

# Collision Data Analysis & Review 2022

Traffic Management & Road Safety



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## Executive Summary

Includes only statistically significant findings for 2022 when compared with the previous 5 years:

- Total and Slight collisions show an increase of 15% and 20% respectively against their 5-year average figures.
- Total and Slight casualties show an increase of 13% and 16% respectively against their 5-year average figures.
- Swindon's Total casualties per billion vehicle kilometres, shows an increase of 15% against its respective 5-year average.
- Analysis of vehicle types shows that:
  - Total casualties for cars sees an increase of 13% against its 5-year average;
  - HGV's > 3.5t have zero Total casualties, resulting in a decrease against its 5-year average.
- Total casualties for car occupants show an increase of 15% against its 5-year average.
- For all road user categories, KSI casualties shows a pronounced decrease for the 50-64 age group of 72% against its 5-year average and 81% against 2021.
- Despite the fall in the number of KSI casualties for the 50-64 age group across all road user casualties, this age group also shows an increase in Total casualties of 23% against its 5-year average.
- For all road user categories:
  - male KSI casualties show a decrease of 67% for the 0-15 age group, and a pronounced decrease for the 50-64 age group of 67%;
  - female Total casualties show increases for the 16-24 and 50-64 age group with 54% and 52% respectively;
  - male Total casualties in the 16-24 age group show a decrease of 25% against its 5-year average;
  - male Total casualties in the 25-39 age group show an increase of 23% against its 5-year average.
- Total casualties for car drivers show an increase for the 40-49 age group of 49% against its 5-year average.
- Total casualties for female car drivers show an increase for the 16-24, 40-49, 50-64 and 75+ age groups of 72%, 54%, 71% and 233% against their respective 5-year averages and a consequent increase of 40% when taking all of these age groups together.
- The 50-64 age group of motorcycle riders show a decrease in KSI casualties to zero.
- For the 25-39 age group of motorcycle riders, there is an increase in Total casualties of 57% on their 5-year average.
- For female cycle riders in the 0-15 age group, with 1 Seriously and 4 Slightly Injured there is an increase of 400% on its 5-year average of 1 and a 67% increase on 2021 when there were

3. This contributed in large part to a statistically significant increase in the total of all of the ages of female pedal cyclists of 78%.

- For KSI male pedestrians in the 50-64 age group, with 1 Serious injury in 2022, there is a decrease in KSIs of 62% on its 5-year average and 80% on 2021 when there were 5. With zero Seriously Injured females in this age group, this results in a decrease of 69% over both genders.
- For the 16-24 age group, Total male pedestrian casualties show a decrease of 80% when compared to its respective 5-year average and 75% when compared to 2021.

## 1. Introduction

Collision data for the calendar years of 2017 – 2022 has been reviewed in order to provide an understanding of the underlying patterns and trends of the collisions and casualties for the road network in the Swindon Borough Council area.

Data is provided by Wiltshire Police via the STATS19 system and covers collisions resulting in:

- **Death** – which occurred within 30 days of the collision.
- **Serious injury** - an injury for which a person is detained in hospital as an “in-patient”, or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushings, burns (excluding friction burns), severe cuts, severe general shock requiring medical treatment.
- **Slight injury** - an injury of a minor nature such as a sprain (including neck whiplash injury), bruise or cut which are not judged to be severe, or slight shock requiring roadside attention. Includes injuries not requiring medical treatment.

### 1.1. Covid-19 Pandemic

The travel restrictions imposed as a result of the Covid-19 pandemic had a significant impact on traffic patterns across the country and this led to a change in the number of road traffic collisions and casualties reported in 2020. However, 2020 will be included in any 5-year average calculations throughout this report **and therefore, any statistical significance test findings must be read with this in mind.**

## 2. Swindon Overview

- Swindon figures do not include roads managed by National Highways, i.e. M4, A419.

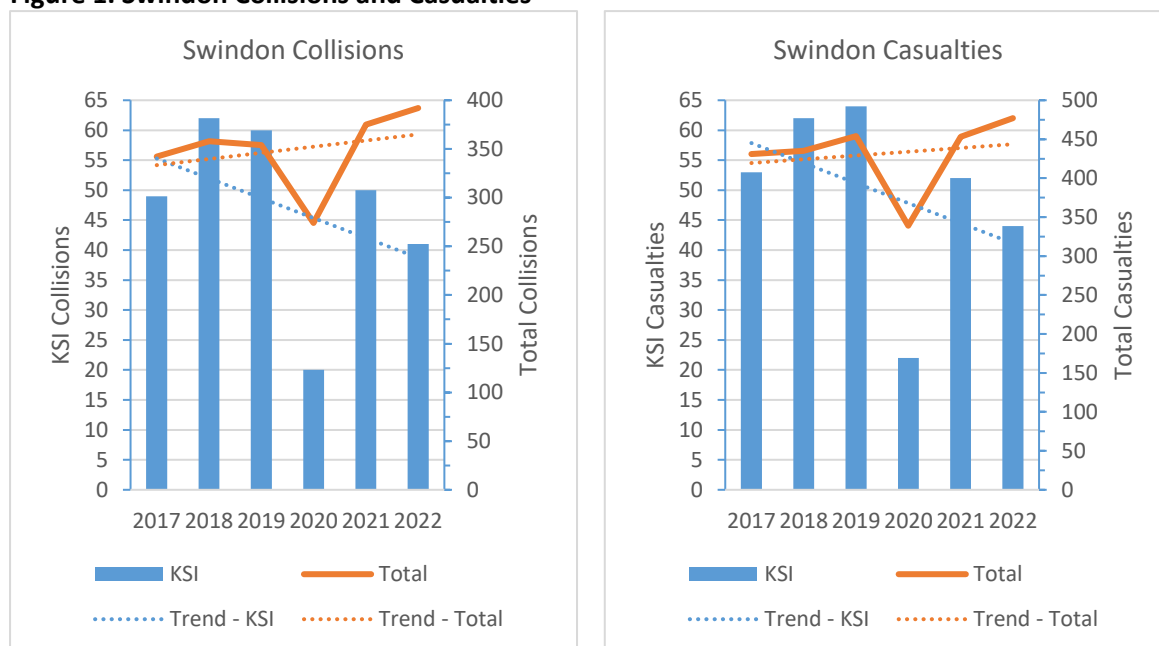
- KSI collisions and casualties both show a decrease on 2021 and their 5-year average figures.
- 2022 has the second lowest number of KSI collisions and casualties, 2020 being the lowest in both instances.
- 2022 also has the second lowest proportion of KSI casualties to Total casualties across the period with 9%, a decrease on both the 5-year average of 12% and 2021 with 11%.
- KSI collisions and casualties show a consequent downward trend.
- KSI collisions and casualties are also down by 31% when compared to 2019, the most recent equivalent pre-pandemic year, whilst the national comparison for Great Britain, sees a decrease of 3% for KSI casualties when compared to 2019.
- Swindon's upward trend for Total collisions and casualties can be attributed to the increase in its numbers of Slight collisions and casualties and these increases are statistically significant.
- For 2022, the figures for Slight and Total collisions and casualties, are the highest across the period and consequently, when Total casualties are compared to 2019, these go against the national trend for Great Britain, which showed a decrease of 12% against this comparator.

