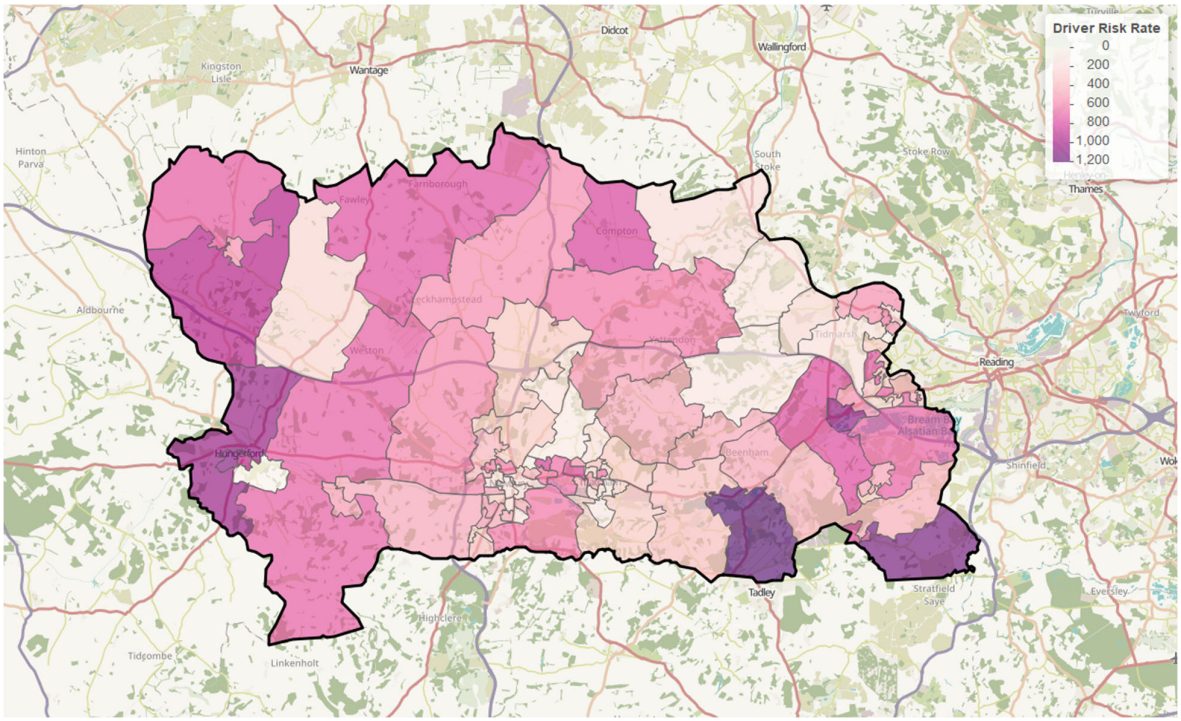
West Berkshire's young resident driver rate of 438.1 per year per 100,000 population of 16-24 year olds is similar to the national rate (5% higher), the South East rate (6% lower), and the Berkshire rate (5% higher). Within Berkshire, West Berkshire has a similar rate to those of Bracknell Forest, Windsor & Maidenhead, and Wokingham. West Berkshire has a lower rate than Slough, but a higher rate than Reading. Of the most similar comparator authorities, West Berkshire has a similar rate to Aylesbury, South Oxfordshire, and Vale of White Horse, and a lower rate than both East Hampshire and Horsham.

Internal

Figure 33 shows West Berkshire'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 to the east of the Borough, around Hungerford and Lambourne, as well as near Aldermaston, Theale, and Stratfield Mortimer. Lower rates are found in the area around Ashmore Green, Bradfield, Upper Basildon, Streatley, and parts of Thatcham.

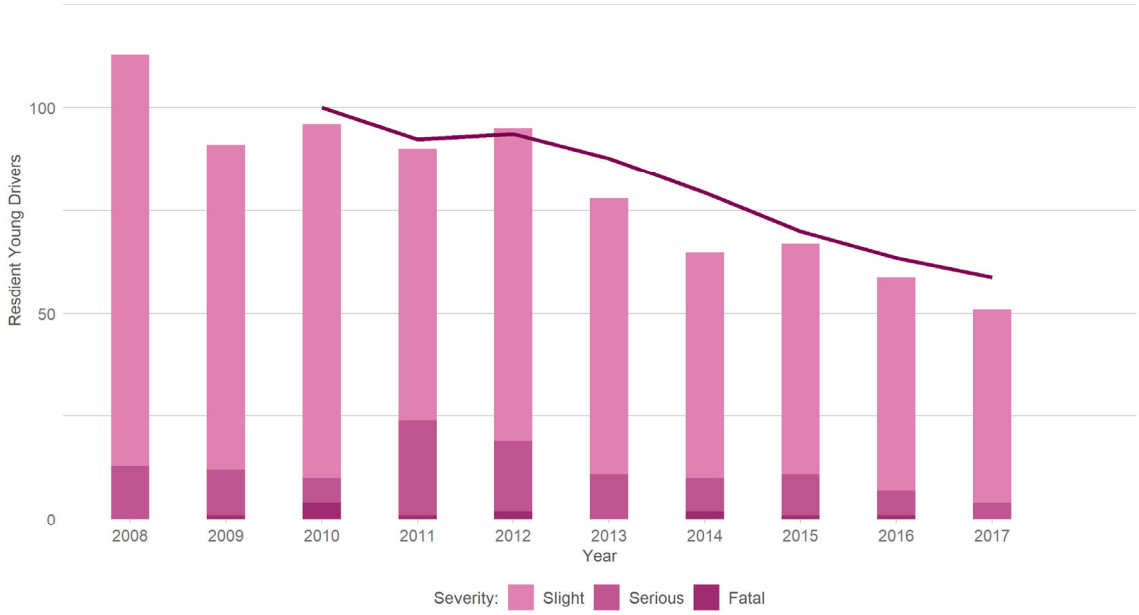
Figure 33 – Annual average young resident motor vehicle drivers per 100,000 16-24 year old population by MSOA (2013-2017)



2.2.3.3 Trends

Figure 34 shows West Berkshire's annual resident young driver numbers, by severity, over the period 2008-2017. Since 2008 there has been a visible downward trend. In 2017 there were 51 young drivers from West Berkshire involved in injury collisions, a 55% reduction from 2008 and a 14% reduction from 2016. In 2017, 4 West Berkshire resident young drivers were involved in collisions where there was a seriously injured casualty.

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



Young Resident Driver crash involvement in other areas

Fifty-six percent of West Berkshire's young resident drivers are involved in collisions on West Berkshire's roads. Other authorities where West Berkshire's young drivers are involved in collisions include Hampshire (10%), Reading (10%) and Oxfordshire (4%).

2.2.3.4 Socio Demographic Analysis

Segmentation

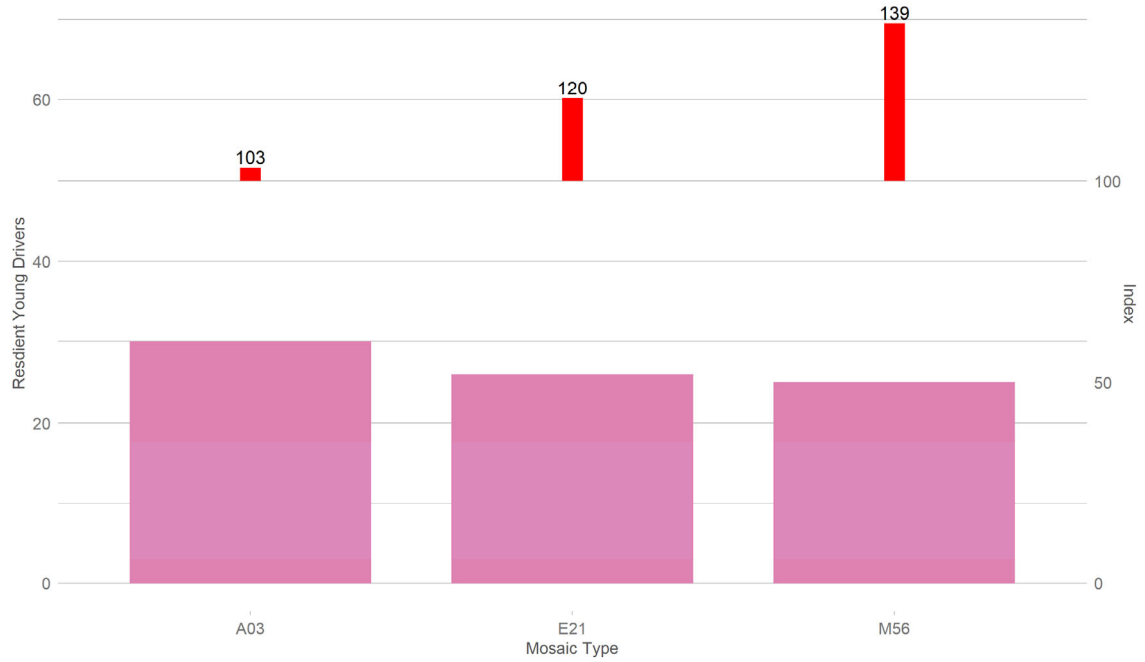
Analysis of the Mosaic communities in which West Berkshire's young resident drivers live provides an insight into those involved in collisions. For an explanation of Mosaic Public Sector and how to understand the following chart, please refer to 4.1.1.1 on page 59.

