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West Berkshire

Area Profiles

2021

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1 Introduction

1.1.1 Aims and Objectives

The aim of this document is to provide a comprehensive profile of road safety issues affecting 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.

The Road Safety Analysis (RSA) 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.

1.2 Overview

1.2.1 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 West Berkshire.

1.2.2 Analytical Techniques

The analytical techniques employed throughout this Area Profile are detailed in the Analytical Techniques section on page 65. 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.

1.3 Profile Configuration

1.3.1 Structure

The Area Profile has been divided into separate analysis of key road user groups. The aim is to allow each section to be used independently if required. This will also allow West Berkshire to update selected sections when appropriate, without a requirement to update the entire document.

Section West Berkshire Resident Risk, starting on page 6, explores Resident Risk. Resident risk analysis includes examining all of West Berkshire's resident casualties and resident motor vehicle users in terms of rates, comparisons with other relevant police force constabularies and 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.

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

Section 3, starting on page 38, provides analysis of Road Network Risk. It also examines rates; comparisons; location by small area; and trends on West Berkshire's roads. Breakdowns by rurality classification of road are also included in this section.

Section 4 starting on page 65, 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.

1.3.2 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 Road Safety Analysis by the Department for Transport for publication in MAST Online over the five-year period between 2016 and 2020 inclusive. For a more complete explanation, please refer to 4.1.1 on page 65 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 over the five-year period between 2016 and 2020 inclusive. For a more complete explanation, please refer to 4.1.2 on page 66 methodology for calculating network collision risk.

2 West Berkshire Resident Risk

For information about the provenance and scope of data included in this section, please refer to section 1.1.2 on page **Error! Bookmark not defined.**. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1 on page 65.

2.1 West Berkshire Resident Casualties

This section examines all casualties who were residents of West Berkshire at the time of injury. For information about West Berkshire's resident motor vehicle users involved in collisions on all roads, please refer to section 2.2.1 on page 21.

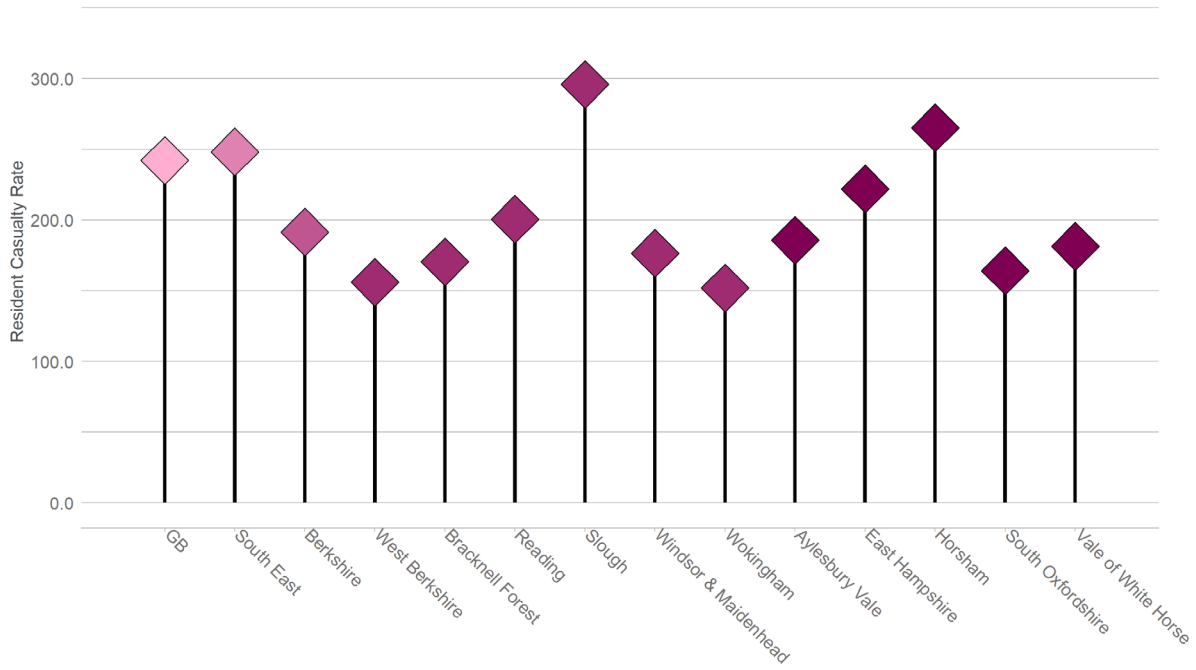
2.1.1 All Resident Casualties

2.1.1.1 Rates

Figure 1 shows the resident casualty rates for West Berkshire compared to the national and regional rates, as well as the most similar comparators of Aylesbury Vale, East Hampshire, Horsham, South Oxfordshire, and Vale of White Horse.

West Berkshire had a resident casualty rate of 156.1 casualties per year, per 100,000 population.

Figure 1 - Annual average West Berkshire resident casualties per 100,000 population (2016 - 2020)



2.1.1.2 Comparisons

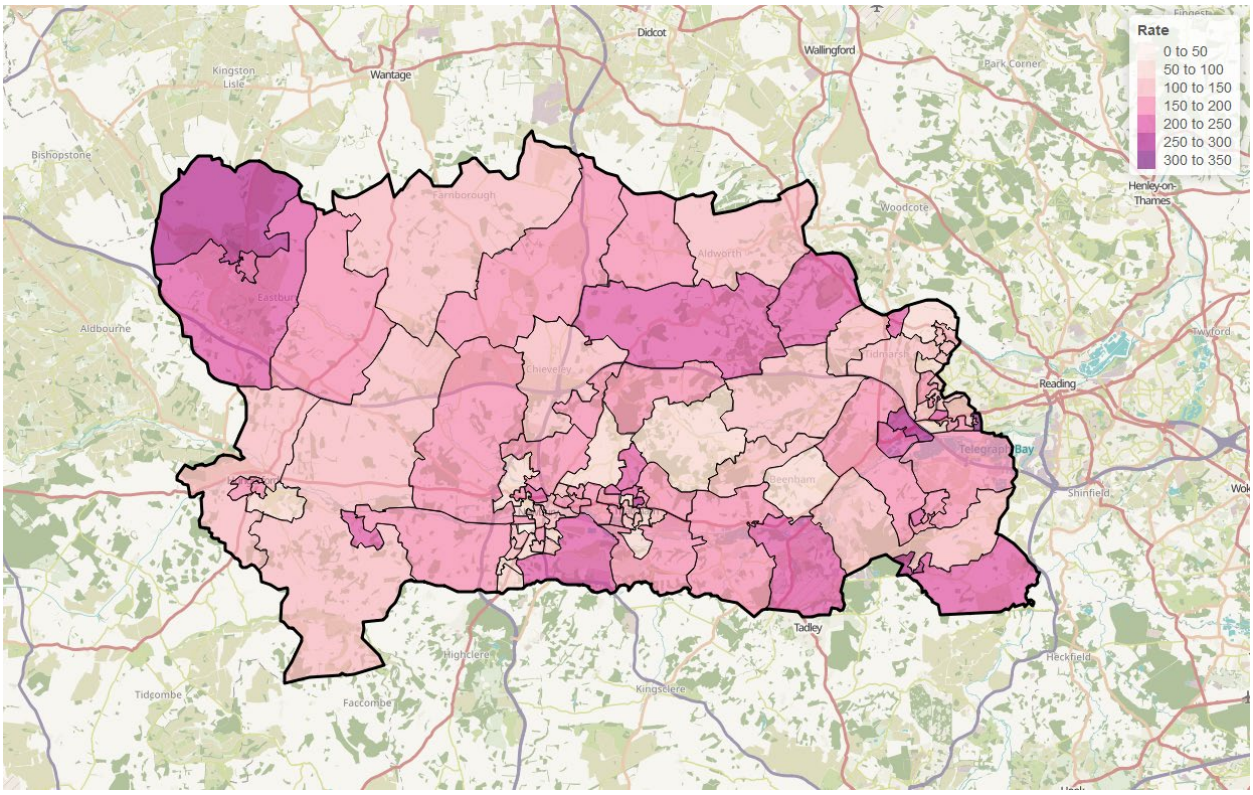
The casualty rate for West Berkshire was 36% below the national rate, 37% below the regional rate for the South East, and 18% below the overall rate for Berkshire. Within Berkshire, West Berkshire had a casualty rate slightly higher than Wokingham, but lower than the rates of Bracknell Forest, Reading, Slough, and Windsor & Maidenhead. West Berkshire also had a lower rate than its most similar comparator authorities of Aylesbury Vale, East Hampshire, South Oxfordshire, Vale of White Horse, and Horsham.

Residency by Small Area

Figure 2 shows the home location of the West Berkshire's resident casualties by lower layer super output area (LSOA). The thematic map is coloured by resident casualties per year per population of LSOA.

The highest resident young adult casualty rates can be found in Upper Lambourn. There are also high rates Hampstead Norreys, Ashampstead, Aldermaston, Theale, and parts of Thatcham.

Figure 2 - West Berkshire resident casualties home location by LSOA, casualties per year per 100,000 population (2016 - 2020)

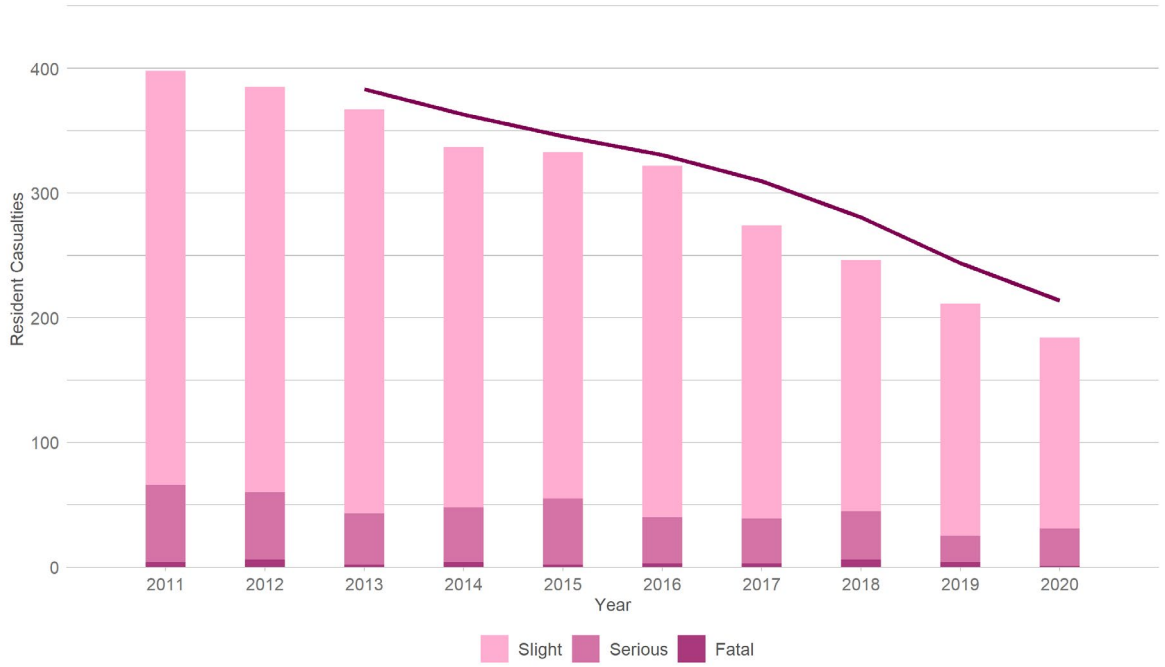


2.1.1.3 Trends

Figure 3 shows West Berkshire's annual resident casualty numbers since 2011, by severity. This includes residents injured anywhere in the country. Also shown is a 3-year moving average trend line.

There is a clear downward trend in resident casualty numbers over the decade. From a peak of 398 in 2011, there has been a reduction of 54% to 184 in 2020. In 2020, there was one resident of West Berkshire who was killed in a collision, and a further 30 that were seriously injured.

Figure 3 - West Berkshire resident casualties, by year and severity (2011 - 2020)



Resident Casualties occurring in other areas

Of West Berkshire's resident casualties, 58% were injured in West Berkshire. This is in line with the national average percentage of resident casualties who were injured in their home authority of 59%. Of the remaining 42%, the majority were injured in Reading (10%), Hampshire (9%), Oxfordshire (4%), Wiltshire (3%), Surrey (2%) and Wokingham (2%)

2.1.1.4 Socio Demographic Analysis

Age

Figure 4 shows the numbers of resident casualties by four specified age groups.

The highest number of resident casualties come from the 17-24, 25-34, and 45-54 age groups. There is also a noticeable peak in casualty numbers in the 35-44 age group. There are fewer resident casualties in the age groups under 17 years old and over 54 years old.

It is more informative to consider Figure 5 which 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.

This shows that both the 17-24 and 25-34 age groups are over-represented when population is taken into account. Furthermore, the 17-24 age group is over-represented in West Berkshire to a greater extent than it is nationally. Casualties in the 24-34 and 35-44 age groups are over-represented to a lesser extent, but slightly less so than the national index. Casualties in the 45-54 age group are slightly over-represented, despite being appropriately represented at a national level based on what we would expect to see given their relative population. Casualties in age groups under 17 years old and over 55 years old are all under-represented in collisions, broadly in line with but

often slightly more so than the under-representation seen nationally. The age group 55-64 being the exception to this trend.

Figure 4 - West Berkshire resident casualties, by granular age group (2016 - 2020)

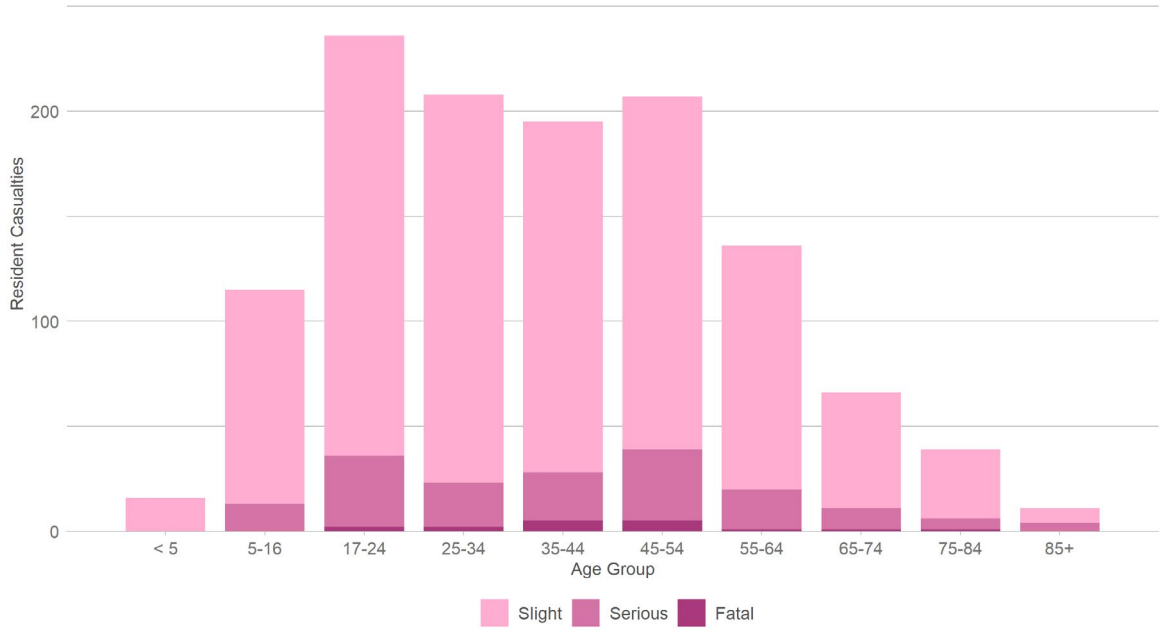


Figure 5 - West Berkshire resident casualties, by age group and indexed by population (2016 - 2020)

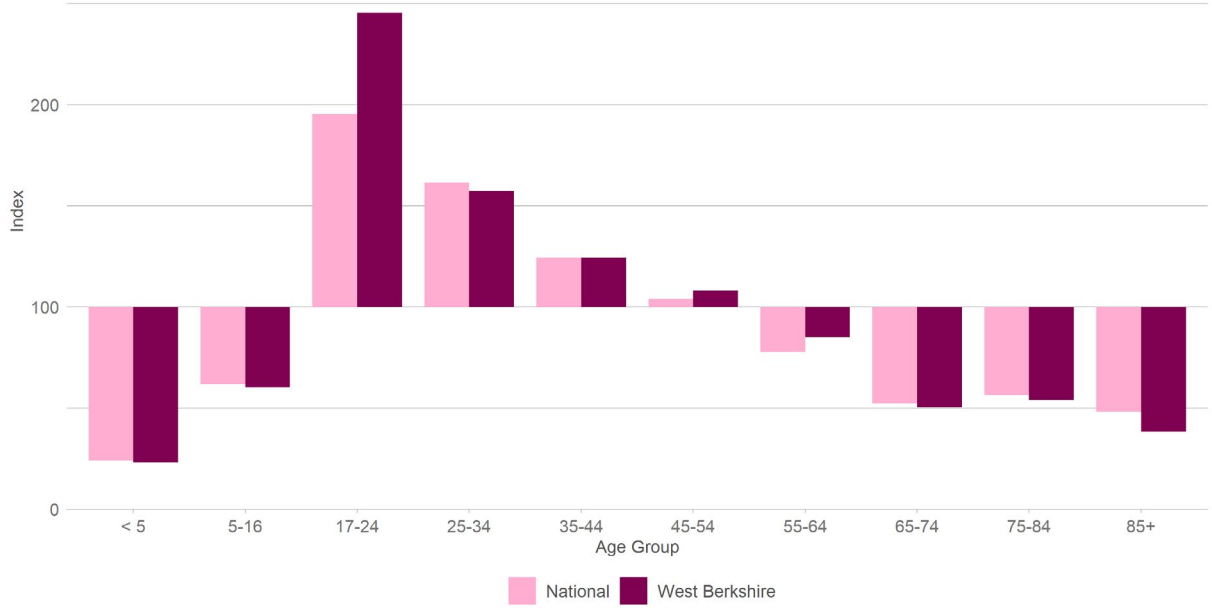
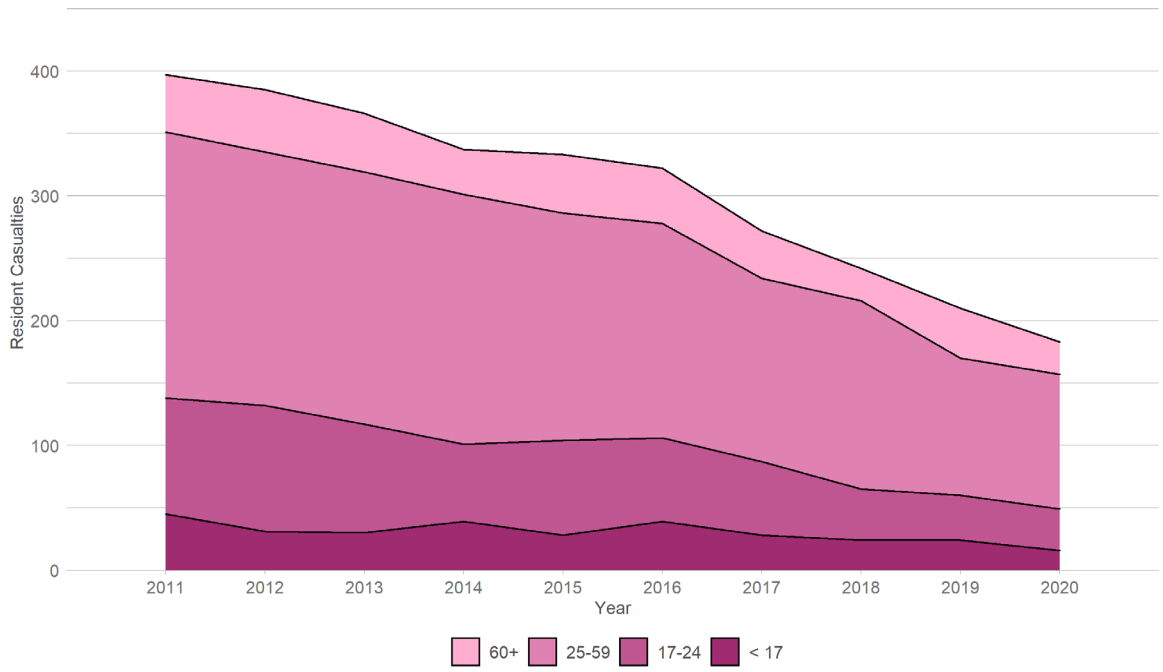


Figure 6 illustrates the overall trend for the four age groups over the last ten years.

The casualty involvement of all age groups has steadily decreased over the decade, by 54% overall. The under 17 and 17-24 age groups experienced the most significant decreases as resident involved casualties, by 64% and 65% respectively. Both the age groups 25-59 and 60+ experienced moderate decreases from 2014-15, with the largest relative decrease seen in the 60+ age group during the period 2018-19.

Figure 6 - West Berkshire resident casualty trend by age group (2011 - 2020)



Segmentation

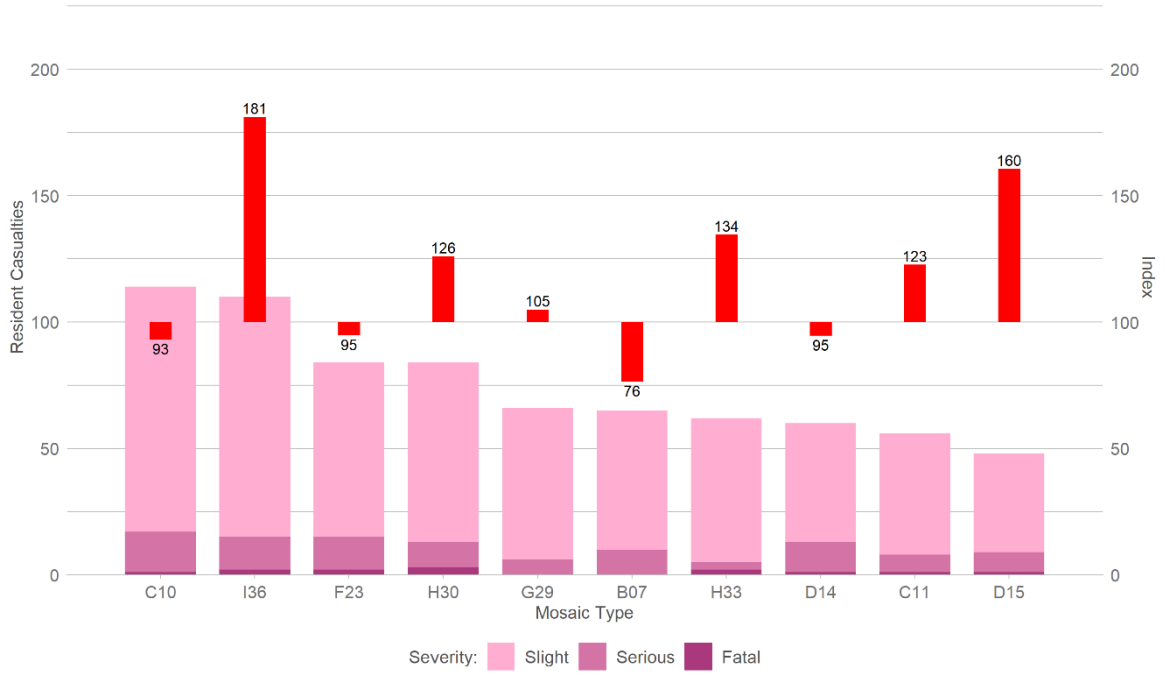
Analysis of the Mosaic communities in which West Berkshire's resident casualties live provides an insight into those injured in collisions. For an explanation of Mosaic Public Sector and how to understand the following chart, please refer to section 4.1.1.1 on page 65.

Figure 7 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 largest number of resident casualties come from communities of *prosperous owners of country houses including affluent families, successful farmers and second-home owners* (Type C10), followed closely by casualties from s*table families with children, renting higher value homes from social landlords* (Type I36). Whilst casualties from Type C10 are slightly under-represented in collisions, those from Type I36 are considerably over-represented when relative population is considered, with an index value of 181.

Residents from *families with school-age children, who have bought the best house they can afford within popular neighbourhoods* (Type H30), and *active families with adult children and some teens, giving prolonged support to the next generation* (Type F23) have a similar level of involvement. Casualties from Type H30 are moderately over-

represented, as are those from communities of *young families and singles setting up home in modern developments that are popular with their peers* (Type H33) and *country-loving families pursuing a rural idyll in comfortable village homes, many commuting some distance to work* (Type C11). Those from communities of *rural families in affordable village homes who are reliant on the local economy for jobs* (Type D15) are considerably over-represented with an index value of 160.

Figure 7 - West Berkshire resident casualties, by Mosaic Type (2016 - 2020)

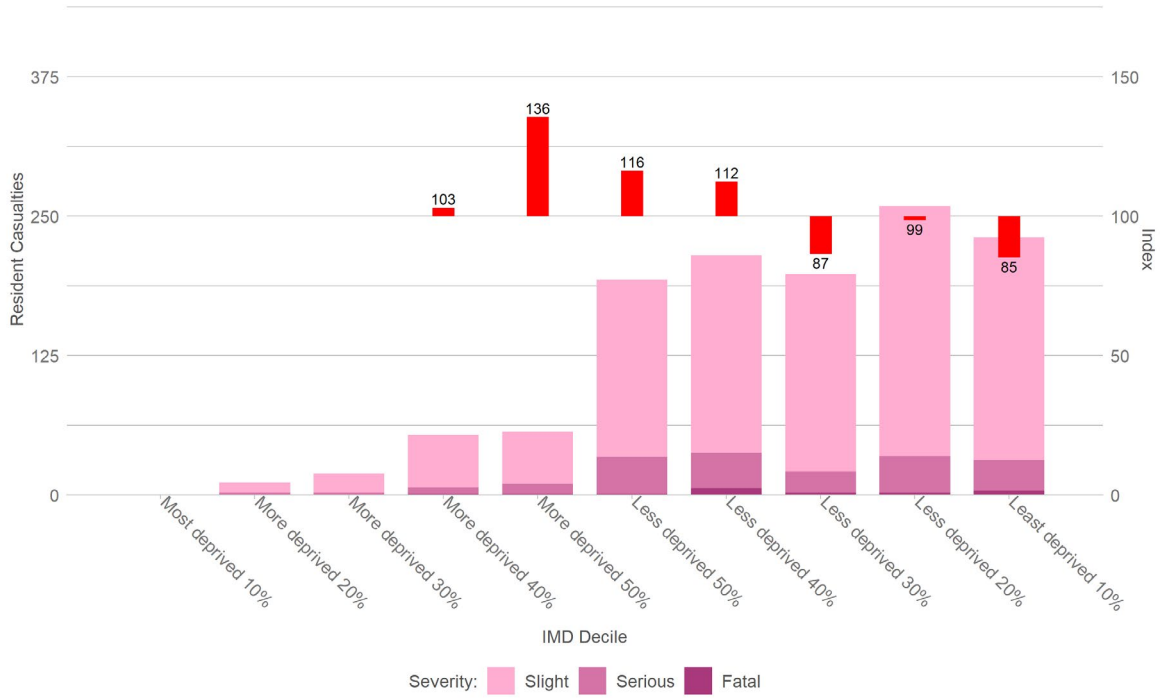


Deprivation

Figure 8 shows resident casualties by the IMD of the LSOA (Lower Super Output Area) in which they reside.