**Table 1 - Swindon Collision trends**

|         | 2017 | 2018 | 2019 | 2020 | 2021 | 2022       | +/- 2022 v.<br>5yr avg | +/- 2022 v.<br>2021 |
|---------|------|------|------|------|------|------------|------------------------|---------------------|
| Fatal   | 5    | 7    | 1    | 1    | 4    | <b>3</b>   | -16.67%                | -25.00%             |
| Serious | 44   | 55   | 59   | 19   | 46   | <b>38</b>  | -14.80%                | -17.39%             |
| Slight  | 293  | 296  | 294  | 254  | 325  | <b>351</b> | 20.04%                 | 8.00%               |
| Total   | 342  | 358  | 354  | 274  | 375  | <b>392</b> | 15.09%                 | 4.53%               |
| KSI     | 49   | 62   | 60   | 20   | 50   | <b>41</b>  | -14.94%                | -18.00%             |

**Table 2 - Swindon Casualty trends**

|         | 2017 | 2018 | 2019 | 2020 | 2021 | 2022       | +/- 2022 v.<br>5yr avg | +/- 2022 v.<br>2021 |
|---------|------|------|------|------|------|------------|------------------------|---------------------|
| Fatal   | 6    | 7    | 1    | 1    | 4    | <b>4</b>   | 5.26%                  | 0.00%               |
| Serious | 47   | 55   | 63   | 21   | 48   | <b>40</b>  | -14.53%                | -16.67%             |
| Slight  | 378  | 373  | 390  | 317  | 401  | <b>433</b> | 16.46%                 | 7.98%               |
| Total   | 431  | 435  | 454  | 339  | 453  | <b>477</b> | 12.93%                 | 5.30%               |
| KSI     | 53   | 62   | 64   | 22   | 52   | <b>44</b>  | -13.04%                | -15.38%             |

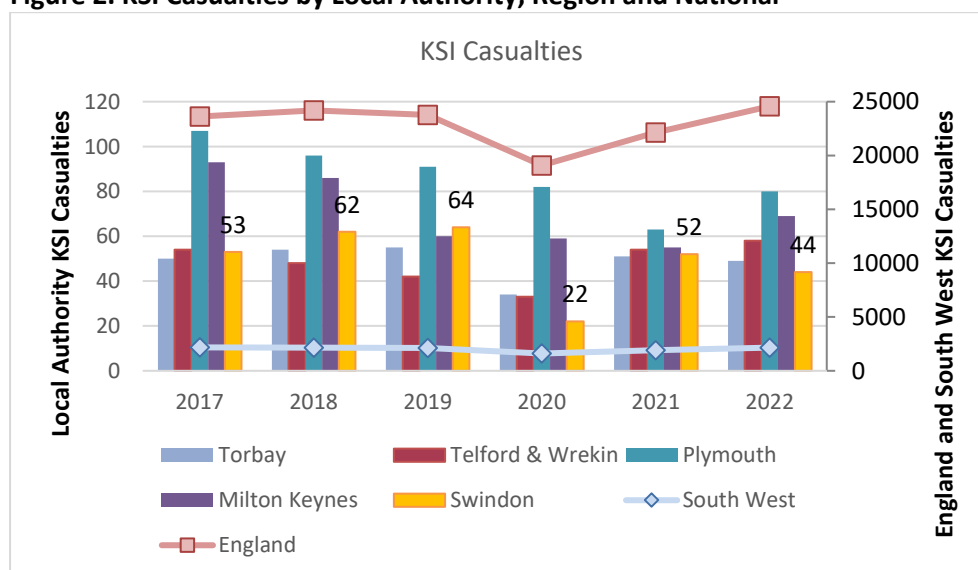
**Figure 1. Swindon Collisions and Casualties**

## 2.1. Regional and National Comparisons

- Figures for other Local Authorities do include roads managed by National Highways, where applicable.

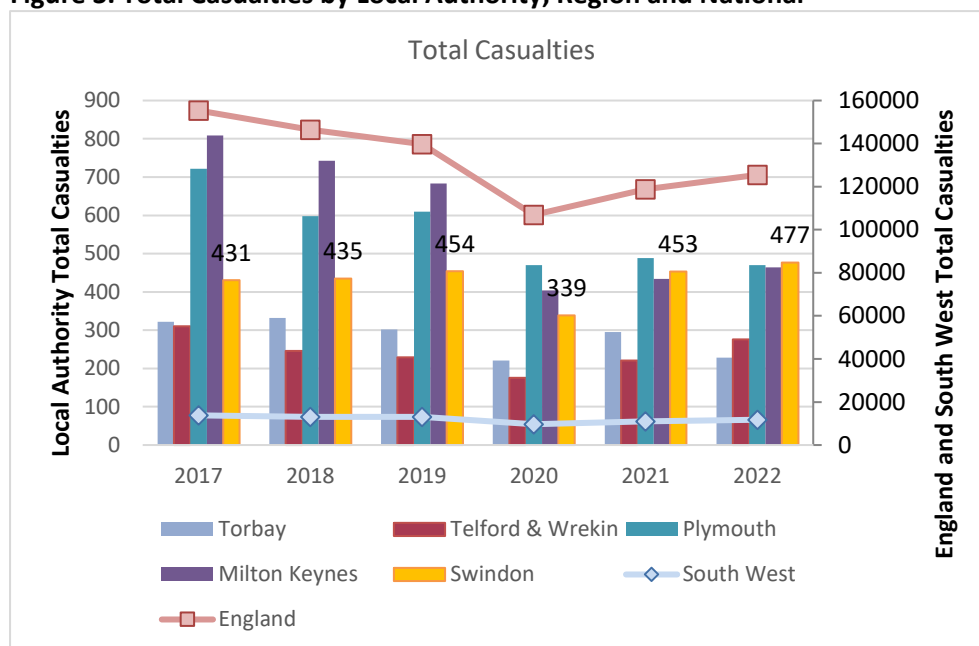
### For KSI casualties:

- The downward trend for Swindon KSIs is a trend repeated for all of the comparators apart from Telford & Wrekin.
- For Telford & Wrekin, the increase on its 5-year average is the highest of all of the comparators at 26%, and this increase is statistically significant.
- Despite the overall downward trend for the South West region and England, they both show increases on their 5-year averages and these are statistically significant.
- For 2022, as with 2021, Swindon has the lowest percentage of KSI casualties to Total casualties against all of the comparator locations.