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

The highest number of young drivers are from *Prosperous owners of country houses including the rural upper class, successful farmers and second-home owners* (Type A03), although this Group is appropriately represented when taking the population of that group in to account.

Active families with teenage and adult children whose prolonged support is eating up household resources (Type E21) and *Stable families with children renting better quality homes from social landlords* (Type M56) have the next highest number of young drivers involved in injury collisions but are at the considerably over-represented, based on population.

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



Deprivation

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

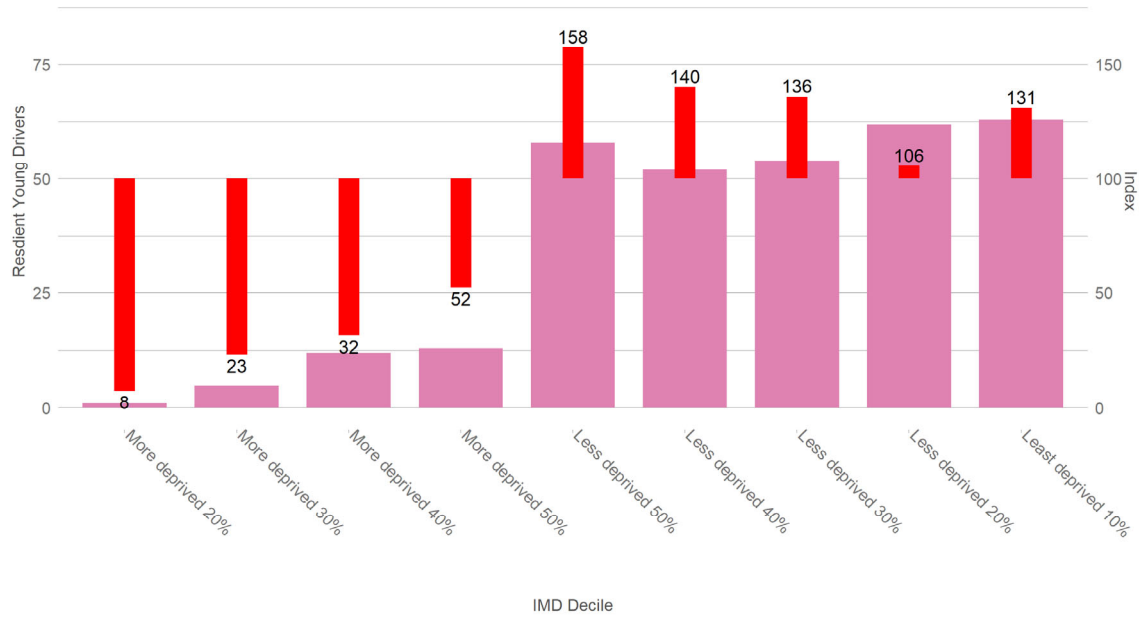


Figure 36 shows young drivers by IMD. The red bars represent the index value showing whether young drivers are over or under-represented based on the population of 16-24 year olds in each community. Higher young driver numbers come from the most affluent areas and, in general, young drivers from these communities are over-represented relative to the population of West Berkshire. The less deprived communities have lower levels of resident young driver involvement and are under-represented based on population.

2.2.3.5 Related Casualties

Passenger and pedestrian casualties

The related casualties of West Berkshire'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 West Berkshire's young resident drivers, 63% of the casualties were the drivers themselves. A further 30% were their passengers and 7% were pedestrians who were injured after the young driver's vehicle hit them. It should be noted that the related casualties of West Berkshire's young resident drivers could live anywhere in the country and have been injured anywhere.

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

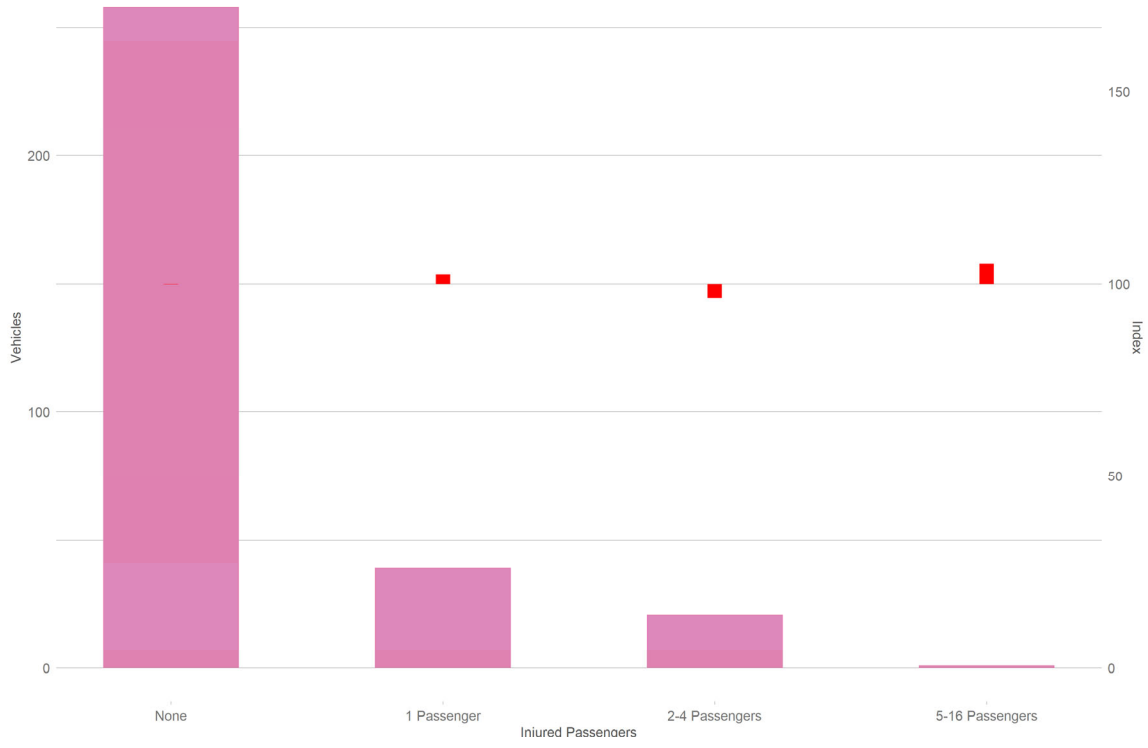


Figure 37 shows the number of young drivers by the presence and quantity of injured passengers in their vehicle. The red bars are indices comparing young drivers to the figures for injured passengers for all young drivers. It shows that most young drivers (81%) do not have injured passengers in their vehicle, and the red bars indicate that the numbers of injured passengers are in line with those of all young drivers in Great Britain.

3 Road Network Risk

3.1 Collisions on all roads

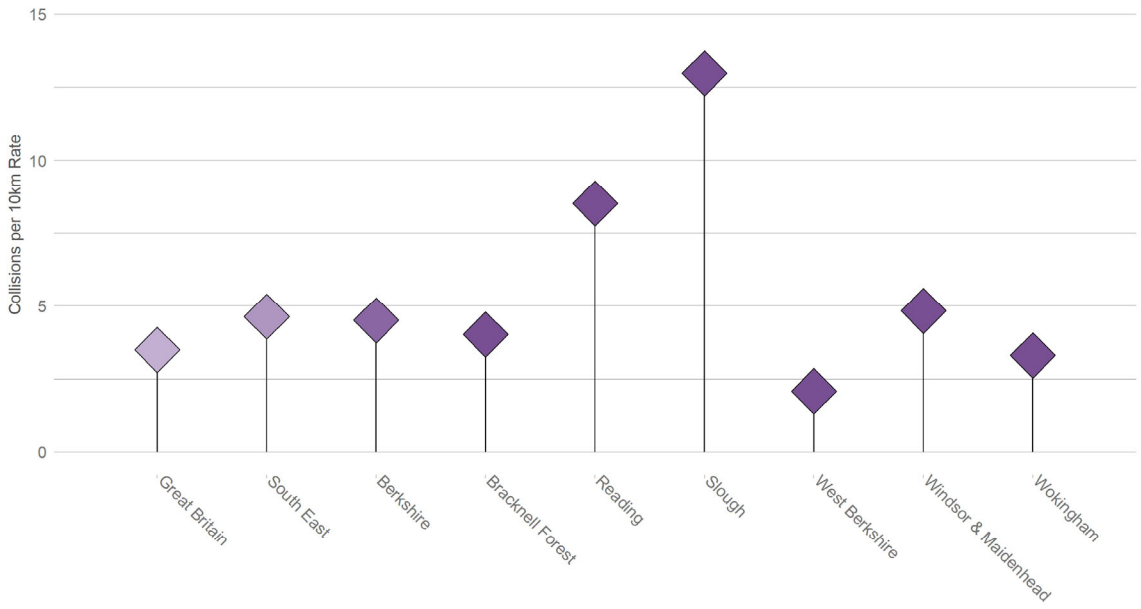
This section refers to all collisions which occurred on West Berkshire's roads. For information on casualties who live in West Berkshire, please refer to 2.1 on page 9 and for analysis involving West Berkshire resident motor vehicle users, please refer to 2.2 on page 24. For an explanation of the methodologies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