The largest number of resident casualties come from communities in the less deprived IMD deciles. This is particularly true of the less deprived 20% and least deprived 10% deciles. Despite this, these casualty numbers are broadly in line with the relative share of the population that these communities constitute. There are fewer overall casualties from the more deprived 50% decile, but communities in this decile are over-represented in casualty numbers based on their relative population.

Figure 8 - West Berkshire resident casualties, by Index of Multiple Deprivation (2016 - 2020)



2.1.2 Resident Child Casualties

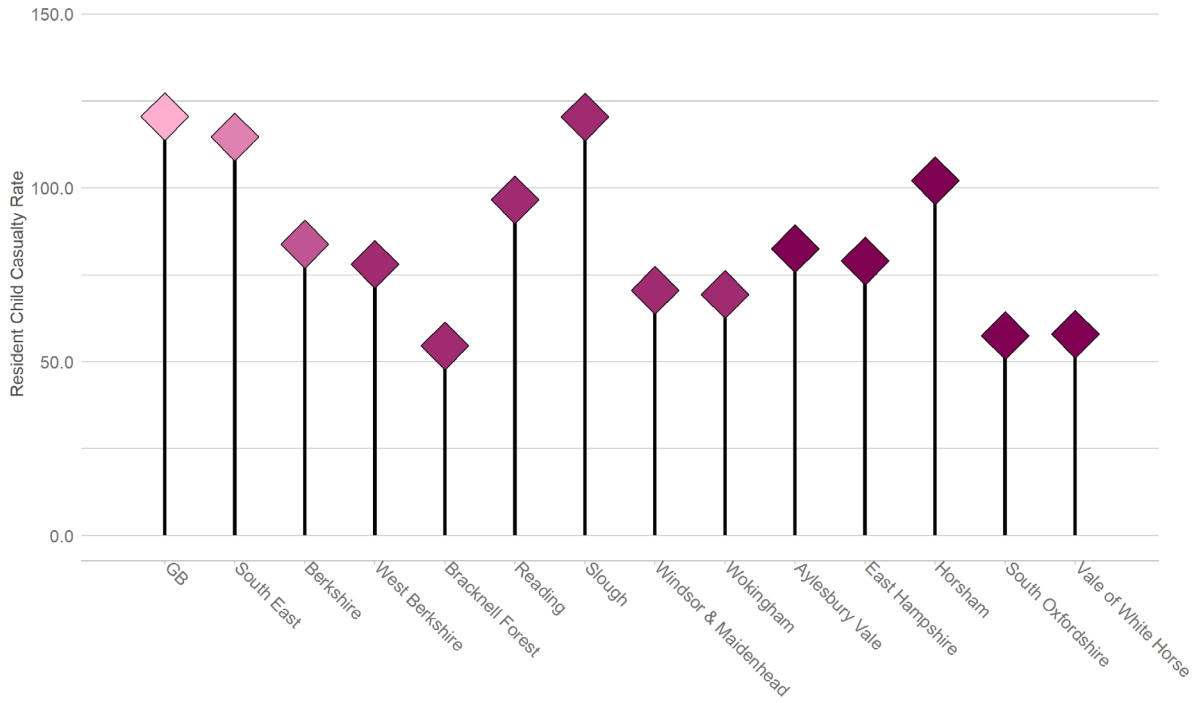
This section examines child casualties who are residents of West Berkshire. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1 on page 65.

2.1.2.1 Rates

Figure 9 shows the West Berkshire resident child casualty rate compared to the national and regional rates, and to the most similar Berkshire and selected external comparators.

West Berkshire had a resident child casualty rate of 78.0 child casualties per year, per 100,000 child population.

Figure 9 - Annual average West Berkshire resident child casualties per 100,000 population (2016 - 2020)



2.1.2.2 Comparisons

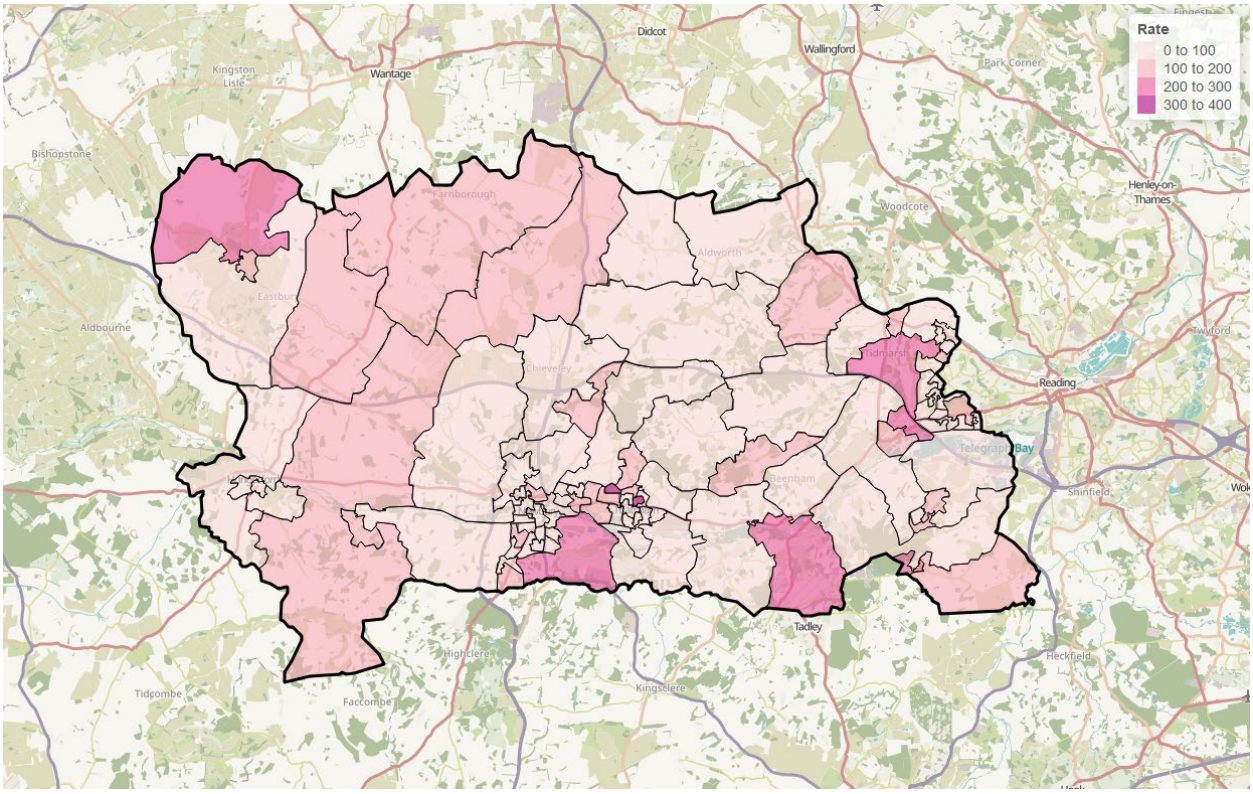
The resident child casualty rate for West Berkshire was 35% below the national rate, 32% below the regional rate, but only 7% less than the overall rate for Berkshire. Within Berkshire, Bracknell Forest had the lowest child casualty rate (54.6), followed by Wokingham (69.4). West Berkshire's rate was higher than the rate for Windsor & Maidenhead, both of which were lower than the rates for Reading and Slough. Of the most similar comparator authorities, West Berkshire's rate was in line was East Hampshire, but higher than the rates for South Oxfordshire and Vale of White Horse, whilst being lower than the rates for Aylesbury Vale and Horsham.

Residency by Small Area

Figure 10 shows the home location of West Berkshire's resident child casualties by lower layer super output area (LSOA). The thematic map is coloured by resident casualties per year per population of LSOA.

The highest resident child casualty rate can be found in parts of Thatcham, Upper Lambourn and Aldermaston. There are also high resident child casualty rates around Greenham, Mortimer Common, Theale, and Tidmarsh.

Figure 10 - West Berkshire resident child casualties home location by LSOA, casualties per year per 100,00 population

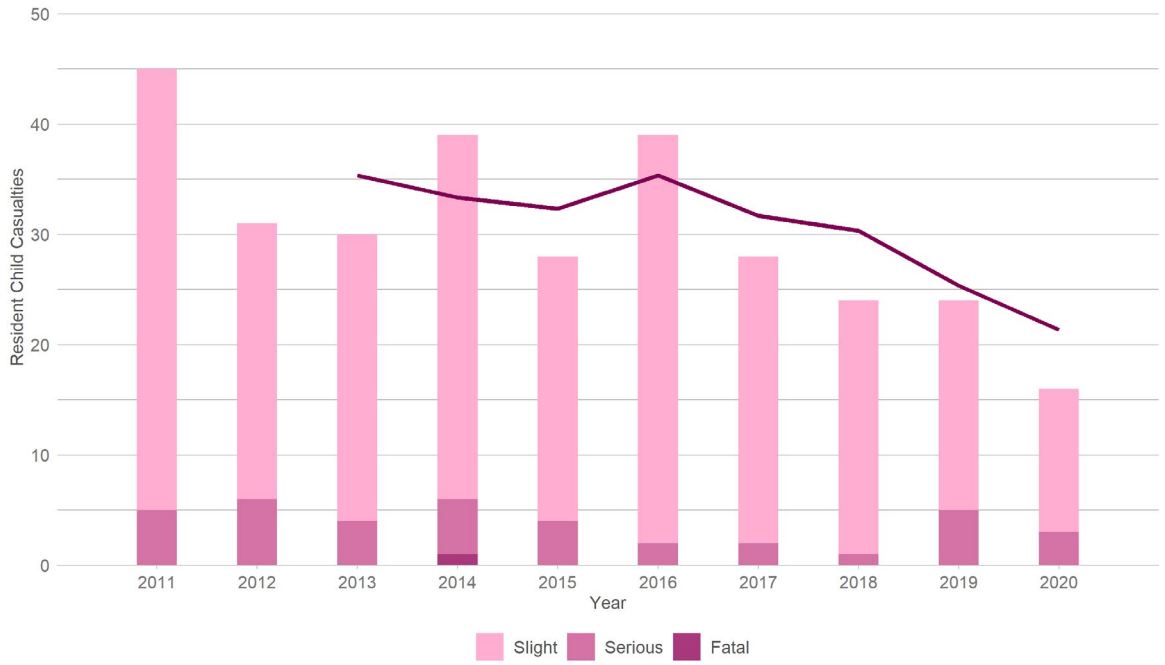


2.1.2.3 Trends

Figure 11 shows West Berkshire's annual resident child casualty numbers since 2011, by severity. This includes residents injured anywhere in the country. Also shown is a 3-year moving average trend line.

Resident child casualty numbers have fluctuated over the decade, with gradual reduction in the overall trend. There were 16 resident child casualties from West Berkshire in 2020, down from their highest level of 45 in 2011. The number of these child casualties that were killed or seriously injured has remained low since 2011, despite peaks in 2014 and 2016. There were three child casualties from West Berkshire that were seriously injured in 2020, and there have been no resident child fatalities since 2014, when there was one child resident fatality.

Figure 11 - West Berkshire resident child casualties, by year and severity (2011 - 2020)



Resident Child Casualties occurring in other areas

Just over three quarters of West Berkshire's resident child casualties were injured on the roads of West Berkshire. Of the remaining 24%, the majority were injured in either the neighbouring authorities of Hampshire (6%), Reading (4%), and Oxfordshire (4%), or in the popular holiday destinations of Dorset (2%) and Devon (2%).

2.1.3 All West Berkshire Resident Pedestrian Casualties

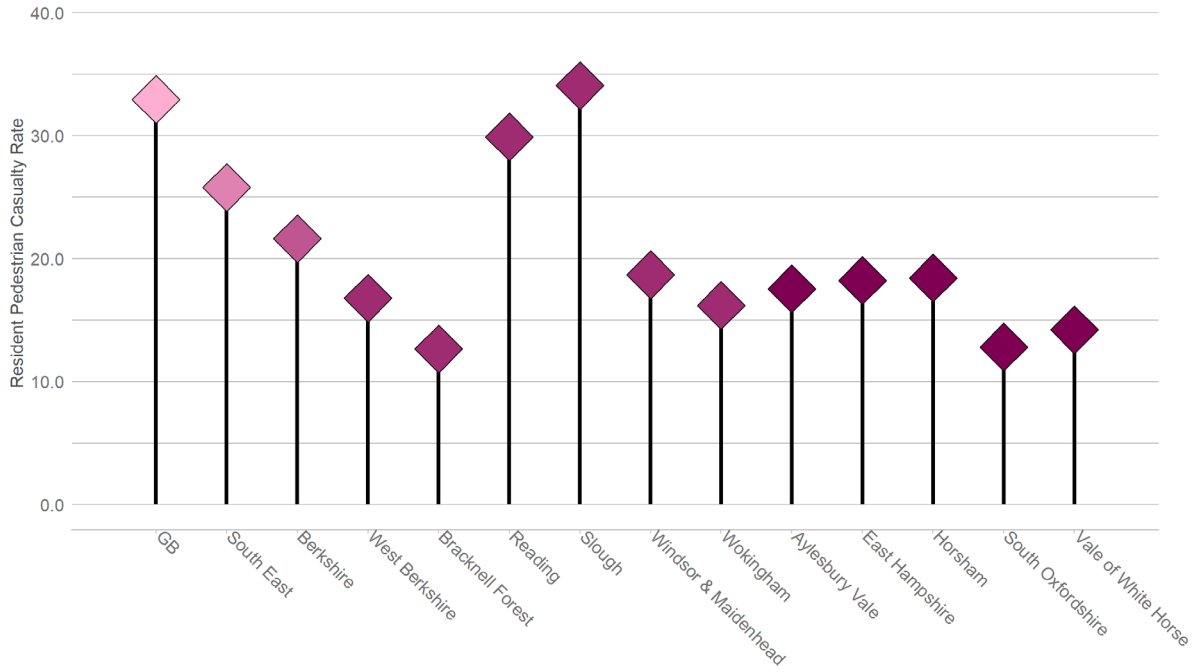
This section examines pedestrian casualties who are residents of West Berkshire. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1 on page 65.

2.1.3.1 Rates

Figure 12 shows the resident pedestrian casualty rates for West Berkshire compared to the national and regional rates, as well as the most similar Berkshire and selected external comparators.

West Berkshire had a pedestrian casualty rate of 16.8 casualties per year, per 100,000 population.

Figure 12 - Annual average West Berkshire resident pedestrian casualties per 100,000 population (2016-2020)



2.1.3.2 Comparisons

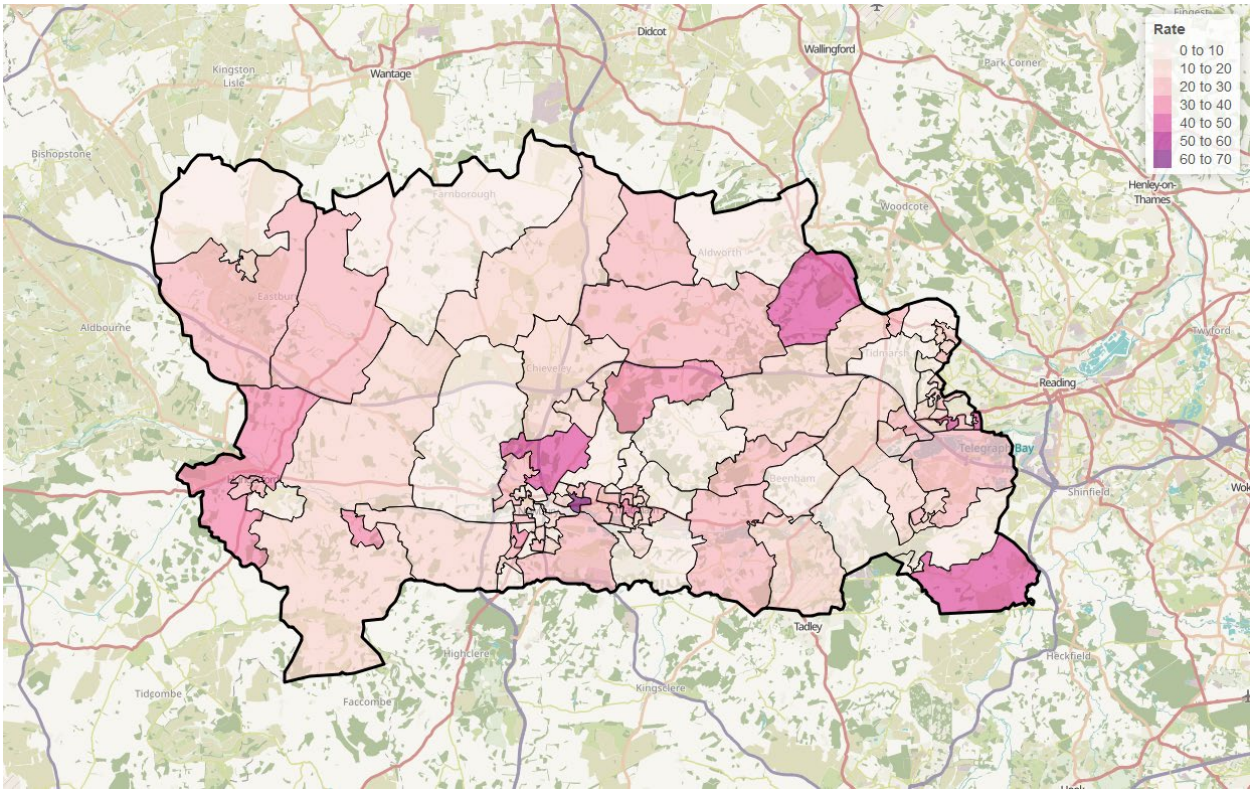
The resident pedestrian casualty rate for West Berkshire was 49% below the national rate, 35% below the regional rate, and 22% less than the overall rate for Berkshire. Within Berkshire, Bracknell Forest had the lowest resident pedestrian casualty rate (12.7) followed by Wokingham (16.2). West Berkshire's rate was lower than the rate for Windsor and Maidenhead, both of which were lower than Reading and Slough. Of the most similar comparator authorities, West Berkshire's rate was lower than Aylesbury Vale, East Hampshire, and Horsham, but higher than the rates of South Oxfordshire and the Vale of White Horse.

Residency by Small Area

Figure 13 shows the home location of the West Berkshire's resident pedestrian casualties by lower layer super output area (LSOA). The thematic map is coloured by resident casualties per year per population of LSOA.

The highest resident pedestrian casualty rates are found around West Berkshire Community Hospital, north of Newbury along the North/South Relief Road and Western Avenue, Upper Basildon, Stratfield Mortimer, Beansheaf, and Underwood Road.

Figure 13 - West Berkshire resident pedestrian casualties home location by LSOA, casualties per year per 100,000 population (2016-2020)

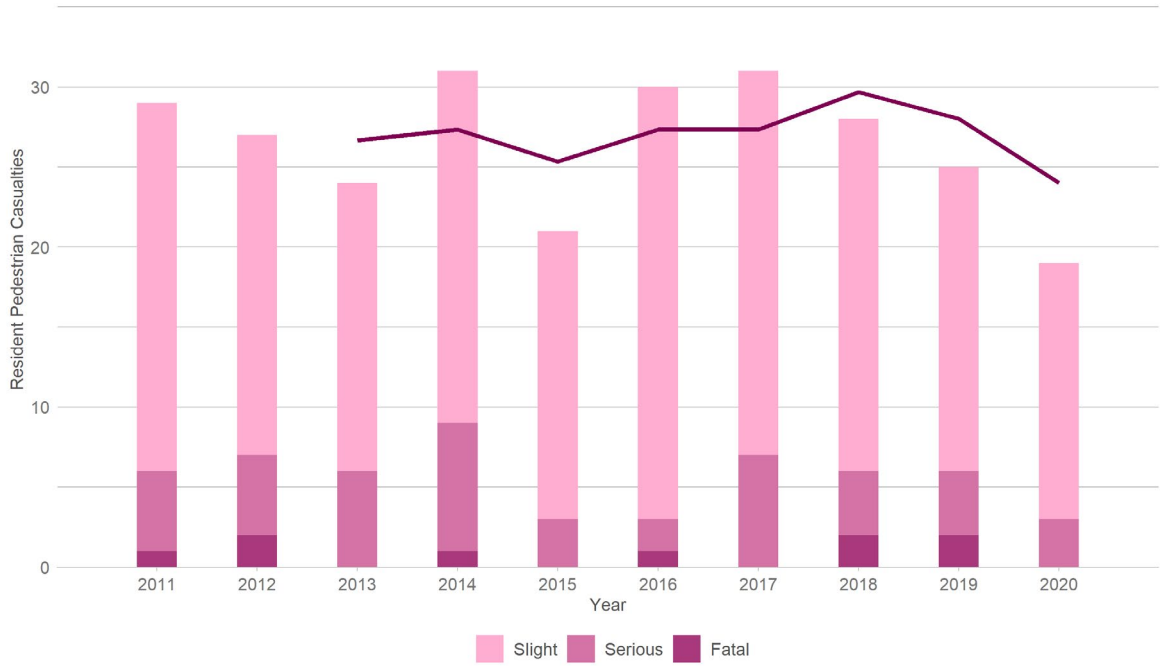


2.1.3.3 Trends

Figure 14 shows West Berkshire's annual resident pedestrian casualty numbers since 2011, by severity. This includes residents injured anywhere in the country. Also shown is a 3-year moving average trend line.

Resident pedestrian casualty numbers have fluctuated, whilst generally experiencing a decrease overall since the start of the decade. There were 19 resident pedestrian casualties from West Berkshire in 2020, down from 29 in 2011 (peak at 30 in 2016). The number of these pedestrian casualties that were killed or seriously injured has remained relatively stable, with the peak of serious injuries occurring in 2014 with a total of 8 seriously injured resident pedestrian casualties.

Figure 14 - West Berkshire resident pedestrian casualties, by year and severity (2011-2020)



Resident Pedestrian Casualties occurring in other areas

Of West Berkshire's resident pedestrian casualties, 74% were injured in West Berkshire. This is slightly above the national average percentage of resident pedestrian casualties who were injured in their home authority of 69%. Of the remaining 26%, the majority were injured in Reading (11%), Oxfordshire (3%), Surrey (2%) and Westminster (2%)

2.1.4 All West Berkshire Resident Pedal Cyclist Casualties

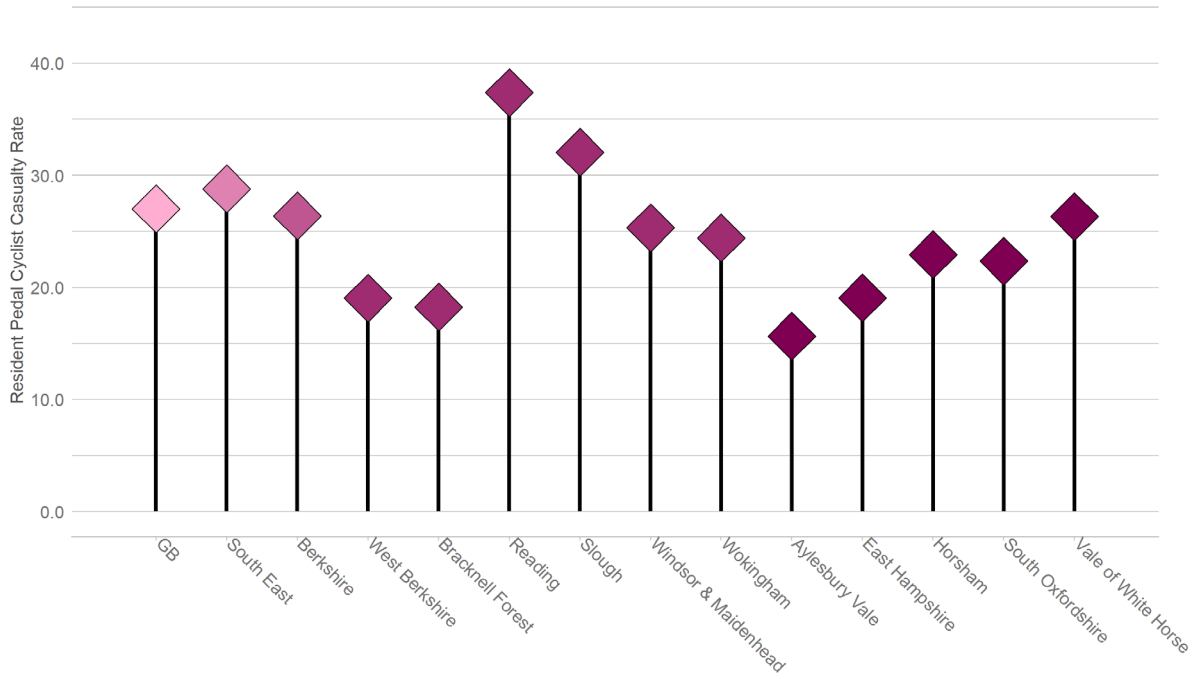
This section examines pedal cyclist casualties who are residents of West Berkshire. For an explanation of the methodologies employed throughout this section, please refer to 4.1.1 on page 65.

2.1.4.1 Rates

Figure 15 shows the resident pedal cyclist casualty rates for West Berkshire compared to the national and regional rates, as well as the most similar Berkshire and selected external comparators.

West Berkshire had a resident pedal cyclist casualty rate of casualties of 19.1 per year, per 100,000 population.