**Figure 2. KSI Casualties by Local Authority, Region and National**

Note: Killed or Seriously Injured is abbreviated to KSI throughout the document and equates to 'Fatal' + 'Serious'

Figure / pictogram are shown as red / green when change +/- is statistically significant when compared with 5-year average

**Figure 3. Total Casualties by Local Authority, Region and National****For Total casualties:**

- In contrast to the findings above for KSI casualties, Swindon is the only location to show an upward trend for Total casualties, accounted for by its statistically significant increase in its number of Slight casualties as noted in the Swindon Overview above.
- Swindon and Telford & Wrekin show statistically significant increases in comparison with their respective 5-year averages.
- All other comparator locations, including the South West region and England, show statistically significant decreases in comparison with their respective 5-year averages.

**2.2. Crash Density and Casualty Rate**

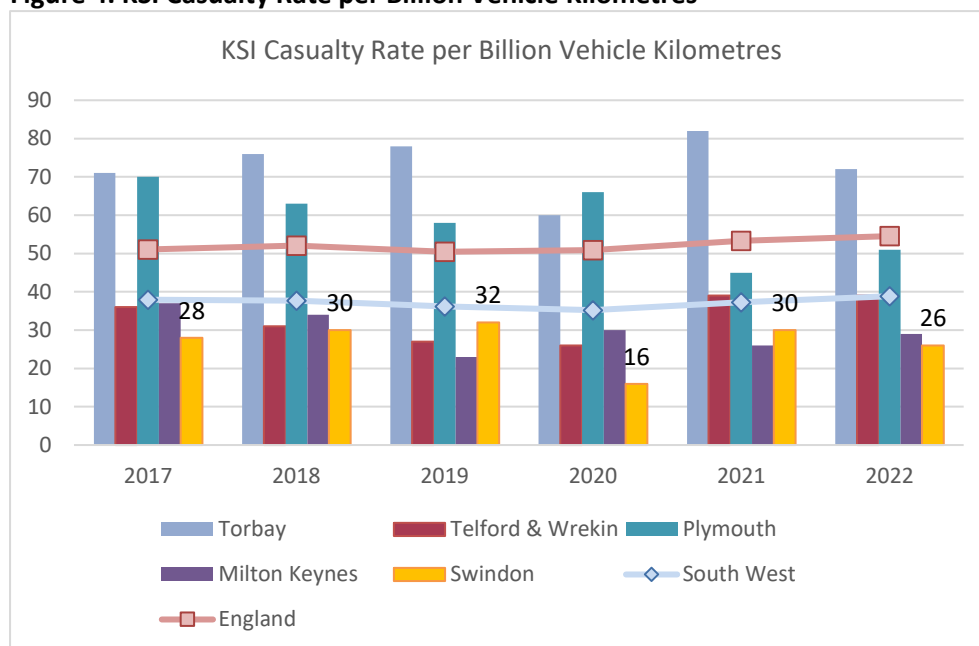
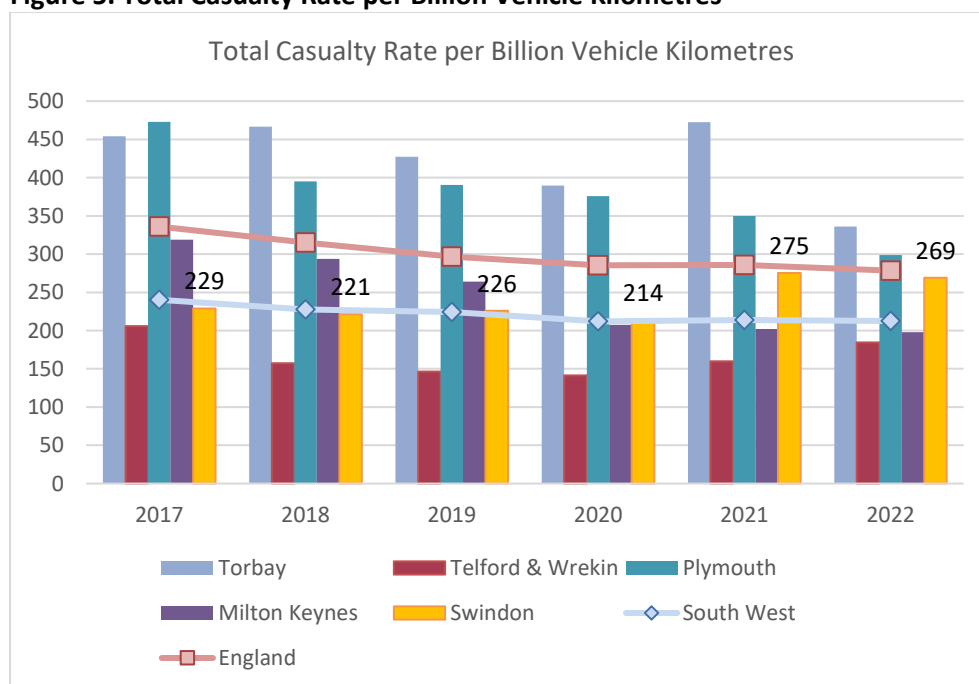
Crash Density is a measure of the collective risk to road users on the highway network based on the number of collisions (Total or KSI) per kilometre.

The Casualty Rate is a similar figure, but takes traffic flows into account, to produce information on the number of KSI casualties per billion vehicle kilometres. This is a more accurate assessment as the inclusion of traffic flows reflects the individual risk to road users using the network and is a key indicator of how the Council is accommodating growth without seeing an exponential rise in collisions and casualty numbers. However, as this data is provided by the DfT, it should be noted that collisions on the trunk road network are also included in these figures.

**For KSI casualties:**

- With a five-year average KSI Casualty Rate of 27 KSI Casualties per billion vehicle kilometres, Swindon has the lowest 5-year average rate against all comparators, and the lowest of all comparators for 2022, and consequently, the overall trend for Swindon is down.
- All other comparators have higher figures for 2022 than Swindon, although Milton Keynes and Plymouth are also showing decreases in their longer-term trends. All other comparators show an upward trajectory for their longer-term trends.



**Figure 4. KSI Casualty Rate per Billion Vehicle Kilometres****Figure 5. Total Casualty Rate per Billion Vehicle Kilometres****For Total casualties:**

- In contrast to the findings above for the KSI Casualty Rate, Swindon is the only location to show an upward trend for its Total casualties per billion vehicle kilometres.
- Swindon and Telford & Wrekin show statistically significant increases in comparison with their respective 5-year averages.
- All other Local Authority comparator locations show statistically significant decreases in comparison with their respective 5-year averages.

## 2.3. Economic Cost of Casualties in Swindon

### Overall cost of casualties and collisions

- Every year the Department for Transport (DfT) release the average cost per reported casualty and per reported collision on Britain's roads. The approach used encompasses all aspects of the valuation including human, economic and medical costs. Added to this, other factors, such as damage to property and insurance administration, are also taken into account.
- The figures used are the average for all severity classifications across the whole of Great Britain.
- For 2022, the DfT has calculated that the average cost per casualty is £92,168, whilst per collision is £124,272. This is an increase of approximately 10% on the DfT's corresponding 2021 figures.
- Based on these latest figures, the cost of all casualties in Swindon in 2022 is just under £44million and for collisions is just over £48.7million.
- This is an increase on the costs reported in 2021 and is in line with the increase in the average costs provided by the DfT, as noted above, coupled with the increase in Swindon's Slight and Total casualty and collision figures.

