

# Review of Shropshire Road Collision Data

Produced by Information, Intelligence and Insights Team

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# Updated Review of Road Collision Data for Shropshire

## 1. Background

The corporate performance report has, for several years, reported the number of Killed and Seriously Injured people (KSI) on the roads of Shropshire. Originally part of the national set of key performance indicators Shropshire has continued to monitor and report this measure.

Reporting of the KSI measure is based on an average of the number of people killed or seriously injured per year, during the preceding 3 year period. This method helps to smooth out any exceptional events and provides a more balanced trend view.

At the end of 2005 there was an annual average of 215 people killed or seriously injured on the roads of Shropshire. Since 2012 the annual average over three years had reduced and stabilised to around the mid 120's.

In 2016 the methodology for recording the severity of casualties in collisions changed. This change resulted in more casualties reported as seriously injured who would previously been classed with slight injuries. The same increase in reporting has been experienced nationally.

As a result of this recording change the rolling KSI figure began to increase. This prompted a request from performance scrutiny to request more detailed information. It is now more than 3 years since the report was presented. This report provides updated information to September 2020.

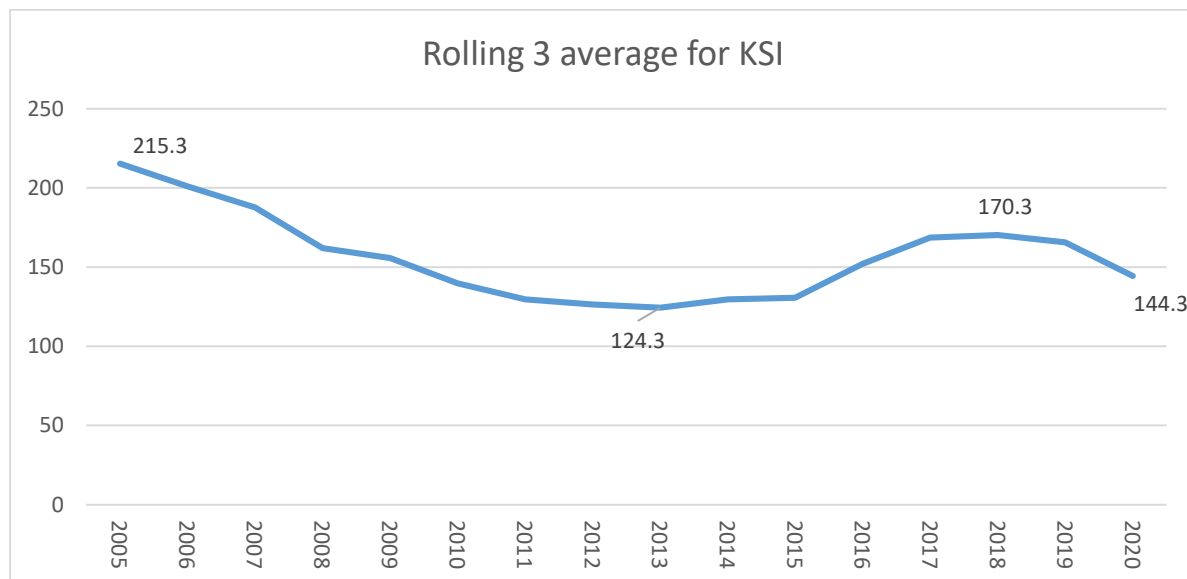


Chart 1 – average number of people killed or seriously injured per year over a 3 year period . Source WM Police data

## 2. Road Network

The local road network within Shropshire is managed and maintained by Shropshire Council. Highways England operates, maintains and improves England's motorways and major A roads. In Shropshire this includes the M54, A5, A49 south of Shrewsbury, A458 from Shrewsbury to the Welsh border and the A483 from Oswestry to the Welsh border. Whilst Shropshire Council liaises with Highways England the trunk road network falls under the responsibility of Highways England. This report covers collisions for both the local and trunk road networks.

### 3. Key figures

The collision data in this covers the period from Jan 2016 to September 2020. It should be noted that 2020 is an incomplete year.

Throughout this report there are references to collisions, casualties and vehicles. Readers should note that 1 collision may involve more than 1 vehicle and result in more than 1 casualty. Vehicles also includes cycles. This report reviews data where a collision results in a casualty who is either slightly, seriously or fatally injured. This report does not cover collisions where no injuries were sustained.

During the review period (Jan 2016 to Sept 2020) there were:

- 2,358 collisions, with
- 3,356 casualties, involving
- 4,392 vehicles
- 652 collisions resulted in an outcome of Killed or Seriously Injured

### 4. Number of Collisions

The following chart shows the number of collisions and the highest level of severity of a casualty within that collision from 2013 to 2020. Please note 2020 only covers Jan - Sept.

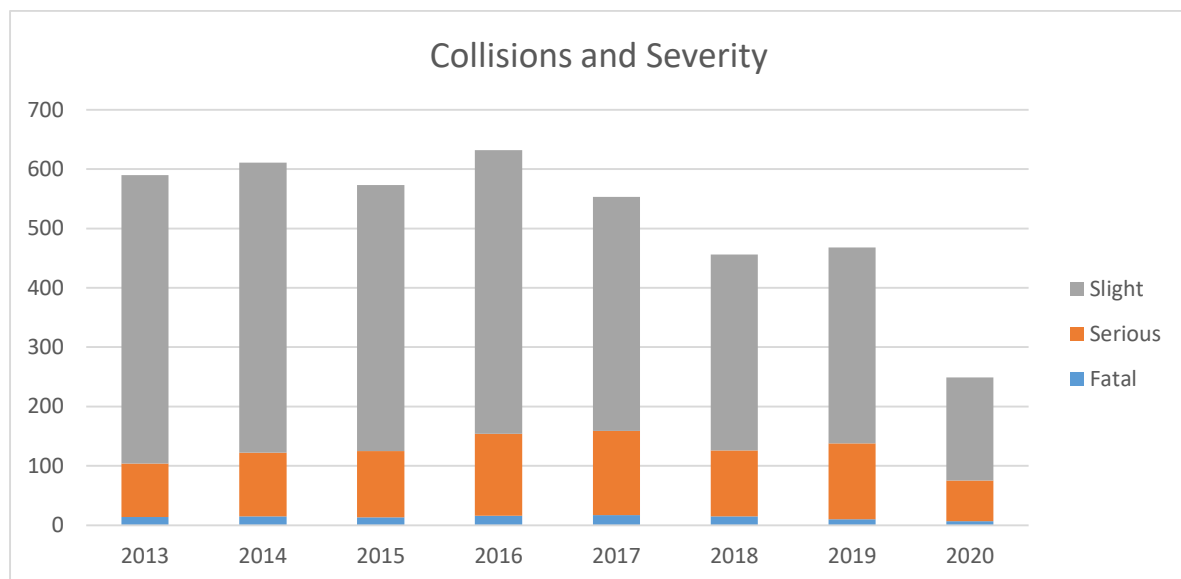


Chart 2 –number of collisions showing the highest severity of any person involved in the collision – WM Police Data

During the period 2013 to 2019 the average number of collisions per year was 554 per year and shows a decrease from the 2017 report when the figure for 2013 to 2016 was 601 per year. The average for the reporting period 2017 to 2019 is 492.

Whilst 2020 only shows a 9-month period it is highly likely that the number of collisions will be lower than in previous years. This follows a downturn in collisions during the national lockdown period due to Covid 19 travel restrictions.

The number of collisions varies and can be affected by many factors along with random unexpected and unexplainable events. There will also be human factors where people are impaired by drink or drugs which result in avoidable collisions.

Collision data is monitored by Shropshire Council and there is regularly liaison with both the Safer Roads Partnership and West Mercia Police where information is shared and where appropriate acted upon to make safety improvements.

### 5. Collision Severity; Shropshire and Great Britain

The ratio of collisions which involve a casualty who is Killed or Seriously are compared in the following charts for Shropshire and that for Great Britain.

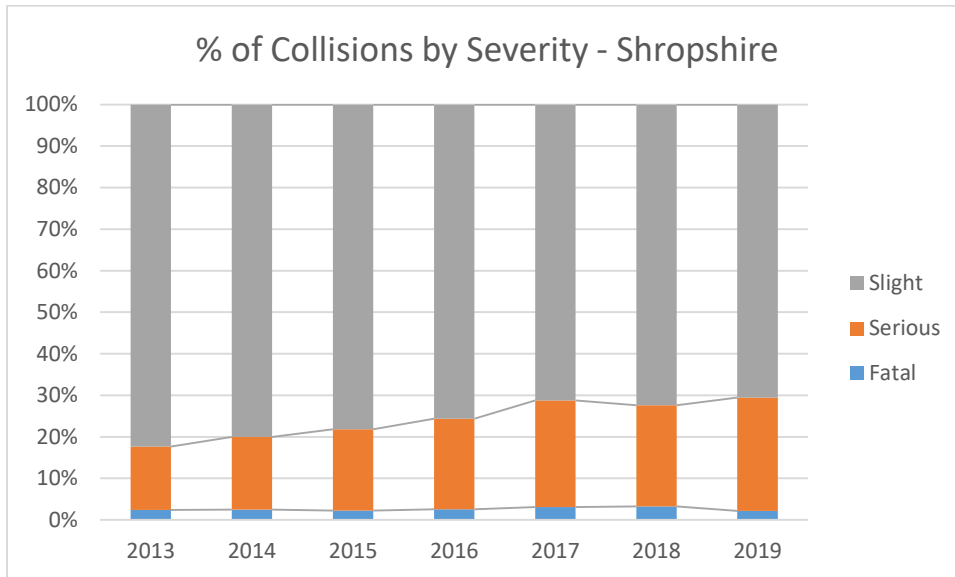


Chart 3 –rate of collisions showing the highest severity of any person involved in the collision – local data

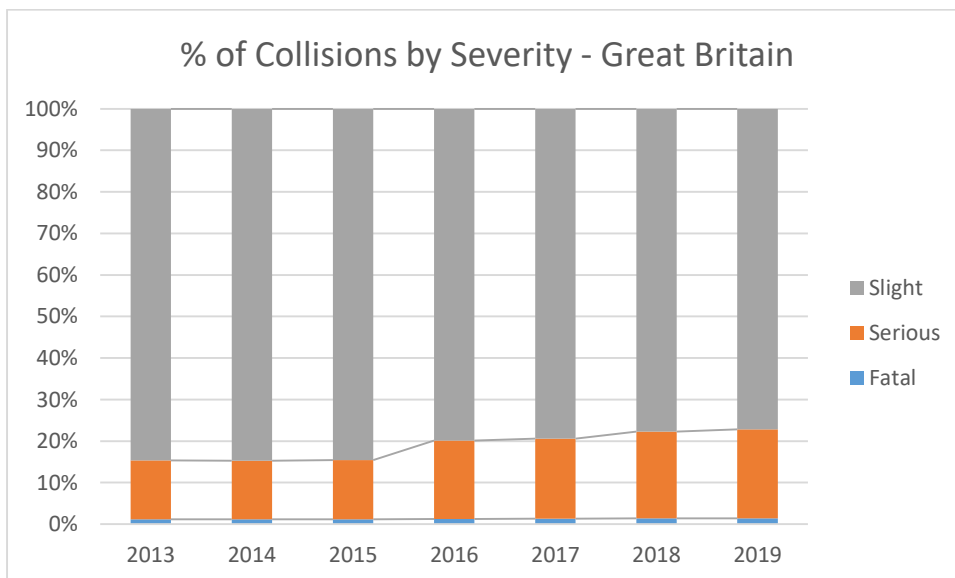


Chart 4 –rate of collisions showing the highest severity of any person involved in the collision – Source DFT Road casualties GB. Note: GB data from 2016 shows adjusted rates of serious injury to take account use of recording data via the CRASH system.