Figure 15 - Annual average West Berkshire resident pedal cyclist casualties per 100,000 population (2016-2020)



2.1.4.2 Comparisons

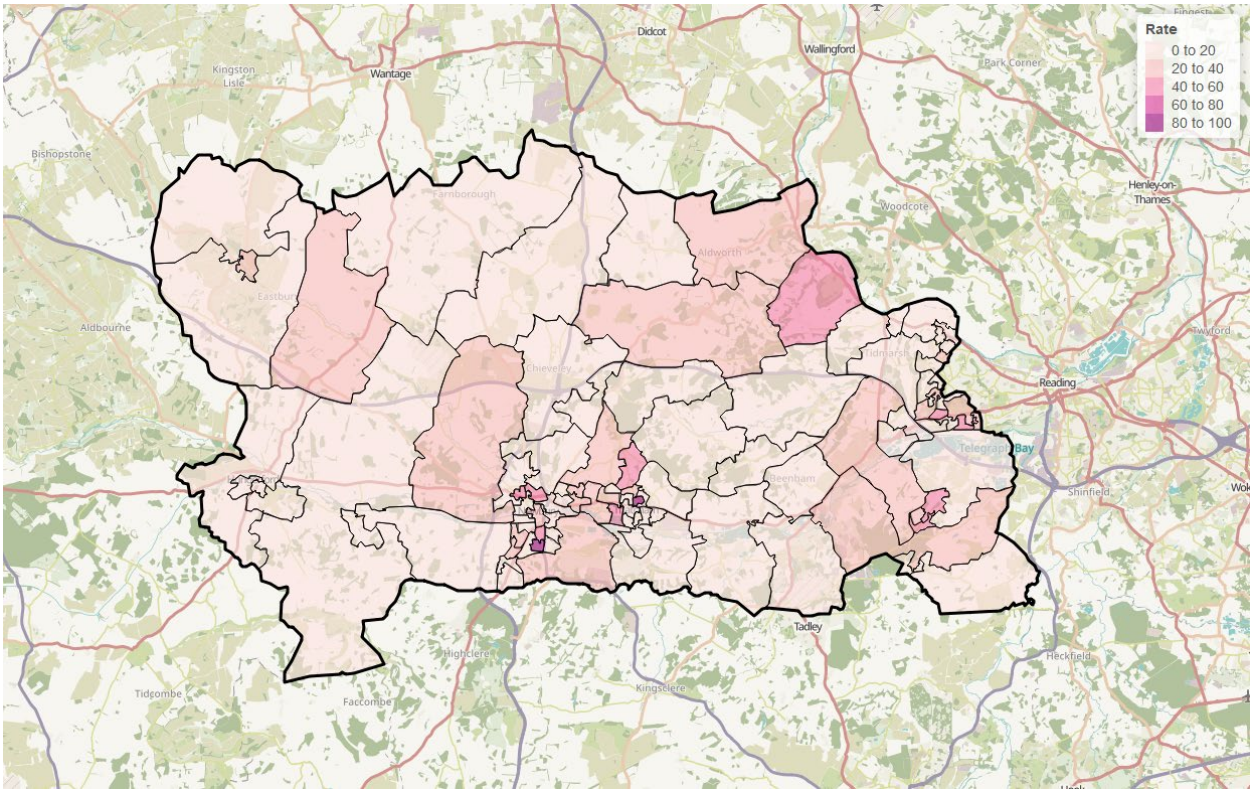
The resident pedal cyclist casualty rate for West Berkshire was 29% below the national rate, 34% below the regional rate, and 28% less than the overall rate for Berkshire. Within Berkshire, Bracknell Forest had the lowest resident pedal cyclist casualty rate (18.2), followed by Wokingham (24.4). West Berkshire's rate was therefore lower than all comparators in Berkshire except Bracknell Forest. Of the most similar comparator authorities, West Berkshire's rate was in line with that of East Hampshire, higher than Aylesbury Vale, but lower than the rates of South Oxfordshire, Vale of White Horse, and Horsham.

Residency by Small Area

Figure 16 shows the home location of the West Berkshire's resident pedal cyclist casualties by lower layer super output area (LSOA). The thematic map is coloured by resident pedal cyclist casualties per year per population of LSOA.

The highest resident pedal cyclist casualty rates are found in Upper Basildon, parts of Newbury, parts of Thatcham, Calcot, as well as east, west and south of Ford's Farm, and around Burghfield Common.

Figure 16 - West Berkshire resident pedal cyclist casualties home location by LSOA, casualties per year per 100,000 population (2016-2020)

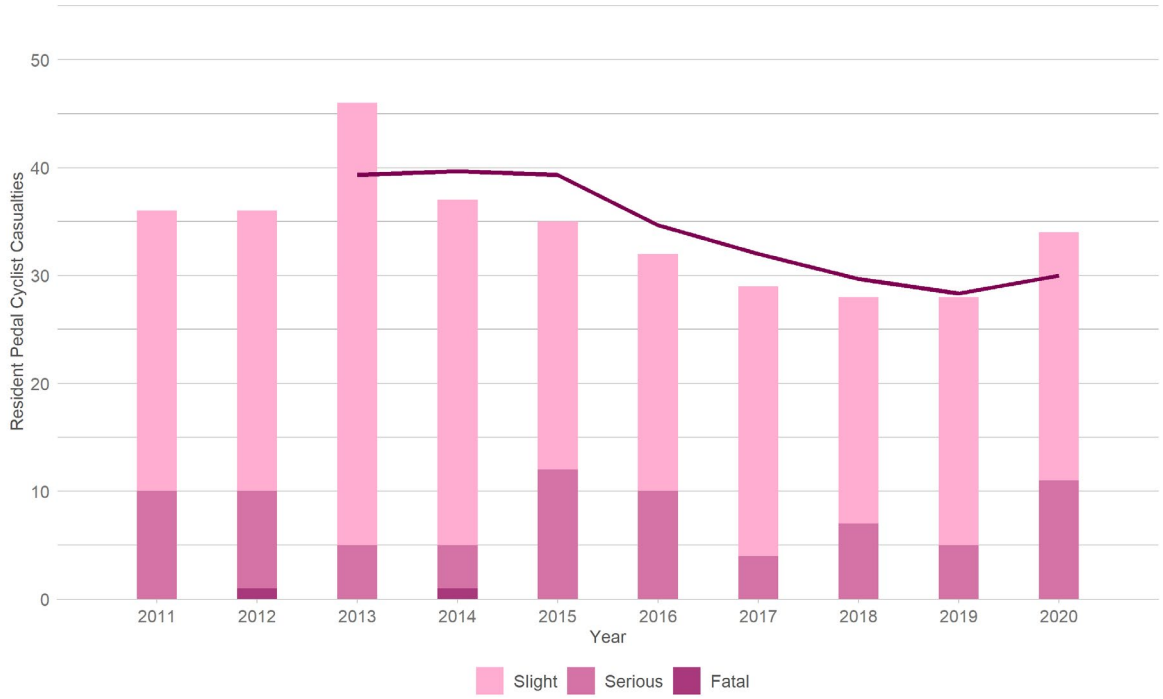


2.1.4.3 Trends

Figure 17 shows West Berkshire's annual resident pedal cyclist casualty numbers since 2011, by severity. This includes residents injured anywhere in the country. Also shown is a 3-year moving average trend line.

Resident pedal cyclist casualty numbers have remained relatively stable across the decade, with a sustained reduction from 2013 (with a peak of 46 casualties) to 2018-2019 (lowest point of 28 casualties for both years). There were 34 resident pedal cyclist casualties from West Berkshire in 2020, down slightly from 36 in 2011. The number of resident pedal cyclist casualties who were seriously injured peaked in 2015 (12 in total), whilst there has not been a fatal resident pedal cyclist injury since 2014.

Figure 17 - West Berkshire resident pedal cyclist casualties, by year and severity (2011-2020)



Resident Pedal Cyclist Casualties occurring in other areas

Of West Berkshire's resident pedal cyclist casualties, 72% were injured in West Berkshire. This is above the national average percentage of resident pedal cyclist casualties who were injured in their home authority of 65%. Of the remaining 28%, the majority were injured in Reading (15%), Oxfordshire (3%), Hampshire (3%), and Westminster (2%).

2.2 West Berkshire Resident Drivers involved in Collisions

This section refers to all drivers of motor vehicles and motorcycles involved in collisions and who are residents of West Berkshire.

2.2.1 All Resident Motor Vehicle Driver Involvement (excluding motorcycle riders)

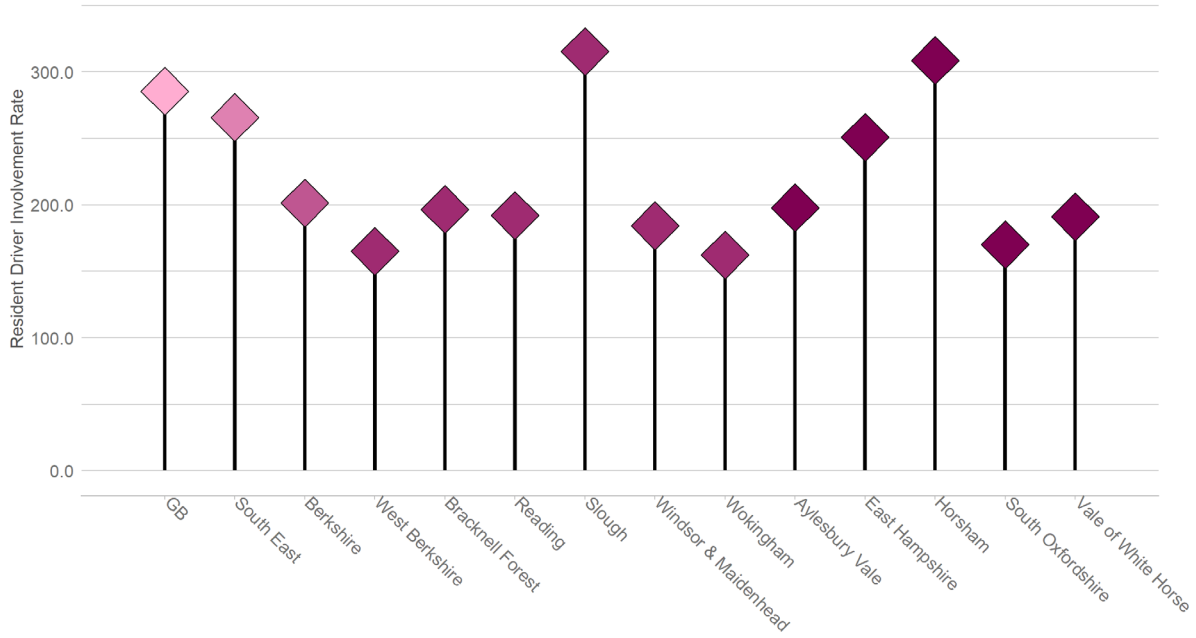
This section analyses all persons recorded as being a West Berkshire resident in charge of a motor vehicle (other than a motorcycle or moped) involved in a collision, regardless of age. Therefore, it includes a small number of drivers recorded as being under the age of seventeen.

2.2.1.1 Rates

Figure 18 shows the resident driver involvement rates for West Berkshire compared to the national and regional rates, as well as the most similar Berkshire and selected external comparators.

West Berkshire had a resident driver involvement casualty rate of 165.0 casualties per year, per 100,000 population.

Figure 18 - Annual average West Berkshire resident involved drivers per 100,000 population (2016-2020)



2.2.1.2 2.2.1.2 Comparisons

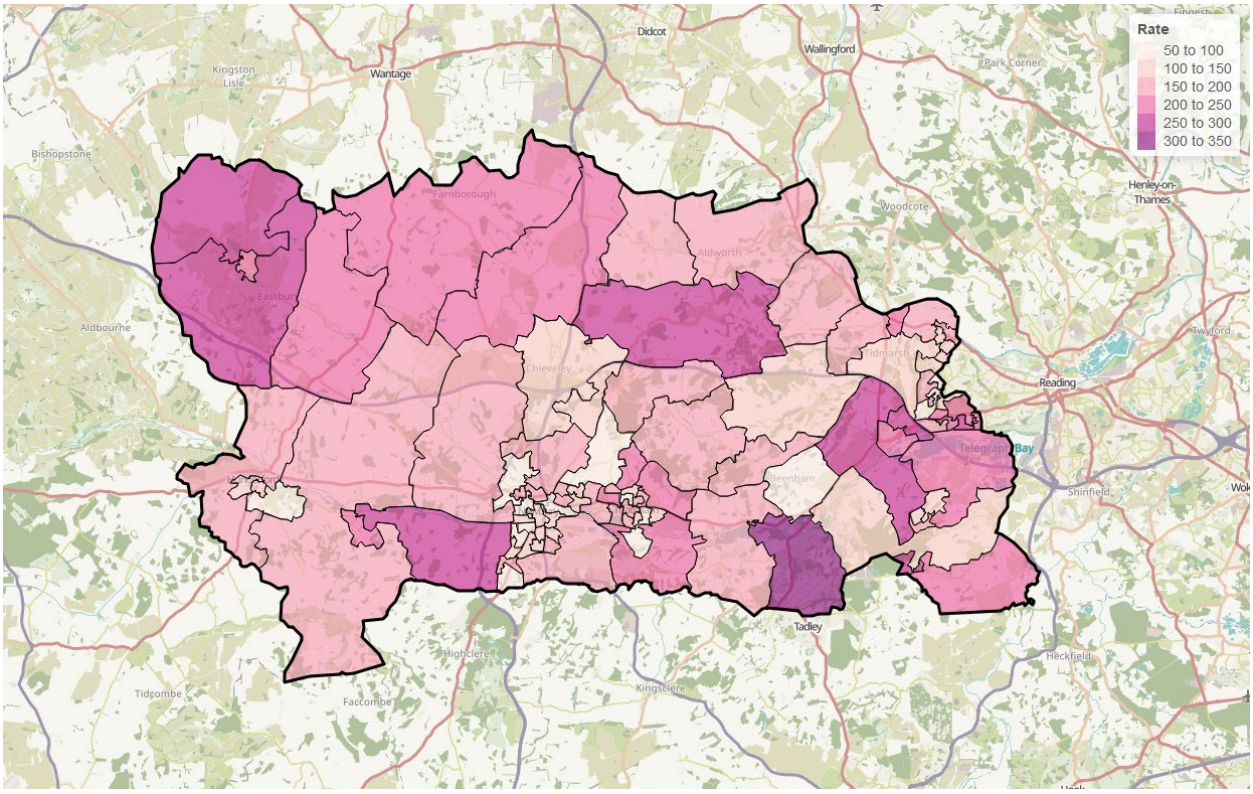
The resident driver involvement rate for West Berkshire was 42% below the national rate, 38% below the regional rate, and 18% less than the overall rate for Berkshire. Within Berkshire, Wokingham had the lowest resident driver involvement rate (162.2) followed by West Berkshire itself. West Berkshire's rate was therefore lower than all comparators in Berkshire except Wokingham. Of the most similar comparator authorities, West Berkshire's rate in line with that of South Oxfordshire, but lower than the other selected external comparators.

Residency by Small Area

Figure 19 shows the home location of the West Berkshire's collision involved resident drivers by lower layer super output area (LSOA). The thematic map is coloured by resident involved drivers per year per population of LSOA.

The highest resident driver involvement rates are found in Eastbury, Upper Lambourn, Enborne, Hampstead Norreys, Aldermaston, Englefield, and Sulhamstead.

Figure 19 - West Berkshire resident involved drivers home location by LSOA, involved drivers per year per 100,000 population (2016-2020)

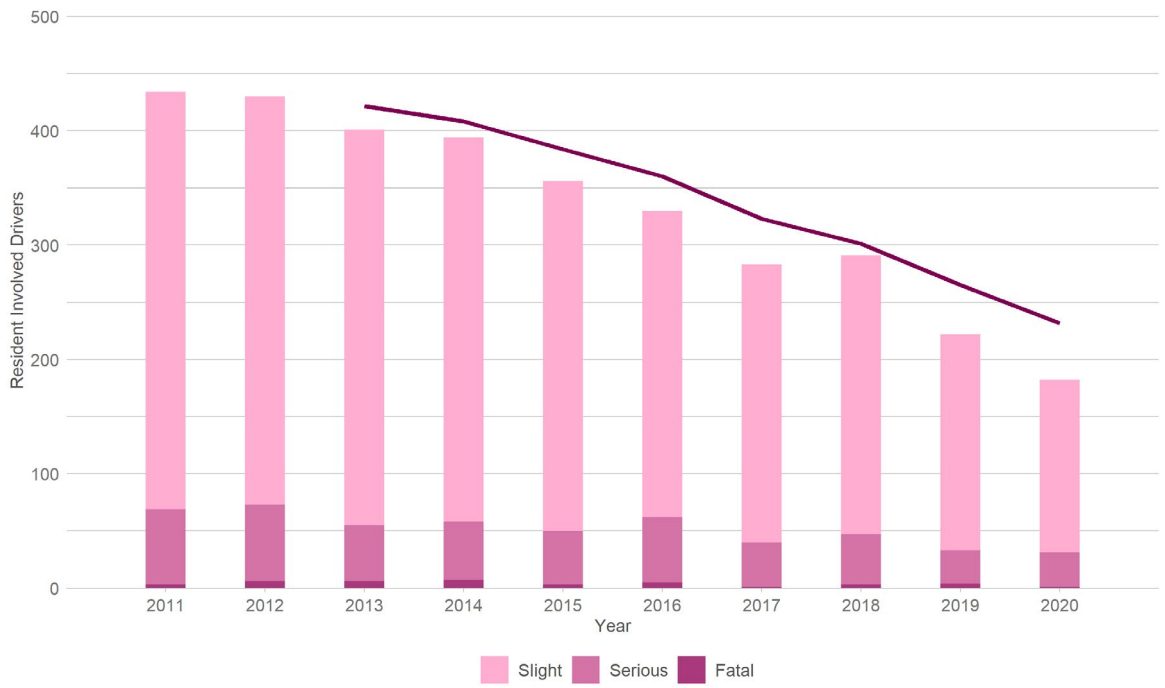


2.2.1.3 Trends

Figure 20 shows West Berkshire's annual collision involved resident driver numbers since 2011, by severity. This includes resident drivers involved in collisions anywhere in the country. Also shown is a 3-year moving average trend line.

Resident involved driver numbers have experienced a gradual and sustained reduction over the past decade. There were 182 collision involved resident drivers from West Berkshire in 2020, down from their highest level of 434 at start of the decade in 2011. The number of these resident involved drivers that were killed or seriously injured has similarly declined, with seriously injured casualties having peaked at 66 in 2011.

Figure 20 - West Berkshire resident involved drivers, by year and severity (2011-2020)



Resident driver collision involvement in other areas

Of West Berkshire's resident involved drivers 47% were injured in West Berkshire. This is in line with the national average percentage of resident involved drivers who were injured in their home authority of 49%. Of the remaining 53%, the majority were injured in Hampshire (11%), Reading (10%), Oxfordshire (6%), Wokingham (3%) Wiltshire (3%), Surrey (2%) and Swindon (2%).

2.2.1.4 Socio Demographic Analysis

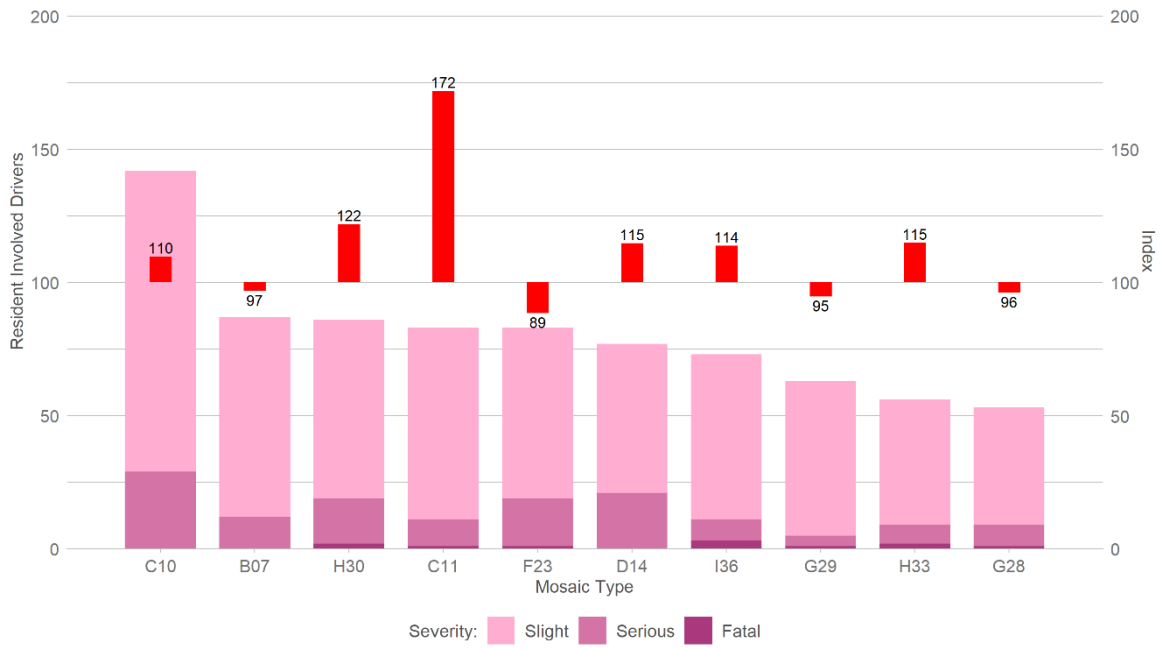
Segmentation

Analysis of the Mosaic communities in which West Berkshire's resident involved drivers 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 section 4.1.1.1 on page 65.

Figure 21 shows West Berkshire's resident involved drivers 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 largest number of resident involved drivers featured as casualties come from communities of *prosperous owners of country houses including affluent families, successful farmers and second-home owners* (Type C10), which is much higher than for any other mosaic type featured. Type C10 is slightly over-represented with an index value of 110. Those from communities of *country-loving families pursuing a rural idyll in comfortable village homes, many commuting some distance to work* (Type C11) are significantly over-represented with an index value of 172, despite being less numerous. The second highest level of over-representation comes from those communities of *families with school-age children, who have bought the best house they can afford within popular neighbourhoods* (Type H30) with an index value of 122, featuring a similar level of resident involved drivers as Type C11.

Figure 21 - West Berkshire resident involved drivers, by Mosaic Type (2016-2020)

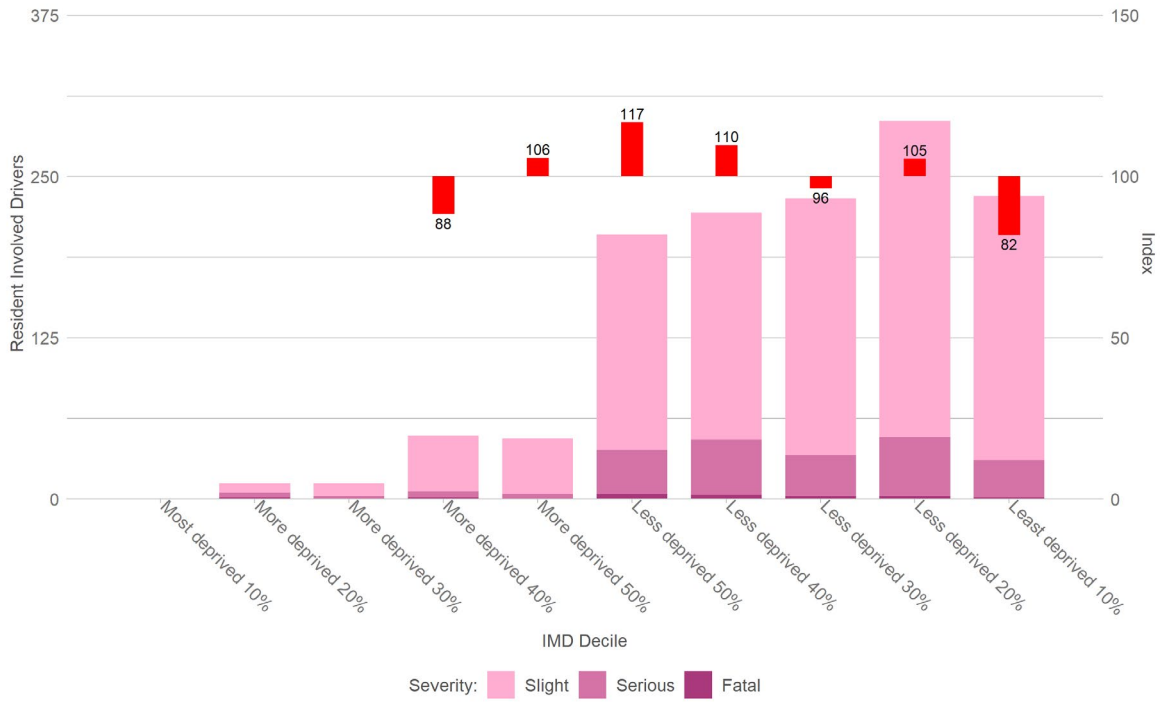


Deprivation

Figure 22 shows resident involved drivers by the IMD of the LSOA (Lower Super Output Area) in which they reside.

The largest number of resident involved drivers come from communities in the less deprived IMD deciles. This is particularly true of the less deprived 20%, and to a lesser extent the less deprived 30% and least deprived 10% deciles. The least deprived 10% decile is notably under-represented however with an index value of 82, whilst the less deprived 40% and 50% deciles are over-represented with index values of 110 and 117 respectively. The less deprived 20% and 30% deciles are represented at levels that are broadly in line with what would be expected based on population share of those communities.

Figure 22 - West Berkshire resident involved drivers, by Index of Multiple Deprivation (2016-2020)



2.2.2 Resident Young Driver Involvement (aged 17 to 24)

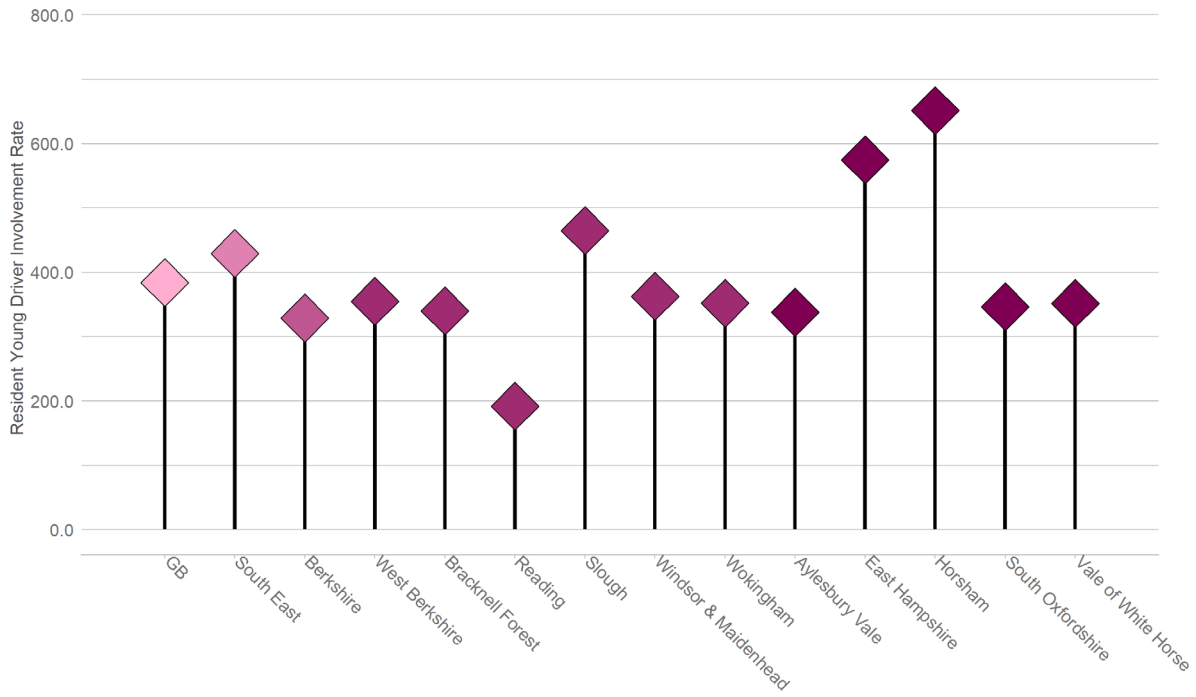
This section analyses all young West Berkshire resident drivers involved in a collision.