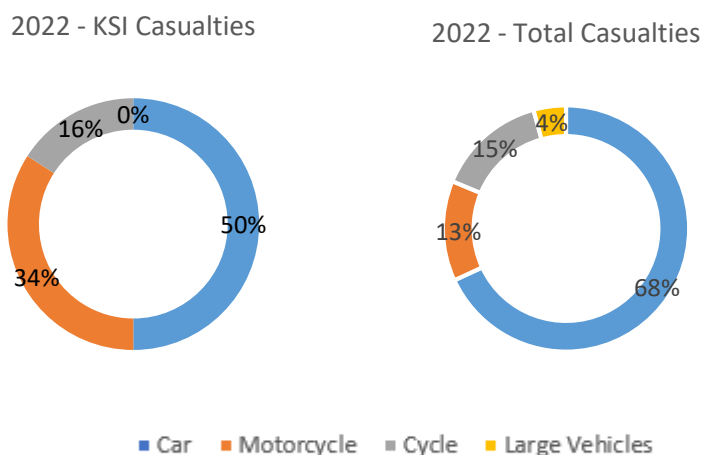
### Cost of collisions by road type

- A more detailed breakdown is also undertaken by the DfT, where collision severity is costed against the road type. This factor is determined by the speed limit of the road, i.e. any local road with a speed limit of 40mph or less, is classified as a 'Built-up' road, whilst any with a speed limit greater than 40mph, is classified as a 'Non Built-up' road.
- The figures used are the average for all injury collisions across the whole of Great Britain.
- For 2022, the DfT has calculated the average cost of an injury collision on a 'Built-up' road to be £101,489 and on a 'Non Built-up' road to be £212,748.
- Due to their speed limits, the majority of Swindon's highway network falls into the 'Built-up' road classification and based on these figures, collisions on Swindon's 'Built-up' network have an economic cost of just over £37.2 million, whilst the corresponding figure for the 'Non Built-up' network is £5.3million.

## 3. Vehicle Type and Road User - overview

### 3.1. Vehicle Type

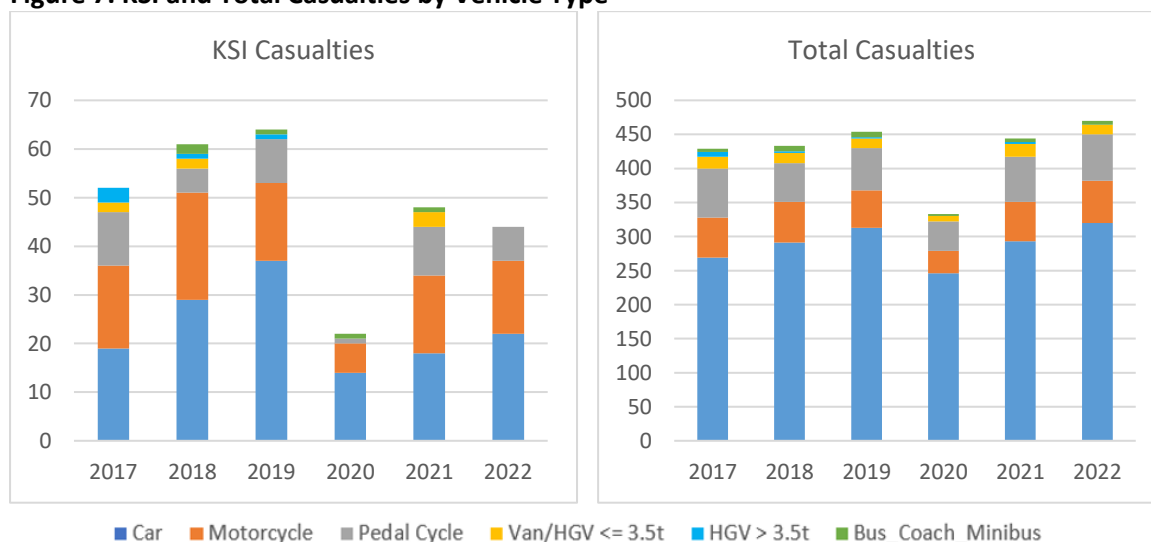
- For 2022, motorcycles and pedal cycles both have a smaller proportion of all Total and KSI casualties than cars, however;
  - KSI motorcycle casualties recorded as a proportion of their Total casualties is 24%;
  - and for pedal cycles their proportion of KSI to Total is 10%;
  - whilst for car casualties this is 7%.

**Figure 6. 2022 – KSI & Total Casualties for Vehicle Types****For KSI casualties:**

- The trend is broadly down for KSI casualties for all vehicle types across the period.
- Car is the only vehicle type where 2022 is up when compared with 2021.
- Large vehicles, i.e. Van/HGV <= 3.5t, HGV > 3.5t and Bus / Coach / Minibus, all have zero KSI casualties in 2022 and this has resulted in 100% reduction when compared with their respective 5-year averages.

**Table 3 - KSI Casualties by Vehicle Type**

|            | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|------------|------|-------------------|---------------------|------|------------------|
| Car        | 22   | 23.4              | -5.98%              | 18   | 22.22%           |
| Motorcycle | 15   | 15.4              | -2.60%              | 16   | -6.25%           |
| Cycle      | 7    | 7.2               | -2.78%              | 10   | -30.00%          |

**Figure 7. KSI and Total Casualties by Vehicle Type****For Total casualties:**

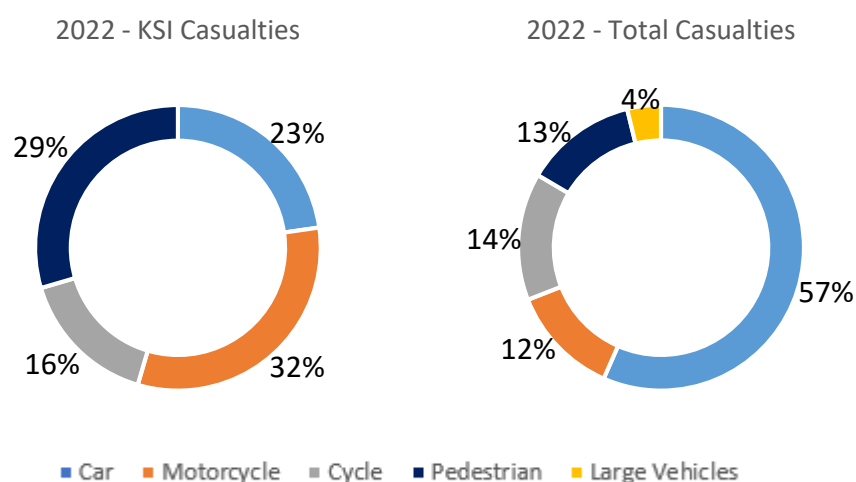
- The trend is up for cars but largely flat for all other vehicle types across the period.
- For cars, 2022 has the highest Total casualty figure across the period for this vehicle type and an increase of 13% on its 5-year average. This is statistically significant and is also an increase when compared with 2021.
- Motorcycles in 2022 have their highest Total casualty figure across the period.
- HGV > 3.5t have zero Total casualties, down from 3 in 2021 and this is statistically significant.