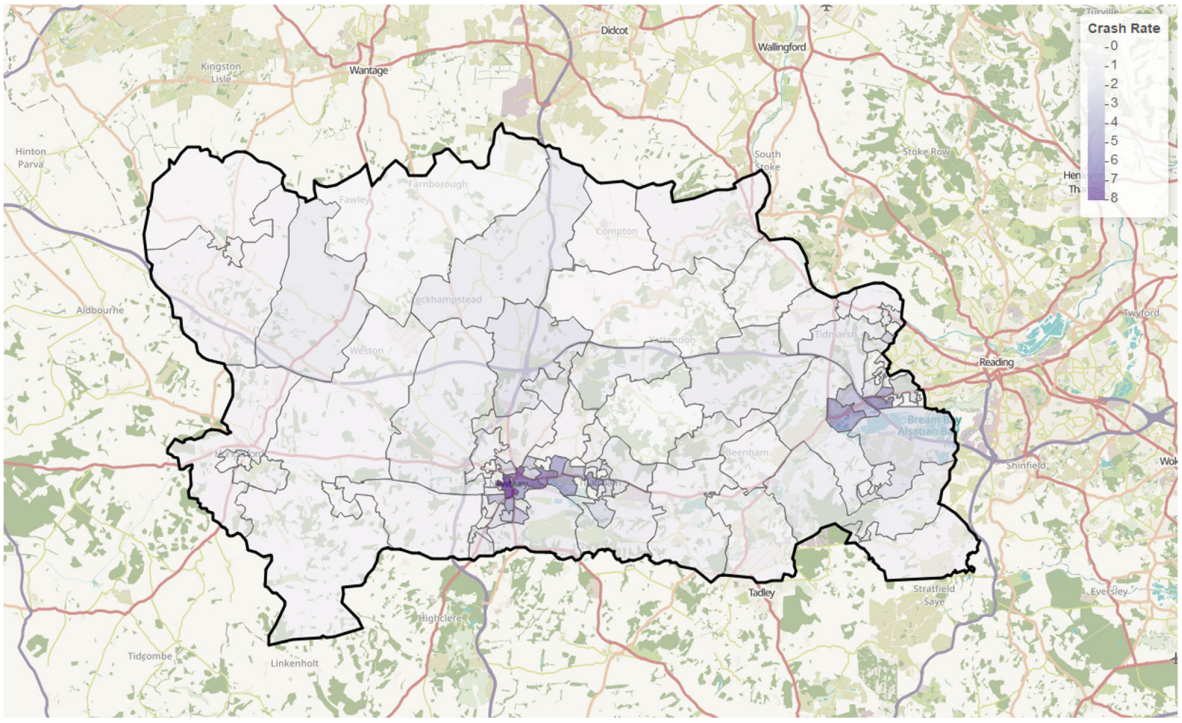


3.1.2 Comparisons

West Berkshire's collisions per km rate is 40% lower than the national rate. It is 5% lower than the South East rate and 5% lower than the Berkshire rate. Within Berkshire, West Berkshire has the lowest rate, 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.

The map (Figure 39) shows collisions on all roads in West Berkshire, 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 between Newbury and Thatcham, as well as around Theale and Holybrook.

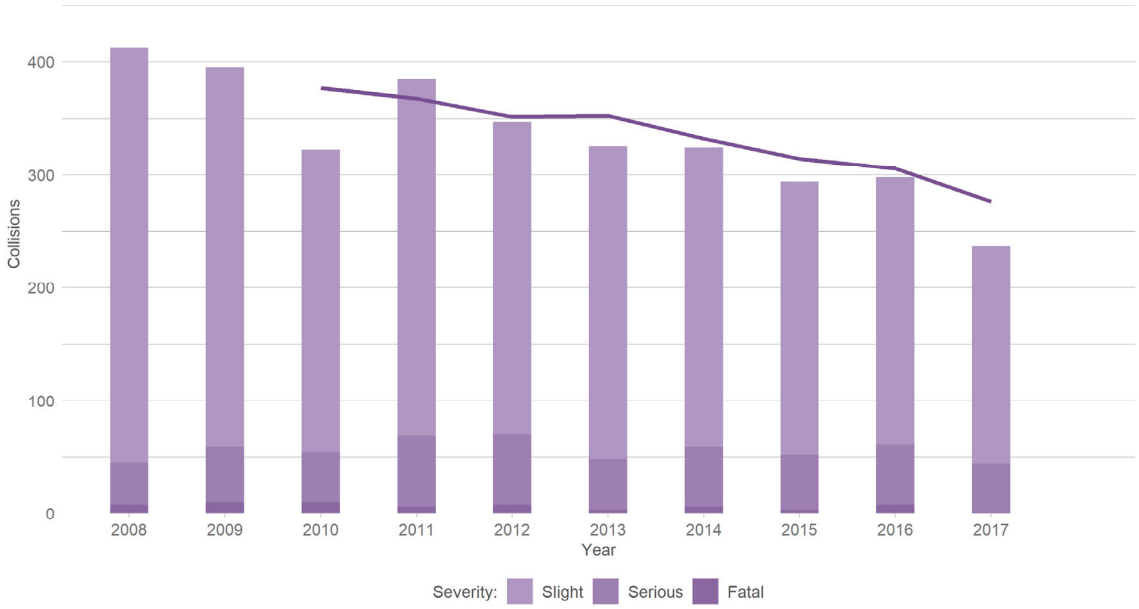
Figure 39 – Annual average collisions (2013-2017) per 10km of road, by LSOA



3.1.3 Trends

Figure 40 shows annual collisions on all of West Berkshire's roads, including strategic roads, from 2008 to 2017. Collisions on West Berkshire's roads have reduced by 43% from 2008 and there has been a general downward trend over the past decade. There were 237 collisions in West Berkshire in 2017, down from 298 in 2016.

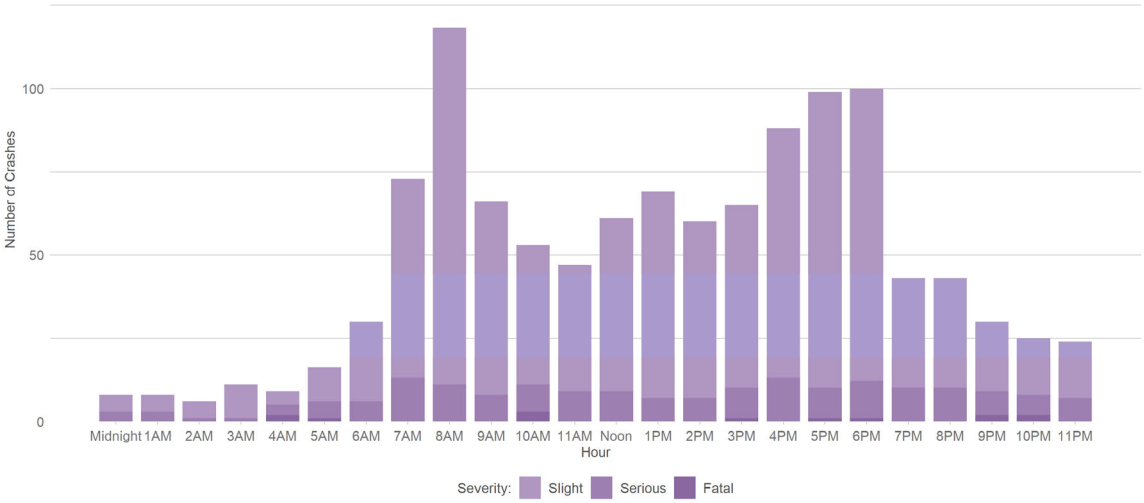
Figure 40 - West Berkshire collisions, by year (2008-2017)



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 4pm and 7pm during the commute home from work.

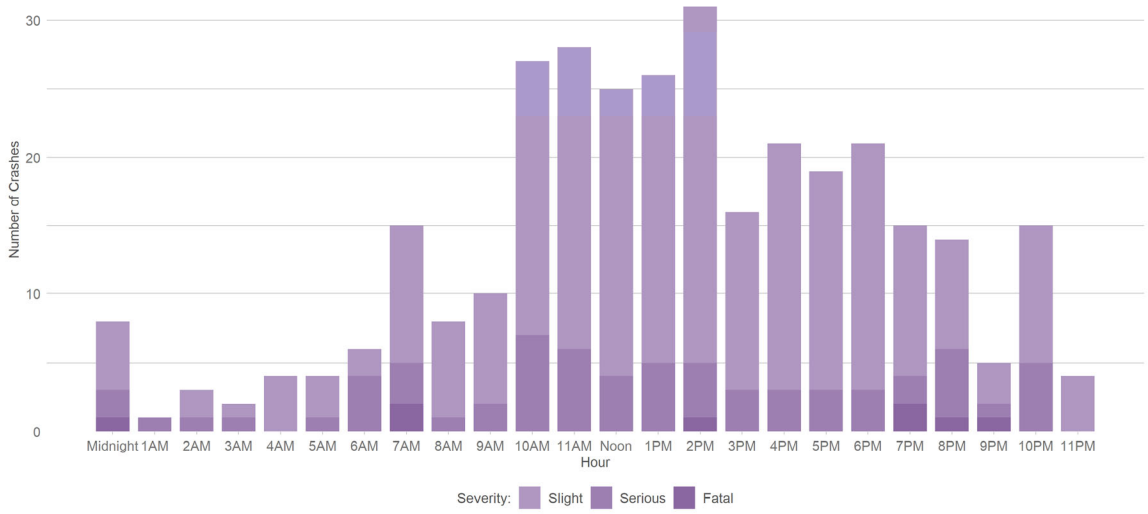
Figure 41 - Collisions on West Berkshire's roads by hour of the day - Weekdays (2013-2017)



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 3pm, with a second peak between 4pm and 7pm. There is also a peak in collisions around 7am and 10pm.