Use of the adjusted data for Great Britain shows a similar pattern to the rates as those experienced in Shropshire. Rates for KSI in Shropshire have now stabilised around 30% whilst in Great Britain the rate is around 23%.

Historically the severity of collisions in Shropshire and of other rural counties is higher than those in Great Britain which is attributed to the type of roads found in rural areas. This will be examined further in the report.

### **Summary**

- Between 2013 and 2016 the annual number of recorded collisions remained around 600
- The annual number of collisions for 2017 to 2019 shows a decrease
- National lockdown has further reduced collisions and it is likely that 2020 will see lower collision levels than those for previous years.
- Increases in the numbers of collisions recorded as severe correspond to the changes to the recording methodology
- The same increases have been experienced by other forces throughout Great Britain.
- Collisions in Shropshire are more likely to result in an outcome of KSI when compared to the national average.

## Detailed Report

The following sections review the collision data to identify factors that impact on collision rates and review factors that are particular to Shropshire. It should be noted that the data only refers to collisions on the public highway, which are reported to the police and have resulted in a casualty.

General trends show that the number of road collisions is decreasing. There are many factors including advances in vehicle safety systems, road improvement schemes and public education programmes. There is not one factor which contributes to causes of collisions, but it is likely to be a mixture of controllable and uncontrollable factors.

## 6. Economic Factors

Research indicates that as an economy grows it results in a growth of traffic, which results in more collisions. When the Gross Domestic Product (GDP) decreases there are indications that the rate of traffic growth slows, and the number of fatalities reduces. During the last recession the volume of motor vehicle traffic saw an actual decrease. The following chart illustrates potential links between economic factors and fatalities.

**Chart 10: Five year rolling average of growth in traffic, GDP and road deaths, GB, 1955 - 2018**



Reported road casualties in Great Britain: annual report 2018 - Page 21

Chart 5 – effects of GDP on numbers of vehicles and fatalities. Source: DFT Reported road casualties in Great Britain 2018

The chart illustrates the relationship between economic cycles and fatality numbers. It will be interesting to observe the impact of the 2020 pandemic both in the short and long-term. Traffic numbers decreased substantially during the lockdown period and should result in a reduction of collision numbers. However, there is evidence that some drivers have used the reduction of traffic to increase their speed, which is a key contributor to the severity of collisions. This may have a temporary impact on the ratio of fatalities and seriously injured. Long-term impacts of the pandemic will include an economic downturn, which as evidenced

in chart 5 is likely to reduce fatalities. Whilst the speed of economic recovery is uncertain the emergence of large-scale homeworking and decreased use of public transport may result in significant changes to work and commuting patterns. This may result in a different relationship between economic factors and road traffic collisions.

### Employment trends for Shropshire from 2004



Chart 6 – Employment trends in Shropshire – Source: NOMIS; ONS Population Survey

The overall trend for employment numbers in Shropshire has been positive with some periods of stability or slight downturns.

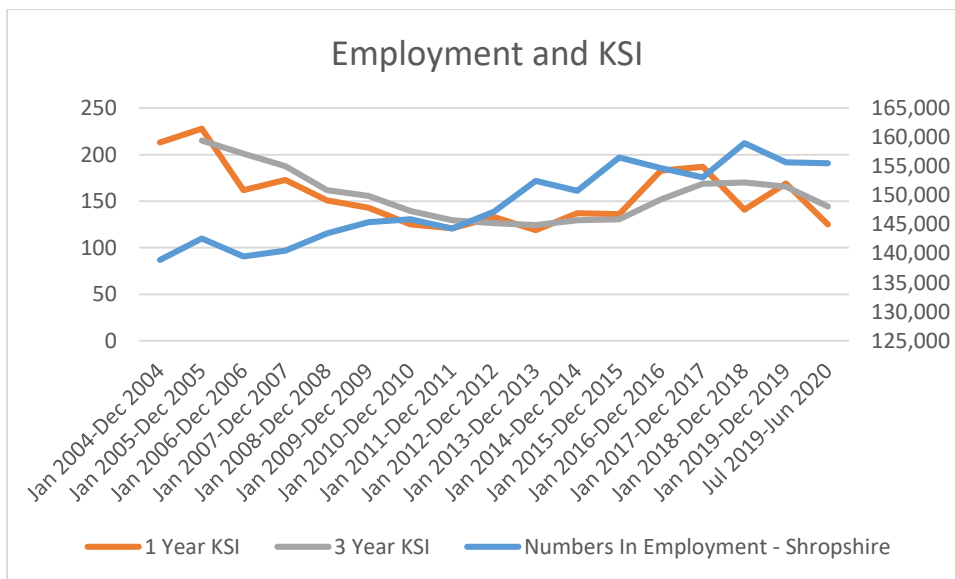


Chart 7 – comparison of Shropshire employment rates to Killed and Seriously Injured figures

Fatality numbers in Shropshire are low and do not provide a clear comparison to the national dataset. Therefore, chart 6 has compared employment and KSI rates. During the period 2004 to 2007 there appeared to be some correlation between KSI casualties and employment rates. From this time, employment numbers have seen a gradual upward trend. KSI rates have seen a reduction to 2013 and then a levelling off pattern until the change of recording methods. The more recent trend indicates a return to a reduction. Overall there does not appear to be any similarities when comparing increased numbers in employment to the number of people killed or seriously injured on the roads in Shropshire.

## 7. Time Factors

Although the pattern of employment increase is different to that of the KSI numbers, the time of collisions and of KSI does increase during key commuting times.

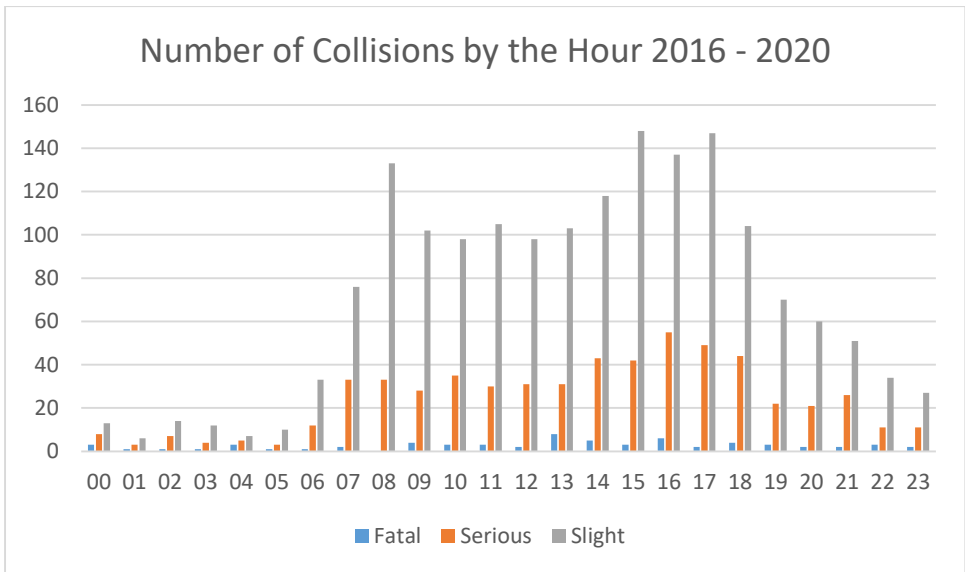


Chart 8 – Collision numbers and condition of most severe casualty by hour of day

The peak time for collisions occurs between 3pm to 6pm with another at 8am to 9am, corresponding to key commuter times.

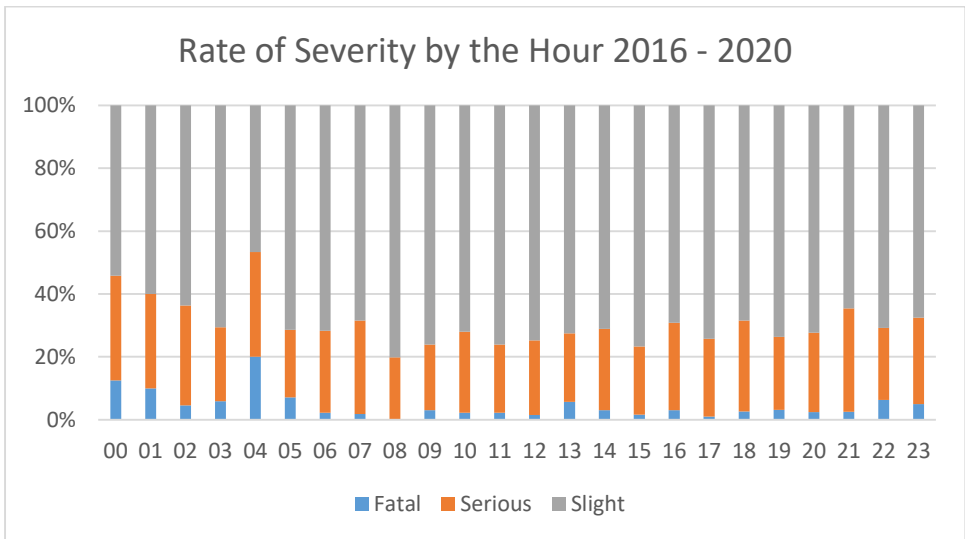


Chart 9 – Collision severity by hour of day

Whilst chart 7 shows that there relatively fewer collisions outside of the key commuter times Chart 8 shows that collisions occurring between 10pm to 6am have a higher rate of fatalities. In summary, night-time collisions are fewer but result in a higher fatality rate.