2.2.2.1 Rates

Figure 23 shows the resident young driver involvement rates for West Berkshire compared to the national and regional rates, as well as the most similar Berkshire and selected external comparators.

West Berkshire had a resident young driver involvement rate of 354.7 casualties per year, per 100,000 population.

Figure 23 - Annual average West Berkshire resident young involved drivers per 100,000 population (2016-2020)



2.2.2.2 Comparisons

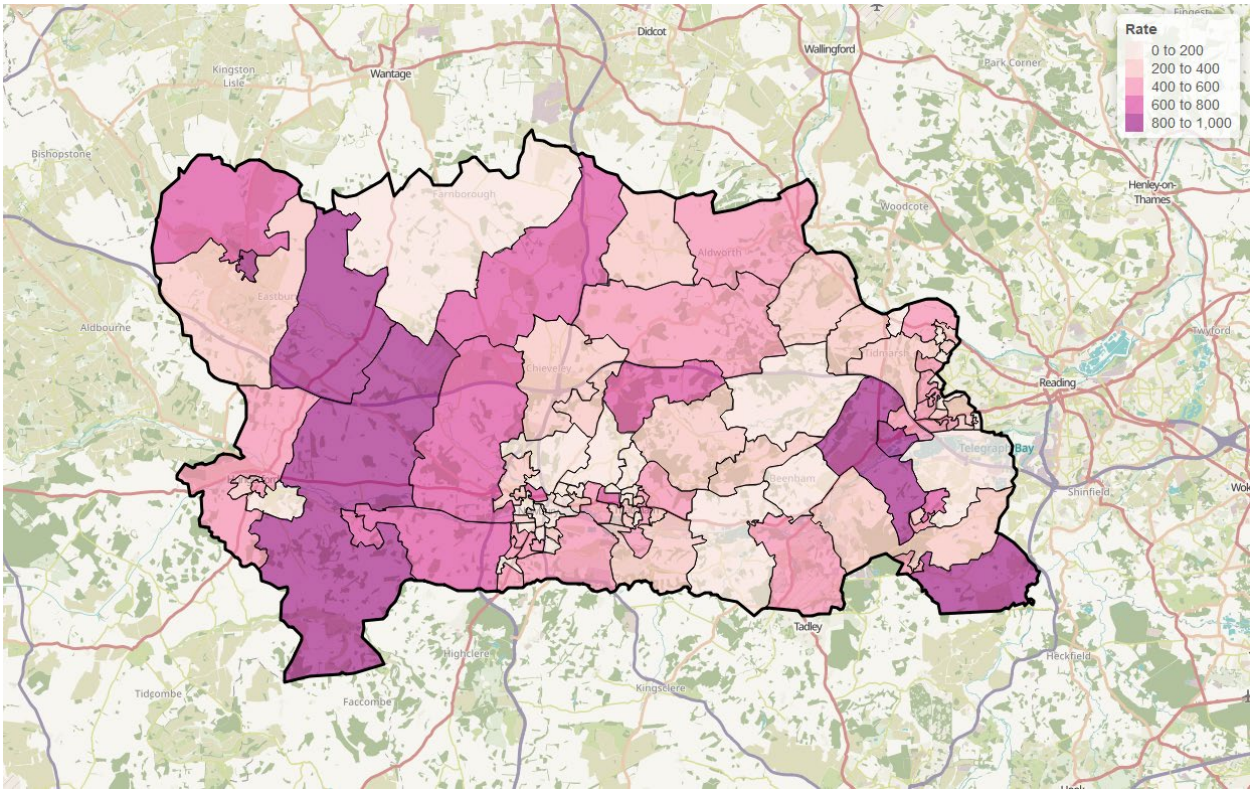
The resident young driver involvement rate for West Berkshire was 8% below the national rate, 17% below the regional rate, and 8% more than the overall rate for Berkshire. Within Berkshire, Reading had the lowest resident young driver involvement adult casualty rate (191.8), followed by Bracknell Forest. West Berkshire's rate was higher than these two comparators and also Wokingham's but was lower than those of Windsor and Maidenhead and Slough. Of the most similar comparator authorities, West Berkshire's rate was higher than those of Aylesbury Vale, South Oxfordshire, and the Vale of White Horse, but lower than East Hampshire and Horsham.

Residency by Small Area

Figure 24 shows the home location of the West Berkshire's collision involved resident young drivers by lower layer super output area (LSOA). The thematic map is coloured by resident involved young drivers per year per young adult population of LSOA.

The highest resident young adult driver involvement rates are found in Great Shefford, Wickham, around Kintbury, Inkpen, Englefield, Sulhamstead, south of Theale, and Stratfield Mortimer.

Figure 24 - West Berkshire resident young involved drivers home location by LSOA, per year per 100,000 population (2016-2020)

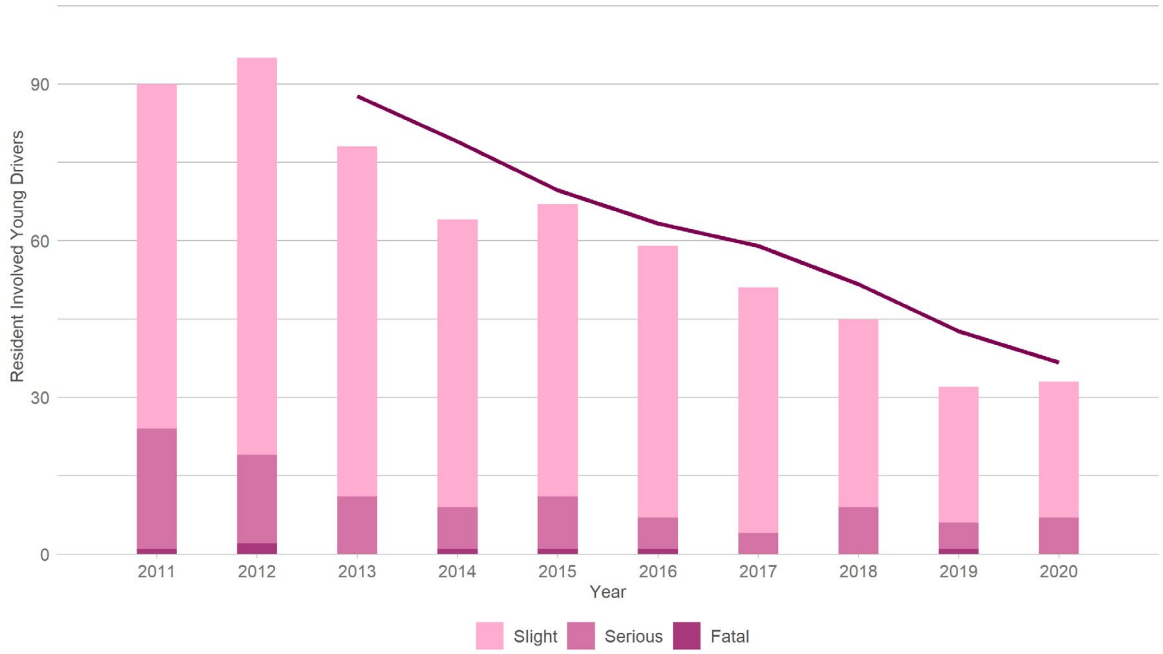


2.2.2.3 Trends

Figure 25 shows West Berkshire's annual collision involved resident young driver numbers since 2011, by severity. This includes resident drivers involved in collisions anywhere in the country. Also shown is a 3-year moving average trend line.

Resident young involved driver numbers have declined significantly over the past decade. There were 33 resident young drivers from West Berkshire in 2020, down from 90 in 2011 (peak of 95 the following year). The number of these resident young drivers that were killed or seriously injured has similarly decreased overall since 2011, with serious casualties falling exponentially from 23 to 7 by 2020.

Figure 25 - West Berkshire resident young involved drivers, by year and severity (2011-2020)



Resident young driver collision involvement in other areas

Of West Berkshire's resident young drivers, 51% were injured in West Berkshire. This is broadly in line with the national average percentage of resident adult casualties who were injured in their home authority of 56%. Of the remaining 49%, the majority were injured in Hampshire (12%), Reading (10%), Oxfordshire (5%), Wiltshire (4%) and Wokingham (2%)

2.2.2.4 Socio Demographic Analysis

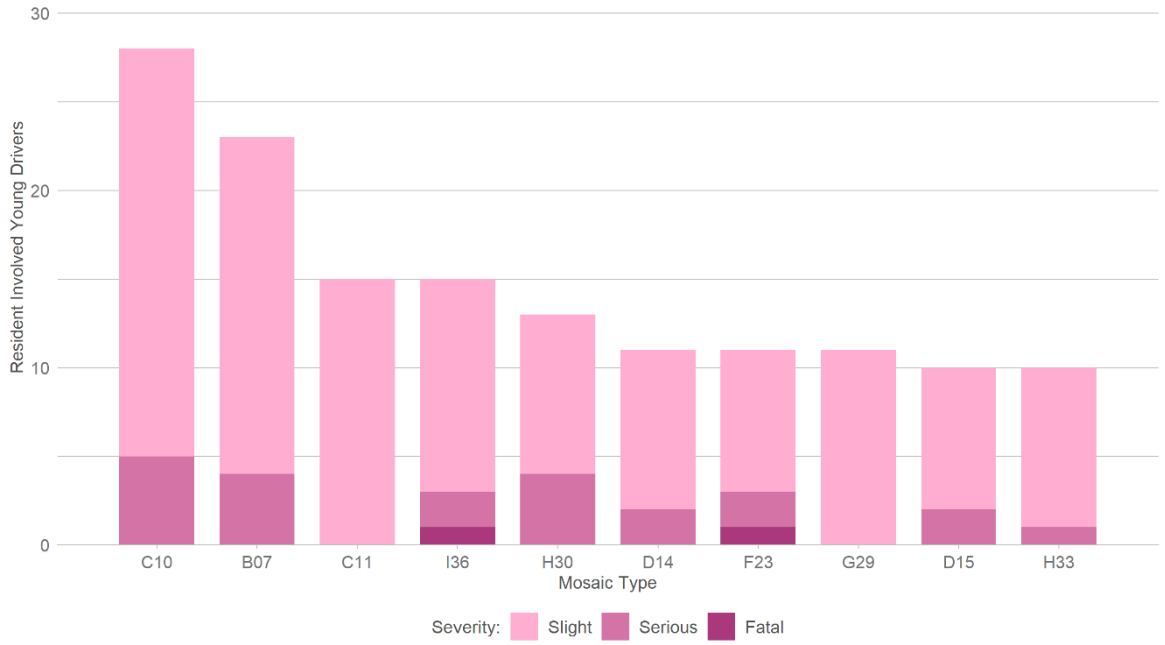
Segmentation

Analysis of the Mosaic communities in which West Berkshire's resident involved young drivers 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 section 4.1.1.1 on page 65.

Figure 26 shows West Berkshire's resident young drivers by the Mosaic Type of the postcode they live in.

The largest number of resident young drivers come from communities of *prosperous owners of country houses including affluent families, successful farmers and second-home owners* (Type C10), followed by *High-achieving families living fast-track lives, advancing careers, finances and their school-age kids' development* (Type B07). These mosaic types feature a notably higher amount of resident involved drivers than any of the other mosaic types featured. Those from communities of *stable families with children, renting higher value homes from social landlords* (Type I36) and *active families with adult children and some teens, giving prolonged support to the next generation* (Type F23) feature the only fatal resident involved young drivers (one each).

Figure 26 - West Berkshire resident young involved drivers, by Mosaic Type (2016-2020)

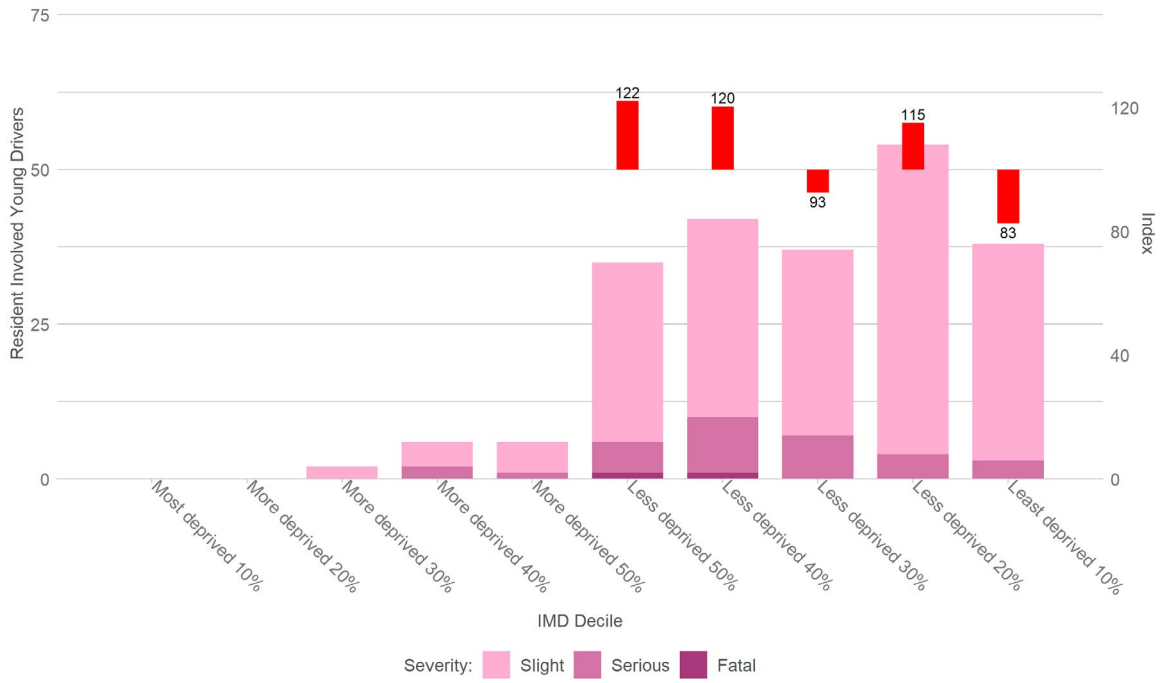


2.2.3.4.2 Deprivation

Figure 27 shows resident involved young drivers by the IMD of the LSOA (Lower Super Output Area) in which they reside.

The largest number of resident young drivers come from communities in the less deprived IMD deciles. This is particularly true of the less deprived 20% and to a slightly lesser extent the least deprived 10% and less deprived 40% deciles. The less deprived 30% decile is represented at broadly the level that would be expected based upon population, whilst the less deprived 20%, 40% and 50% deciles are over-represented with index values of 115, 120 and 122 respectively.

Figure 27 - West Berkshire resident young involved drivers, by Index of Multiple Deprivation (2016-2020)



2.2.3 Related Casualties

2.2.3.1 Passenger and pedestrian casualties

The related casualties of West Berkshire's resident young drivers have been analysed. Related casualties can be the driver themselves; an injured passenger; or a pedestrian struck by the driver's vehicle. Consequently, injured drivers and passengers of other vehicles are not included in the analysis.

Figure 28 shows that resident involved young drivers in West Berkshire are overwhelmingly involved as casualties when there are no other 'injured passengers' The much lower levels, of when either one or 2-4 passengers are injured, have index values that are similarly represented at levels that are in line with what would be expected.

Figure 28 - Injured passengers in West Berkshire's resident involved young drivers' vehicles, compared to all young drivers (2016-2020)

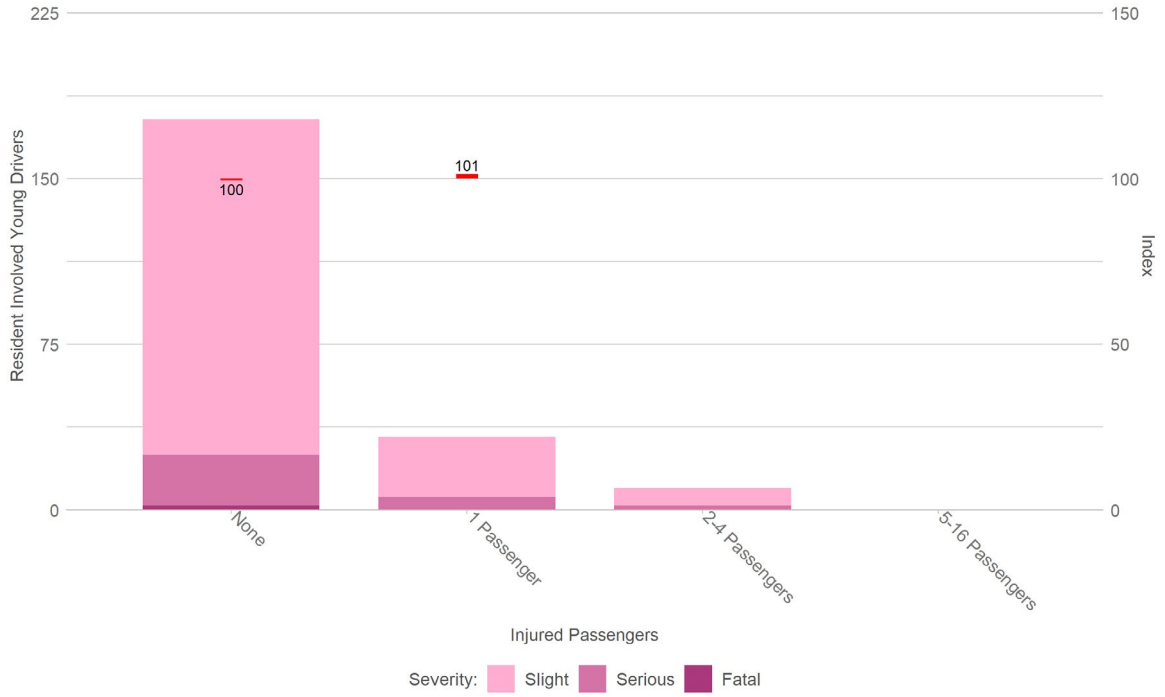
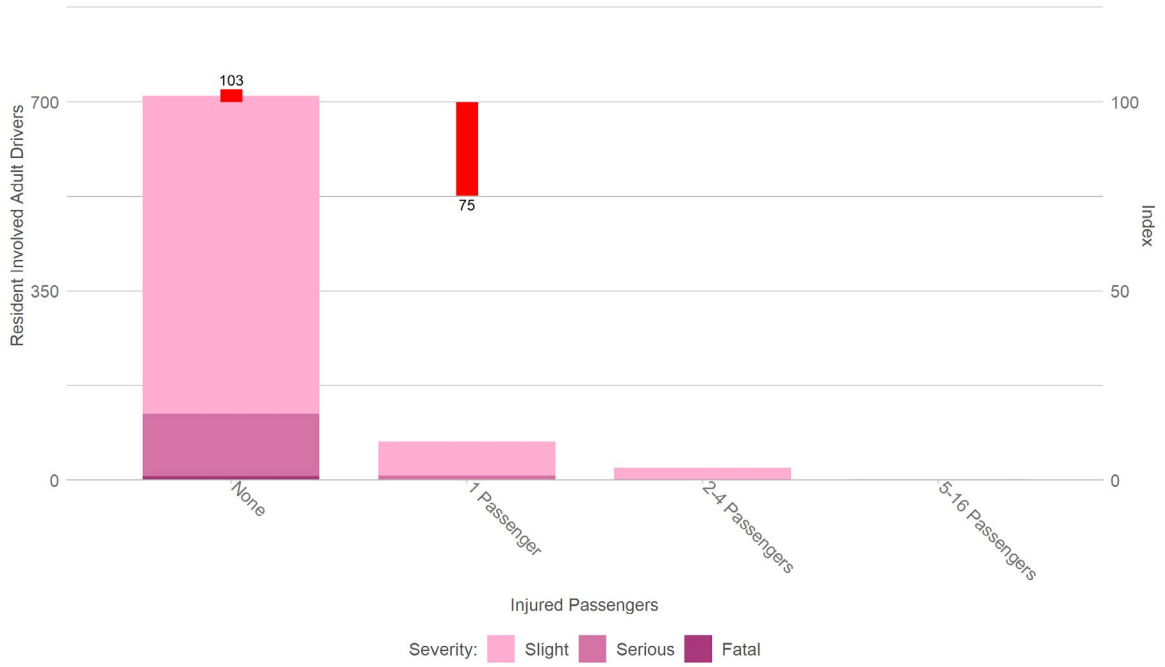


Figure 29 - Injured passengers in West Berkshire's resident involved adult drivers vehicles, compared to all adult drivers (2016-2020)



2.3 West Berkshire resident motorcycle riders involved in collisions

2.3.1 Resident Motorcyclist Involvement

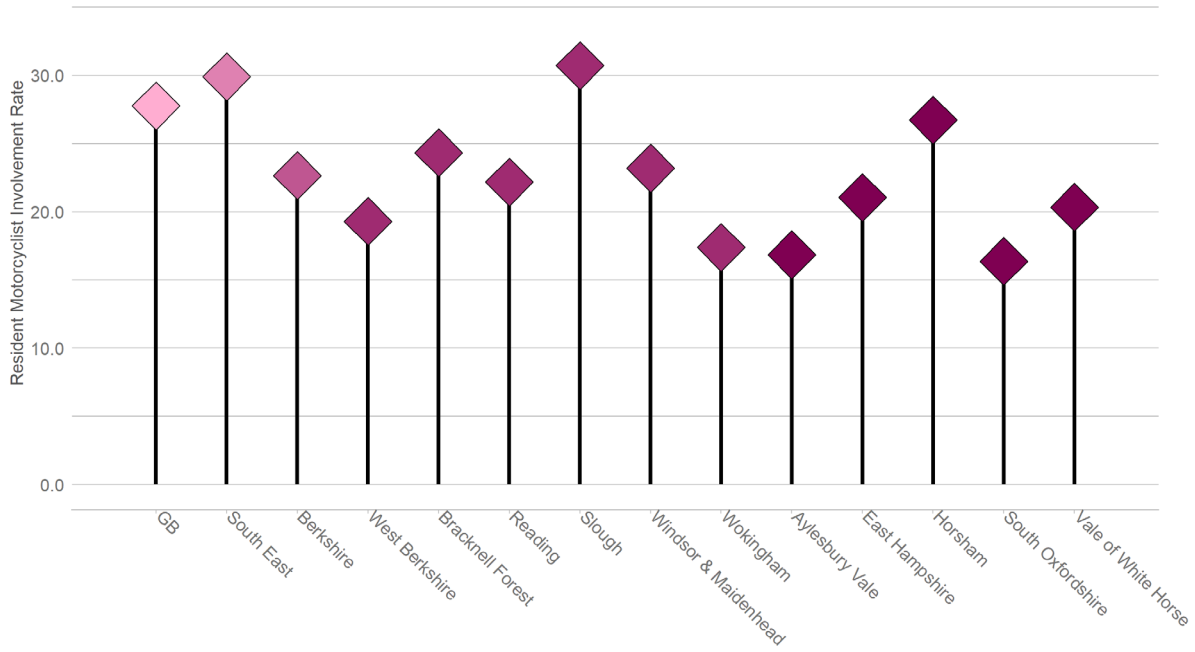
This section refers to motorcyclists involved in collisions and who are residents of West Berkshire.

2.3.1.1 Rates

Figure 30 shows the resident motorcyclist involvement rates for West Berkshire compared to the national and regional rates, as well as the most similar Berkshire and selected external comparators.

West Berkshire had a resident motorcyclist involvement rate of 19.3 casualties per year, per 100,000 population.

Figure 30 - Annual average West Berkshire resident involved motorcyclist per 100,000 population (2016-2020)



2.3.1.2 Comparisons

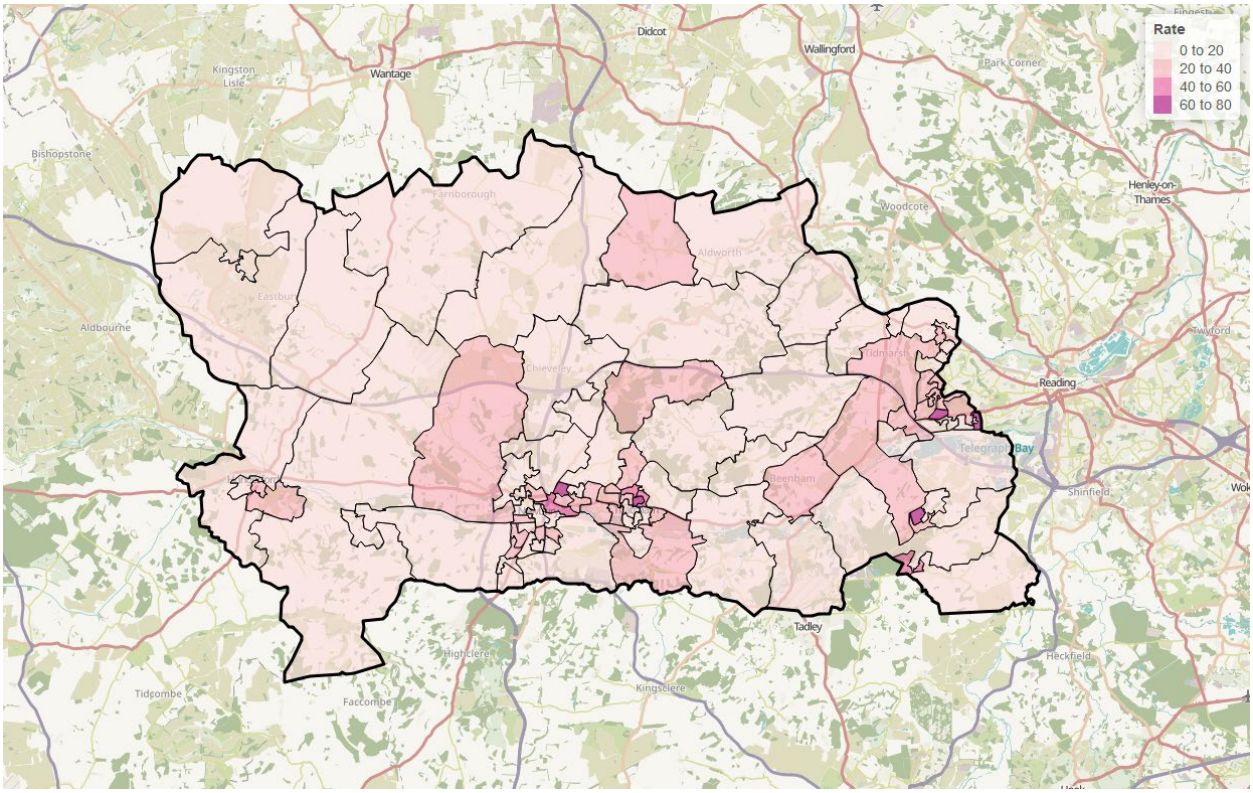
The resident motorcyclist involvement rate for West Berkshire was 30% below the national rate, 35% below the regional rate, and 15% less than the overall rate for Berkshire. Within Berkshire, Wokingham had the lowest resident motorcyclist involvement (17.4), followed by West Berkshire itself. West Berkshire's rate was therefore lower than all comparators in Berkshire except Wokingham. Of the most similar comparator authorities, West Berkshire's rate was higher than those of Aylesbury Vale and South Oxfordshire, but lower than East Hampshire, Vale of White Horse, and Horsham.