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



3.1.3.1 Collisions involving drivers who reside in other areas

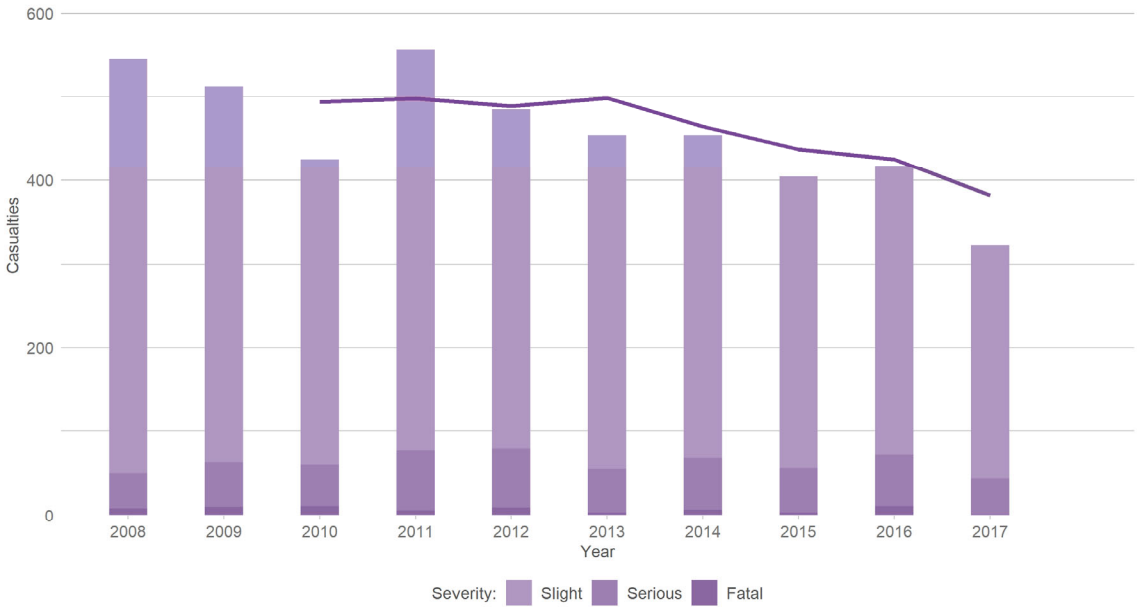
Using the driver's home postcode from STATS19 enables analysis of where drivers involved in collisions in West Berkshire reside. Forty-eight percent of drivers with known postcodes involved in collisions in West Berkshire are from West Berkshire. The rest are from areas including Hampshire (9%), Reading (8%) and Oxfordshire (5%).

3.1.4 Casualty trends on all roads

3.1.4.1 All casualties

Figure 43 shows annual casualty numbers on West Berkshire's roads. Casualties on West Berkshire's roads have reduced over the past decade. In 2017 there were 323 casualties on West Berkshire's roads, a reduction of 41% from 2008, and a decrease of 23% from 2015. The number of casualties who were killed or seriously injured on the roads of West Berkshire have stayed at a similar level over recent years.

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



3.1.4.2 Child casualties

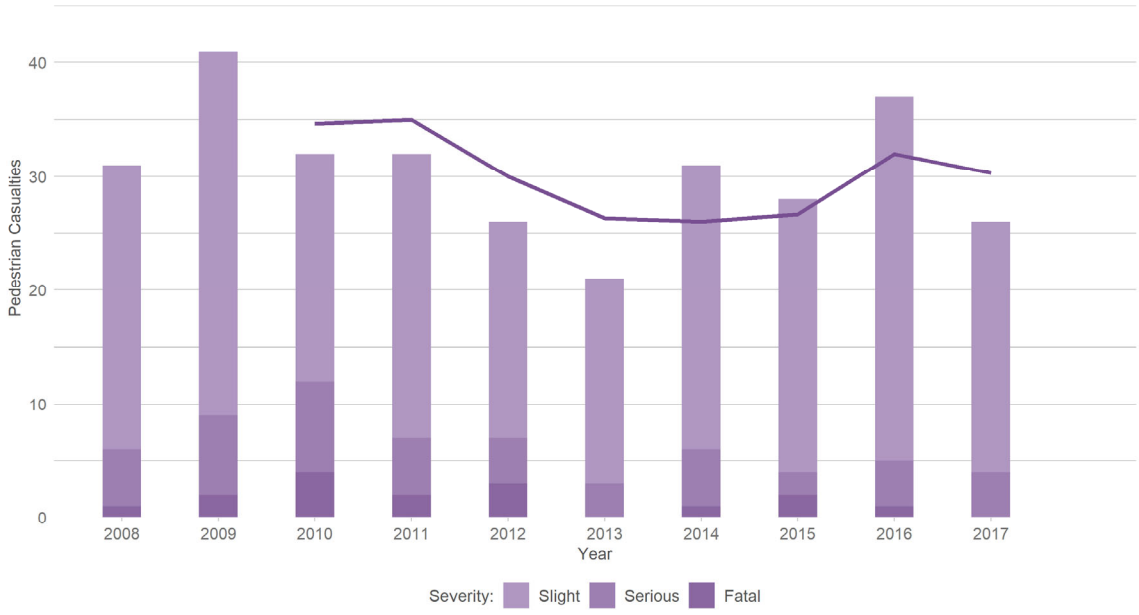
Figure 44 shows annual child casualty numbers on West Berkshire's roads. The number of child casualties on West Berkshire's roads has fluctuated over the last decade. In 2017 there were a total of 35 child casualties in West Berkshire, three of whom was seriously injured.

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

3.1.4.3 Pedestrian casualties

Figure 45 shows annual pedestrian casualty numbers on West Berkshire's roads. There have been fluctuations in pedestrian casualties, although numbers have fallen from a peak of 41 in 2009. In 2017, there were 26 pedestrian casualties including 4 seriously injured casualties.

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



3.1.4.4 Pedal cyclist casualties

Figure 46 shows annual pedal cycle user casualty numbers on West Berkshire's roads. Pedal cycle user casualty numbers have fluctuated over the last 10 years. In 2017, there were 21 pedal cycle user casualties on the roads of West Berkshire including 4 seriously injured casualties.

Figure 46 - Pedal cycle user casualties on West Berkshire'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 West Berkshire'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, with a notable drop in 2017, and that numbers of these collisions are low. However this downward trend has been slower than for all officer attended collisions, so the proportion of collisions attributed impairment CFs has increased. In the past five-year period (2013-2017) 39% of collisions where an impairment CF has been recorded have resulted in a killed or seriously injured casualty, compared to 21% for all officer attended, at least one CF recorded collisions.

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

Comparisons

Figure 48 shows collisions on West Berkshire'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

West Berkshire's percentage of substance impairment collisions is similar to the overall Berkshire percentage and the percentage for the South East, all of which are higher than the national percentage. The percentage for West Berkshire is also similar to that of Reading. It is lower than the percentage for Windsor & Maidenhead, but higher than the percentages of Bracknell Forest, Slough and Wokingham.