**Table 4 – Total Casualties by Vehicle Type**

|                       | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|-----------------------|------|-------------------|---------------------|------|------------------|
| Car                   | 320  | 282.4             | 13.31%              | 293  | 9.22%            |
| Motorcycle            | 62   | 53.0              | 16.98%              | 58   | 6.90%            |
| Cycle                 | 68   | 60.0              | 13.33%              | 66   | 3.03%            |
| Van/HGV <= 3.5t       | 14   | 14.6              | -4.11%              | 19   | -26.32%          |
| HGV > 3.5t            | 0    | 2.8               | -100.00%            | 3    | -100.00%         |
| Bus / Coach / Minibus | 6    | 5.8               | 3.45%               | 5    | 20.00%           |

### 3.2. Road User

- For 2022, motorcyclists, pedestrians and cyclists all have a smaller proportion of Total casualties than cars. However, motorcyclists and pedestrians have a greater proportion of all KSI casualties than cars, and;
  - motorcycle rider / passenger casualties recorded as KSI as a proportion of their Total casualties is 24%;
  - for pedestrians their proportion of KSI to Total is 22%;
  - for cyclists their proportion of KSI to Total is 10%;
  - whilst for car occupant casualties this is 4%.
- Thus, it can be seen that pedestrians, motorcyclists and pedal cyclists are more vulnerable to serious injury when involved in collisions and for 2022, as a group, they comprise 39% of Total Casualties but 77% of KSI casualties, which is down on 2021 (85%), but up on the 5-year average (73%). However, taking their figures as a group, the trend for KSI casualties is down, whilst for Total casualties shows a shallow upward trajectory.

**Figure 8. 2022 – KSI & Total Casualties for Road Users**

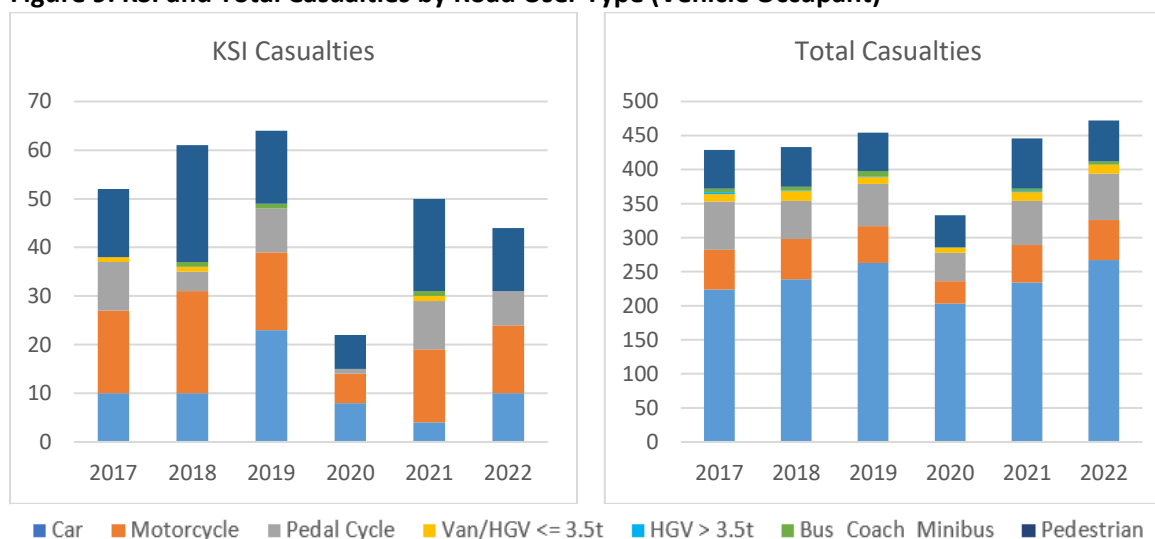
#### For KSI casualties:

- The trend is down for KSI casualties for car occupants, motorcyclists and pedestrians across the period, and although also down for pedal cyclists, is a much less pronounced trajectory than for the other road users.
- Car occupant is the only road user where 2022 is up on 2021, it is noted that this is a marked increase on 2021's figure and this will be monitored going forward.
- Cyclist is the only road user where 2022 is up on its 5-year average.

- Large vehicle occupants, i.e. Van/HGV <= 3.5t, HGV > 3.5t and Bus / Coach / Minibus, all have zero KSI casualties in 2022 and this has resulted in 100% reduction when compared with their respective 5-year averages.

**Table 5 – KSI Casualties by Road User**

|              | 2022      | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|--------------|-----------|-------------------|---------------------|------|------------------|
| Car occupant | <b>10</b> | 11.0              | -9.09%              | 4    | 150.00%          |
| Motorcyclist | <b>14</b> | 15.0              | -6.67%              | 15   | -6.67%           |
| Cyclist      | <b>7</b>  | 6.8               | 2.94%               | 10   | -30.00%          |
| Pedestrian   | <b>13</b> | 15.8              | -17.72%             | 19   | -31.58%          |

**Figure 9. KSI and Total Casualties by Road User Type (Vehicle Occupant)****For Total casualties:**

- The trend for Total casualties is up for car occupants and pedestrians, down for motorcyclists and largely flat for all other road user types.
- Car occupants have the highest Total casualty figure across the period for this category of road user and the increase on its 5-year average is statistically significant and is also an increase when compared with 2021.
- Motorcyclists have the equal highest Total casualty figure across the period for this category of road user.
- Occupants of HGV > 3.5t have zero casualties.