## Day and month of collisions

The following chart shows the number of collisions by day of the week from 2016 to 2019.

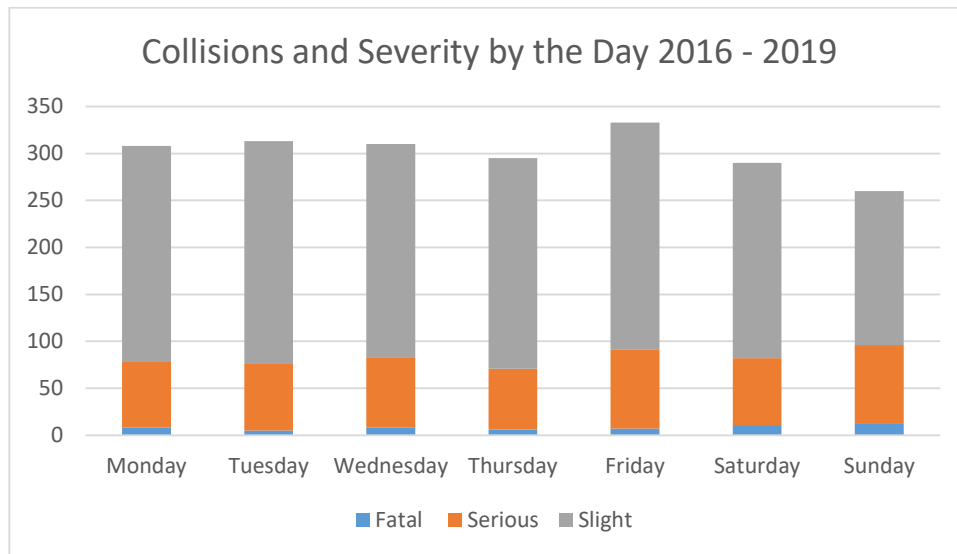


Chart 10 – trend of collisions by days

Whilst Friday is the most likely day of the week for a collision to occur the highest percentage of fatalities occurs over the weekend. 26% of collisions occur over the weekend whilst 41.3% of fatalities during the reporting period occurred during that time.

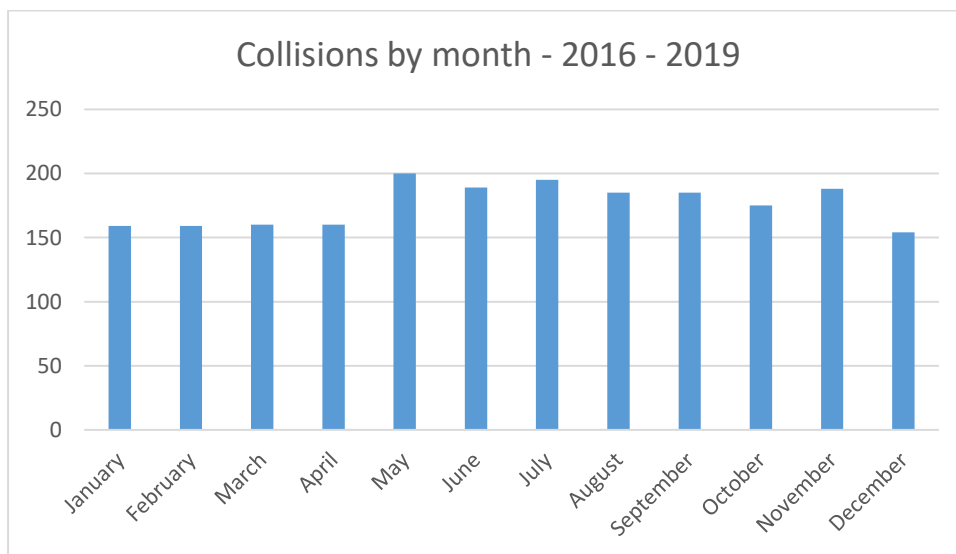


Chart 11 – number of collisions by month

Collisions by month over the period show that the peak months are generally summer months and November. Numbers generally reduce during the winter months when there is likely to be less leisure traffic. November coincides with the end of British Summer Time when clocks go back one hour, which may be a contributing factor.

Increases in summer road traffic is a likely factor in collision rates. The A458 heading towards Snowdonia sees the biggest seasonal increase in traffic on England's major A roads. During the summer it carries almost a quarter (23.1 per cent) more vehicles than during the rest of the year. Source: RAC Foundation

## 8. Population and Age Factors

### Population trends

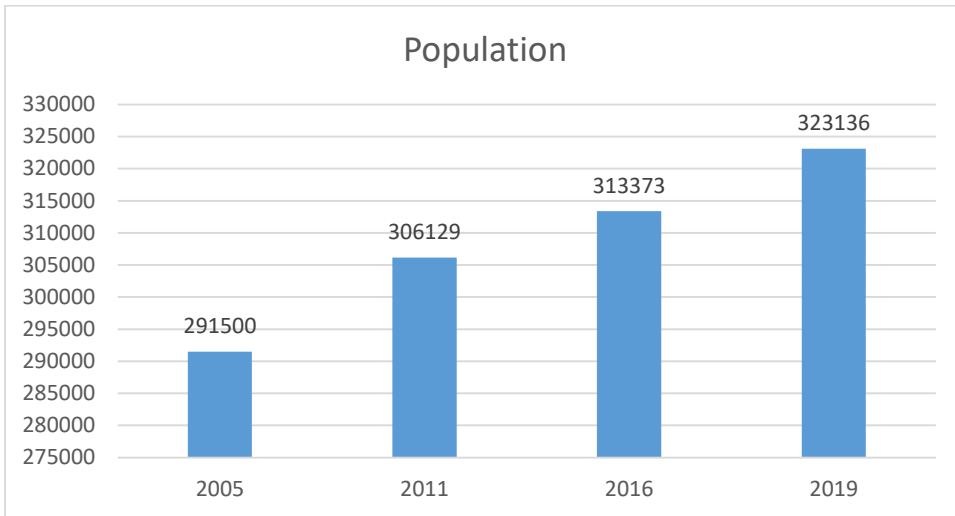


Chart 12 – population numbers of Shropshire by year

At the time of the first reporting the rolling three-year collision data in 2005 the mid year population estimates for Shropshire were 291,500. The latest estimates place the population of Shropshire at 323,136 an increase of 10.8% over the period.

The increase in population figures may be a contributing factor to any changes in collision rates.

### Age of casualties

The following chart compares the age profile of Shropshire compared to the age of casualties.

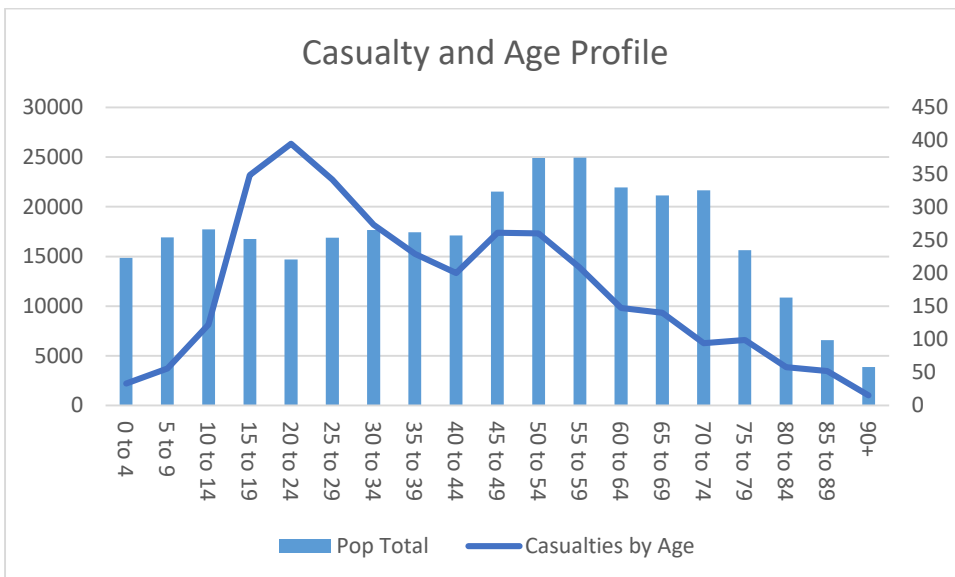


Chart 13 – comparison of casualty numbers to age profile of Shropshire

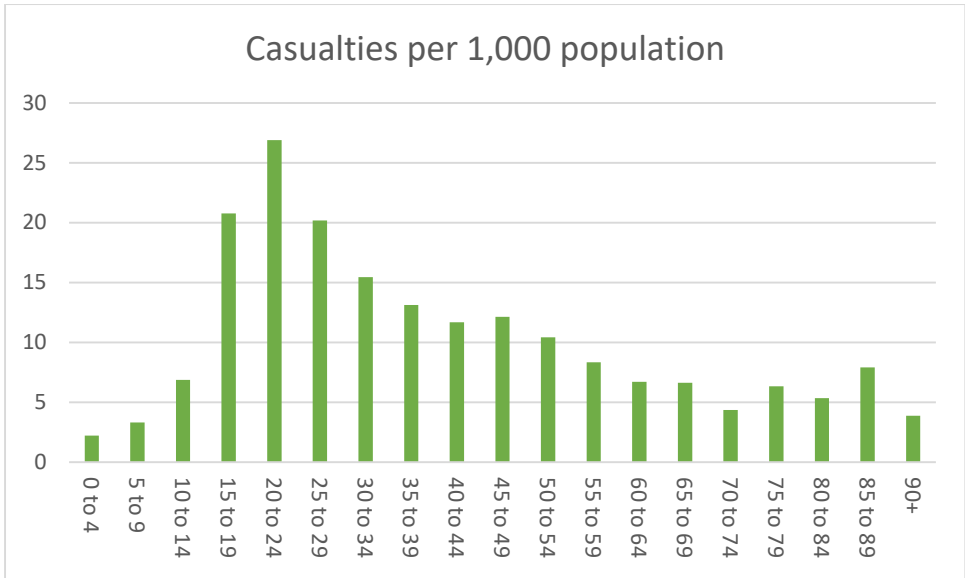


Chart 14 –casualty numbers per 1,000 population

Similar to national patterns the chart shows how young age groups make up a disproportionate number of the casualties when compared to the age profile of the county.

15 to 29 year olds equate to 14.9% of the population but account for 32.5% of all casualties. Highest amongst this group is the 20 – 24 year age group. This group accounts for 4.54% of the population but make-up 11.86% of the casualties.