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

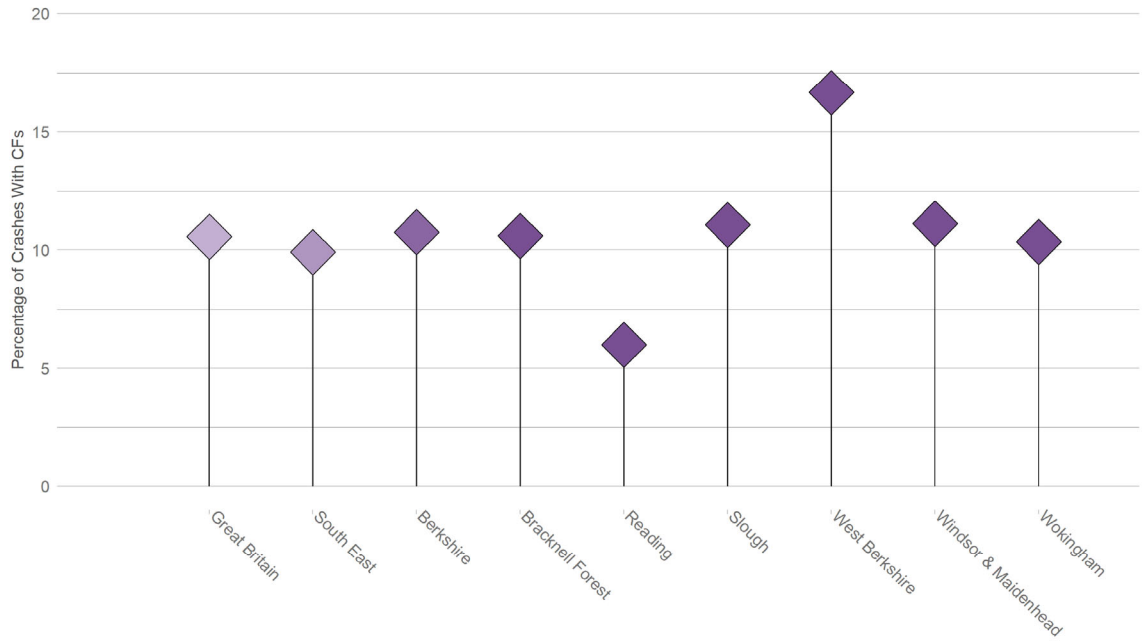
Figure 49 shows annual collisions on West Berkshire's roads where at least one of the speed related contributory factors were recorded. Numbers have fluctuated, but there has been a general downward trend over the decade. This reduction has been at a slower rate than collisions in general, indicating that the proportion of collisions attributed a speed related CF has increased. In 2017 there were 26 collisions on the roads of West Berkshire where a speed related CF was recorded, down 33% from 2008. In the past five-year period (2013-2017) 23% of collisions where a speed related CF has been recorded have resulted in a killed or seriously injured casualty, higher than for all officer attended, at least one CF recorded collisions (21%).

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

Comparisons

Figure 50 shows collisions on West Berkshire'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



West Berkshire has a higher percentage of speed related collisions than the national, regional and overall Berkshire percentages. It is also higher than all of the other authorities in Berkshire.

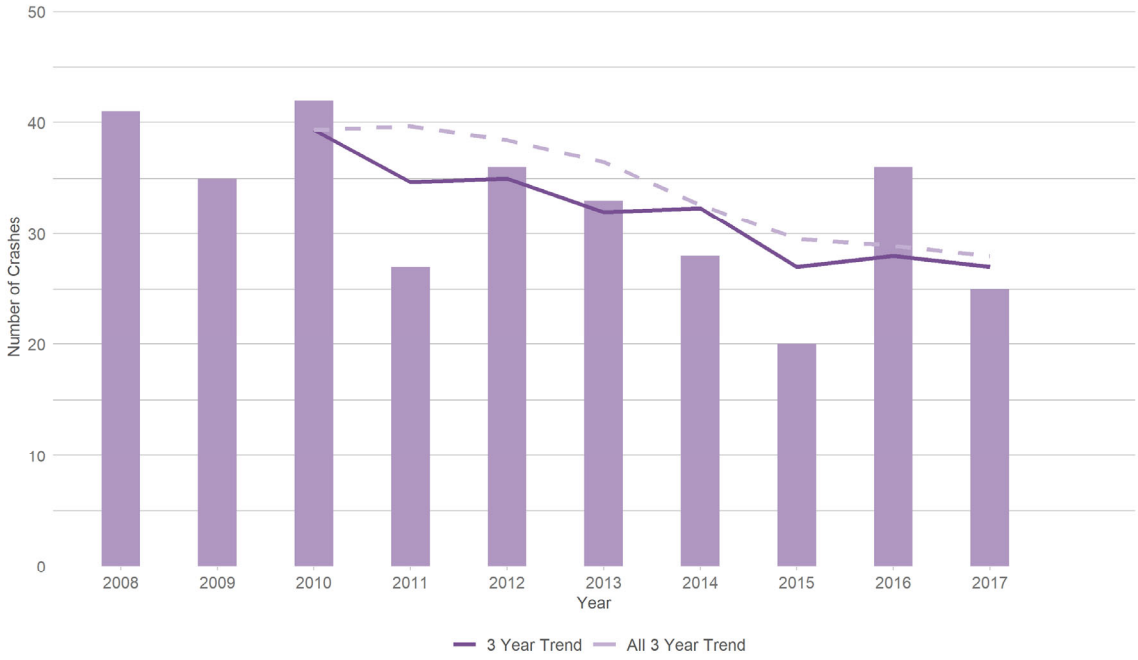
3.1.5.3 Road Surface

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 West Berkshire's roads where the road surface contributory factors were attributed. There has been a general downward trend since 2010, at a faster rate than collisions in general. In 2017 there were 25 collisions where a road surface related CF was attributed, down from 36 in 2015.

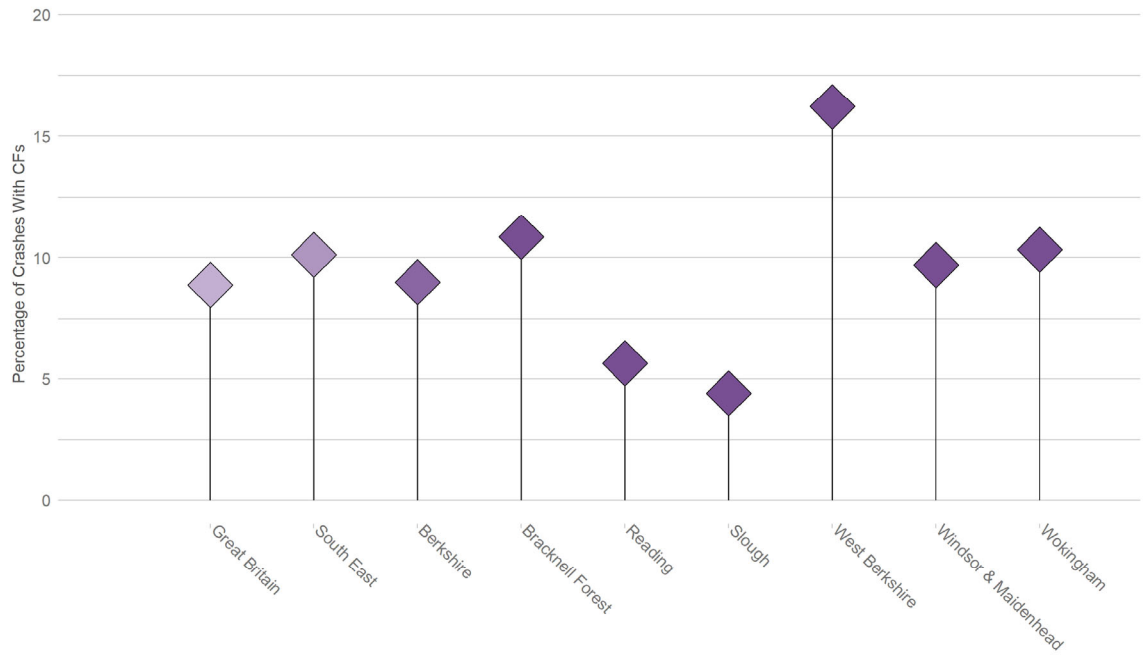
Figure 51 - Annual collisions in West Berkshire where CF101, CF102 and/or CF103 was recorded (2008-2017), excluding strategic roads



Comparisons

Figure 52 shows collisions on West Berkshire'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



West Berkshire has a higher percentage of road surface related collisions than the national, regional, and overall Berkshire percentages, as well as all of the authorities in Berkshire.

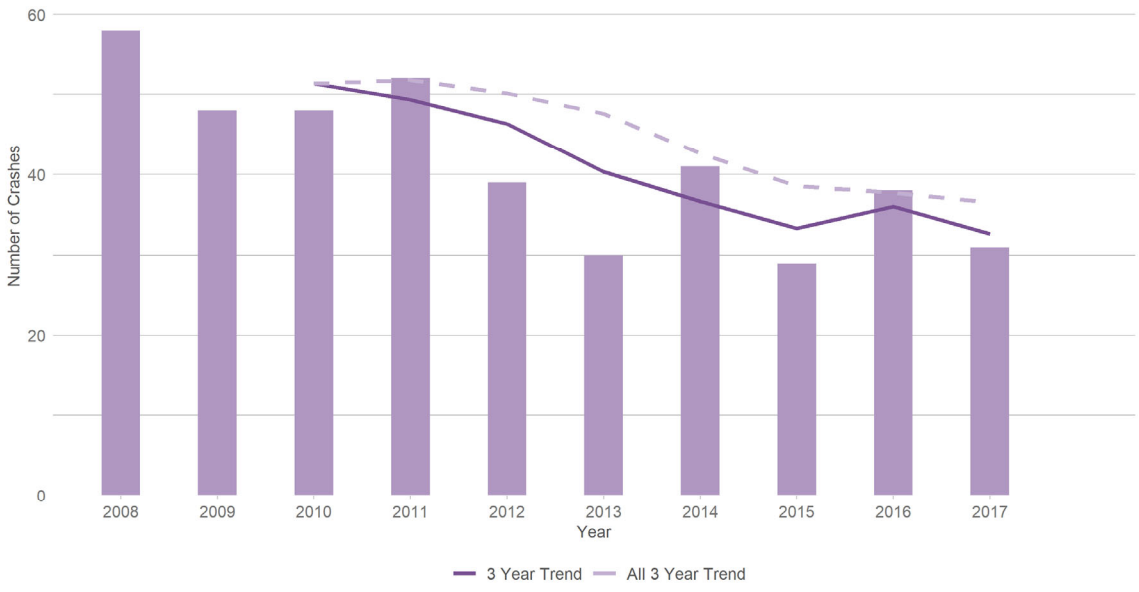
3.1.5.4 Unsafe Behaviour

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 West Berkshire'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 at a faster rate than collisions overall, with casualty numbers down 47% since 2008. In 2017, there were 31 collisions where at least one of the unsafe behaviour contributory factors was recorded, including 8 resulting in a seriously injured casualty.