**Table 6 – Total Casualties by Road User**

|                                | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|--------------------------------|------|-------------------|---------------------|------|------------------|
| Car occupant                   | 267  | 232.6             | 14.79%              | 234  | 14.10%           |
| Motorcyclist                   | 59   | 51.8              | 13.90%              | 55   | 7.27%            |
| Cyclist                        | 68   | 59.2              | 14.86%              | 65   | 4.62%            |
| Van/HGV <= 3.5t occupant       | 13   | 11                | 18.18%              | 13   | 0.00%            |
| HGV > 3.5t occupant            | 0    | 1.2               | -100.00%            | 1    | -100.00%         |
| Bus / Coach / Minibus occupant | 5    | 4.8               | 4.17%               | 4    | 25.00%           |
| Pedestrian                     | 60   | 58.4              | 2.74%               | 74   | -18.92%          |

### 3.3. Age / Gender

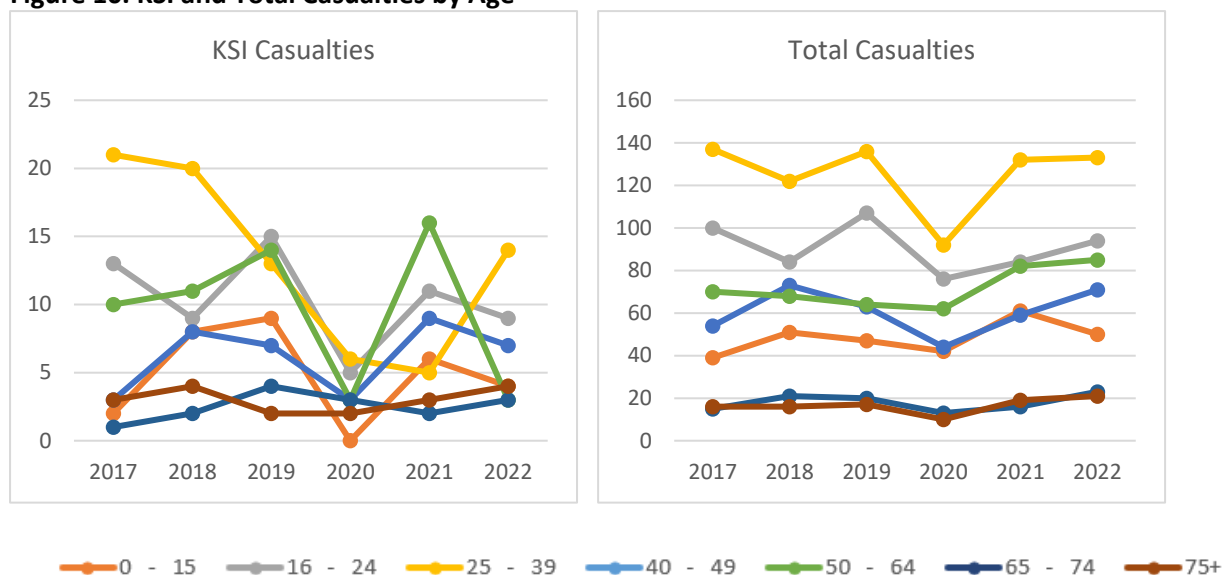
#### 3.3.1. Age

##### For KSI casualties:

- The trends are flat or downward for the younger age groups, including the 25-39-year olds, whose trend is still down, despite showing a marked increase on 2021.
- The 50-64 age group shows a statistically significant decrease with 3 casualties being the equal lowest figure across the period and the equal lowest across the age groups for 2022.
- Despite a slight rise in the trends for the older age groups, the 65-74 age group has the equal lowest figure for KSI casualties across the age groups for 2022.

**Table 7 - KSI Casualties by Age**

|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 0 - 15  | 4    | 5                 | -20.00%             | 6    | -33.33%          |
| 16 - 24 | 9    | 10.6              | -15.09%             | 11   | -18.18%          |
| 25 - 39 | 14   | 13                | 7.69%               | 5    | 180.00%          |
| 40 - 49 | 7    | 6                 | 16.67%              | 9    | -22.22%          |
| 50 - 64 | 3    | 10.8              | -72.22%             | 16   | -81.25%          |
| 65 - 74 | 3    | 2.4               | 25.00%              | 2    | 50.00%           |
| 75+     | 4    | 2.8               | 42.86%              | 3    | 33.33%           |

**Figure 10. KSI and Total Casualties by Age****For Total casualties:**

- The 5-year trends are slightly up for the 0-15-year olds and down for the other younger age groups.
- The 50-64 age group shows a statistically significant increase, despite its fall in the number of KSI casualties noted above. With 85 Total casualties this is higher than any year in the previous 5-year period.

**Table 8 - Total Casualties by Age**

|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 0 - 15  | 50   | 48                | 4.17%               | 61   | -18.03%          |
| 16 - 24 | 94   | 90.2              | 4.21%               | 84   | 11.90%           |
| 25 - 39 | 133  | 123.8             | 7.43%               | 132  | 0.76%            |
| 40 - 49 | 71   | 58.6              | 21.16%              | 59   | 20.34%           |
| 50 - 64 | 85   | 69.2              | 22.83%              | 82   | 3.66%            |
| 65 - 74 | 23   | 17                | 35.29%              | 16   | 43.75%           |
| 75+     | 21   | 15.6              | 34.62%              | 19   | 10.53%           |

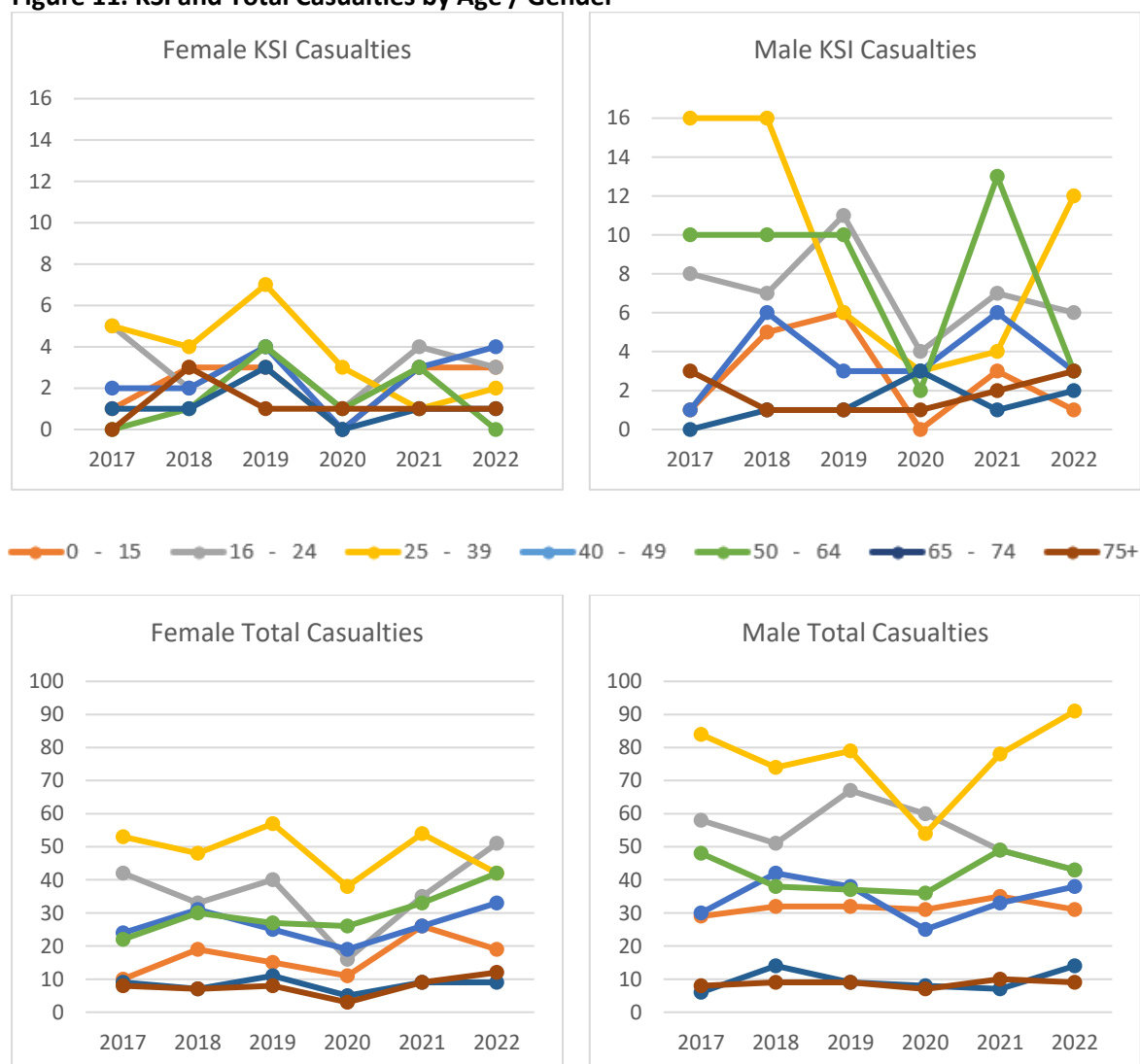
**3.3.2. Age / Gender****For KSI casualties:**