### KSI by Age Groups

The following charts reviews the severity of casualties by age bands

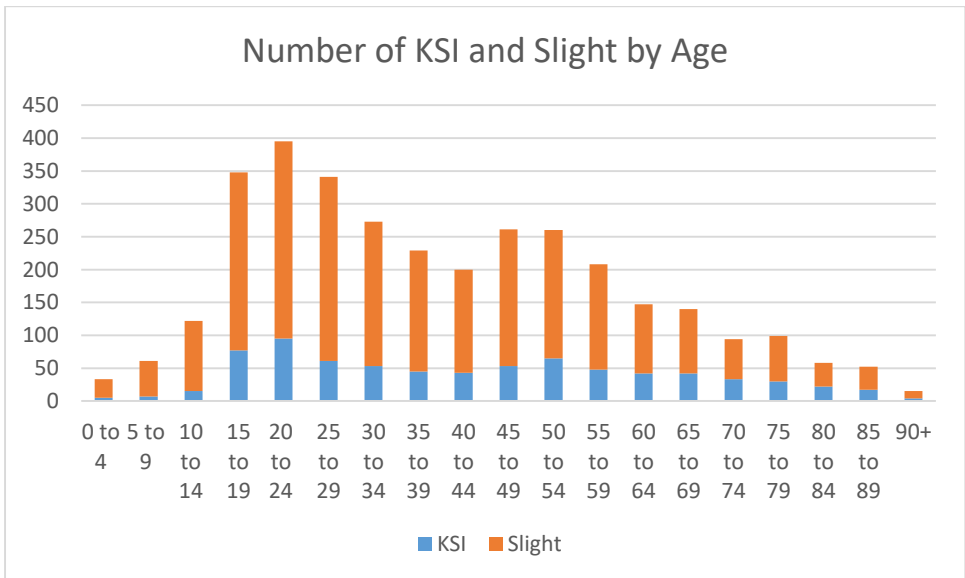


Chart 15 – number and severity of casualties by age band

The total number of casualties is highest amongst the 20 to 24 year age group which also has the highest number of KSI.

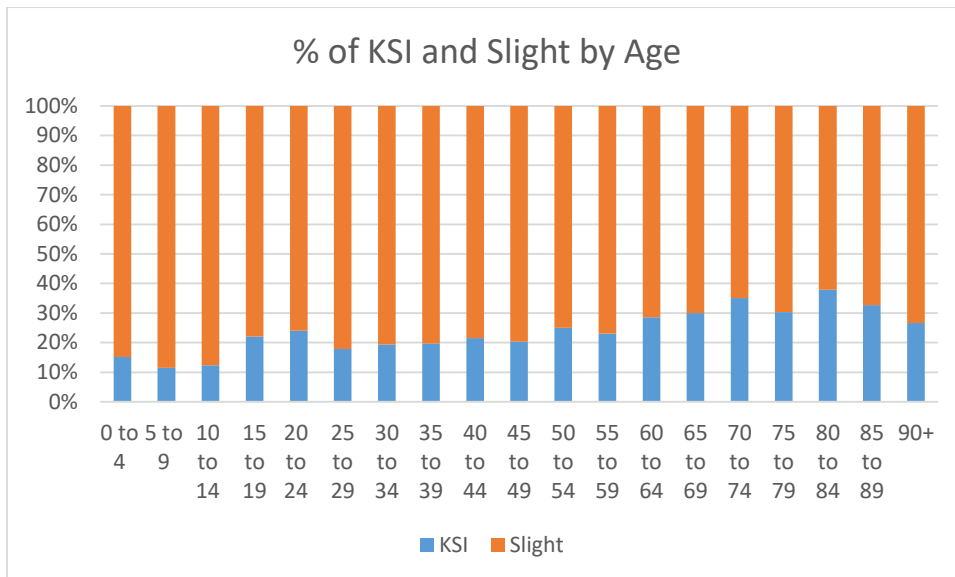


Chart 16 – ratio of casualties by severity of casualty and by age band

Whilst the likelihood of a casualty from a road traffic collision is highest amongst the younger age groups the chart indicates that the severity of injuries is likely to increase with age. From the age of 60, if a person is involved in a traffic collision, it is more likely that the severity will be higher.

The over 60's account for 18.1% of all casualties but account for 25% of all killed or seriously injured.

This profile of severity of casualties by age is relevant to Shropshire. In the 2011 census the percentage of over 65's was 20.7% of the population. This was higher than the national rate of 16.4%. The latest mid year population estimates for 2019 indicate that the population of over 65's in Shropshire has increased and now accounts for 24.7% of the Shropshire population. Population forecasts for Shropshire show that the over 65's will account for 33% of the population by 2037. (Population forecasts developed by Information, Intelligence & Insight team of Shropshire Council)

Based on the aging profile of Shropshire residents, it is likely that collisions involving older residents could be a future contributing factor for the number of Killed or Seriously Injured casualties.

## 9. Vehicle Factors

Vehicle registrations in England and Shropshire are shown in the table below

	Cars	Motorcycle	Light Goods	Heavy Goods	Buses & Coaches	Other vehicles
Shropshire	77.15%	3.36%	12.34%	1.52%	0.29%	5.33%
England	82.44%	3.19%	10.65%	1.32%	0.39%	2.01%

Table 1 – vehicle registrations by location - Source: DFT Licensed vehicles by body type 2019

The percentage of vehicles registered in Shropshire shows that there is a lower percentage of cars than the national rate. Since 2016 Shropshire has seen a slight reduction in the percentage of cars from 77.7% to 77.1% and an increase in light goods vehicles from 11.6% to 12.34%. The higher percentage of goods and other vehicles which includes; agricultural vehicles and hackney carriages reflects the rurality of the county.

The following table shows the ownership of cars by household in Shropshire and England

	No cars	1 car or van	2 cars or vans	3 cars or vans	4 or more cars or vans
Shropshire	15.8%	42.2%	30.8%	7.9%	3.3%
England	25.8%	42.2%	24.7%	5.5%	1.9%

Table 2 – % of households with a car - Source: 2011 Census – Office for National Statistics

The ownership of cars per household in Shropshire is higher than the average for England. This profile is typical in rural areas as people have lower access to public transport and find it more impractical to walk or cycle to destinations. Rural residents are therefore more reliant on their own transport.

The following chart shows the number of vehicles involved in collisions for the period 2016 to Sept 2020.

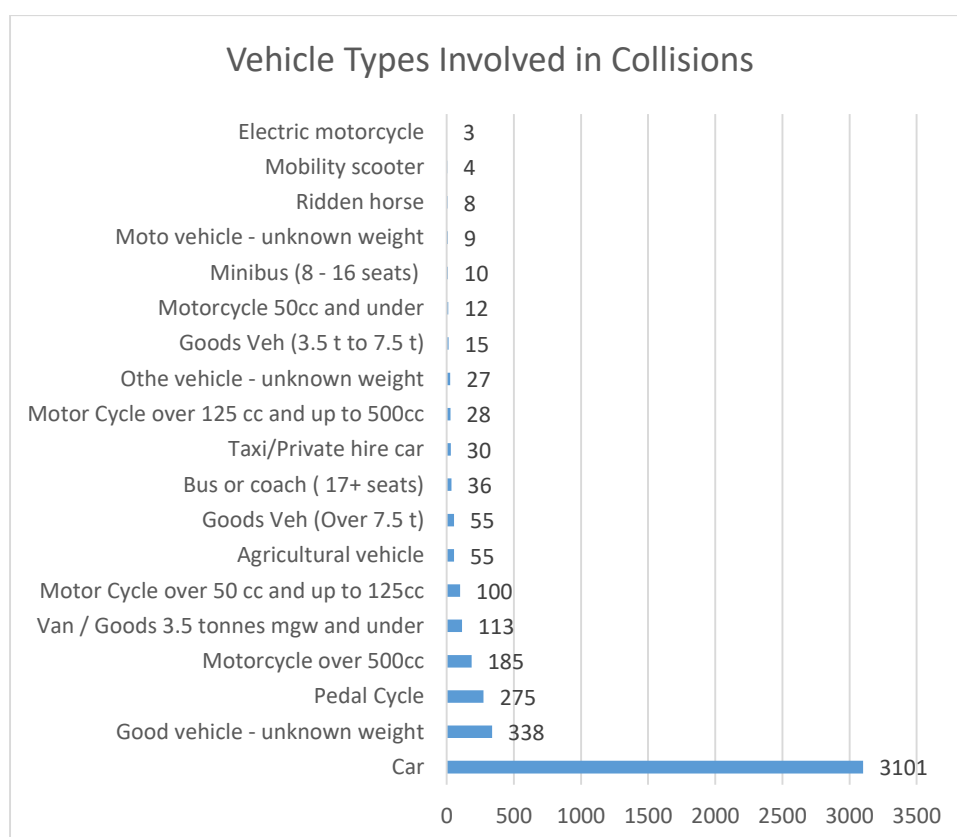


Chart 17 – number of vehicles involved in a collision by vehicle group

As the largest transport group, it follows that cars account for the majority of vehicles involved in collisions. Motorcycles grouped by different power ratings are the second largest group, followed by goods vehicles and pedal cycles.

There is a disproportionate number of collisions involving pedal cycles and motorbikes. Department for Transport vehicle licensing statistics show that 3.5% of registered vehicles are motorbikes and account for around 1% of distance travelled. The figures show that 7.4% of vehicles involved in collisions within Shropshire are motorbikes. This is lower than the rate for 2012 – 2017 of 8.5%

It is interesting to note that electric motorcycles and mobility scooters, albeit small numbers, are now included in the list.

Since 1996, there has been a big increase in the number of larger motorcycles. In 1996, motorcycles over 500cc only accounted for 34% of all licensed motorcycles and now 55%. The growth of large motorcycles is illustrated in the following chart.

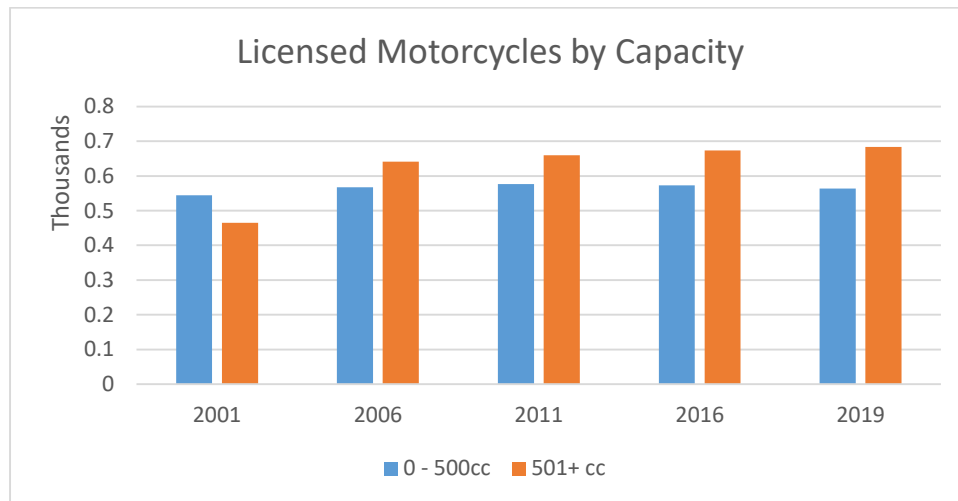


Chart 18 – number of licensed motorcycles by capacity. Source DFT vehicle licensing statistics

The largest growth has been within the largest capacity size of 1000+ cc with a growth of 146% from 2001 to 2019.