Residency by Small Area

Figure 31 shows the home location of the West Berkshire's collision involved resident motorcyclist by lower layer super output area (LSOA). The thematic map is coloured by resident involved motorcyclist per year per population of LSOA.

The highest resident motorcyclist involvement rates are found in parts of Newbury, parts of Thatcham, Burghfield Common, Calcot, east of Fords Farm, and Mortimer Common.

Figure 31 - West Berkshire resident involved motorcyclist home location by LSOA, involved motorcyclist per year per 100,000 population (2016-2020)

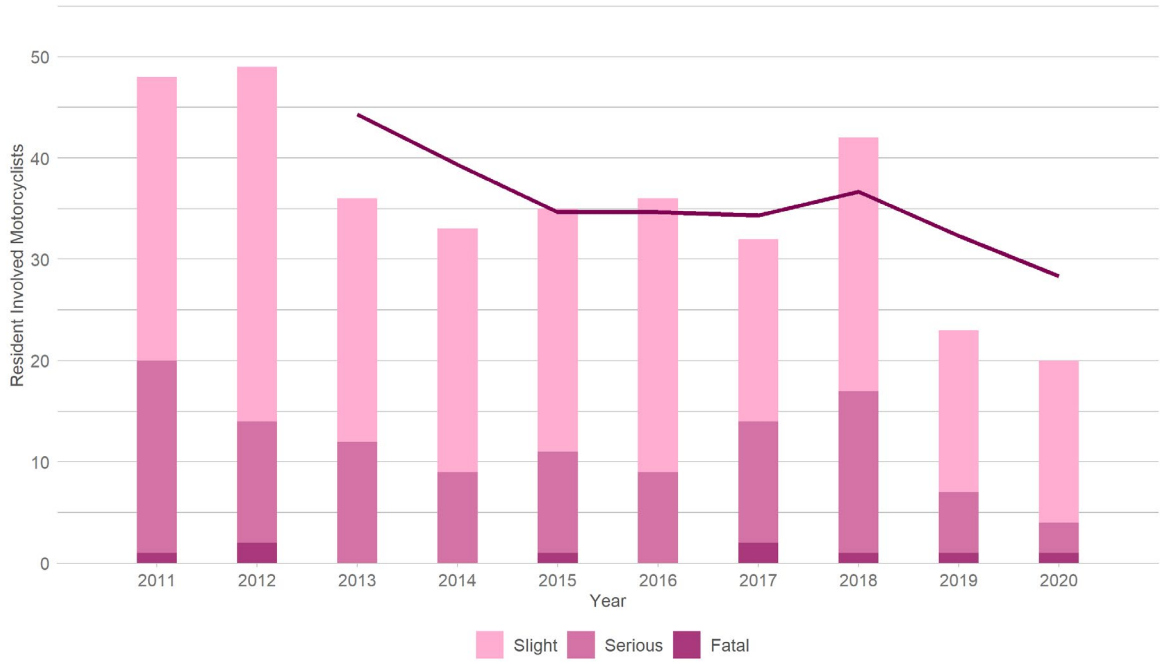


2.3.1.3 Trends

Figure 32 shows West Berkshire's annual collision involved resident motorcyclist numbers since 2011, by severity. This includes resident motorcyclists involved in collisions anywhere in the country. Also shown is a 3-year moving average trend line.

Resident involved motorcyclist numbers have experienced a steady reduction over the past decade. There were 20 resident involved motorcyclist casualties from West Berkshire in 2020, down from their highest level of 48 at start of the decade in 2011 (peak of 49 the following year). The number of these resident involved motorcyclist casualties that were killed or seriously injured has remained relatively stable, with serious injuries having decreased markedly however since 2018 to their lowest point in 2020 (3 in total).

Figure 32 - West Berkshire resident involved motorcyclist, by year and severity (2011-2020)



Resident motorcyclist collision involvement in other areas

Of West Berkshire's resident involved motorcyclist casualties 60% were injured in West Berkshire. This is above the national average percentage of resident involved motorcyclist casualties who were injured in their home authority of 52%. Of the remaining 40%, the majority were injured in Hampshire (9%), Reading (12%), Wokingham (3%), Buckinghamshire (3%) and Surrey (2%).

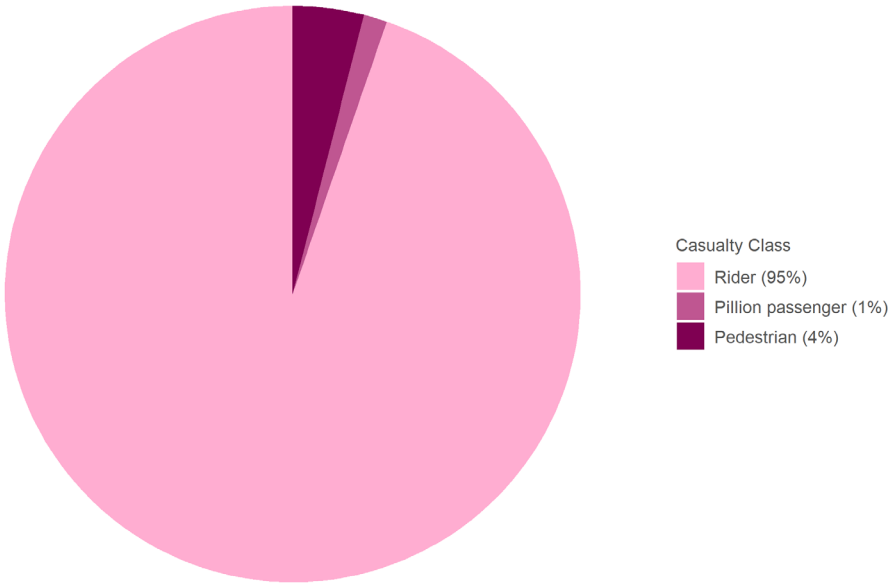
2.3.2 Related Casualties

2.3.2.1 Passenger and pedestrian casualties

The related casualties of West Berkshire's resident motorcycle riders have been analysed in Figure 33. Related casualties can be the rider themselves; an injured pillion passenger; or a pedestrian struck by the rider's motorcycle. Consequently, injured drivers and passengers of other vehicles are not included in the analysis.

The chart shows that overwhelmingly that the related casualties are the resident involved motorcycle riders themselves, with a small but significant proportion of related casualties being pedestrians.

Figure 33 - Related casualties of West Berkshire's resident involved motorcyclists (2016-2020)



3 West Berkshire Road Network Risk

For information about the provenance and scope of data included in this section, please refer to section 1.1.2 on page **Error! Bookmark not defined.**. For an explanation of the methodologies employed throughout this section, please refer to 4.1.2 on page 66.

3.1 Collisions in West Berkshire

This section refers to all collisions which occurred on West Berkshire's roads. For an explanation of the methodologies employed throughout this section, please refer to 4.1.2 on page 66.

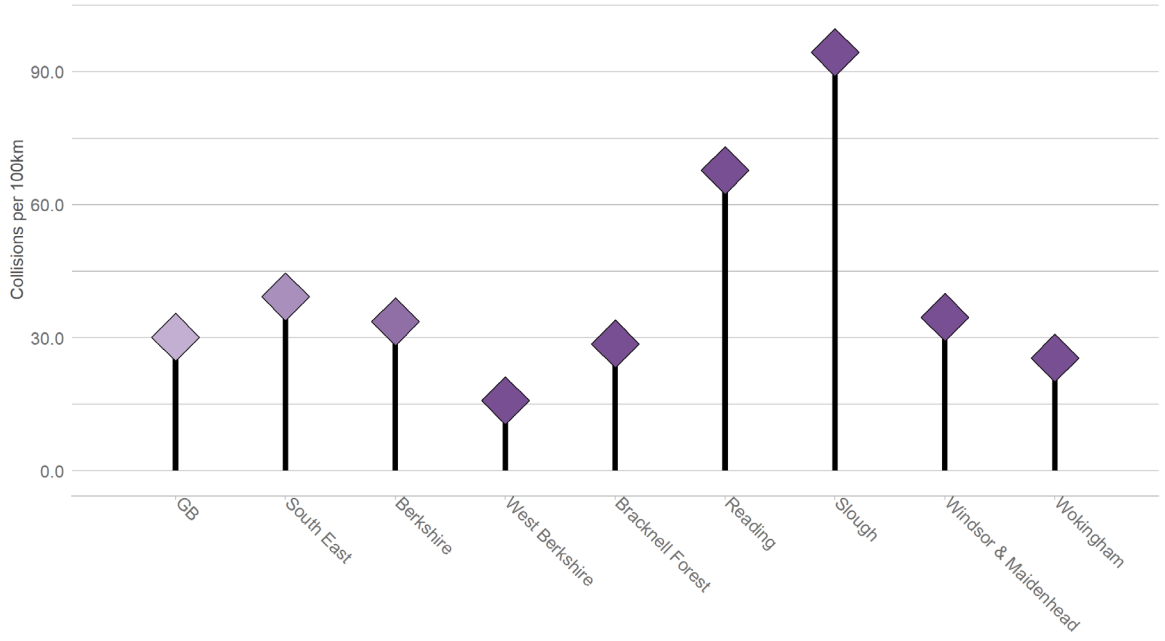
3.1.1 Rates

3.1.1.1 Collisions per 100km of road

Figure 34 below shows the rate of average annual collisions between 2016 and 2020 per 100km of road in West Berkshire compared to the national and regional rates, and those of the most similar comparators.

Between 2016 and 2020, West Berkshire had a collision rate of 15.8 collisions per year, per 100km of road.

Figure 34 - Annual average collisions per 100km of road (2016-2020)



3.1.1.2 Comparisons

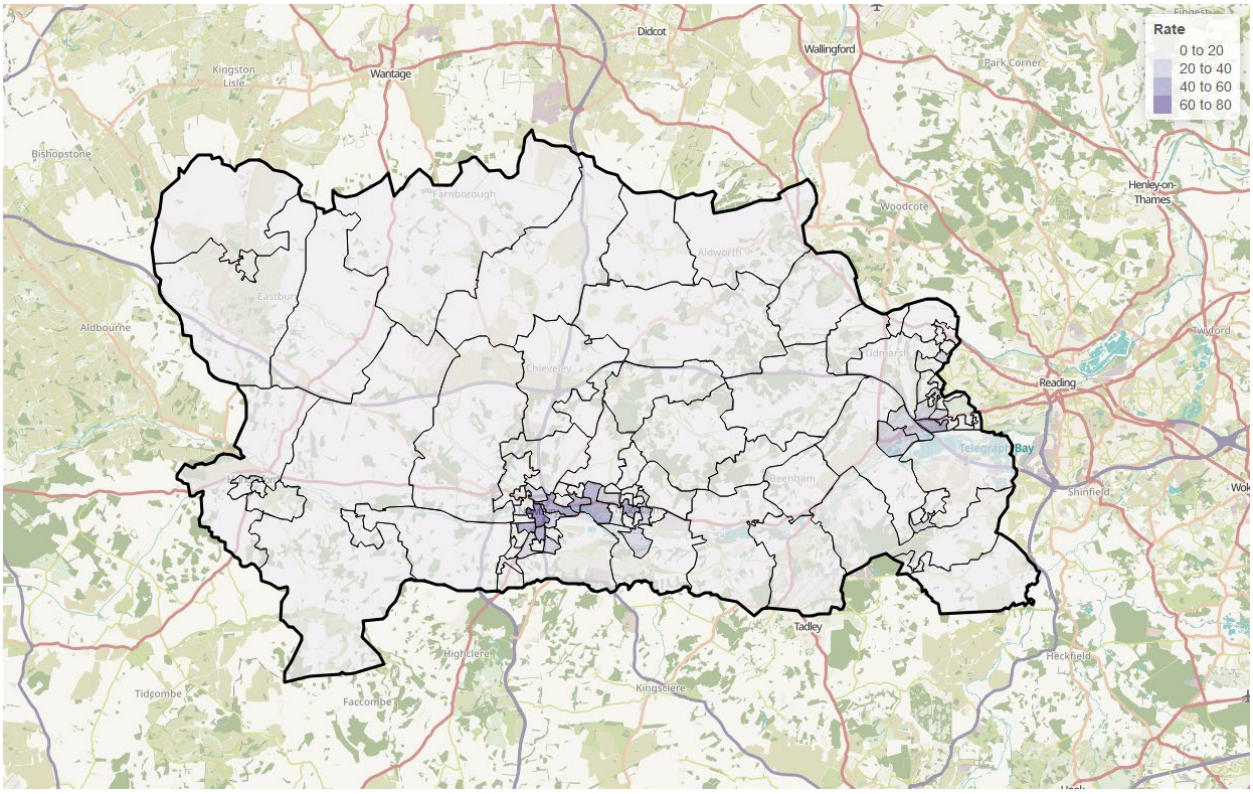
The collision rate on West Berkshire's road network was 47% lower than the national rate. It was less than half the rate of both the South East region and of Berkshire as a whole, and the lowest within Berkshire.

Collisions by Small Area

Figure 35 shows collisions on all roads in West Berkshire by LSOA. The thematic map is colour coded by the rate of annual average collisions per 100km of road.

The highest collision rates can be found in and around Newbury, Thatcham, Theale, and Calcot.

Figure 35 - Annual average collisions per 100km of road (2016-2020)

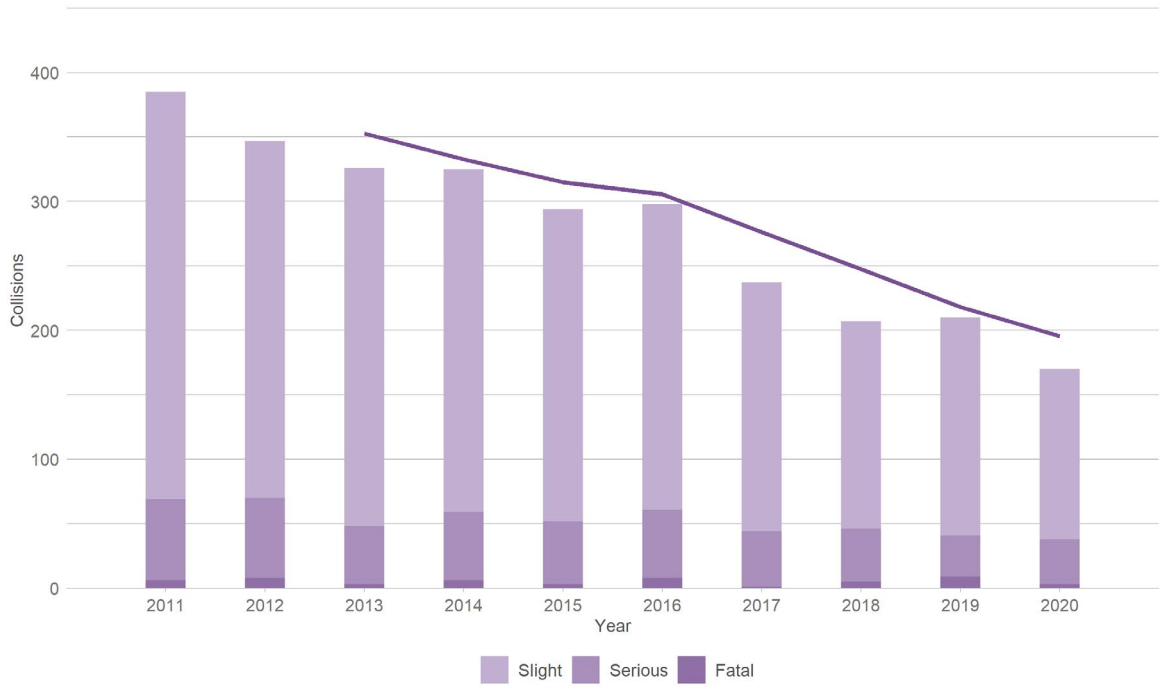


3.1.1.3 Trends

Figure 36 shows annual collisions on West Berkshire's roads, since 2011 by severity.

Collision numbers on the roads of West Berkshire have gradually reduced over the decade, as have the number of fatal or serious collisions. In 2020, there were 170 collisions in West Berkshire, a reduction of 56% from a peak of 385 in 2011, but a decrease from 210 in 2019. Three of these collisions involved a fatality, and a further 35 collisions involved serious injury.

Figure 36 - West Berkshire collisions, by year and severity (2011-2020)

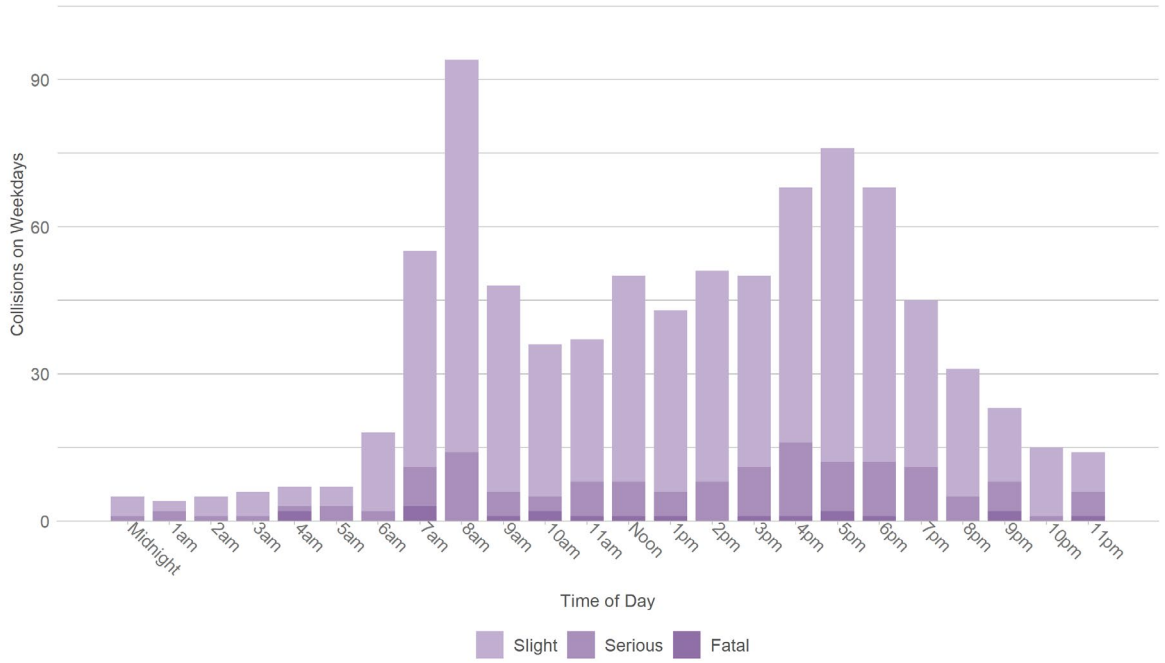


3.1.1.4 Collisions by hour of the day

Collisions by hour of the day on weekdays

Figure 37 shows collisions on weekdays by the hour of the day in which they occurred. There are distinct peaks in collision numbers at the usual commuting times of between 7am and 9am, and between 4pm and 7pm.

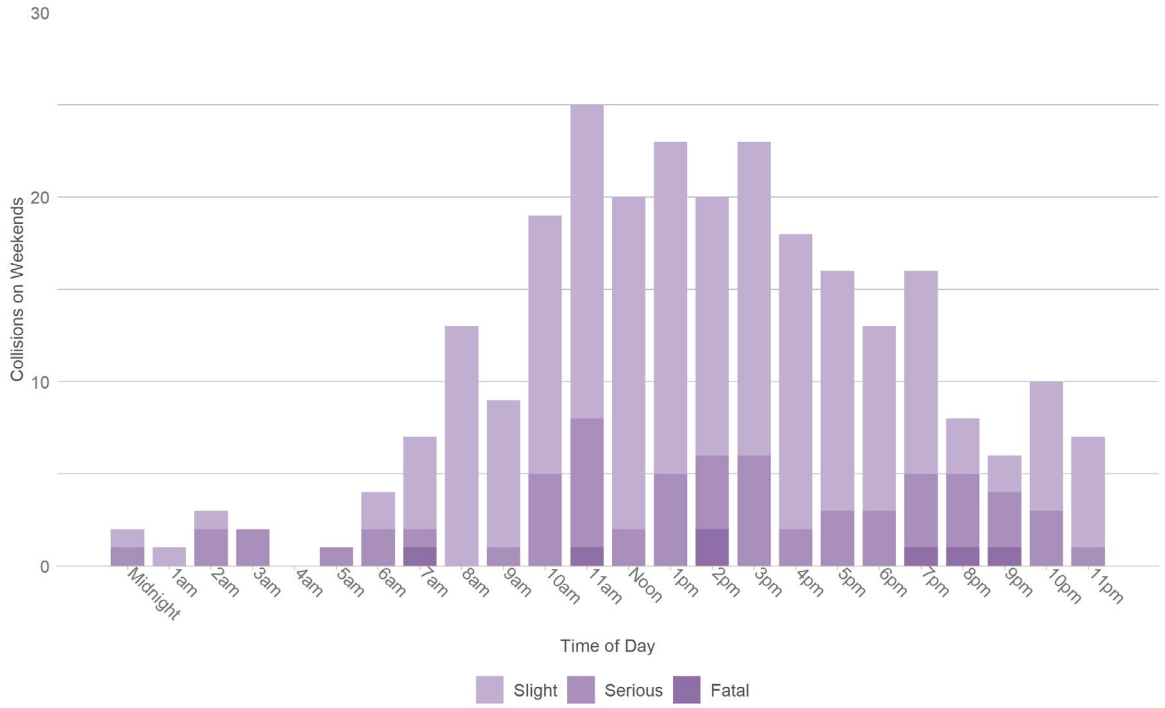
Figure 37 - West Berkshire collisions, by hour of the day during weekdays (2016-2020)



Collisions by hour of the day on weekends

Figure 38 shows collisions on a weekend by the hour of the day in which they occurred. Compared to weekdays, collision numbers are more evenly spread throughout the day, with the majority occurring between 10am and 7pm.

Figure 38 - West Berkshire collisions, by hour of the day during weekends (2016-2020)



Collision involved drivers who reside in other areas

Just over half (51%) of drivers involved in collisions on the roads of West Berkshire for whom home postcode was recorded were residents of West Berkshire. This is in line with the national average percentage of collision-involved drivers who are involved in collisions in their home authority of 50%. Of the remaining 49%, the majority were involved in collisions in Reading (11%), Hampshire (10%), Oxfordshire (5%) Wokingham (3%), Wiltshire (2%) and Surrey (2%)

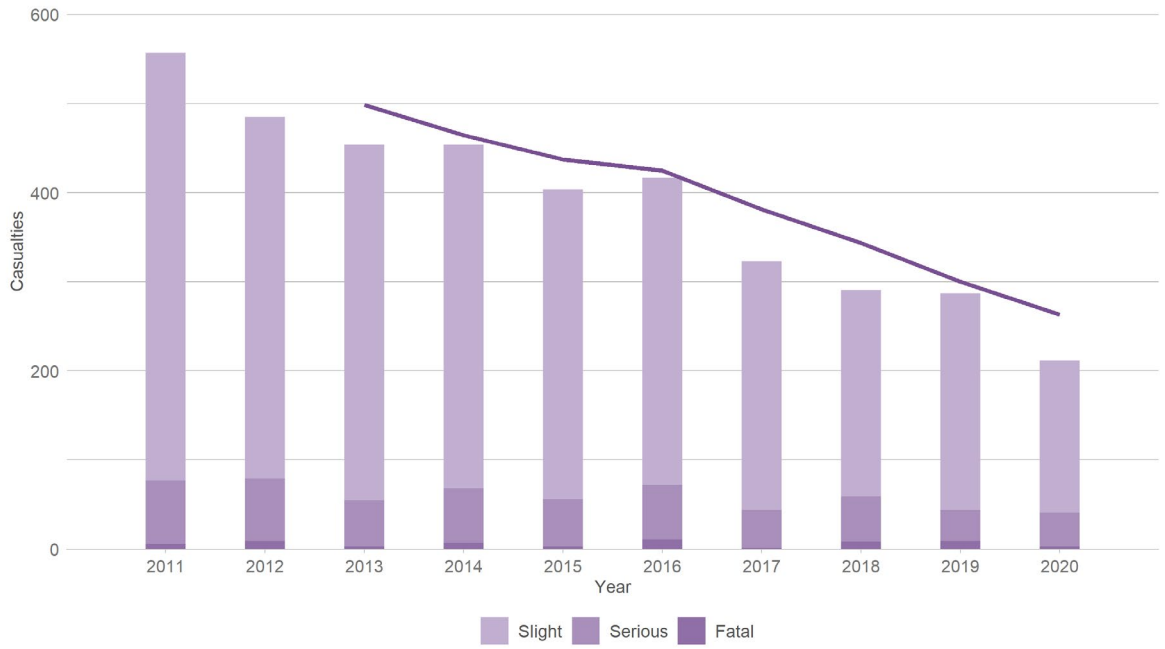
3.1.2 Casualty trends on all roads

3.1.2.1 All casualties

Figure 39 shows annual casualty numbers on collisions on West Berkshire's roads.

As seen with collision numbers, casualty numbers on West Berkshire's roads have gradually reduced since 2011. There were 212 casualties injured in West Berkshire in 2020, down by 62% from 2011. Of these, three were killed and a further 38 were seriously injured.