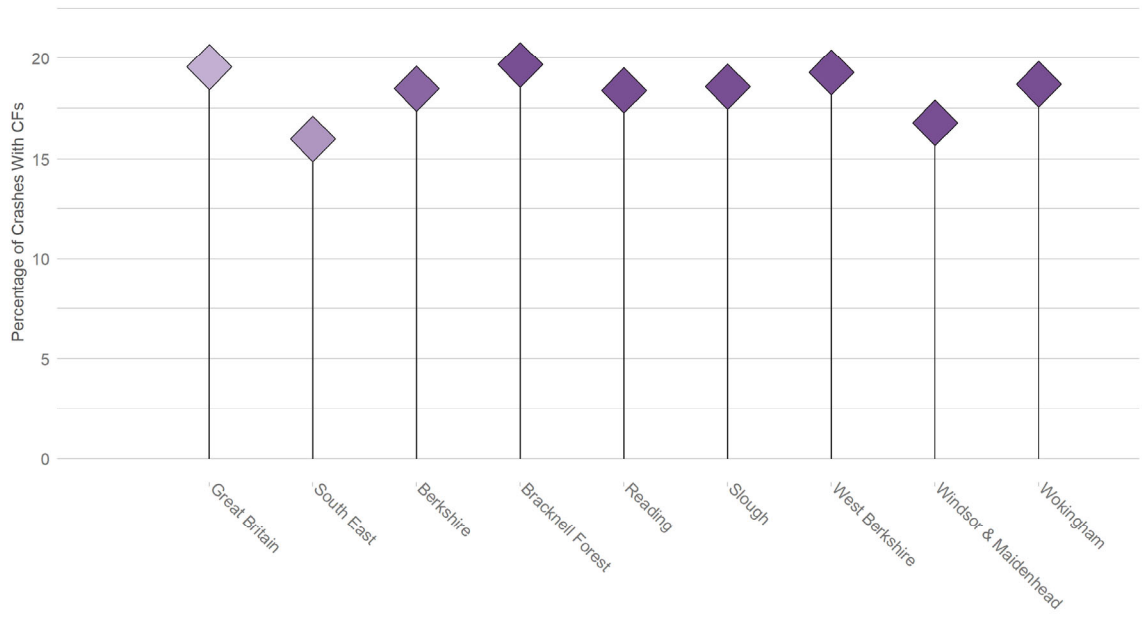
Figure 53 - Collisions on West Berkshire's roads where CF601 and/or CF602 were recorded (2008-2017), excluding strategic roads



Comparisons

Figure 54 shows collisions on West Berkshire'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



West Berkshire's percentage of unsafe behaviour related collisions is similar to both the national andt he overall Berkshire percentage, higher than the regional percentage. West Berkshire has a similar percentage to all the other Berkshire authorities, apart from Windsor & Maidenhead which is 13% lower.

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.

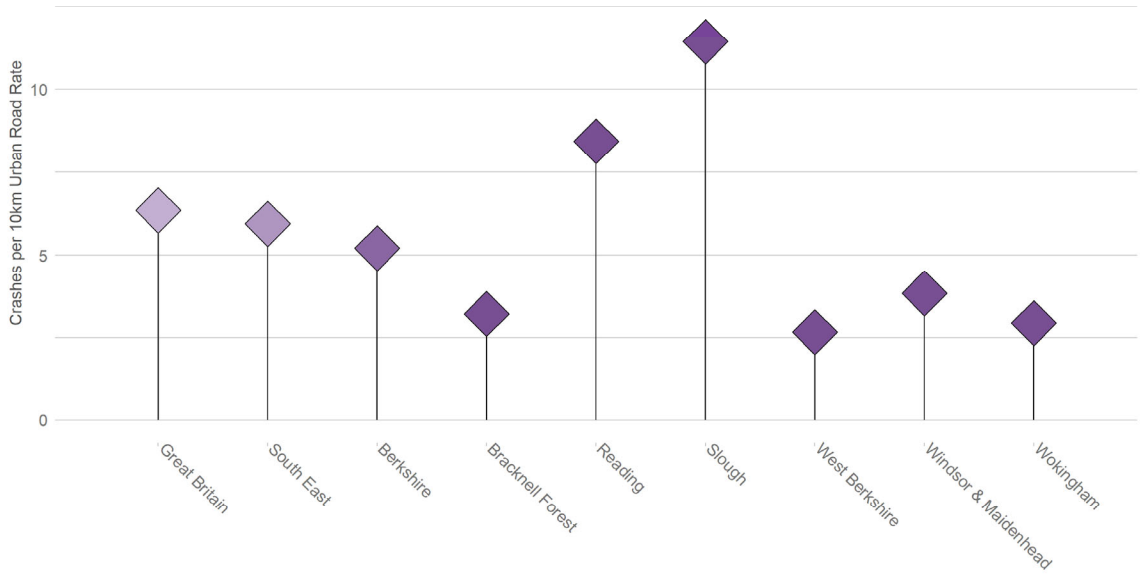
3.2.1 Urban Roads

This section includes all roads in urban areas of West Berkshire, 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)



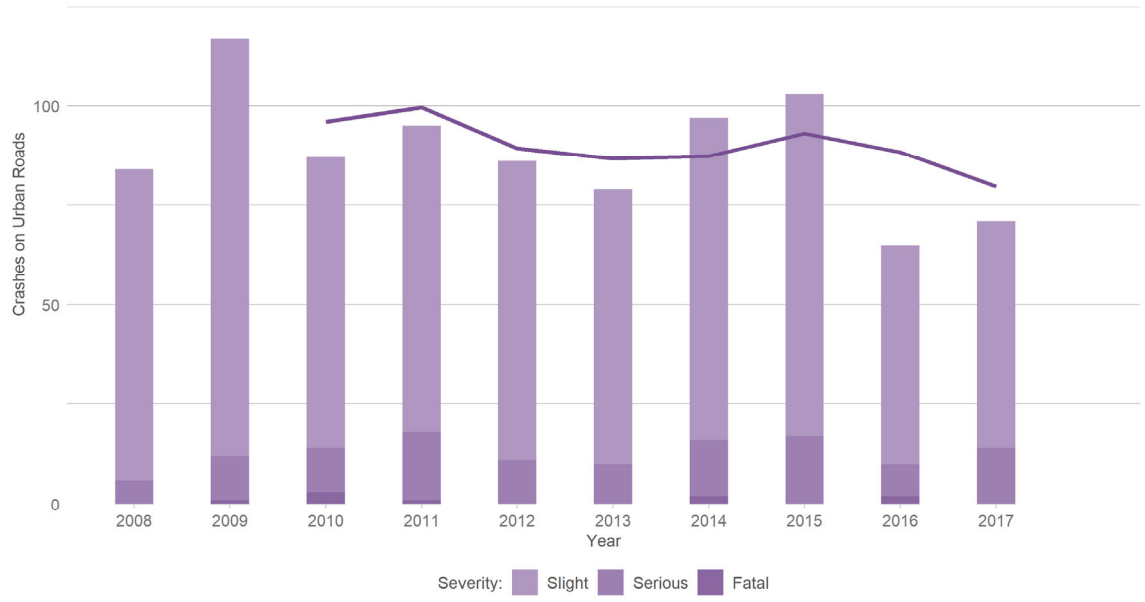
3.2.1.2 Comparisons

West Berkshire's urban road collision rate of 2.7 per year per 10 km is lower than the national, South East and Berkshire rates. It is also the lowest of authorities in Berkshire, similar to those of Bracknell Forest, Windsor & Maidenhead, and Wokingham.

3.2.1.3 Trends

Figure 56 shows the annual numbers of collisions on West Berkshire's urban roads, by severity, between 2008 and 2017. There have been fluctuations in collision numbers on urban roads over the past decade. In 2017 there were a 15% reduction from 2008 but a 9% increase from 2016, with 71 collisions on West Berkshire's urban roads, including 14 where there were one or more seriously injured casualties. There were no fatalities on urban roads in West Berkshire in 2017.