The National Travel Survey 2016 shows that pedal cycles account for around 2% of personal travel trips and 1% of distance travelled. The figures show that 6.2% of vehicles involved in collisions within Shropshire are pedal cycles an increase from 5.7% for the period 2012 – 2017.

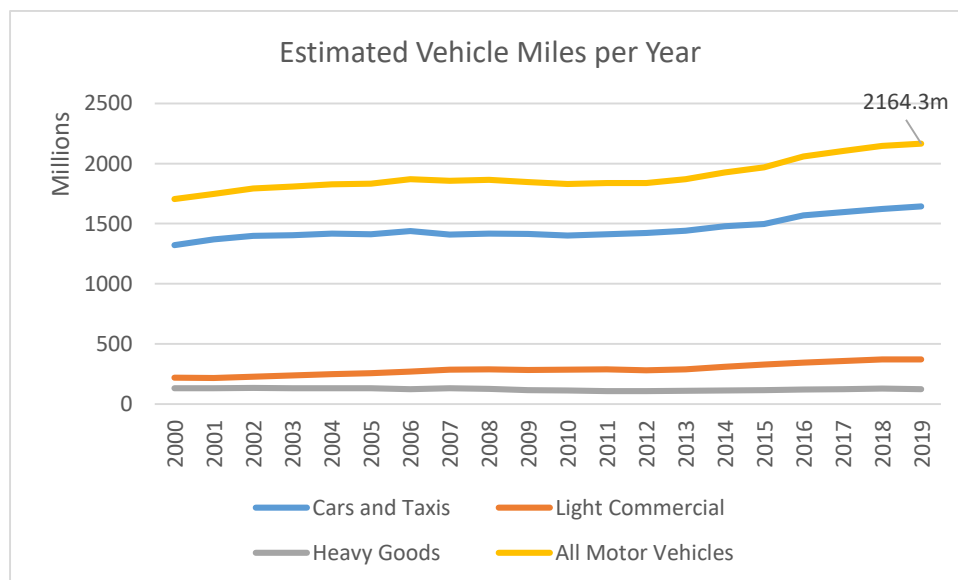


Chart 19 – Source: DFT Traffic by Local Authority (TRA89) see DFT for definitions of road traffic estimates

The estimated amount of vehicle miles travelled in Shropshire has seen an increase of 5% from 2016 to 2019 during which time collision numbers have shown a decrease (chart 2). During this time vehicle miles by cars and taxi have increased 4.9% whilst the largest growth is in light commercial vehicles 8.1%. Heavy goods vehicle miles have remained at similar levels. This reflects national trends which has seen an increase in larger vehicles to

transport more goods and thus using fewer smaller lorries. Van usage has increased for the carrying of tools and the delivery of goods, which reflects the growth of online shopping.

### Vehicle Casualty Types

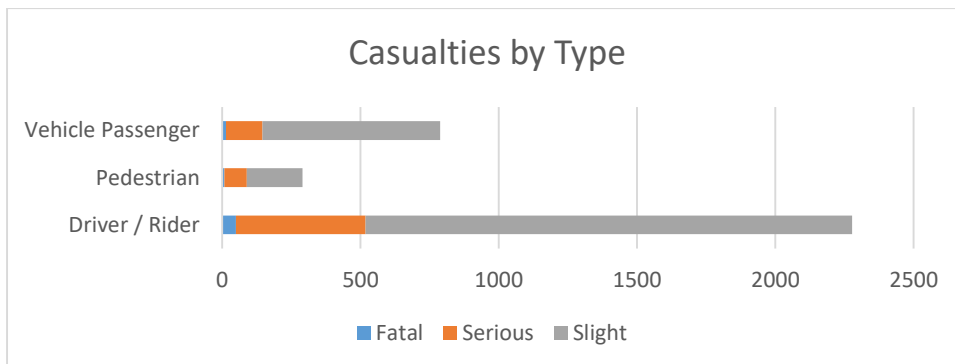


Chart 20 – ratio of collisions by speed limit with severity of most seriously injured casualty

The majority of casualties, as to be expected are the drivers or riders of vehicles. The second largest group are their passengers followed by pedestrians.

### Driver Casualties

When reviewing driver outcomes of fatal and serious casualties by vehicle type there is, as expected, a higher number for cars.

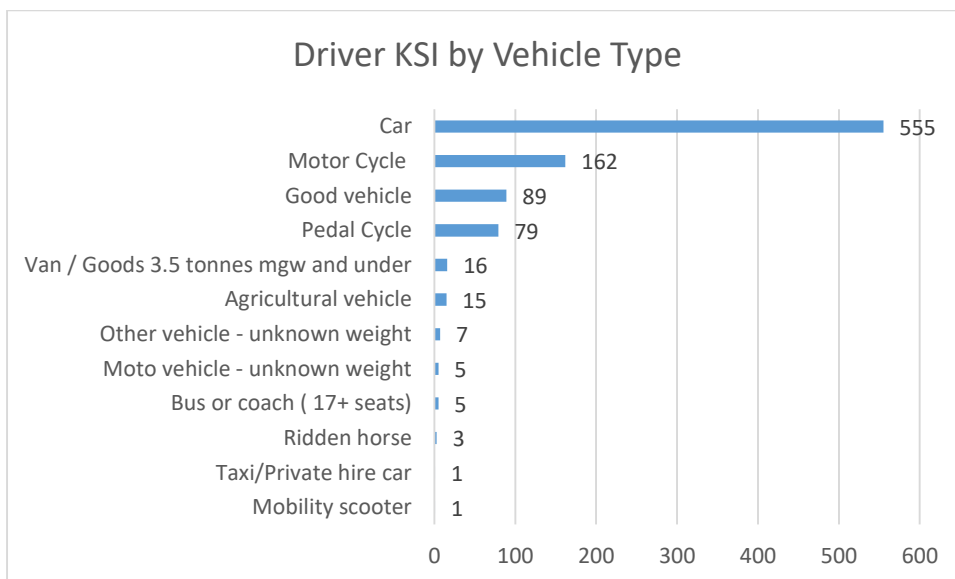


Chart 21 – number of serious or fatal driver casualties by vehicle type

When examining driver casualties the chart shows that killed or seriously injured driver casualties are apportioned as follows:

- Car Drivers 59%
- Motorcycles 29%
- Goods Vehicles 9.5%
- Pedal Cycles 8.4%

Motorbikes account for 1% of vehicle miles travelled, 3% of registered vehicles, account for 7.4% of vehicles involved in collisions with riders accounting for 29% of those killed or

seriously injured drivers/riders. Of the 162 motorcycle KSI casualties 64% were on machines 500cc+

### Passengers

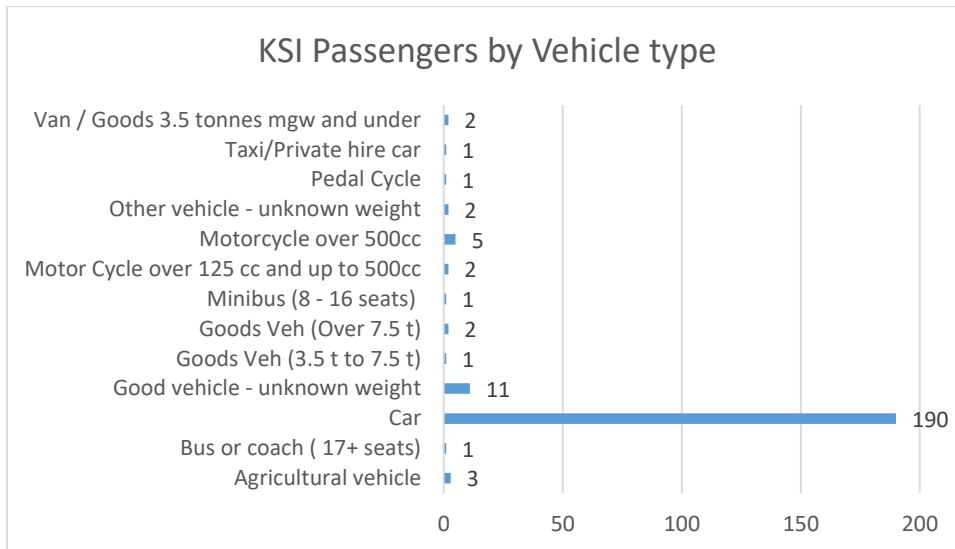


Chart 22 – number serious or fatal passenger casualties by vehicle type

When examining passenger casualties the chart shows that killed or seriously injured passenger casualties are apportioned as follows:

- Car Passengers 85.6%
- Passengers of goods vehicles/vans 7.2%
- Motorcycle Passengers 3.1%

### Pedestrians

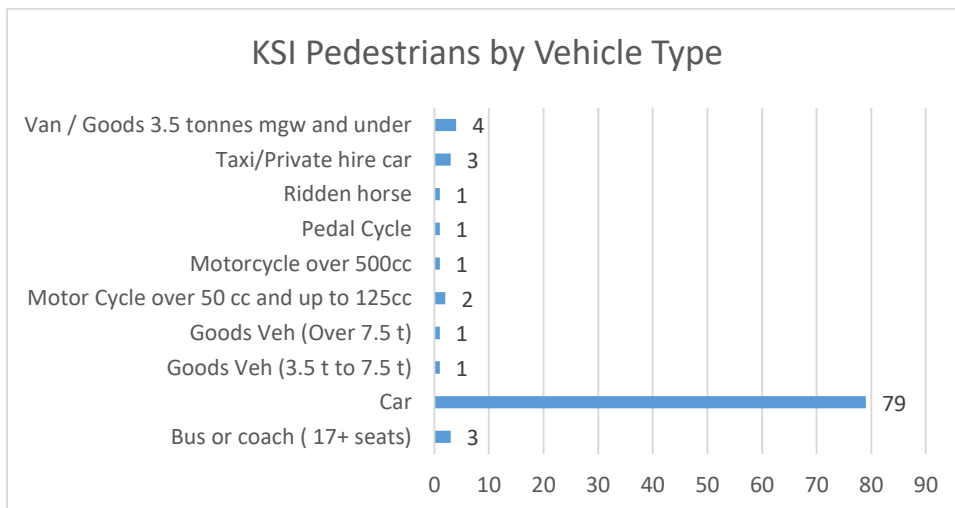


Chart 23 – number of pedestrians with serious or fatal injuries by causal vehicle type

When examining pedestrian casualties the chart shows that killed or seriously injured pedestrians casualties are primarily as a result of injuries caused by a car.