Figure 39 - Casualties on West Berkshire's roads by year (2011-2020)

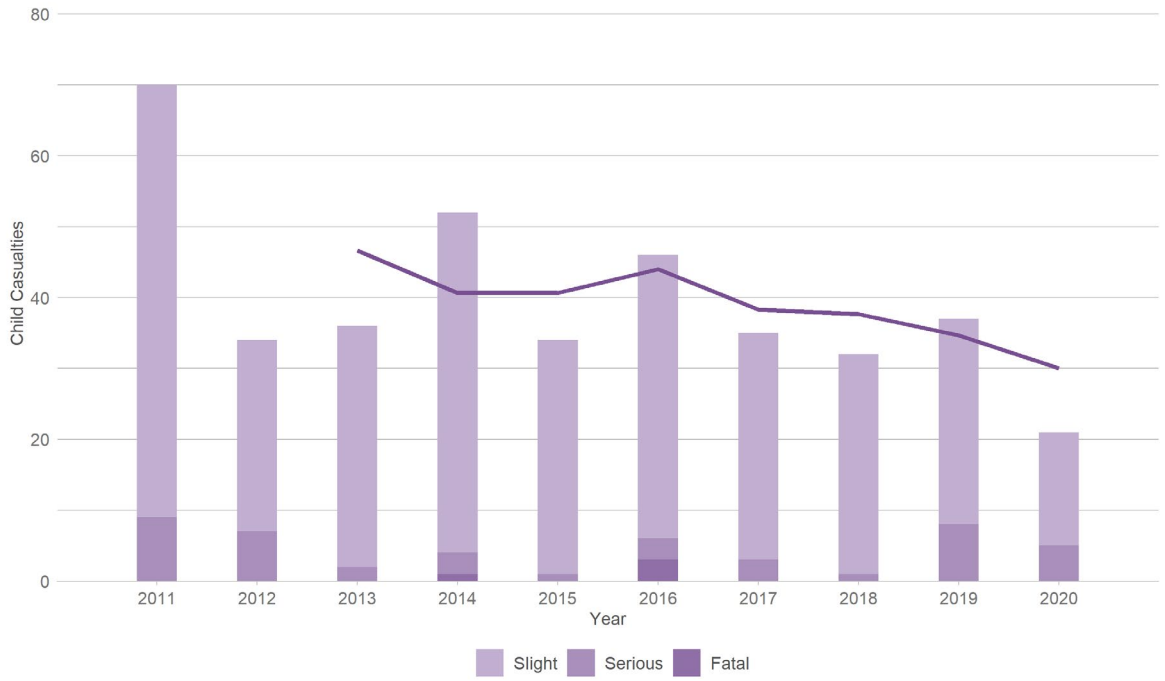


3.1.2.2 Child casualties

Figure 40 shows annual child casualty numbers on collisions on West Berkshire's roads.

Numbers have fluctuated but remained low over the past decade. In 2020, there were 21 child casualties on the roads of West Berkshire, five of which was seriously injured. This is down 70% from 2011, and down from 37 in 2019. There have no child fatalities on West Berkshire's roads since 2016.

Figure 40 - Child casualties on West Berkshire's roads by year (2011-2020)

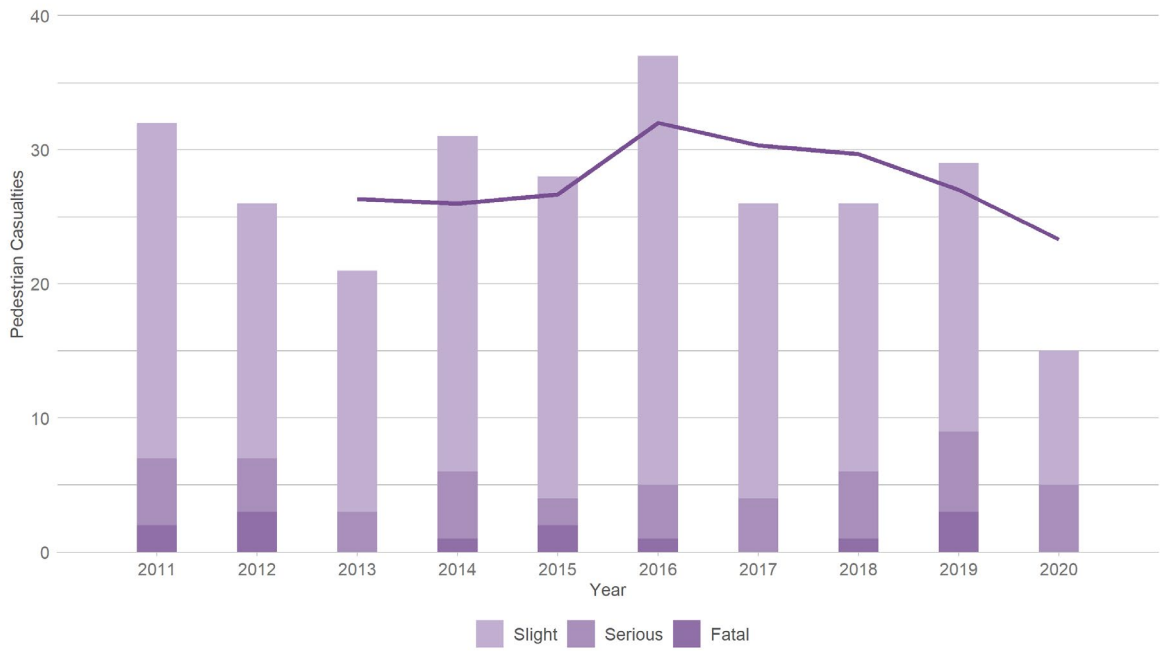


3.1.2.3 Pedestrian casualties

Figure 41 shows annual pedestrian casualty numbers on collisions on West Berkshire's roads.

The number of pedestrian casualties injured in West Berkshire has remained low over the decade, and as a result have been vulnerable to random fluctuations. There was a distinct downward trend up until 2013, which has levelled off since. In 2020, there were 15 pedestrian casualties on West Berkshire's roads (a reduction of over 50% since 2001) of which five were seriously injured and non were killed.

Figure 41 - Pedestrian casualties on West Berkshire's roads by year (2011-2020)

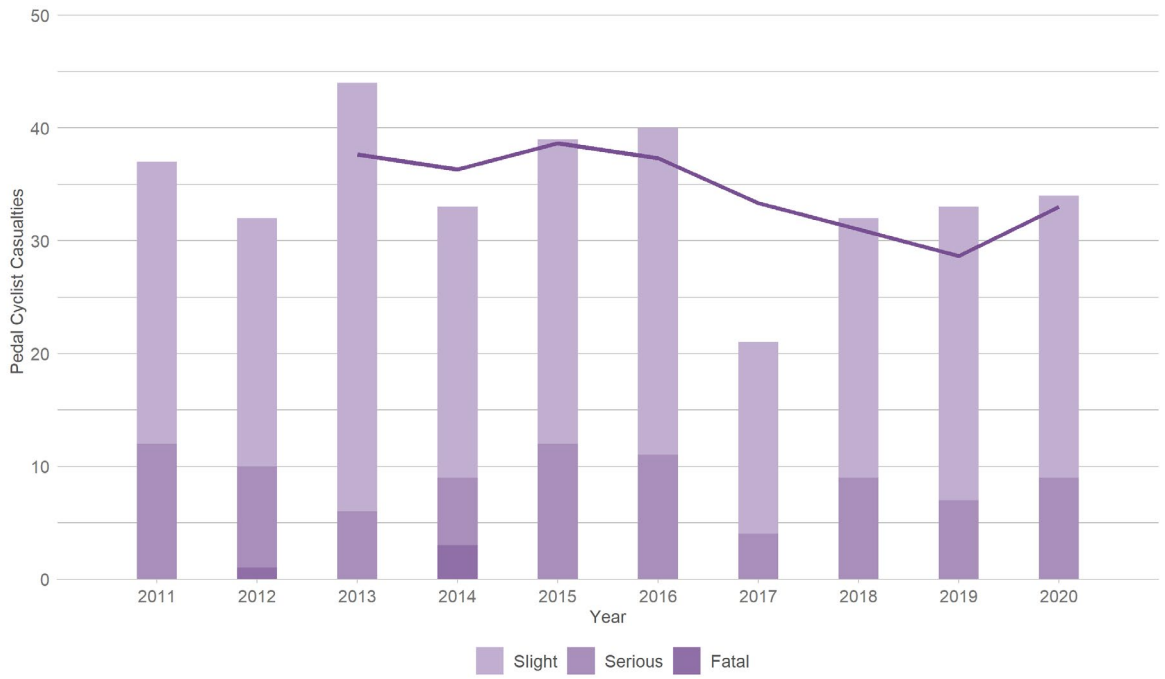


3.1.2.4 Pedal cyclist casualties

Figure 42 shows annual pedal cyclist casualty numbers on collisions on West Berkshire's roads.

The number of pedal cyclists injured in West Berkshire each year has fluctuated since 2010, but with increases each year since 2017. In 2017, there was a low point of 21 pedal cyclist casualties, but this rose back up, culminating in 34 pedal cyclist casualties in 2020, of which 9 were serious. There have been no pedal cyclist fatalities in West Berkshire since 2014.

Figure 42 - Pedal cyclist casualties on West Berkshire's roads by year (2011-2020)

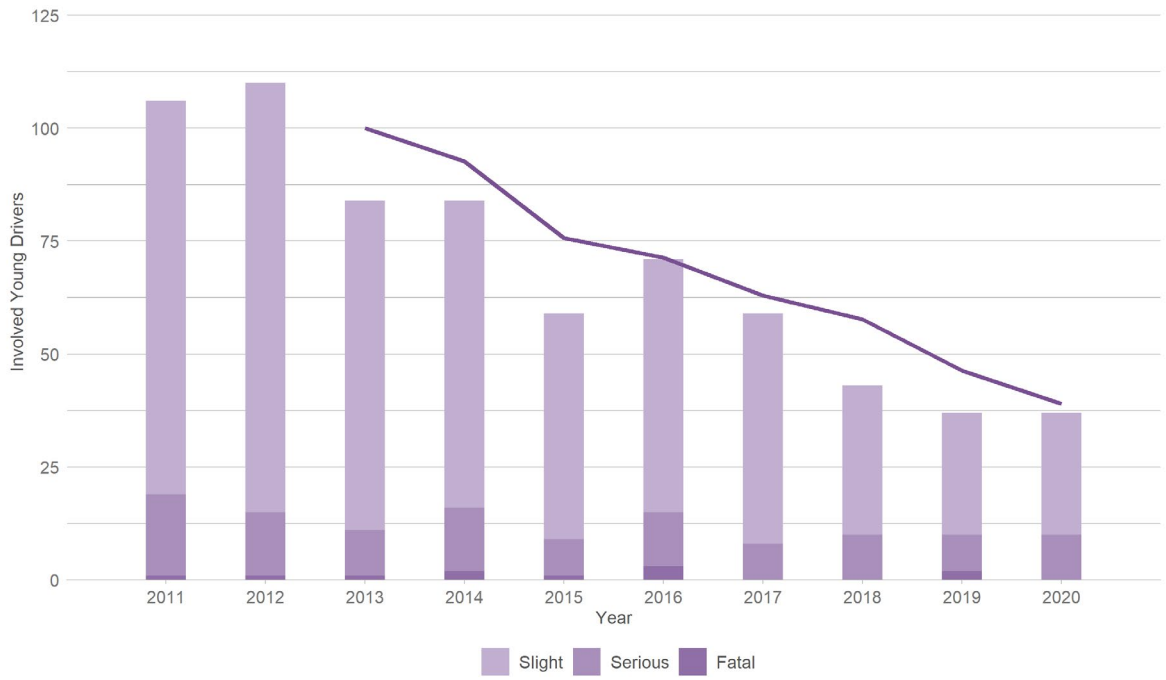


3.1.2.5 Involved young drivers

Figure 43 shows annual involved young driver numbers on West Berkshire's roads.

The number of young drivers involved in collisions in West Berkshire each year has shown a steady decline since 2012. In 2020, there were 37 collision-involved young drivers, down by 65% from 106 in 2011. There were no young drivers involved in fatal collisions in West Berkshire in 2020.

Figure 43 - Involved young drivers on West Berkshire's roads by year (2011-2020)

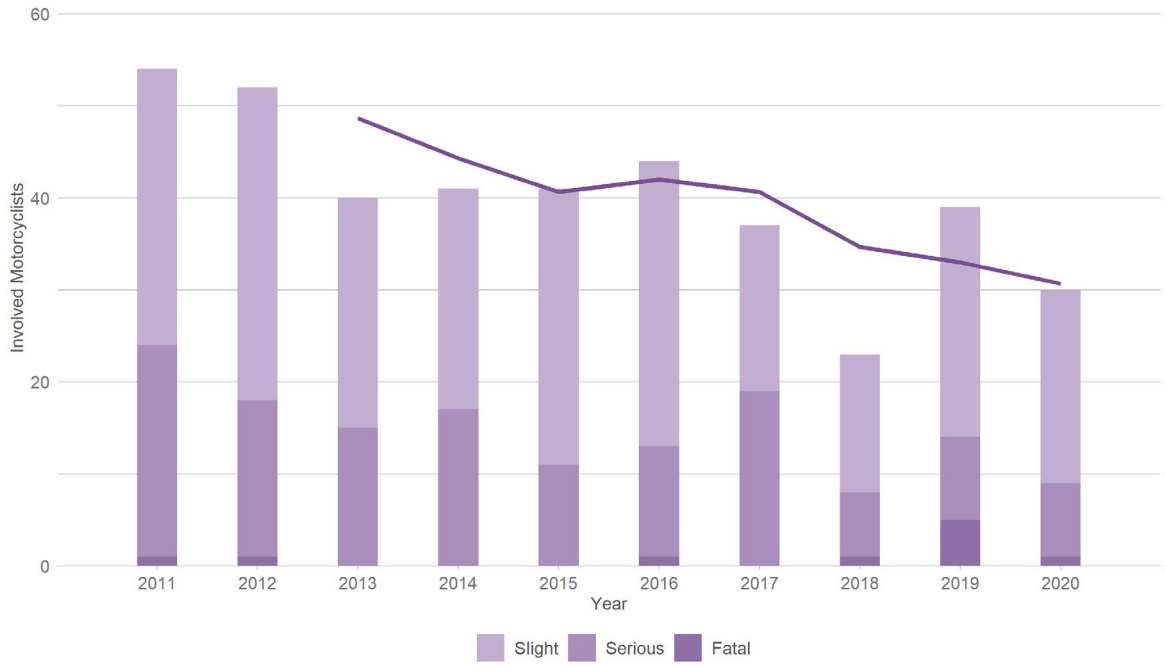


3.1.2.6 Involved motorcyclists

Figure 44 shows annual collision-involved motorcyclist numbers on West Berkshire's roads.

The number of motorcyclists involved in collisions in West Berkshire each year has fluctuated since 2010. In 2020, there were 30 collision-involved motorcyclists, down by 44% from 54 in 2011. Of these, one was involved in a fatal collision, and a further eight were involved in collisions with at least one seriously injured casualty.

Figure 44 - Involved motorcyclists on West Berkshire's roads by year (2011-2020)



3.2 Collisions on Urban Roads in West Berkshire

The following section investigates collisions in West Berkshire which occurred on urban roads.

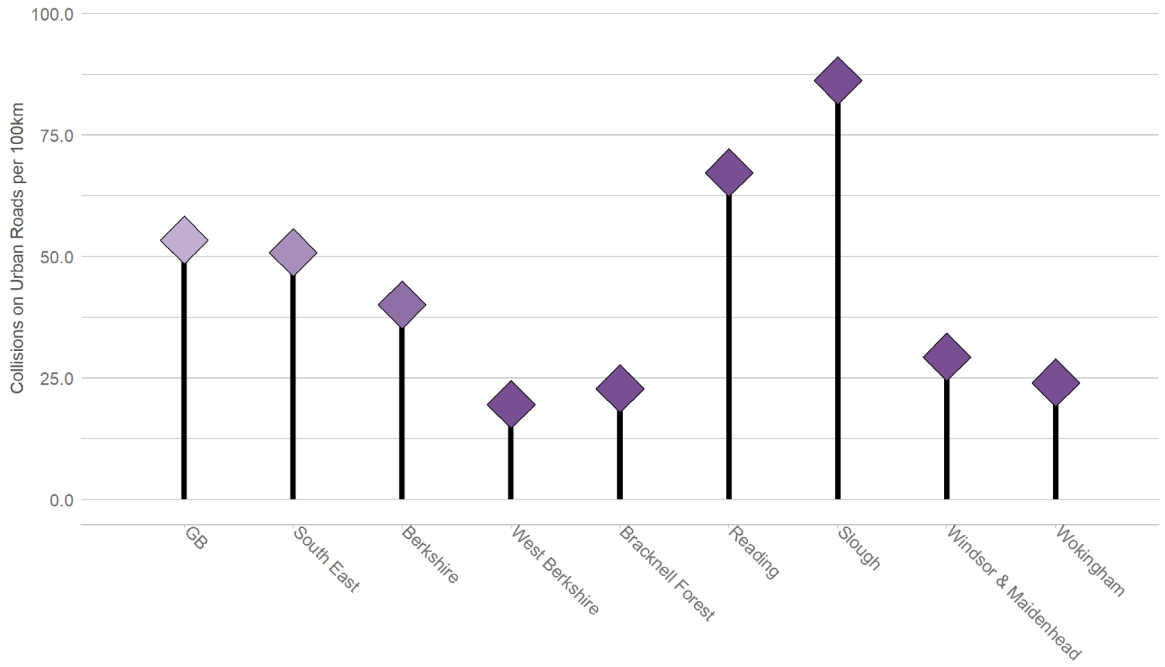
3.2.1 Rates

3.2.1.1 Collisions on urban road per 100km of urban road

Figure 45 below shows the rate of average annual collisions on urban roads between 2016 and 2020 per 100km of urban road in West Berkshire compared to the national and regional rates, and those of the most similar comparators.

West Berkshire's urban roads had a collision rate of 19.6 collisions per year, per 100km of urban road length.

Figure 45 - Annual average collisions on urban roads per 100km of urban road (2016-2020)



3.2.1.2 Comparisons

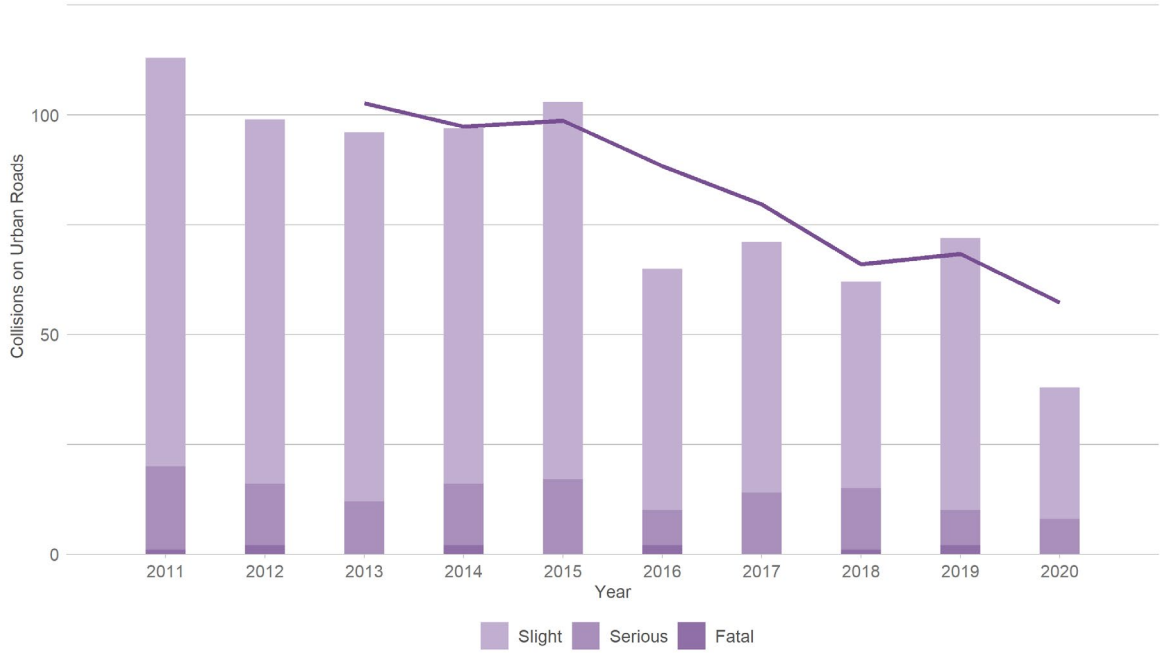
West Berkshire's urban roads collision rate was 63% lower than the national rate. It was 62% lower than the regional rate, and 51% lower than the overall rate for Berkshire. Within Berkshire, West Berkshire had the lowest urban roads collision rate, slightly lower than the rates for Bracknell Forest and Wokingham.

3.2.1.3 Trends

Figure 46 shows annual collisions on West Berkshire's urban roads, since 2011 by severity.

Collision numbers on urban roads in West Berkshire in the past five years were noticeably lower than earlier in the decade. In 2020, there were 38 collisions on urban roads in West Berkshire, down from 113 in 2011. Of these, there were no fatal collisions, and eight involved a seriously injured casualty.

Figure 46 - West Berkshire collisions on urban roads, by year and severity (2011-2020)



3.3 Collisions on Rural Roads in West Berkshire

The following section investigates collisions in West Berkshire which occurred on rural roads.

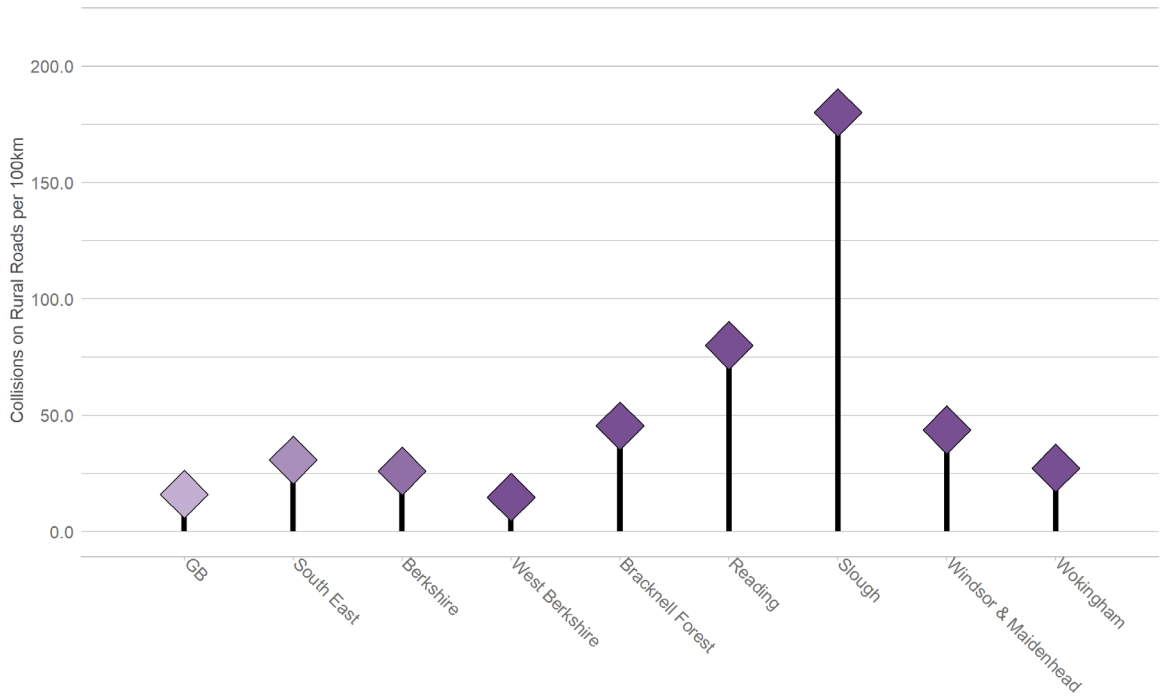
3.3.1 Rates

3.3.1.1 Collisions on rural road per 100km of rural road

Figure 47 below shows the rate of average annual collisions on rural roads between 2016 and 2020 per 100km of rural road in West Berkshire compared to the national and regional rates, and those of the most similar comparators.

West Berkshire's rural roads had a collision rate of 14.8 collisions per year, per 100km of rural road length.

Figure 47 - Annual average collisions on rural roads per 100km of rural road (2016-2020)



3.3.1.2 Comparisons

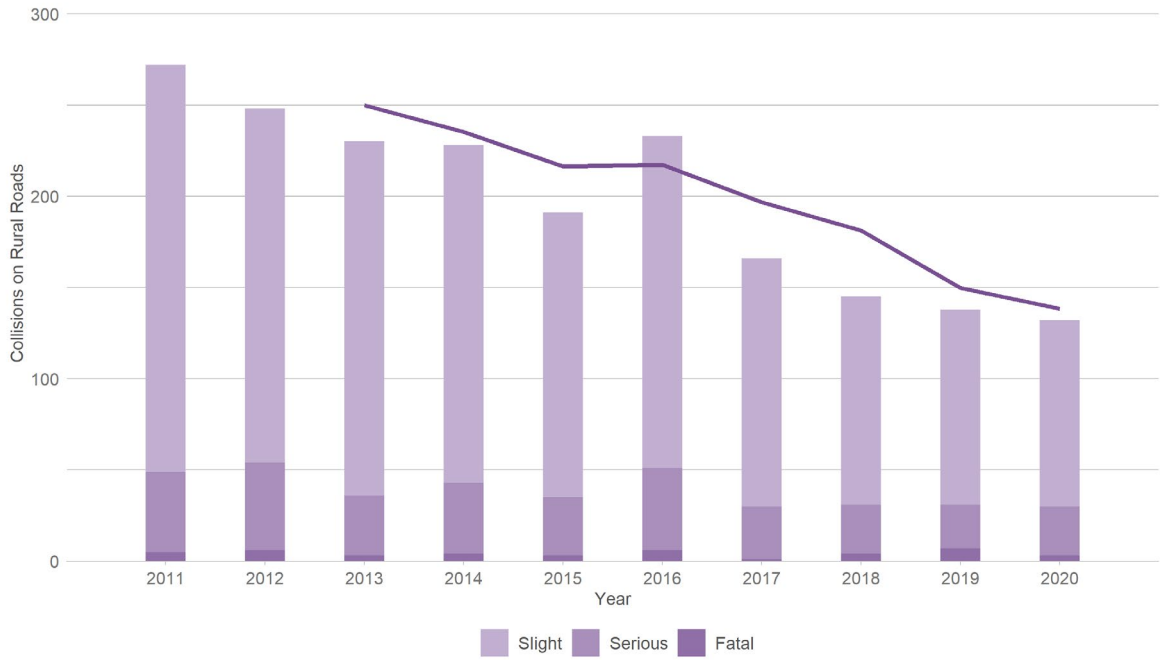
West Berkshire's rural roads collision rate was 8% lower than the national rate. It was 52% lower than the regional rate, and 43% lower than the overall rate for Berkshire. Within Berkshire, West Berkshire had the lowest rural roads collision rate, followed by Wokingham (27.3) and Windsor and Maidenhead (43.7).