- For the previous 5 years, on average, the gender split for KSI casualties is that males account for 70% and females for 30%. 2022 largely falls into line with this, with 68% for males and 32% for females and 2022 continues a downward trend for both genders.
- The number of male KSI casualties in the 0-15 age group shows a statistically significant decrease, with the figure for 2022 being the lowest of all male age groups for the year.
- The increase for the 25-39 age group, as shown in Table 7, is largely accounted for by an increase for males from 4 in 2021 to 12 in 2022, and a consequent increase of one-third on its 5-year average.
- For males in the 40-49 age group, the number of KSI casualties fell by a half when compared with 2021 and nearly one quarter when compared with its 5-year average.
- The decrease for the 50-64 age group, as shown in Table 7, is accounted for by a statistically significant decrease in the male KSI casualties for this age group combined with a decrease in the female KSI casualties to zero.

Table 9 - KSI Casualties by Age &amp; Gender

|         | 2022 |    | 2017-2021 average |     | +/- 2022 v. 5yr avg |         | 2021 |    | +/- 2022 v. 2021 |         |
|---------|------|----|-------------------|-----|---------------------|---------|------|----|------------------|---------|
|         | F    | M  | F                 | M   | F                   | M       | F    | M  | F                | M       |
| 0 - 15  | 3    | 1  | 2                 | 3   | 50.00%              | -66.67% | 3    | 3  | 0.00%            | -66.67% |
| 16 - 24 | 3    | 6  | 3.2               | 7.4 | -6.25%              | -18.92% | 4    | 7  | -25.00%          | -14.29% |
| 25 - 39 | 2    | 12 | 4                 | 9   | -50.00%             | 33.33%  | 1    | 4  | 100.00%          | 200.00% |
| 40 - 49 | 4    | 3  | 2.2               | 3.8 | 81.82%              | -21.05% | 3    | 6  | 33.33%           | -50.00% |
| 50 - 64 | 0    | 3  | 1.8               | 9   | -100.00%            | -66.67% | 3    | 13 | -100.00%         | -76.92% |
| 65 - 74 | 1    | 2  | 1.2               | 1.2 | -16.67%             | 66.67%  | 1    | 1  | 0.00%            | 100.00% |
| 75+     | 1    | 3  | 1.2               | 1.6 | -16.67%             | 87.50%  | 1    | 2  | 0.00%            | 50.00%  |

Figure 11. KSI and Total Casualties by Age / Gender

**For Total casualties**

- For the previous 5 years, on average, the gender split for Total casualties is that males account for 61% and females for 39%. There has been a steady increase in the percentage accounted for by females with 2022 having the highest percentage across the period with 44%. Males in 2022 account for 56% and this continues a moderate downward trend.
- For the 16-24-year olds:



- this is a statistically significant increase for females with 2022 being the highest across the period and this age group having the highest number of all the female age groups in 2022;
- conversely, this is a statistically significant decrease for males with 2022 being the lowest across the period for males in this age group.
- For males in the 25-39 age group, this is a statistically significant increase with 2022 being the highest across the period and with this male age group having the highest number out of all of the male age groups for 2022, equating to one-third of male Total casualties.
- For females in the 50-64 age group, with one fewer than male casualties, this is a statistically significant increase on its 5-year average and an increase on 2021, with 2022 having the highest number of Total casualties for females in this age group across the period.

**Table 10 - Total Casualties by Age & Gender**

|         | 2022 |    | 2017-2021 average |      | +/- 2022 v. 5yr avg |         | 2021 |    | +/- 2022 v. 2021 |         |
|---------|------|----|-------------------|------|---------------------|---------|------|----|------------------|---------|
|         | F    | M  | F                 | M    | F                   | M       | F    | M  | F                | M       |
| 0 - 15  | 19   | 31 | 16.2              | 31.8 | 17.28%              | -2.52%  | 26   | 35 | -26.92%          | -11.43% |
| 16 - 24 | 51   | 43 | 33.2              | 57   | 53.61%              | -24.56% | 35   | 49 | 45.71%           | -12.24% |
| 25 - 39 | 42   | 91 | 50                | 73.8 | -16.00%             | 23.31%  | 54   | 78 | -22.22%          | 16.67%  |
| 40 - 49 | 33   | 38 | 25                | 33.6 | 32.00%              | 13.10%  | 26   | 33 | 26.92%           | 15.15%  |
| 50 - 64 | 42   | 43 | 27.6              | 41.6 | 52.17%              | 3.37%   | 33   | 49 | 27.27%           | -12.24% |
| 65 - 74 | 9    | 14 | 8.2               | 8.8  | 9.76%               | 59.09%  | 9    | 7  | 0.00%            | 100.00% |
| 75+     | 12   | 9  | 7                 | 8.6  | 71.43%              | 4.65%   | 9    | 10 | 33.33%           | -10.00% |