- Car 82.3%
- Vans or Goods Vehicle 6.25%
- Bus or coach, Taxi or Private Hire both 6.25%



The profile of fatal casualties by all road user type in Shropshire differs from the national results. The following table shows the comparison. National data is for 2016 only, Shropshire data is for 2016 to 2020 as data for 2019 alone would be too small for comparison.

	Shropshire 2016 - 2020	Great Britain 2019
Car	58.8%	42%
Pedestrian	11.7%	26.8%
Motorcycle	17.6%	19.1%
Cyclist	4.4%	5.7%

Table 3 – fatalities by road user type and locality

The data shows that Shropshire experiences a higher rate of fatalities in cars than that for Great Britain. The higher rate of car ownership in rural counties may be a factor in this. Conversely the lower rate of fatalities for pedestrians and pedal cyclists may be due to less urban environments where pedestrian and cycling collisions are more likely to occur.

## 10. Road Factors

The type of roads has an impact on the nature of collisions. National data, shown in table 4, illustrates that slight injuries are more likely to occur in built-up areas. The Highway Code defines a built-up area as a settled area in which the speed limit of a road is automatically 30 mph. However, a built-up area is not defined by the presence of houses, but by the presence of street lights.

Casualty figures for England show that there are higher rates of slight injuries and serious injuries in built-up areas as opposed to higher rates of fatalities in non built-up areas. In England motorways account for 21% of traffic but only 5% of casualties.

	Built up	Non built up	Motorway
Fatal	44%	51%	5%
Serious	66%	30%	3%
Slight	73%	22%	5%

Table 4 – national fatality rates by built-up of road. Source: DFT Reported road casualties in Great Britain 2016

### Composition of roads in Shropshire

Built-up and non built-up roads are derived from the urban and rural classification of roads. The figures in table 7 illustrate the high percentage of rural roads within the county. Within Shropshire there are:

12.4 km of motorway

32.2 km of urban A roads and 527.7 km of rural A roads

25.4 km of urban B roads and 535.5 km of rural B roads

336.2 km of urban C and U roads and 3716.4 km of rural C and U roads

	Shropshire	England
Motorway	0.24%	1.01%
Urban Roads	7.59%	40.66%
Rural Roads	92.17%	58.33%

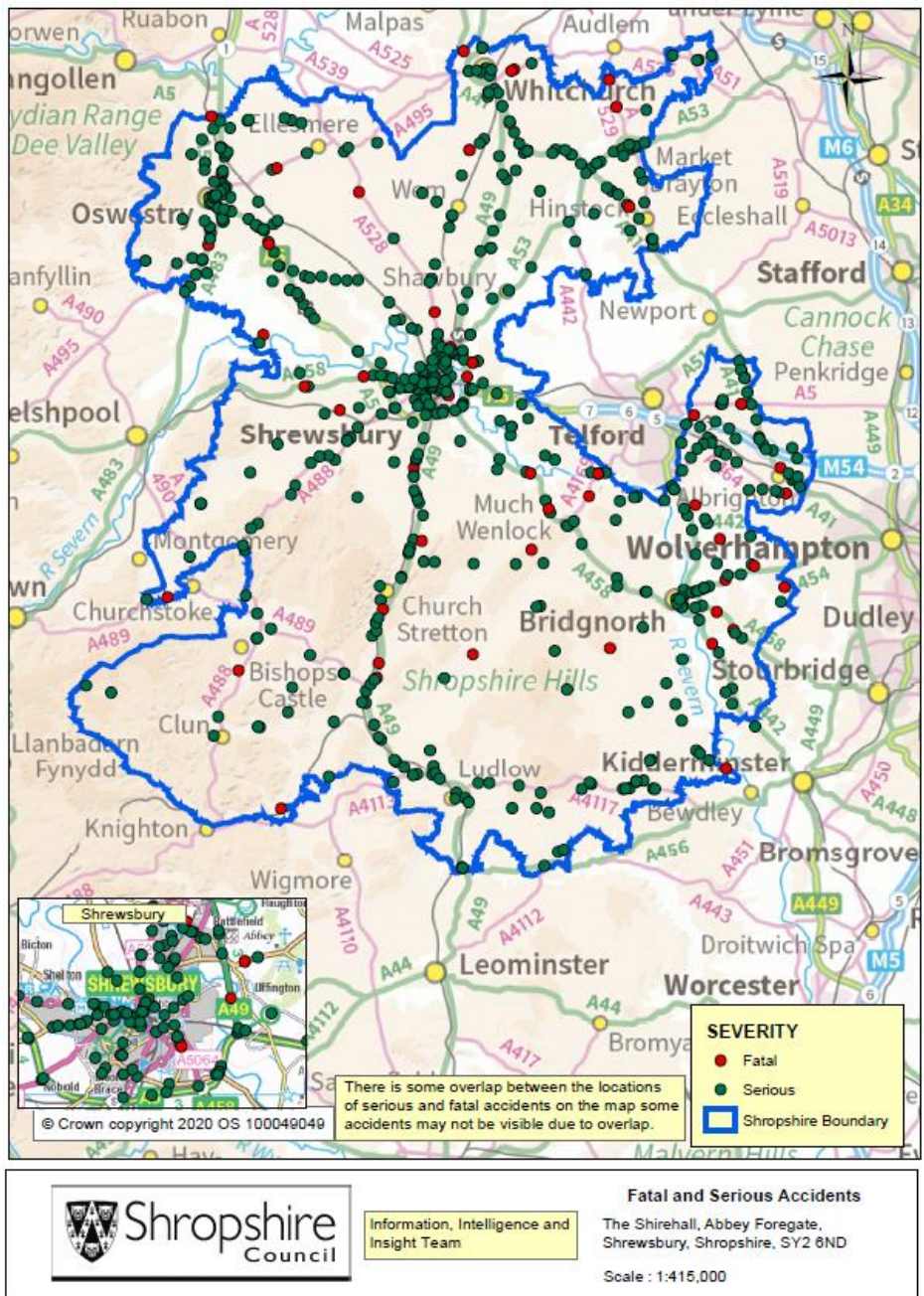
Table 6 – road type ratios - Source: DFT Total road length (kilometres) by road type and local authority in Great Britain, 2014

Shropshire is home to a large rural, non built-up, highway network. Many of these roads have speed limits above 30mph, which are single carriageway and have limited overtaking opportunities. This high percentage of rural, non built-up roads coupled with national data highlighting that fatality rates are higher in non built-up areas presents Shropshire with

specific challenges to reduce collision and casualty rates. Details of collisions by road type and speed are shown in table 8.

### 11. Location of collisions

Records of collisions show the road number where an incident occurred. As is to be expected the roads with the greatest length and those which carry higher volumes of traffic will have a higher number of collisions. Collision data is monitored by Shropshire Council and there is regularly liaison with both the Safer Roads Partnership and West Mercia Police where information is shared and acted upon where appropriate. The following map highlights the location of KSI collisions.

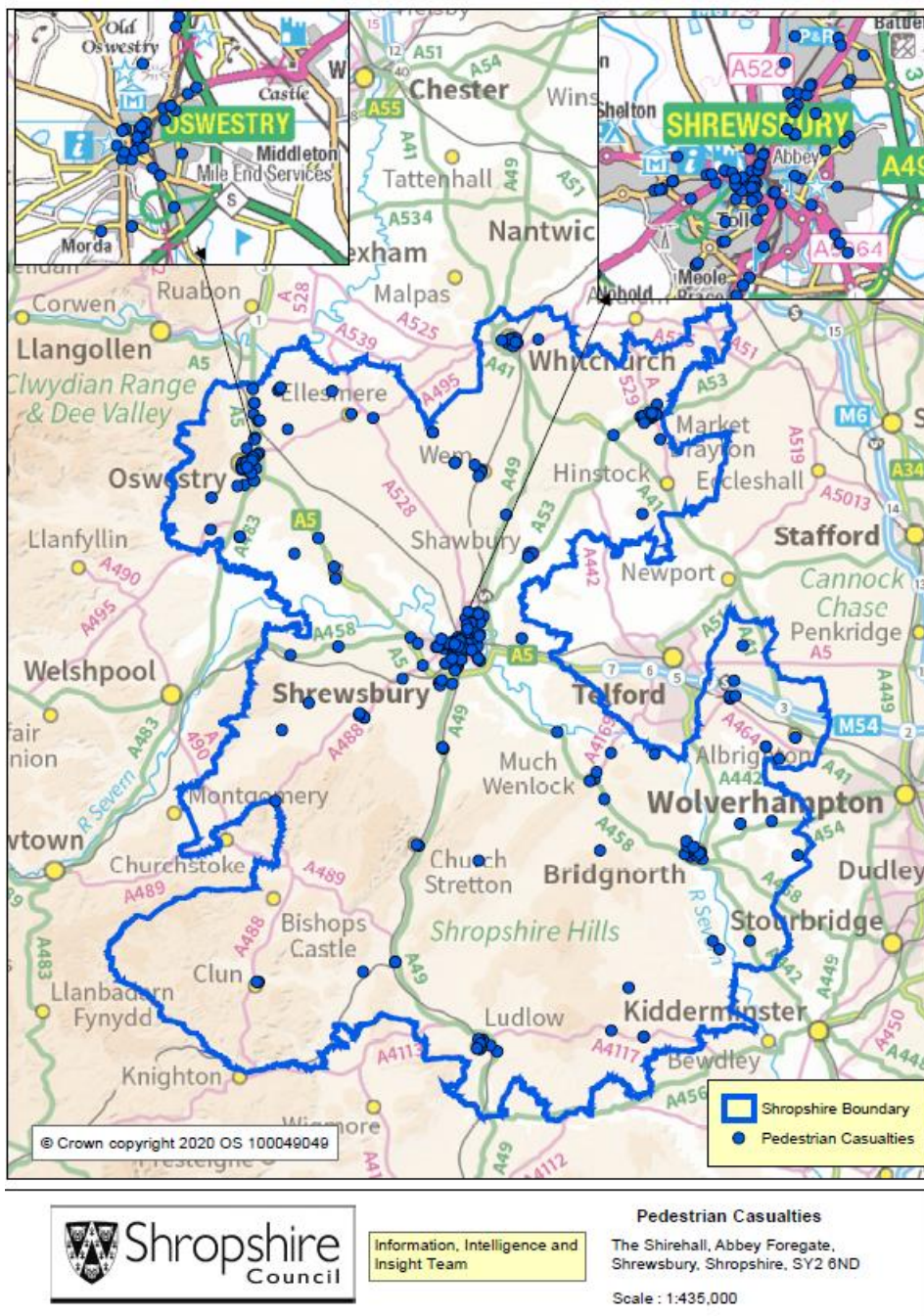


Map 1 – location map of serious and fatal collisions

Collisions with a severity of fatal and serious injuries are predominantly located along the key network routes.