3.3.1.3 Trends

Figure 48 shows annual collisions on West Berkshire's rural roads, since 2011 by severity.

Collision numbers on rural roads in West Berkshire have gradually declined, and in the past four years were noticeably lower than earlier in the decade. In 2020, there were 132 collisions on rural roads in West Berkshire, down from the peak of 272 in 2011. Of these, there were three fatal collisions, and 27 involved a seriously injured casualty.

Figure 48 - West Berkshire collisions on rural roads, by year and severity (2011-2020)



3.4 Contributory Factors

Each section below examines trends in reported collisions on West Berkshire's roads 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.

For more information about CFs and the techniques used to analyse them see Contributory Factors in section 4.1.4 on page 67. For a complete list of all CFs and CF groupings used by Agilysis, see Contributory Factor Groupings on page 83.

3.4.1 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.

3.4.1.1 Trends

Figure 49 - Collisions in West Berkshire where CF306 and/or CF307 were recorded (2011-2020)

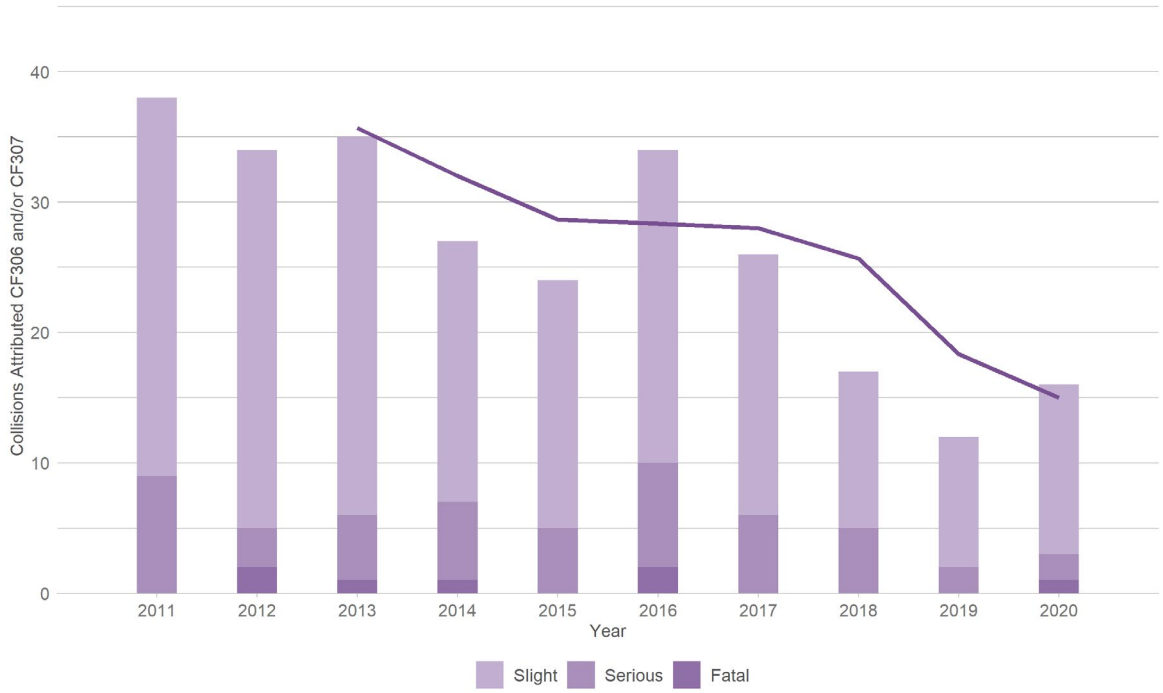
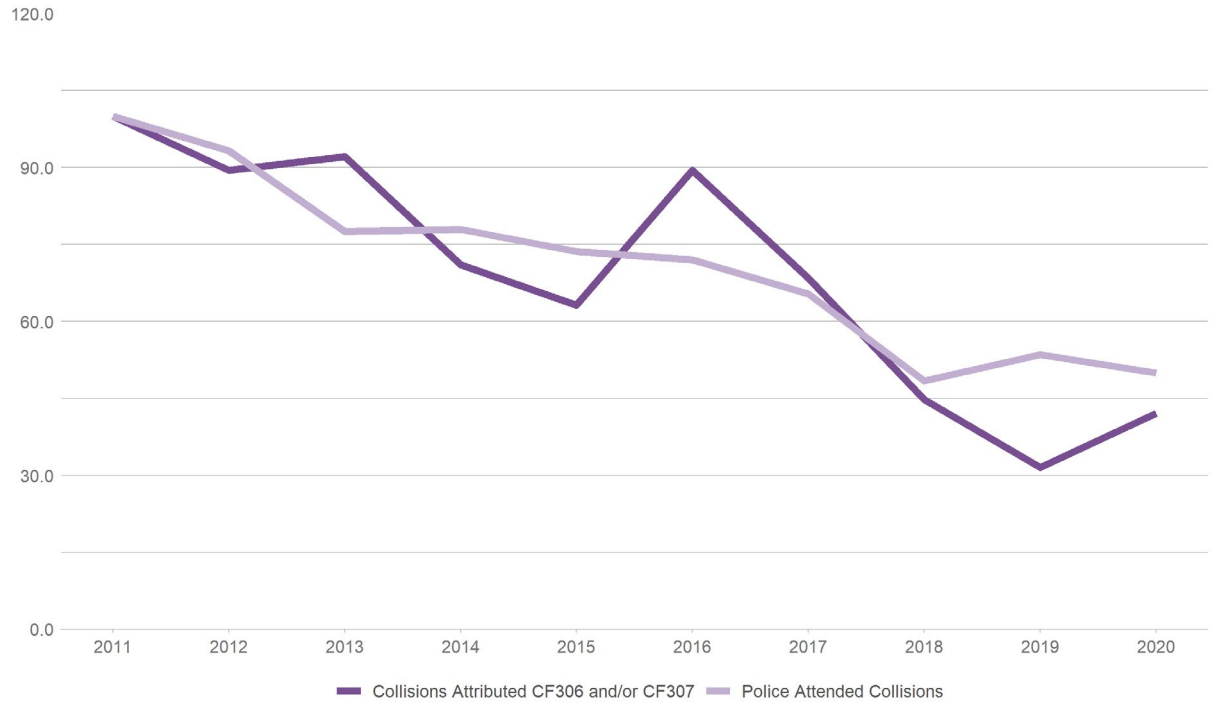


Figure 49 shows annual collisions on West Berkshire's roads where at least one of the speed choice CFs were recorded, with a three-year moving average trend line for speed choice collisions. Figure 50 shows the trends for collisions where speed choice CFs were recorded and for collisions where a police officer attended, indexed over a 2011 baseline for comparison.

The number of speed choice attributed collisions has remained low over the decade and have shown a downward trend since 2013, despite a spike in numbers in 2016 which disrupted this trend. In 2020, there were 16 speed choice CF collisions, down from 38 in 2011. Of these collisions, one involved at least one fatal casualty, and two involved serious casualties. Using 2011 as a baseline, it is clear that that these reductions occurred at a similar rate to the reductions in the number of all police officer attended collisions until 2018, with only a notably higher point in the trend for speed choice CFs in 2016. After this point the number of collisions where speed choice CFs were recorded decreased at a much greater rate than the relatively stable rate of all police officer attended collisions from 2018-2020 (particularly in 2019)

Figure 50 - Collision trends in West Berkshire where CF306 and/or CF307 were recorded compared to officer attended collision trends (2011-2020)

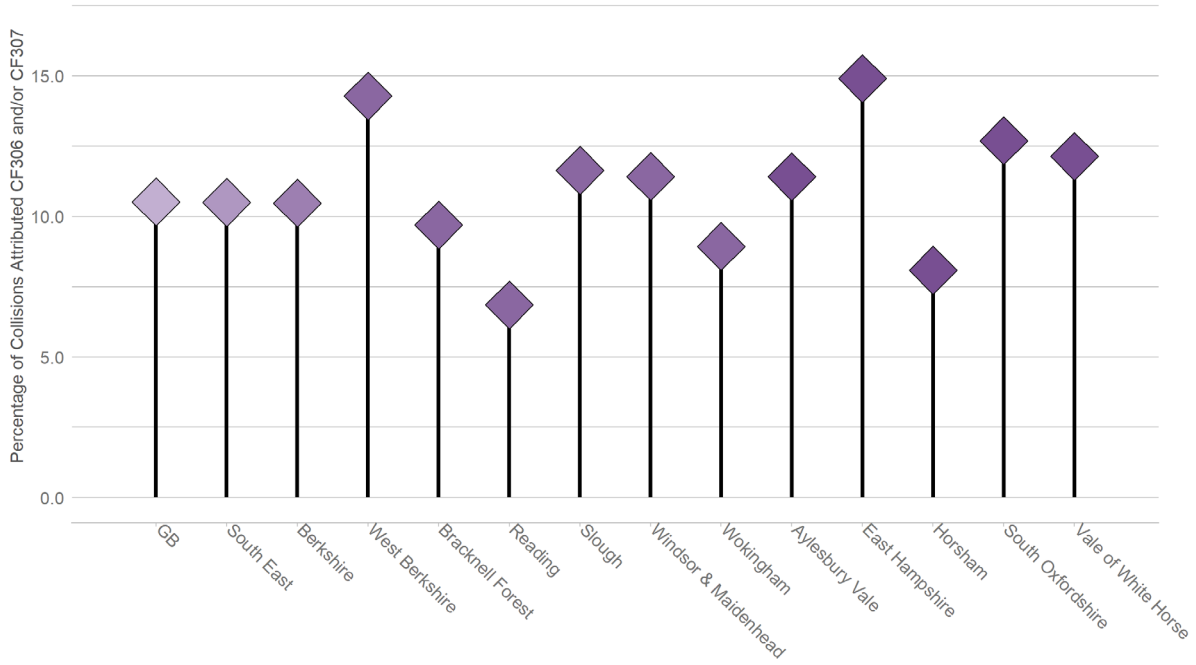


3.4.1.2 Comparisons

Figure 51 shows collisions on West Berkshire's roads where at least one of the speed choice CFs was recorded, as a percentage of all officer attended collisions where any CF was recorded. Also shown are the national, regional and comparator authorities' percentages.

Of all collisions in West Berkshire between 2016 and 2020 with police officer attendance, 14.3% of collisions were attributed a speed choice CF. This is higher than the percentages seen nationally and in the South East region. West Berkshire had the highest percentage of speed choice attributed collisions of all the authorities in Berkshire. This percentage was higher than all but one of the similar external comparator authorities, with the exception being East Hampshire (14.9%)

Figure 51 - Percentage of collisions in West Berkshire and comparators where CF306 and/or CF307 were recorded (2016-2020)



3.4.2 Impairment

This section examines collisions, by severity, 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.

3.4.2.1 Trends

Figure 52 - Collisions in West Berkshire where CF501 and/or CF502 were recorded (2011-2020)

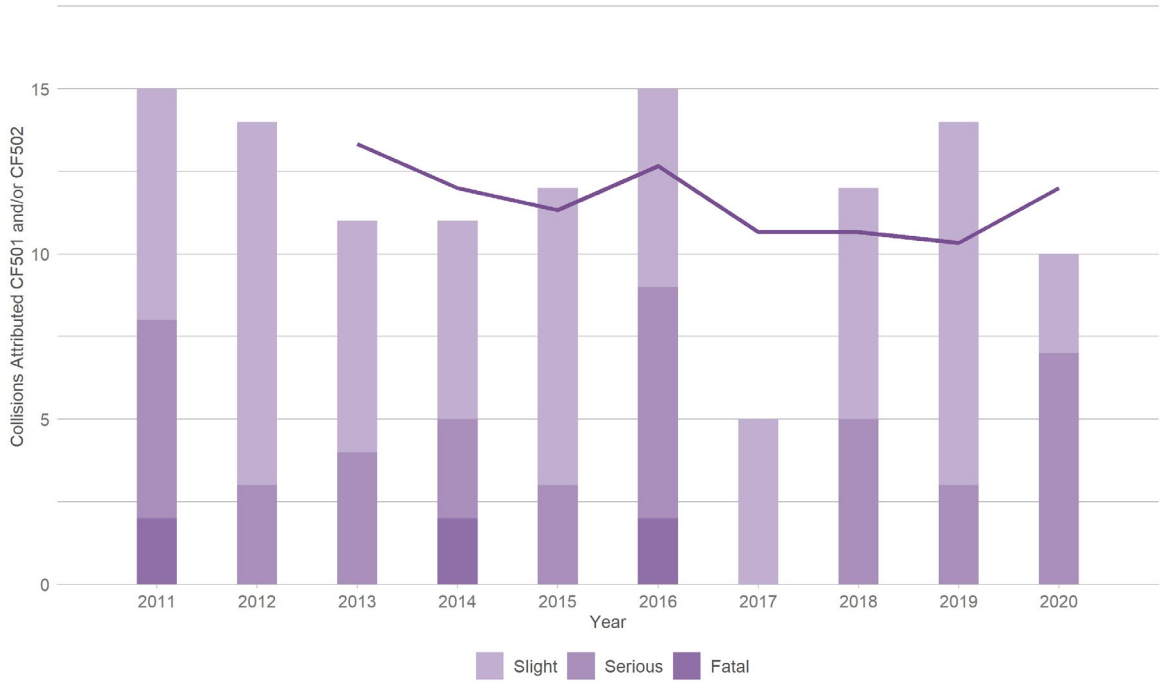


Figure 52 shows annual collisions on West Berkshire's roads where at least one of the impairment CFs were recorded, with a three-year moving average trend line for impairment collisions. Figure 53 shows the trends for collisions where impairment CFs were recorded and for collisions where a police officer attended, indexed over a 2011 baseline for comparison.

The number of impairment CF attributed collisions has remained low over the decade. There was a distinct downward trend in impairment related collisions up to 2014, but there have been noticeable spikes in recent years, with 2011 and 2016 having the highest figures of the decade. As numbers are low, this could be a result of random fluctuation. In 2020, there were 10 impairment related collisions, down from 15 in 2011. Of these collisions, seven involved seriously injured casualties. Using 2011 as a baseline, these fluctuations have resulted in a trend that was broadly in line with the trend for all officer attended collisions until 2015, after which the trend for impairment CF attributed collisions peaked in 2016 and then decreased dramatically in 2017. The trend for impairment CF attributed collisions has remained at a higher rate than that of all police officer attended collisions since.

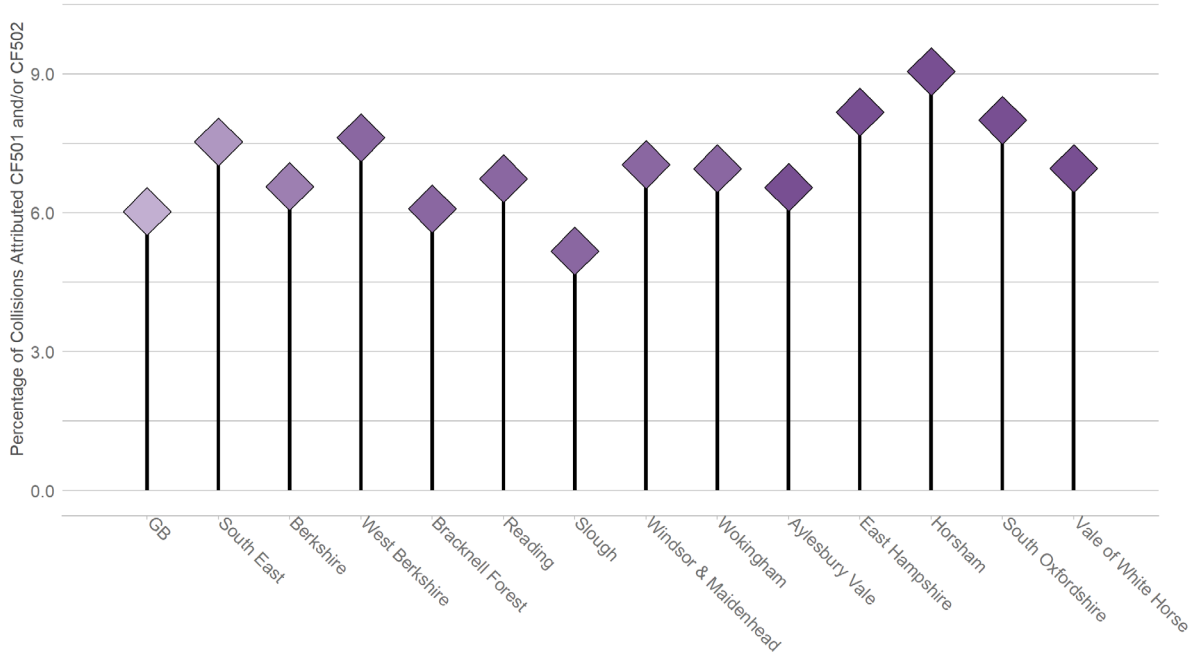
Figure 53 - Collision trends in West Berkshire where CF501 and/or CF502 were recorded compared to officer attended collision trends (2011-2020)

3.4.2.2 Comparisons

Figure 54 shows collisions on West Berkshire's roads where at least one of the impairment CFs was recorded, as a percentage of all officer attended collisions where any CF was recorded. Also shown are the national, regional and comparator authorities' percentages.

In West Berkshire, 7.6% of collisions with officer attendance were attributed an impairment CF between 2016 and 2020. This is higher than the national percentage, the percentage seen across Berkshire as a whole, but similar to the percentage for the South East region. Within Berkshire, West Berkshire's percentage is higher than the percentages of Bracknell Forest, Reading, Slough, and Wokingham and Windsor & Maidenhead. It is slightly lower than the percentages recorded for the external comparator authorities of South Oxfordshire, East Hampshire and Horsham, but higher than Wokingham, Aylesbury, and the Vale of White Horse.

Figure 54 - Percentage of collisions in West Berkshire and comparators where CF501 and/or CF502 were recorded (2016-2020)



3.4.3 Road Surface Conditions

This section examines collisions, by severity, where at least one of the CFs 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.

3.4.3.1 Trends

Figure 55 - Collisions in West Berkshire where CF101 and/or CF102 and/or CF103 were recorded (2011-2020)

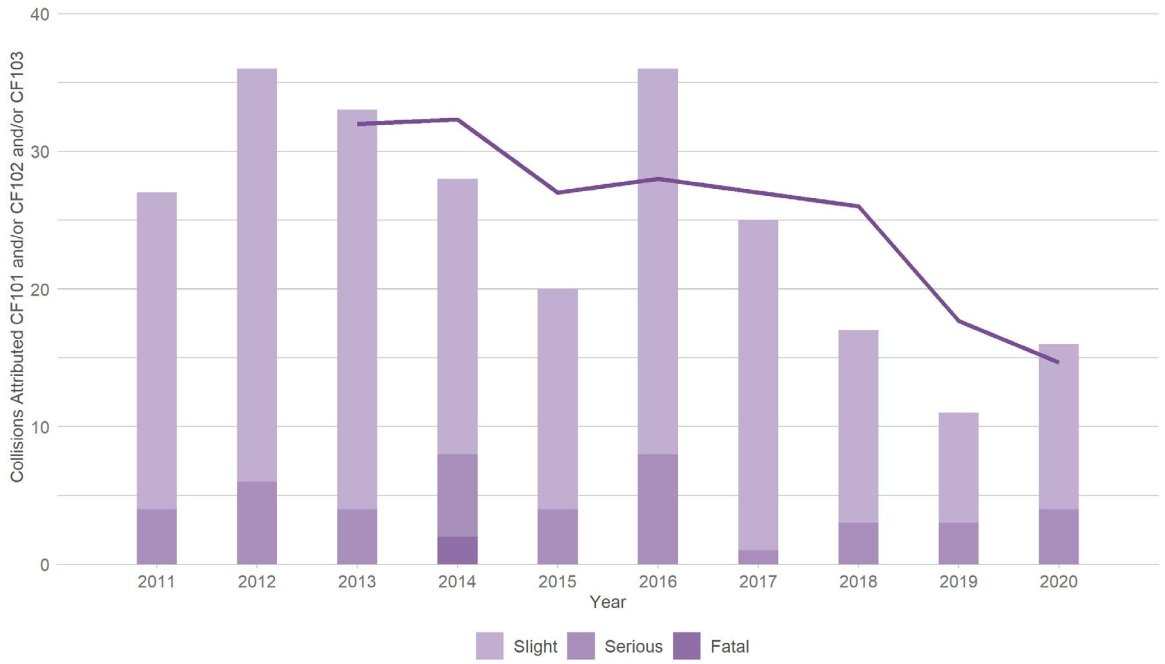
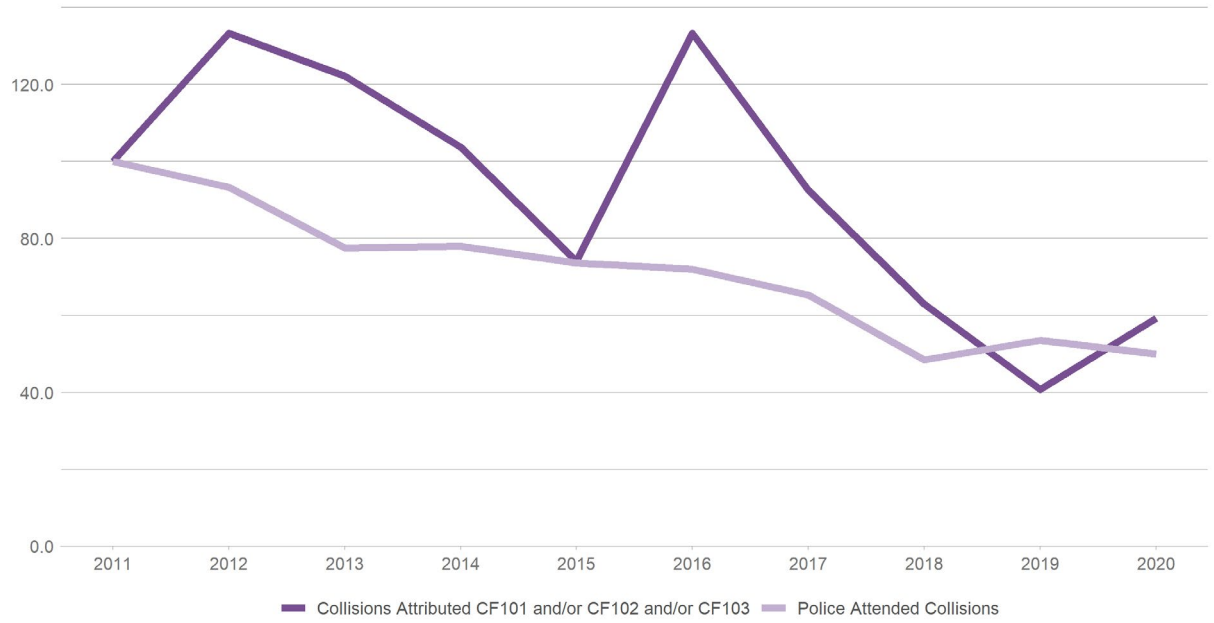


Figure 55 shows annual collisions on West Berkshire's roads where at least one of the road surface CFs were recorded, with a three-year moving average trend line for road surface collisions. Figure 56 shows the trends for collisions where road surface CFs were recorded and for collisions where a police officer attended, indexed over a 2011 baseline for comparison.

Numbers of road surface related collisions have shown a broadly downward trend over the decade, despite some fluctuation and peaks in 2012 and 2016 (36 road surface CF attributed in both years. There were 16 collisions in 2020 that were attributed a road surface CF, down from 27 in 2011. Of these, four involved seriously casualties. Using 2011 as a baseline, this reduction occurred at a consistently higher rate than the one seen for all police officer attended collisions, with 2019 as the exception.

Figure 56 - Collision trends in West Berkshire where CF101 and/or CF102 and/or CF103 were recorded compared to officer attended collision trends (2011-2020)

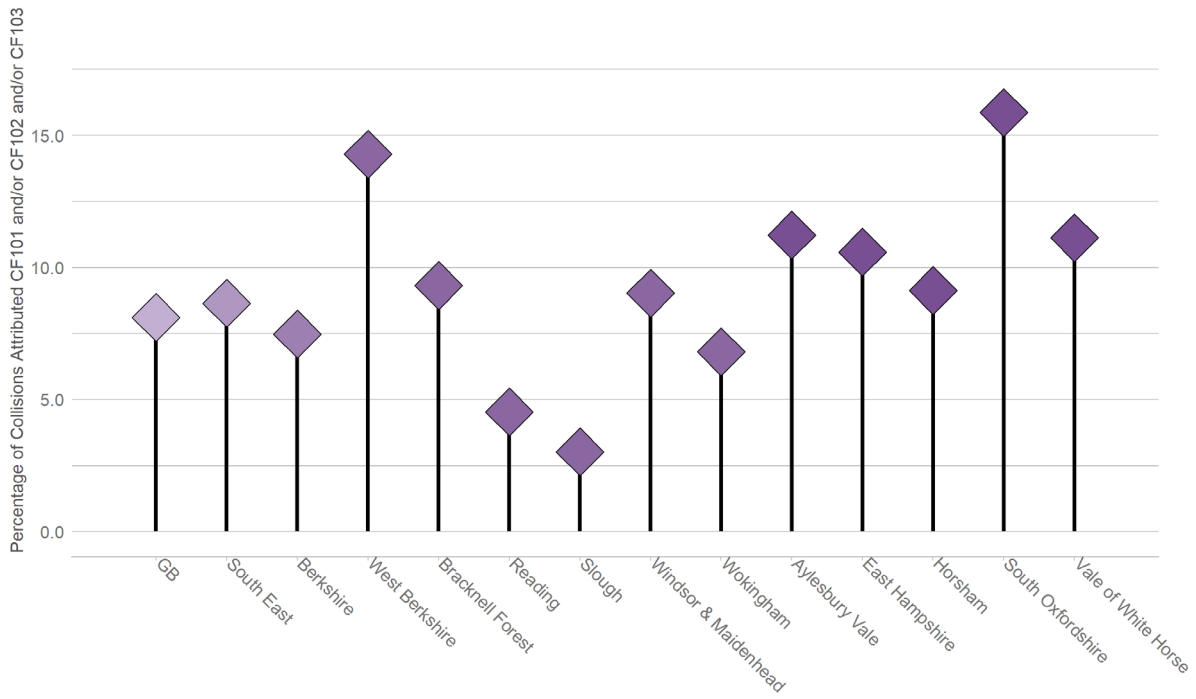


3.4.3.2 Comparisons

Figure 57 shows collisions on West Berkshire's roads where at least one of the road surface CFs was recorded, as a percentage of all officer attended collisions where any CF was recorded. Also shown are the national, regional and comparator authorities' percentages.