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



3.2.2 Rural Roads

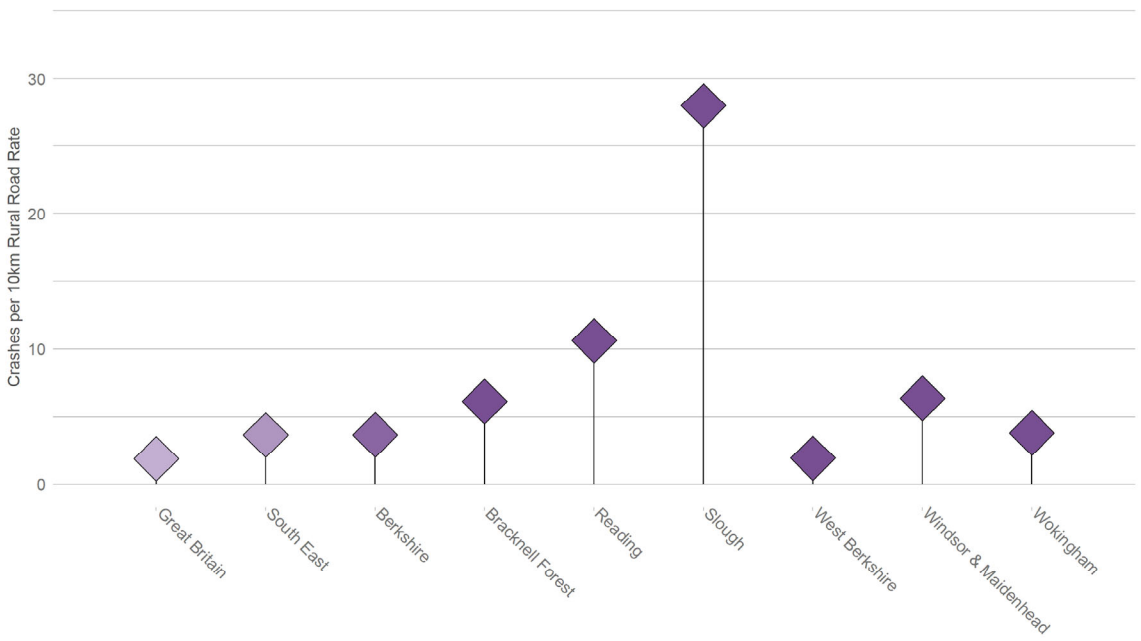
This section includes all roads in rural areas of West Berkshire, including strategic roads.

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)



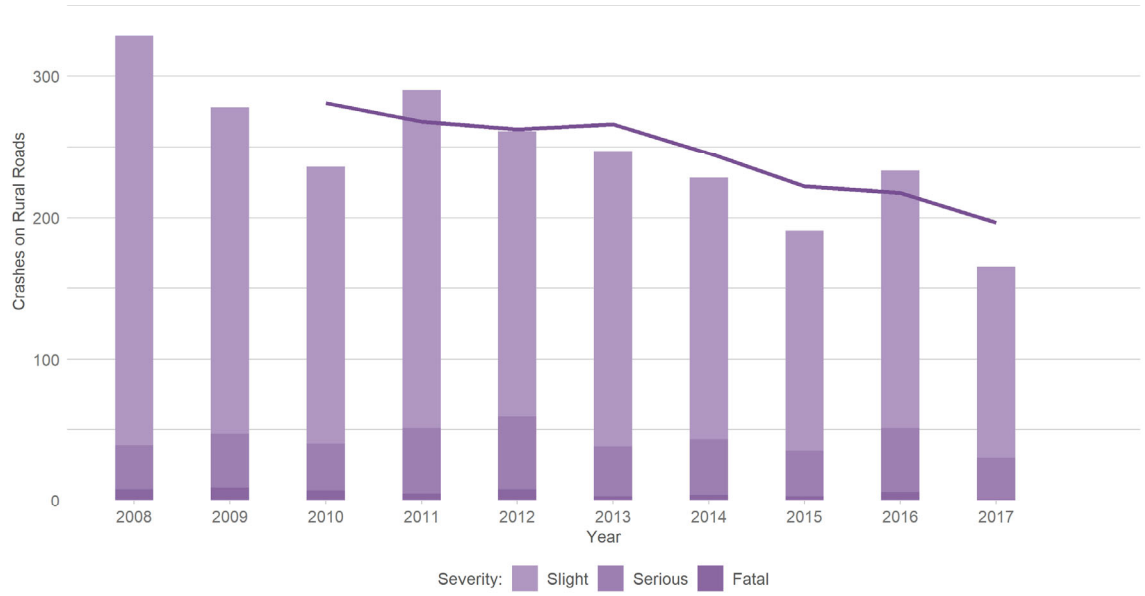
3.2.2.2 Comparisons

West Berkshire has a similar rural road collision rate to the national rate. It is lower than the South East and Berkshire rates. Of the six Berkshire authorities West Berkshire has the lowest rural collision rate although this is skewed by the prevalence of rural roads in the area.

3.2.2.3 Trends

Figure 58 shows West Berkshire's collisions on rural roads, by year from 2008 to 2017. Collisions on rural roads have decreased steadily over the past ten years. In 2017 there were 166 collisions on West Berkshire's rural roads, a 50% reduction from 2008. There was 1 collision where there were one or more fatalities and 29 collisions where there were one or more seriously injured casualties.

Figure 58 - West Berkshire'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 West Berkshire reside. Thematic maps are used to illustrate the number of casualties per head of population from each small area in West Berkshire. 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 West Berkshire'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 West Berkshire 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 West Berkshire 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 system[2], 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 West Berkshire 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 West Berkshire'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 West Berkshire 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 West Berkshire 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 West Berkshire, 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 West Berkshire 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 West Berkshire 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 West Berkshire's roads over time and by severity, with additional trends explored depending on road type. In order to determine the distribution of collisions within West Berkshire, 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 West Berkshire 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 West Berkshire's most similar authorities have been selected using Mosaic classification. Because of the size of West Berkshire only district authorities have been selected for comparison. The chosen five districts are:

Table 1 - Comparator Authorities for West Berkshire

Local Authority District
Aylesbury Vale
East Hampshire
Horsham
South Oxfordshire
Vale of White Horse

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 West Berkshire. 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	Type	Description
A	Country Living	A01	Rural Vogue
		A02	Scattered Homesteads
		A03	Wealthy Landowners
		A04	Village Retirement
B	Prestige Positions	B05	Empty-Nest Adventure
		B06	Bank of Mum and Dad
		B07	Alpha Families
		B08	Premium Fortunes
		B09	Diamond Days
C	City Prosperity	C10	World-Class Wealth
		C11	Penthouse Chic
		C12	Metro High-Flyers
		C13	Uptown Elite
D	Domestic Success	D14	Cafes and Catchments
		D15	Modern Parents
		D16	Mid-Career Convention
		D17	Thriving Independence
E	Suburban Stability	E18	Dependable Me
		E19	Fledgling Free
		E20	Boomerang Boarders
		E21	Family Ties
F	Senior Security	F22	Legacy Elders
		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
H	Aspiring Homemakers	H30	Affordable Fringe
		H31	First-Rung Futures
		H32	Flying Solo
		H33	New Foundations
		H34	Contemporary Starts
		H35	Primary Ambitions
I	Urban Cohesion	I36	Cultural Comfort
		I37	Community Elders
		I38	Asian Heritage
		I39	Ageing Access
J	Rental Hubs	J40	Career Builders
		J41	Central Pulse
		J42	Learners & Earners
		J43	Student Scene
		J44	Flexible Workforce
		J45	Bus-Route Renters
K	Modest Traditions	K46	Self Supporters

		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
M	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
O	Municipal Challenge	O62	Low Income Workers
		O63	Streetwise Singles
		O64	High Rise Residents
		O65	Crowded Kaleidoscope
		O66	Inner City Stalwarts

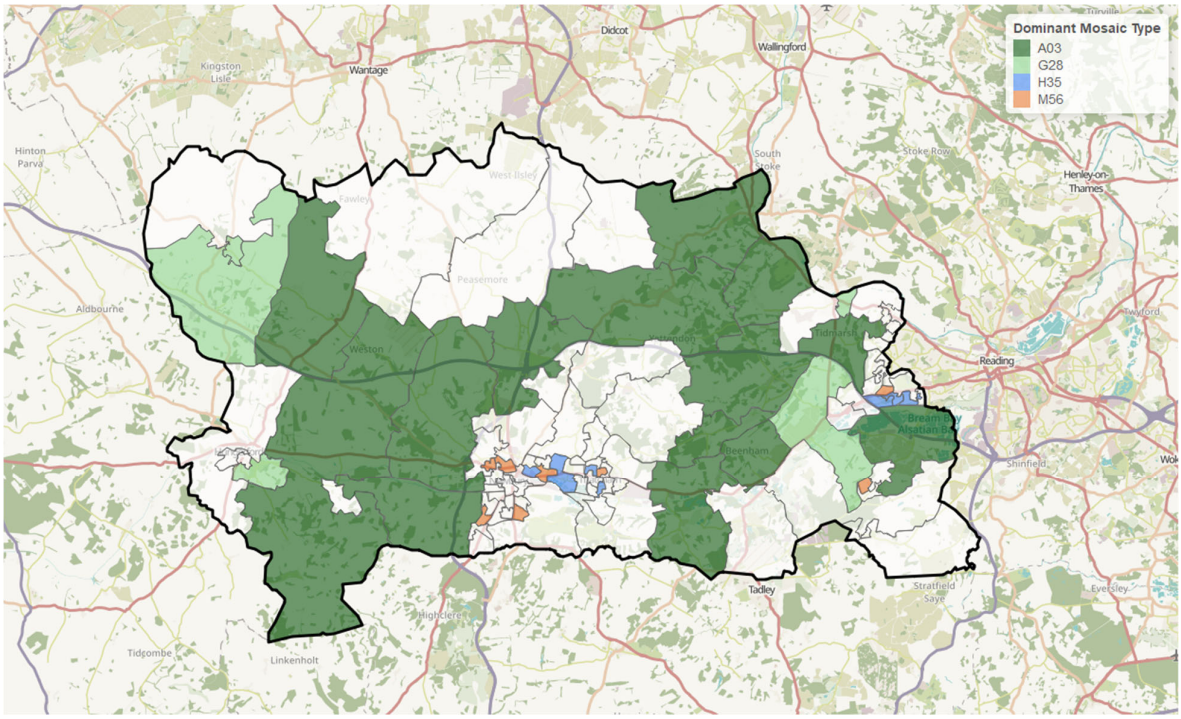
4.2.2 Profile and distribution for selected Mosaic Types

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.