The following map highlights the location of pedestrian collisions



Map 2 – location map of pedestrian casualties

Collisions involving pedestrians are predominantly centred in key market towns of the county.

## 12. Road Speeds

The following charts shows the number and rate of collisions by the speed limit of the primary roads where collisions have occurred.

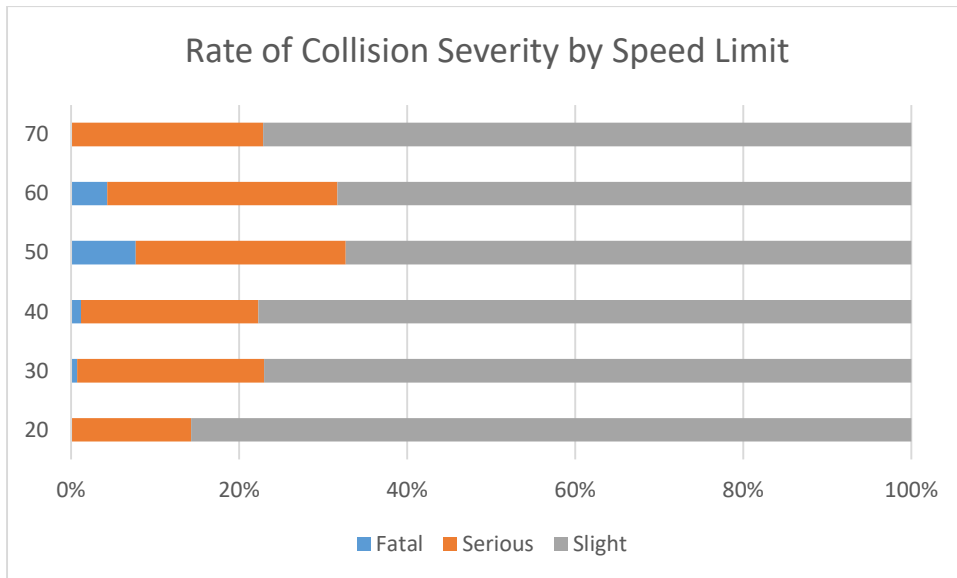


Chart 24 – ratio of collisions by speed limit with severity of most seriously injured casualty

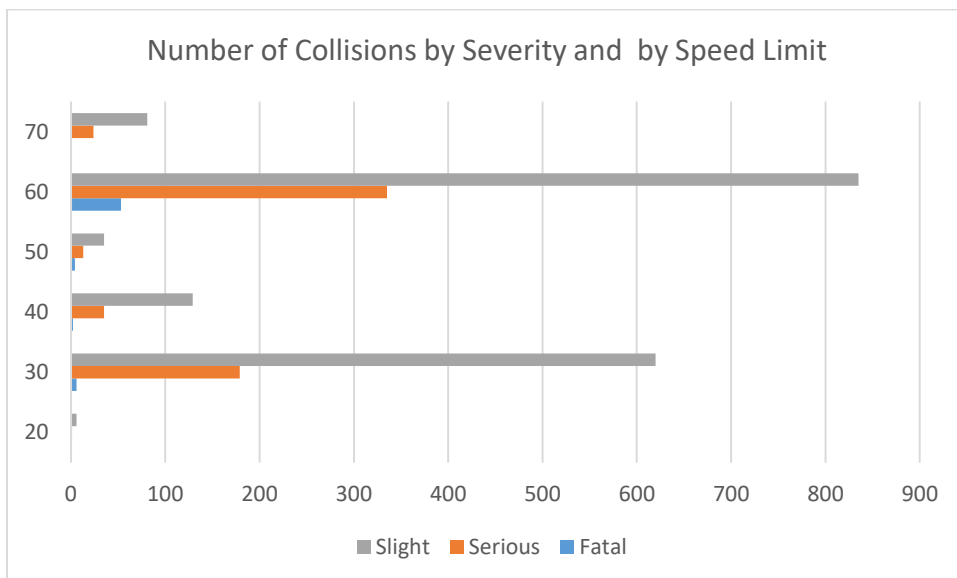


Chart 25 – number of collisions by speed limit with severity of most seriously injured casualty

Most collisions occur on 60mph roads with the severity of collisions increasing also increasing. Whilst 50mph collision numbers are relatively low the rate of fatalities is the highest of the speed limits. When further examining the data by road types it shows that 60mph single carriageways incur the most collisions.

This is illustrated in the table on the next page.

The table illustrates that 49.6% of collisions occur on single carriageways with a 60mph speed limit.

Road Type	20	30	40	50	60	70	Grand Total
<b>Dual Carriageway</b>			<b>4</b>	<b>6</b>	<b>2</b>	<b>13</b>	<b>92</b>
Serious				1	1	1	23
Slight			4	5	1	12	69
<b>One Way Street</b>	<b>2</b>	<b>28</b>	<b>1</b>				<b>31</b>
Serious			12				12
Slight	2	16	1				19
<b>Roundabout</b>	<b>1</b>	<b>46</b>	<b>8</b>	<b>3</b>	<b>39</b>	<b>11</b>	<b>108</b>
Fatal		1					1
Serious		11			1	7	1
Slight	1	34	8	2	32	10	87
<b>Single Carriageway</b>	<b>4</b>	<b>725</b>	<b>151</b>	<b>47</b>	<b>1169</b>		<b>2096</b>
Fatal		5	2	4	53		64
Serious	1	156	34	11	327		529
Slight	3	564	115	32	789		1503
<b>Slip Road</b>		<b>1</b>			<b>2</b>	<b>2</b>	<b>5</b>
Slight		1				2	2
<b>Unknown</b>		<b>1</b>					<b>1</b>
Slight		1					1

Table 6 – number of collisions by road type and severity of most seriously injured casualty

81.5% of fatalities occur on 60mph single carriageway roads.

Whilst 60mph single carriageways account for a high proportion of collisions these are not all A roads. Shropshire has an above average amount of unclassified roads which account for 26% of collisions.

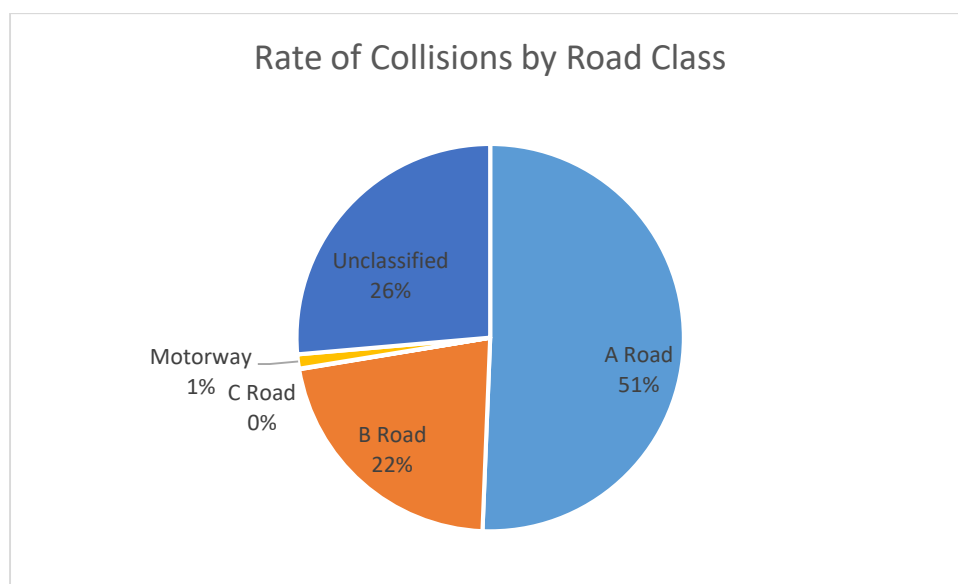


Chart 26 – number of vehicles involved in a collision by vehicle group

The following table shows the severity of collisions by speed and road class.

Road Class	20	30	40	50	60	70
<b>A Road</b>	<b>3</b>	<b>253</b>	<b>117</b>	<b>47</b>	<b>696</b>	<b>78</b>
Fatal		2	1	3	36	
Serious	1	56	24	12	197	21
Slight	2	195	92	32	463	57
<b>B Road</b>	<b>2</b>	<b>175</b>	<b>36</b>	<b>4</b>	<b>296</b>	<b>0</b>
Fatal		1	1	1	13	
Serious		47	10	1	83	
Slight	2	127	25	2	200	
<b>C Road</b>					<b>1</b>	
Serious					1	
<b>Motorway</b>		<b>1</b>				<b>27</b>
Serious						3
Slight		1				24
<b>Unclassified</b>	<b>2</b>	<b>376</b>	<b>13</b>	<b>1</b>	<b>230</b>	<b>0</b>
Fatal		3			4	
Serious		76	1		54	

Table 7 – number of collisions by road class and severity of most seriously injured casualty

### 13. Collision Factors

Each collision record shows the potential causal factors of the collision. There may be multiple factors leading to a collision and therefore up to four causal factors may be recorded. Factors are recorded as highly likely or possible causes of the collision, but other factors may also have been a contributory reason.