Between 2016 and 2020, 14.3% of West Berkshire's police officer attended collisions were attributed a road surface contributory factor. This is higher than the percentage for all other authorities within Berkshire, as well as the overall percentage seen nationally and in the South East. Of the most similar comparator authorities, this is lower than the percentage for South Oxfordshire but higher than the percentages of Aylesbury Vale, East Hampshire, Vale of White Horse, and Horsham.

Figure 57 - Percentage of collisions in West Berkshire and comparators where CF101 and/or CF102 and/or CF103 were recorded (2016-2020)



3.4.4 Unsafe Behaviour

This section examines collisions, by severity, where at least one of the CFs 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.

3.4.4.1 3.4.5.1 Trends

Figure 58 - Collisions in West Berkshire where CF601 and/or CF602 were recorded (2011-2020)

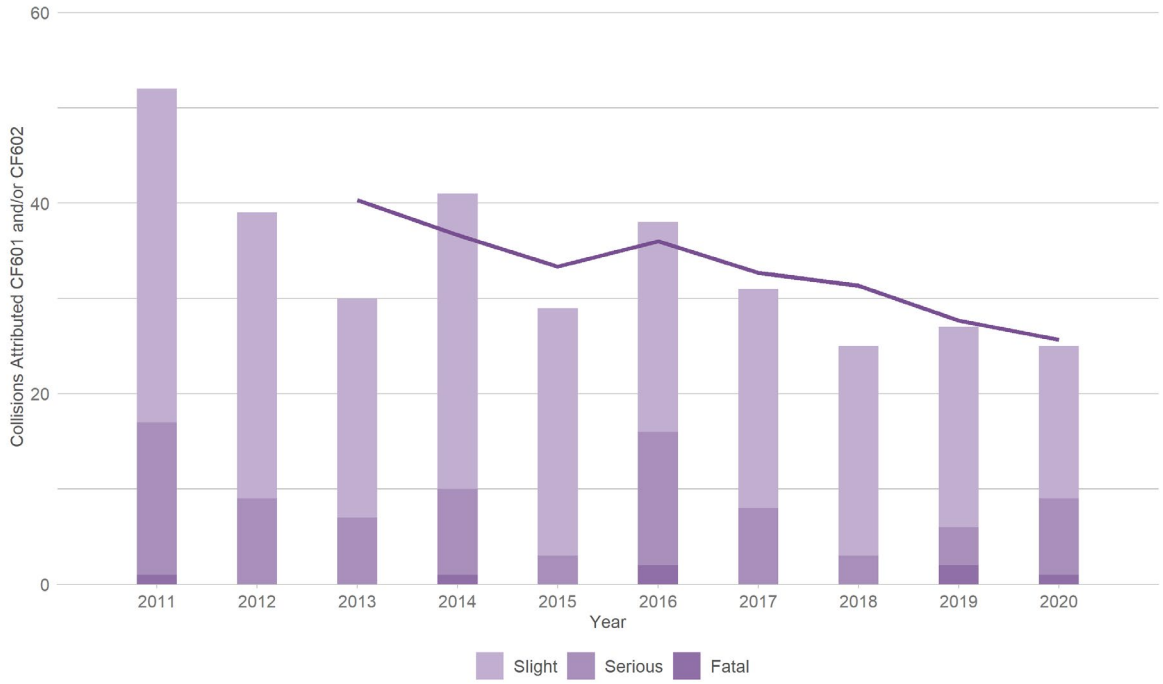
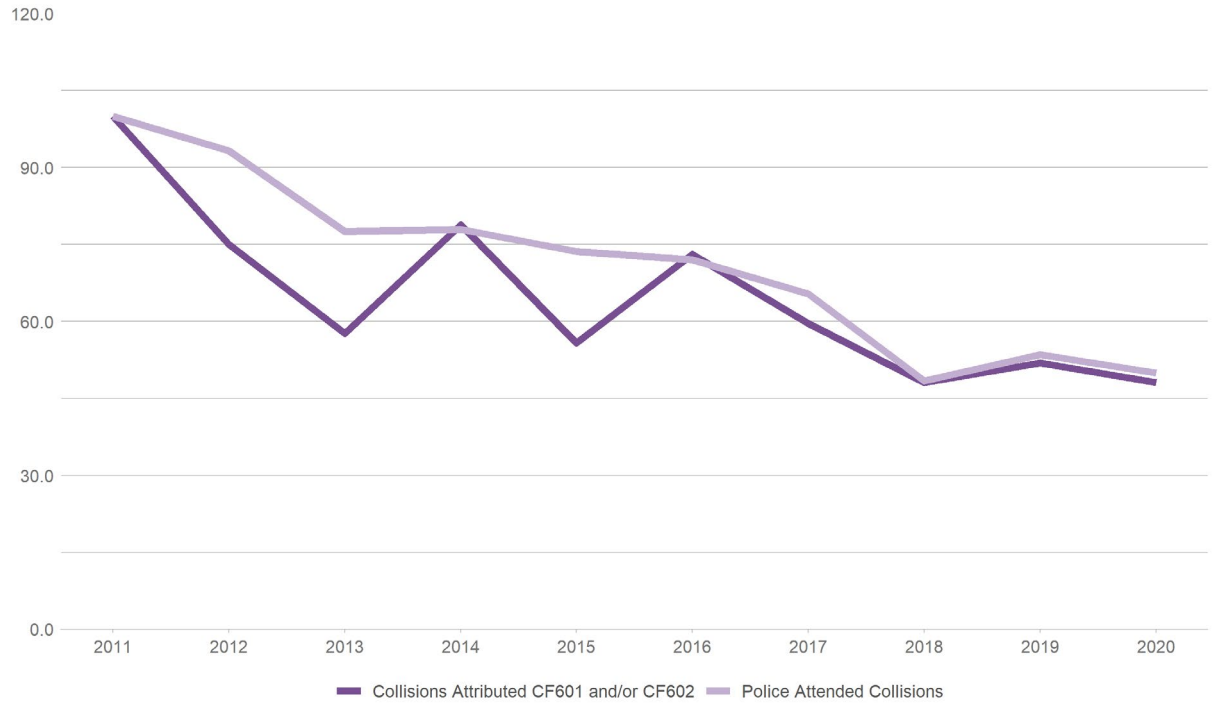


Figure 58 shows annual collisions on West Berkshire's roads where at least one of the unsafe behaviour CFs were recorded, with a three-year moving average trend line for unsafe behaviour collisions. Figure 59 shows the trends for collisions where unsafe behaviour CFs were recorded and for collisions where a police officer attended, indexed over a 2011 baseline for comparison.

There has been a distinct downward trend in unsafe behaviour related collisions with moderate fluctuation, down from 52 in 2011 to 25 in 2020. Of these 25 collisions, one involved at least one fatal casualty, and eight involved seriously injured casualties. Using 2011 as a baseline, this downward trend is broadly in line with the annual reductions in the number of all police officer attended collisions in West Berkshire.

Figure 59 - Collision trends in West Berkshire where CF601 and/or CF602 were recorded compared to officer attended collision trends (2011-2020)

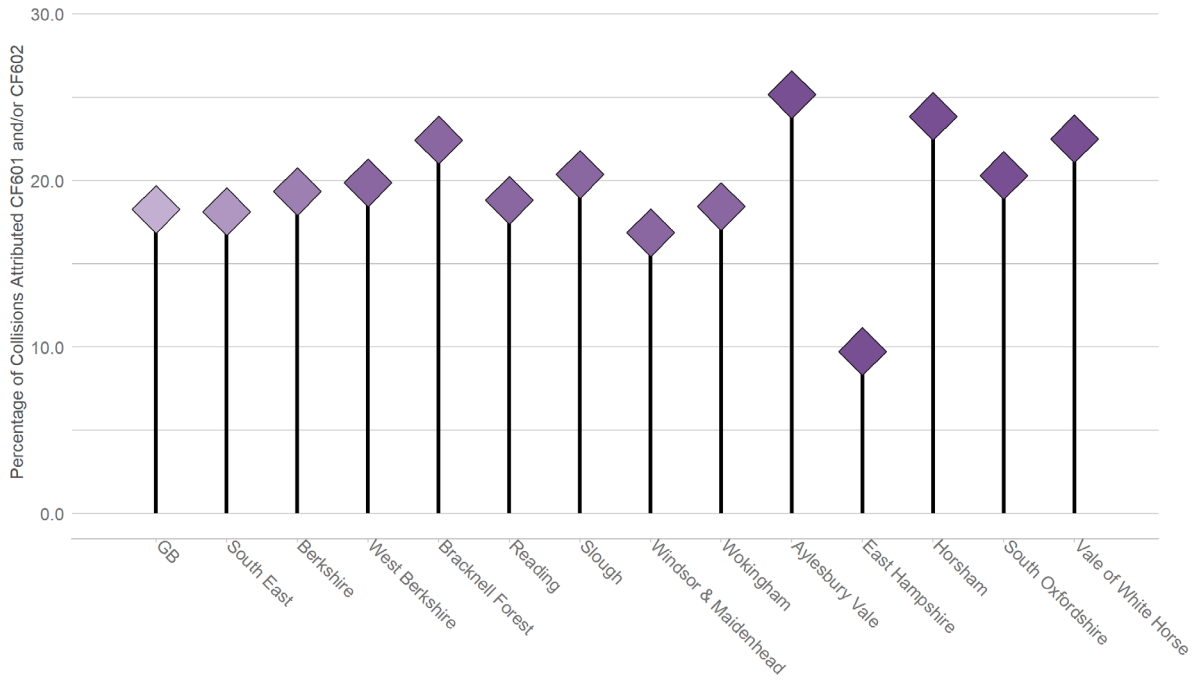


3.4.4.2 Comparisons

Figure 60 shows collisions on West Berkshire's roads where at least one of the unsafe behaviour CFs was recorded, as a percentage of all officer attended collisions where any CF was recorded. Also shown are the national, regional and comparator authorities' percentages.

In West Berkshire, 19.9% of collisions between 2016 and 2020 that were attended by a police officer were attributed an unsafe behaviour contributory factor, slightly above the percentage recorded in Berkshire as a whole. This is higher than the national percentage and the regional percentage in the South East. Within Berkshire, West Berkshire's percentage is higher than those of Reading, Windsor and Maidenhead, and Wokingham, but lower than those of Bracknell Forest and Slough. West Berkshire's percentage of unsafe behaviour related collisions is in line with that of South Oxfordshire, higher than that of East Hampshire, but lower than those of Aylesbury Vale, Vale of White Horse, and Horsham.

Figure 60 - Percentage of collisions in West Berkshire and comparators where CF601 and/or CF602 were recorded (2016-2020)



4 Appendices

4.1 Analytical Techniques

4.1.1 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 typically used are super output areas as defined by the Office for National Statistics (ONS). 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 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.

4.1.1.1 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 STATS19 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 section 4.2.1 on page 68, whilst profiles and distribution for the Mosaic Types identified in this Area Profile as providing insight on West Berkshire's residents are detailed on page 69.

This profile displays Mosaic analysis as dual series column charts, to facilitate quick and easy insight into residents and relative risk. In these charts, the wider background columns denote the absolute number of West Berkshire resident casualties or drivers in each Mosaic Type or Group, corresponding to the value axis to the left of the chart. The columns in the foreground provide an index for each Mosaic Type or Group. These indices are 100 based, where a value of 100 indicates the number of casualties or drivers shown by the corresponding background column is exactly in proportion to the population of communities in West Berkshire where that Type or Group 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.

Where appropriate, additional Mosaic profiles for drivers may be provided with indices based on Experian's estimate of the average annual mileage typically driven by each Group or Type. These profiles help to identify situations where exposure to road risk for some communities is out of proportion to their population due to unusually high or low levels of vehicle use.

4.1.1.2 Deprivation

Deprivation levels are examined using UK Index of Multiple Deprivation (IMD) values. IMD is calculated by the Office for National Statistics (ONS), 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.

4.1.2 Collisions

MAST Online has been used to determine average annual road injury collision levels for West Berkshire and relevant comparator areas. Dividing this annual rate by road length in each area generates an annual collision rate per kilometre of road, which allows direct comparisons to be made between authorities. Road length data have been taken from central government figures, and where required have been calculated separately for different road classes and environments. Charts have been devised which compare local rates with the equivalent figures for Great Britain and comparator highway authorities. District authorities 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, sometimes classified by kinds of road network. 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

4.1.2.1 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 is 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.

4.1.3 Comparators

In order to put the figures for West Berkshire into context, comparisons with other areas have been made.

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

4.1.4 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.

In CF analysis specifically related to pedestrians, only CFs directly assigned either to pedestrian casualties or to drivers and riders who first hit a pedestrian casualty are analysed. 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

Contributory Factor Groupings on page 83.

4.2 Mosaic Public Sector

This section provides information on all of the Mosaic Types and more detailed analysis of the specific Types identified as being of interest to West Berkshire. More information on what Mosaic can be found in section 4.1.1.1 on page 65.

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	City Prosperity	A01	World-Class Wealth
		A02	Uptown Elite
		A03	Penthouse Chic
		A04	Metro High-Flyers
B	Prestige Positions	B05	Premium Fortunes
		B06	Diamond Days
		B07	Alpha Families
		B08	Bank of Mum and Dad
		B09	Empty-Nest Adventure
C	Country Living	C10	Wealthy Landowners
		C11	Rural Vogue
		C12	Scattered Homesteads
		C13	Village Retirement
D	Rural Reality	D14	Satellite Settlers
		D15	Local Focus
		D16	Outlying Seniors
		D17	Far-Flung Outposts
E	Senior Security	E18	Legacy Elders
		E19	Bungalow Heaven
		E20	Classic Grandparents
		E21	Solo Retirees

F	Suburban Stability	F22	Boomerang Boarders
		F23	Family Ties
		F24	Fledgling Free
		F25	Dependable Me
G	Domestic Success	G26	Cafes and Catchments
		G27	Thriving Independence
		G28	Modern Parents
		G29	Mid-Career Convention
H	Aspiring Homemakers	H30	Primary Ambitions
		H31	Affordable Fringe
		H32	First-Rung Futures
		H33	Contemporary Starts
		H34	New Foundations
		H35	Flying Solo
I	Family Basics	I36	Solid Economy
		I37	Budget Generations
		I38	Economical Families
		I39	Families on a Budget
J	Transient Renters	J40	Value Rentals
		J41	Youthful Endeavours
		J42	Midlife Renters
		J43	Renting Rooms
K	Municipal Tenants	K44	Inner City Stalwarts
		K45	City Diversity
		K46	High Rise Residents
		K47	Single Essentials
		K48	Mature Workers
L	Vintage Value	L49	Flatlet Seniors
		L50	Pocket Pensions
		L51	Retirement Communities
		L52	Estate Veterans
		L53	Seasoned Survivors
M	Modest Traditions	M54	Down-to-Earth Owners
		M55	Back with the Folks
		M56	Self Supporters
N	Urban Cohesion	N57	Community Elders
		N58	Culture & Comfort
		N59	Large Family Living
		N60	Ageing Access
O	Rental Hubs	O61	Career Builders
		O62	Central Pulse
		O63	Flexible Workforce
		O64	Bus-Route Renters
		O65	Learners & Earners
		O66	Student Scene

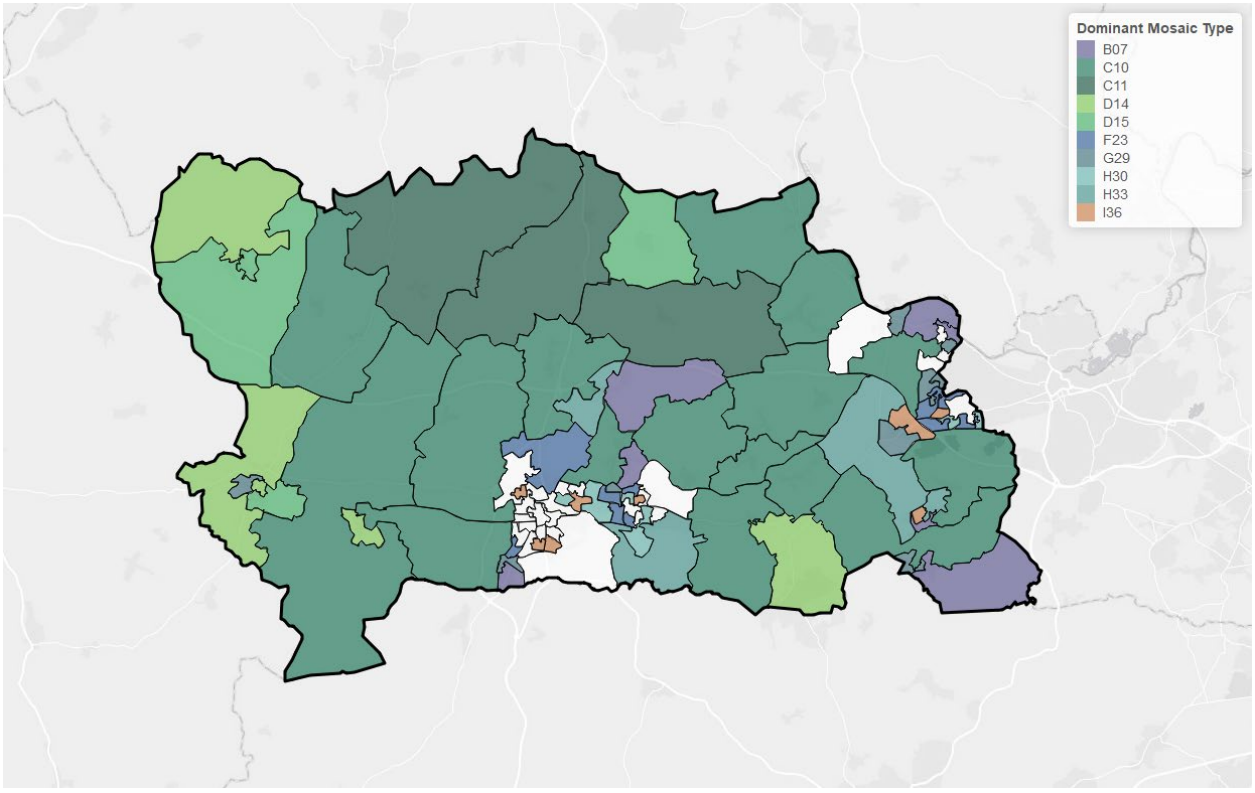
4.2.2 4.2.2 Profile and distribution for selected Mosaic Types

The table below shows Mosaic Types identified by socio-demographic profiling 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.

C10 Wealthy Landowners	I36 Solid Economy	H30 Primary Ambitions	B07 Alpha Families
Wealthy Landowners are older owners of large, attractive houses in rural and village settings. These properties often encompass generous gardens or land. Residents are usually married and aged in their fifties or sixties. Some have adult children living at home and others have seen their children move away.	Solid Economy are families who rent higher-value homes from local authorities or housing associations. Householders are usually aged in their thirties, forties or early fifties and children range from primary age up to young adulthood. Many families are headed by a couple, but others include singles or adults sharing.	Primary Ambitions are families who have bought more affordable houses on the periphery of desirable neighbourhoods that have access to good schools and amenities. Parents are in their thirties or early forties and have pre-school or primary-aged children. Many moved in a few years ago with family life and school catchments in mind.	Alpha Families are parents achieving career success while bringing up children. They are typically aged in their late thirties and forties, with children at primary or secondary school.

Figure 61 shows West Berkshire's LSOAs colour coded by dominant Mosaic Type.

Figure 61 - West Berkshire's dominant Mosaic Types by LSOA



4.3 Data Tables

All Casualties - West Berkshire Residents (2.1.1)

Year	Fatal	Serious	Slight	Total
2011	4	62	332	398
2012	6	54	325	385
2013	2	41	324	367
2014	4	44	289	337
2015	2	53	278	333
2016	3	37	282	322
2017	3	36	235	274
2018	6	39	201	246
2019	4	21	186	211
2020	1	30	153	184

Child Casualties - West Berkshire Residents (2.1.2)

Year	Fatal	Serious	Slight	Total
2011	0	5	40	45
2012	0	6	25	31
2013	0	4	26	30
2014	1	5	33	39
2015	0	4	24	28

2016	0	2	37	39
2017	0	2	26	28
2018	0	1	23	24
2019	0	5	19	24
2020	0	3	13	16

Pedestrian Casualties - West Berkshire Residents (2.1.3)

Year	Fatal	Serious	Slight	Total
2011	1	5	23	29
2012	2	5	20	27
2013	0	6	18	24
2014	1	8	22	31
2015	0	3	18	21
2016	1	2	27	30
2017	0	7	24	31
2018	2	4	22	28
2019	2	4	19	25
2020	0	3	16	19

Pedal Cycle User Casualties - West Berkshire Residents (2.1.4)

Year	Fatal	Serious	Slight	Total
2011	0	10	26	36
2012	1	9	26	36
2013	0	5	41	46
2014	1	4	32	37
2015	0	12	23	35
2016	0	10	22	32
2017	0	4	25	29
2018	0	7	21	28
2019	0	5	23	28
2020	0	11	23	34

Motor Vehicle Drivers involved in injury collisions - West Berkshire Residents (2.2.1)

Year	Fatal	Serious	Slight	Total
2011	3	66	365	434
2012	6	67	357	430
2013	6	49	346	401
2014	7	51	336	394
2015	3	47	306	356

2016	5	57	268	330
2017	1	39	243	283
2018	3	44	244	291
2019	4	29	189	222
2020	1	30	151	182

Young Adult Drivers involved in injury collisions- West Berkshire Residents (2.2.2)

Year	Fatal	Serious	Slight	Total
2011	1	23	66	90
2012	2	17	76	95
2013	0	11	67	78
2014	1	8	55	64
2015	1	10	56	67
2016	1	6	52	59
2017	0	4	47	51
2018	0	9	36	45
2019	1	5	26	32
2020	0	7	26	33

Motorcyclists involved in injury collisions - West Berkshire Residents (2.3.1)

Year	Fatal	Serious	Slight	Total
2011	1	19	28	48
2012	2	12	35	49
2013	0	12	24	36
2014	0	9	24	33
2015	1	10	24	35
2016	0	9	27	36
2017	2	12	18	32
2018	1	16	25	42
2019	1	6	16	23
2020	1	3	16	20

All Collisions - West Berkshire Roads (3.1)

Year	Fatal	Serious	Slight	Total
2011	6	63	316	385
2012	8	62	277	347
2013	3	45	278	326
2014	6	53	266	325
2015	3	49	242	294

2016	8	53	237	298
2017	1	43	193	237
2018	5	41	161	207
2019	9	32	169	210
2020	3	35	132	170

Urban Collisions - West Berkshire Roads (3.2)

Year	Fatal	Serious	Slight	Total
2011	1	19	93	113
2012	2	14	83	99
2013	0	12	84	96
2014	2	14	81	97
2015	0	17	86	103
2016	2	8	55	65
2017	0	14	57	71
2018	1	14	47	62
2019	2	8	62	72
2020	0	8	30	38

Rural Collisions - West Berkshire Roads (3.3)

Year	Fatal	Serious	Slight	Total
2011	5	44	223	272
2012	6	48	194	248
2013	3	33	194	230
2014	4	39	185	228
2015	3	32	156	191
2016	6	45	182	233
2017	1	29	136	166
2018	4	27	114	145
2019	7	24	107	138
2020	3	27	102	132

Collisions by hour of the day (Weekdays) - West Berkshire Roads (3.1.1.4)

Time of Day	Fatal	Serious	Slight	Total
Midnight	0	1	4	5
1am	0	2	2	4
2am	0	1	4	5
3am	0	1	5	6
4am	2	1	4	7

5am	0	3	4	7
6am	0	2	16	18
7am	3	8	44	55
8am	0	14	80	94
9am	1	5	42	48
10am	2	3	31	36
11am	1	7	29	37
Noon	1	7	42	50
1pm	1	5	37	43
2pm	0	8	43	51
3pm	1	10	39	50
4pm	1	15	52	68
5pm	2	10	64	76
6pm	1	11	56	68
7pm	0	11	34	45
8pm	0	5	26	31
9pm	2	6	15	23
10pm	0	1	14	15
11pm	1	5	8	14

Collisions by hour of the day (Weekends) - West Berkshire Roads (3.1.1.4)

Time of Day	Fatal	Serious	Slight	Total
Midnight	0	1	1	2
1am	0	0	1	1
2am	0	2	1	3
3am	0	2	0	2
5am	0	1	0	1
6am	0	2	2	4
7am	1	1	5	7
8am	0	0	13	13
9am	0	1	8	9
10am	0	5	14	19
11am	1	7	17	25
Noon	0	2	18	20
1pm	0	5	18	23
2pm	2	4	14	20
3pm	0	6	17	23
4pm	0	2	16	18
5pm	0	3	13	16

6pm	0	3	10	13
7pm	1	4	11	16
8pm	1	4	3	8
9pm	1	3	2	6
10pm	0	3	7	10
11pm	0	1	6	7

Collisions involving factors 306 and/or 307 (speed related) - West Berkshire Roads (3.4.1)

Year	Fatal	Serious	Slight	Total
2011	0	9	29	38
2012	2	3	29	34
2013	1	5	29	35
2014	1	6	20	27
2015	0	5	19	24
2016	2	8	24	34
2017	0	6	20	26
2018	0	5	12	17
2019	0	2	10	12

Collisions involving factors 501 and/or 502 (impairment related) - West Berkshire Roads (3.4.2)

Year	Fatal	Serious	Slight	Total
2011	2	6	7	15
2012	0	3	11	14
2013	0	4	7	11
2014	2	3	6	11
2015	0	3	9	12
2016	2	7	6	15
2017	0	0	5	5
2018	0	5	7	12
2019	0	3	11	14

Collisions involving factors 101 and/or 102 and/or 103 (road surface related) - West Berkshire Roads (3.4.3)

Year	Fatal	Serious	Slight	Total
2011	0	4	23	27
2012	0	6	30	36
2013	0	4	29	33
2014	2	6	20	28
2015	0	4	16	20
2016	0	8	28	36

2017	0	1	24	25
2018	0	3	14	17
2019	0	3	8	11

Collisions involving factors 601 and/or 602 (unsafe behaviour related) - West Berkshire Roads (3.4.4)

Year	Fatal	Serious	Slight	Total
2011	1	16	35	52
2012	0	9	30	39
2013	0	7	23	30
2014	1	9	31	41
2015	0	3	26	29
2016	2	14	22	38
2017	0	8	23	31
2018	0	3	22	25
2019	2	4	21	27

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*
				Dazzling headlights
	Junction Errors	**Fatigue Impairment**	**Pedestrian Behaviour**	*Dazzling sun*
	Junction overshoot	*Fatigue*	*Crossing road masked by stationary or parked vehicle*	*Rain, sleet, snow or fog*
	Junction restart (moving off at junction)		*Failed to look properly*	*Spray from other vehicles*
			Failed to judge vehicle's path or speed	*Visor or windscreen dirty or scratched*
			Wrong use of pedestrian crossing facility	*Vehicle blind spot*
			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	

4.5 List of Figures

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