A03 Wealthy Landowners	**M56** Solid Economy	**H35** Primary Ambitions	**G28** Local Focus
These prosperous owners of country houses include the rural upper class, successful farmers and second-home owners. They tend to be mature married couples living in high value large detached homes. They tend to own several cars and annual mileage driven is high. These communities prefer not to be contacted but contact by post is their preferred channel.	These communities of stable families with children renting better quality homes from social landlords tend to work in lower wage service roles. They have relatively stable finances but small bills can be a struggle. Ownership of vans and motorcycles is high amongst these communities. Average annual mileage is lower amongst this Type.	These forward-thinking younger families have good household incomes and have a mortgage. 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 mobile call, SMS or email.	These rural families in affordable village homes are reliant on the local economy for jobs. They often work in skilled trades and live a long distance from towns and cities. Van and motorcycle ownership levels are high amongst this Type. They prefer to be contacted via landline telephone.

Figure 59 shows West Berkshire's LSOAs colour coded by dominant Mosaic Type. *Prosperous owners of country houses including the rural upper class, successful farmers and second-home owners* (Type A03) dominate much of the rural areas of West Berkshire. They cover a large area across the centre of West Berkshire encompassing places such as Beenham, Hampstead Norreys, Great Shefford and Chieveley, as well as to the east around Grazeley Green and Tidmarsh. *Stable families with children renting better quality homes from social landlords* (Type M56) are dominant in the outskirts of Newbury and Thatcham and in parts of Calcot, Theale and Burghfield Common. *Forward-thinking younger families who sought affordable homes in good suburbs which they may now be out-growing* (*Type H35) are dominant around Benham Hill and Thatcham and to the south of Calcot. Rural families in affordable village homes who are reliant on the local economy for jobs* (Type G28) dominate in the area to the south of Lambourn and to the south of Hungerford.

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



4.3 Data Tables

All Casualties – West Berkshire Roads (3.1.4.1)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	3	52	**55**	399	**454**
2014	7	61	**68**	386	**454**
2015	3	53	**56**	348	**404**
2016	11	61	**72**	345	**417**
2017	1	43	**44**	279	**323**
Overall Total	**25**	**270**	**295**	**1757**	**2052**

Child Casualties – West Berkshire Roads (3.1.4.2)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	2	**2**	34	**36**
2014	1	3	**4**	48	**52**
2015	0	1	**1**	33	**34**
2016	3	3	**6**	40	**46**
2017	0	3	**3**	32	**35**
Overall Total	**4**	**12**	**16**	**187**	**203**

Pedestrian Casualties – West Berkshire Roads (3.1.4.3)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	3	**3**	18	**21**
2014	1	5	**6**	25	**31**
2015	2	2	**4**	24	**28**
2016	1	4	**5**	32	**37**
2017	0	4	**4**	22	**26**
Overall Total	**4**	**18**	**22**	**121**	**143**

Pedal Cycle User Casualties – West Berkshire Roads (3.1.4.4)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	6	**6**	38	**44**
2014	3	6	**9**	24	**33**
2015	0	12	**12**	27	**39**
2016	0	11	**11**	29	**40**
2017	0	4	**4**	17	**21**
Overall Total	**3**	**39**	**42**	**135**	**177**

All Collisions – West Berkshire Roads (3.1.3)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	3	45	**48**	278	**326**
2014	6	53	**59**	266	**325**
2015	3	49	**52**	242	**294**
2016	8	53	**61**	237	**298**
2017	1	43	**44**	193	**237**
Overall Total	**21**	**243**	**264**	**1216**	**1480**

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

	KSI		KSI Total		Overall Total
Hour	Fatal	Serious		Slight	
Midnight	0	3	**3**	5	**8**
1AM	0	3	**3**	5	**8**
2AM	0	1	**1**	5	**6**
3AM	0	1	**1**	10	**11**
4AM	2	3	**5**	4	**9**
5AM	1	5	**6**	10	**16**
6AM	0	6	**6**	24	**30**
7AM	0	13	**13**	60	**73**
8AM	0	11	**11**	107	**118**
9AM	0	8	**8**	58	**66**
10AM	3	8	**11**	42	**53**
11AM	0	9	**9**	38	**47**
Noon	0	9	**9**	52	**61**
1PM	0	7	**7**	62	**69**
2PM	0	7	**7**	53	**60**
3PM	1	9	**10**	55	**65**
4PM	0	13	**13**	75	**88**
5PM	1	9	**10**	89	**99**
6PM	1	11	**12**	88	**100**
7PM	0	10	**10**	33	**43**
8PM	0	10	**10**	33	**43**
9PM	2	7	**9**	21	**30**
10PM	2	6	**8**	17	**25**
11PM	0	7	**7**	17	**24**
Overall Total	**13**	**176**	**189**	**963**	**1152**

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

	KSI		KSI Total		Overall Total
Hour	Fatal	Serious		Slight	
Midnight	1	2	**3**	5	**8**
1AM	0	1	**1**	0	**1**
2AM	0	1	**1**	2	**3**
3AM	0	1	**1**	1	**2**
4AM	0	0	**0**	4	**4**
5AM	0	1	**1**	3	**4**
6AM	0	4	**4**	2	**6**
7AM	2	3	**5**	10	**15**
8AM	0	1	**1**	7	**8**
9AM	0	2	**2**	8	**10**
10AM	0	7	**7**	20	**27**
11AM	0	6	**6**	22	**28**
Noon	0	4	**4**	21	**25**
1PM	0	5	**5**	21	**26**
2PM	1	4	**5**	26	**31**
3PM	0	3	**3**	13	**16**
4PM	0	3	**3**	18	**21**
5PM	0	3	**3**	16	**19**
6PM	0	3	**3**	18	**21**
7PM	2	2	**4**	11	**15**
8PM	1	5	**6**	8	**14**
9PM	1	1	**2**	3	**5**
10PM	0	5	**5**	10	**15**
11PM	0	0	**0**	4	**4**
Overall Total	**8**	**67**	**75**	**253**	**328**

Collisions on urban roads in West Berkshire (3.2.1.3)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	10	**10**	69	**79**
2014	2	14	**16**	81	**97**
2015	0	17	**17**	86	**103**
2016	2	8	**10**	55	**65**
2017	0	14	**14**	57	**71**
Overall Total	**4**	**63**	**67**	**348**	**415**

Collisions on rural roads in West Berkshire (3.2.2.3)

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	3	35	**38**	209	**247**
2014	4	39	**43**	185	**228**
2015	3	32	**35**	156	**191**
2016	6	45	**51**	182	**233**
2017	1	29	**30**	136	**166**
Overall Total	**17**	**180**	**197**	**868**	**1065**

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

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	4	**4**	7	**11**
2014	2	3	**5**	6	**11**
2015	0	3	**3**	9	**12**
2016	2	7	**9**	6	**15**
2017	0	0	**0**	5	**5**
Overall Total	**4**	**17**	**21**	**33**	**54**

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

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	1	5	**6**	29	**35**
2014	1	6	**7**	20	**27**
2015	0	5	**5**	19	**24**
2016	2	8	**10**	24	**34**
2017	0	6	**6**	20	**26**
Overall Total	**4**	**30**	**34**	**112**	**146**

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

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	4	**4**	29	**33**
2014	2	6	**8**	20	**28**
2015	0	4	**4**	16	**20**
2016	0	8	**8**	28	**36**
2017	0	1	**1**	24	**25**
Overall Total	**2**	**23**	**25**	**117**	**142**

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

	KSI		KSI Total		Overall Total
Year	Fatal	Serious		Slight	
2013	0	7	**7**	23	**30**
2014	1	9	**10**	31	**41**
2015	0	3	**3**	26	**29**
2016	2	14	**16**	22	**38**
2017	0	8	**8**	23	**31**
Overall Total	**3**	**41**	**44**	**125**	**169**

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

4.5 List of Figures