The following chart shows the sum of high-level causal factors

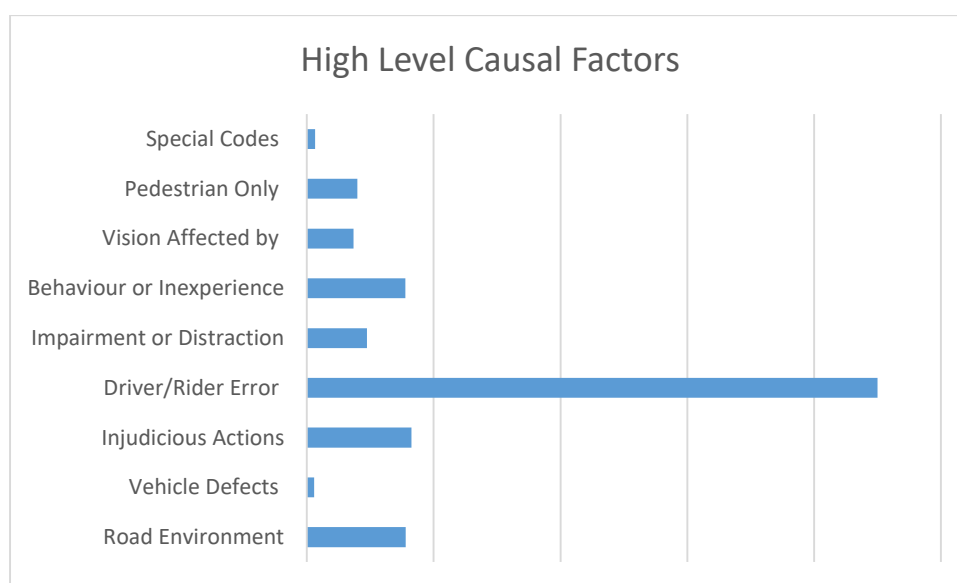


Chart 27 – sum of recorded causal factors

Driver or rider error is the most likely cause of a collision followed by Injudicious Actions, this is the same pattern as national results. The following table provides additional details of the causal factors and illustrates the range and complexities of causes.

<b>Road Conditions</b>	Slippery road (due to weather)	Deposit on road (e.g. oil, mud, chippings)	Poor or defective road surface	Sunken, raised or slippery inspection cover	Road layout (e.g. bend, hill, narrow carriageway)	Temporary road layout (e.g. contraflow)	Animal or object in carriageway	Inadequate or masked signs or road markings	Defective traffic signals	Traffic calming (e.g. speed cushions, road humps, chicanes)
	3.57%	0.8%	0.32%	0.00%	3.38%	0.13%	0.61%	0.19%	0.00%	0.05%
<b>Vehicle Defects</b>	Tyres illegal, defective or under-inflated	Defective lights or indicators	Defective brakes	Defective steering or suspension	Defective or missing mirrors	Overloaded or poorly loaded vehicle or trailer				
	0.13%	0.05%	0.16%	0.06%	0.00%	0.26%				
<b>Injudicious Actions</b>	Following too close	Exceeding speed limit	Disobeyed Give Way or Stop sign or markings	Disobeyed automatic traffic signal	Travelling too fast for conditions	Cyclist entering road from pavement	Illegal turn or direction of travel	Disobeyed pedestrian crossing facility	Vehicle travelling along pavement	Disobeyed double white lines
	2.72%	2.16%	0.75%	0.22%	3.49%	0.26%	0.24%	0.22%	0.13%	0.27%
<b>Driver/Rider Error</b>	Failed to look properly	Failed to judge other person's path or speed	Poor turn or manoeuvre	Sudden braking	Swerved	Junction overshoot	Junction restart (moving off at junction)	Failed to signal or misleading signal	Too close to cyclist, horse or pedestrian	Loss of control
	17.42%	11.78%	7.74%	2.42%	1.68%	0.38%	0.40%	0.59%	1.09%	7.88%
<b>Impairment or Distraction</b>	Impaired by alcohol	Impaired by drugs (illicit or medicinal)	Driver using mobile phone	Fatigue	Distraction in vehicle	Distraction outside vehicle	Illness or disability, mental or physical	Uncorrected, defective eyesight	Rider wearing dark clothing	Not displaying lights at night or in poor visibility
	2.07%	0.58%	0.21%	0.79%	1.35%	0.56%	1.17%	0.10%	0.14%	0.14%
<b>Behaviour or Inexperience</b>	Careless, reckless or in a hurry	Learner or inexperienced driver/rider	Aggressive driving	Nervous, uncertain or panic	Unfamiliar with model of vehicle	Inexperience of driving on the left	Driving too slow for conditions or slow vehicle (e.g. tractor)			
	5.74%	2.00%	1.15%	0.77%	0.27%	0.14%	0.02%			
<b>Vision Affected by</b>	Stationary or parked vehicle(s)	Road layout (e.g. bend, winding road, hill crest)	Dazzling sun	Rain, sleet, snow or fog	Spray from other vehicles	Dazzling headlights	Vehicle blind spot	Vegetation	Buildings, road signs, street furniture	Visor or windscreen dirty, scratched or frosted etc.
	0.50%	1.43%	1.30%	0.75%	0.05%	0.19%	0.27%	0.27%	0.11%	0.11%
<b>Pedestrian Only</b>	Failed to look properly	Careless, reckless or in a hurry	Failed to judge vehicle's path or speed	Crossing road masked by stationary or parked vehicle	Impaired by alcohol	Impaired by drugs (illicit or medicinal)	Dangerous action in carriageway (e.g. playing)	Wrong use of pedestrian crossing facility	Pedestrian wearing dark clothing at night	Disability or illness, mental or physical
	2.05%	0.61%	0.54%	0.42%	0.50%	0.08%	0.22%	0.24%	0.24%	0.22%
<b>Special Codes</b>	Stolen vehicle	Vehicle in course of crime	Emergency vehicle on a call	Vehicle door opened or closed negligently	Other					
	0.16%	0.18%	0.10%	0.06%	0.62%					

Table 8 – recorded causal factors, % of total contributing factors

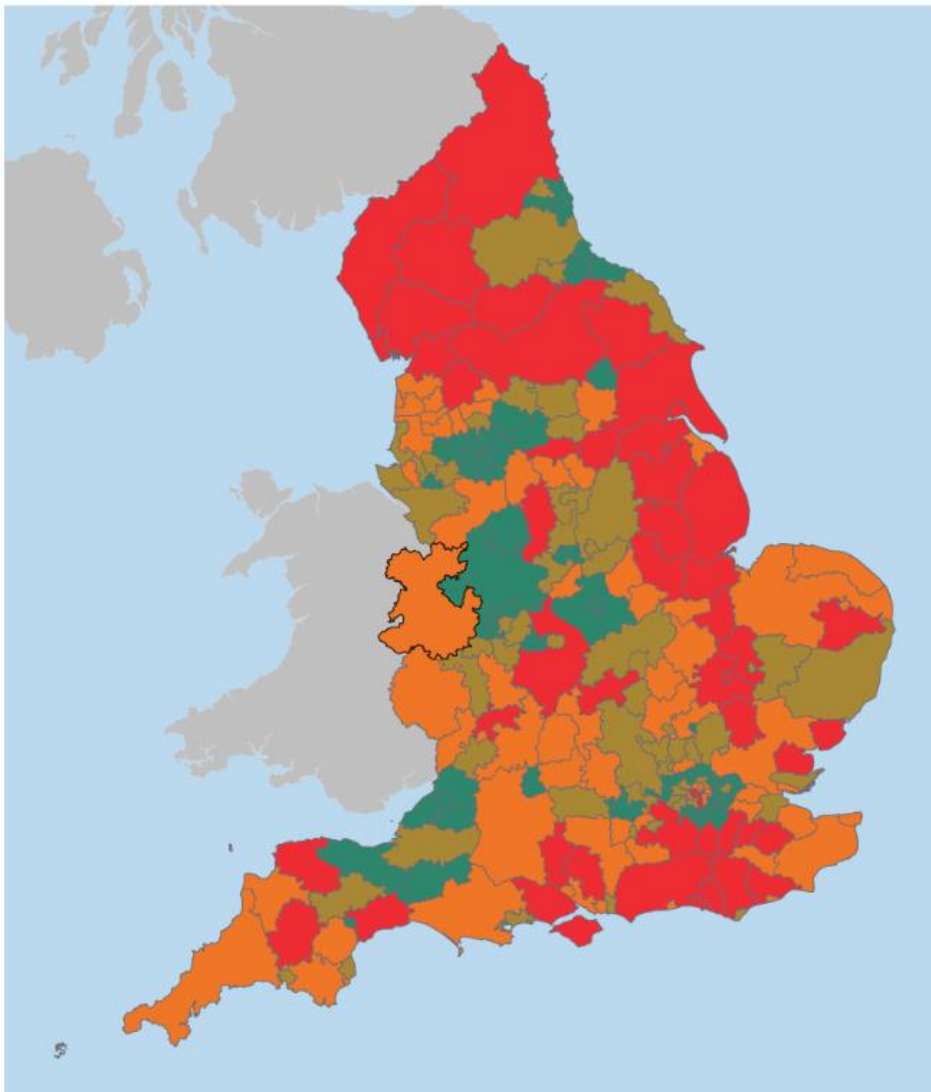
The data in table 8, previous page, illustrates the total number of references to the causal factor regardless of which causal factor it is numbered as or if it is a highly likely or possible factor. Of the 2,358 collisions there were 6241 contributing factors. Driver errors, actions, behaviour and experiences are key often key causal factors within collisions. Where road conditions are cited as a causal effect the main reasons relate to weather conditions and the nature of our rural roads, which often have blind bends, narrowing points and dips which reduce visibility.

## 14. Benchmarking

Whilst this report focuses on collisions and KSI rates in Shropshire it is also worth comparing rates with other authorities. The following map shows the rate of KSI per 100,000 people.

**Killed and seriously injured (KSI) casualties on England's roads per 100,000 population (2016-18) for All English authorities**

Quartiles within All English authorities



Powered by LG Inform

Map 3 – quartile rankings of killed and seriously injured collisions in England by local authorities



KSI Rates in Shropshire are higher than the national average but similar to those in other rural areas. Table 5 highlights that non built up areas experience a higher proportion of fatalities than Urban (built-up) areas. Whereas more urban areas experience higher rates of slight injuries.

## **Summary Points**

- **Annual collision numbers in Shropshire have reduced since the last report in 2017,**
- **Changes to the reporting methodology in 2016 resulted in an increased rate of KSI . After the initial 3 year rolling period expired the rate has started to reduce,**
- **2020 collision numbers are likely to be lower due to lockdown situations; this may distort reporting over the next 3 years,**
- **Collisions are most frequent at key commuting times,**
- **Young drivers are most likely to experience collisions,**
- **Fatality rates increase between 10pm and 4am and at weekends,**
- **Collisions involving older people (65+) increase the risk of KSI,**
- **Motorcyclists and pedal cyclists are at greater risk of collisions and fatalities compared to volumes of traffic,**
- **64% of motorcycle casualties are on machines 500cc and above,**
- **Higher percentage of roads in Shropshire are in non-urban areas which is likely to increase the severity of a collision,**
- **A high percentage of KSI collisions occur on single carriageway roads with a 60mph speed limit,**
- **Key causal factors are linked to driver/rider errors or behaviour,**
- **Where road conditions are cited as a causal factor the main causes are related to weather conditions and the nature of roads with bends, hills or narrow carriageways, which are more likely in rural areas.**

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