#### 4. Vehicle Type and Road User – detail

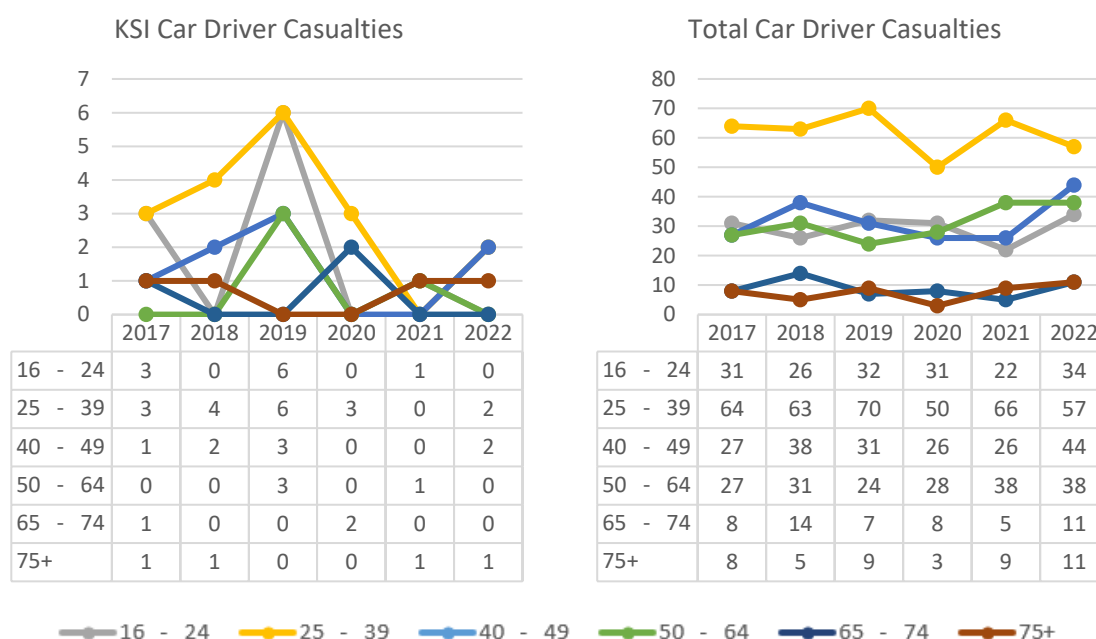
##### 4.1. Car Drivers

###### For KSI casualties:

- Car driver KSI casualties represent 3% of all car driver casualties and this is up on 2021 when it was 2% and down on the 5-year average of 5%.
- There were zero fatalities for car drivers in 2022, with only 1 fatality for car drivers across the period, in 2019.
- For 2022, with 5 KSI car driver casualties in total, there are 2 Seriously Injured females and 3 Seriously Injured males and the trend is markedly down for both female and male car drivers.
- For younger car drivers:
  - there were zero Seriously Injured in the 16-24 age group;
  - and with 2 Seriously Injured in the 25-39 age group, this is a decrease on its 5-year average resulting in a consequent downward trend.
- Conversely the 2 Seriously Injured for the 40-49 age group shows an increase on its 5-year average, although the trend does still show a shallow downward trajectory for this age group.
- There were zero Seriously Injured casualties in the 50-64 and 65-74 age groups.

**Table 11 - Car Driver KSI Casualties by Age**

|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 16 - 24 | 0    | 2                 | -100.00%            | 1    | -100.00%         |
| 25 - 39 | 2    | 3.2               | -37.50%             | 0    | -                |
| 40 - 49 | 2    | 1.2               | 66.67%              | 0    | -                |
| 50 - 64 | 0    | 0.8               | -100.00%            | 1    | -100.00%         |
| 65 - 74 | 0    | 0.6               | -100.00%            | 0    | -                |
| 75+     | 1    | 0.6               | 66.67%              | 1    | 0.00%            |

**Figure 12. KSI and Total Casualties for Car Drivers by Age****For Total casualties:**

- Female car drivers showed a statistically significant increase of 40% against their respective 5-year average and a 51% increase on 2021.
- The trend is slightly up for both genders.
- For the 16-24-year olds, there is a statistically significant increase for females on their 5-year average, however this is countered by a decrease for males against their 5-year average, resulting in an overall flat trend for this age group.
- The only age group to show a decrease is the 25-39-year olds and this is accounted for by a decrease for both genders.
- For the 40-49 age group, this is a statistically significant increase on its 5-year average and an increase when compared with 2021, and 2022 has the highest number across the period. This is largely accounted for by a statistically significant increase for female car drivers with a corresponding increase for male car drivers in this age group.
- Female car drivers also showed a statistically significant increase for the 50-64 and 75+ age groups, this is countered somewhat by a decrease for males in both age groups, however, when both genders are taken together, there is a consequent upward trend for both age groups.

**Table 12 – Car Driver Total Casualties by Age**

|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 16 - 24 | 34   | 28.4              | 19.72%              | 22   | 54.55%           |
| 25 - 39 | 57   | 62.6              | -8.95%              | 66   | -13.64%          |
| 40 - 49 | 44   | 29.6              | 48.65%              | 26   | 69.23%           |
| 50 - 64 | 38   | 29.6              | 28.38%              | 38   | 0.00%            |
| 65 - 74 | 11   | 8.4               | 30.95%              | 5    | 120.00%          |
| 75+     | 11   | 6.8               | 61.76%              | 9    | 22.22%           |

**4.1.1. Young Drivers****For KSI casualties:**

- The trend is down for young car drivers in the 16-24 age group.
- With zero KSI young car driver KSI casualties in 2022, as a percentage of Total young car driver casualties, 2022 is down on 2021 when it was 5% and on the 5-year average of 7%.

**For Total casualties:**

- The trend for young car drivers in the 16-24 age group shows a slight upward trajectory.
- The increase is accounted for by the statistically significant increase for female car drivers as noted above. Whilst male car drivers showed a decrease against their 5-year average and when compared to 2021, and the figure for 2022 for male car drivers is the equal lowest across the period for this age group.

**Table 13 – Young Car Driver Total Casualties by Gender**

|         | 2022 |    | 2017-2021 average |    | +/- 2022 v. 5yr avg |         | 2021 |    | +/- 2022 v. 2021 |         |
|---------|------|----|-------------------|----|---------------------|---------|------|----|------------------|---------|
|         | F    | M  | F                 | M  | F                   | M       | F    | M  | F                | M       |
| 16 - 24 | 23   | 11 | 13.4              | 15 | 71.64%              | -26.67% | 9    | 13 | 155.56%          | -15.38% |

**4.1.2. Older Drivers****For KSI casualties:**

- When taking the two older age groups together, car driver KSI casualties represent 5% of Total older car driver casualties and this is down on 2021 when it was 7% and on the 5-year average of 8% and the trend is correspondingly down.
- The single KSI casualty for 2022 for the older age groups is a female car driver in the 75+ age group.

**For Total casualties:**

- Despite the increase in both female and male car driver casualties for the 65-74 age group, the trend is down for this age group across the period.
- For the 75+ age group, the overall increase is accounted for by the statistically significant increase for female car drivers, as noted in 4.1 above, and whilst male car drivers showed a decrease against both their 5-year average and when compared with 2021, the overall trend is up for this age group.

**Table 14 – Older Car Driver Total Casualties by Gender**

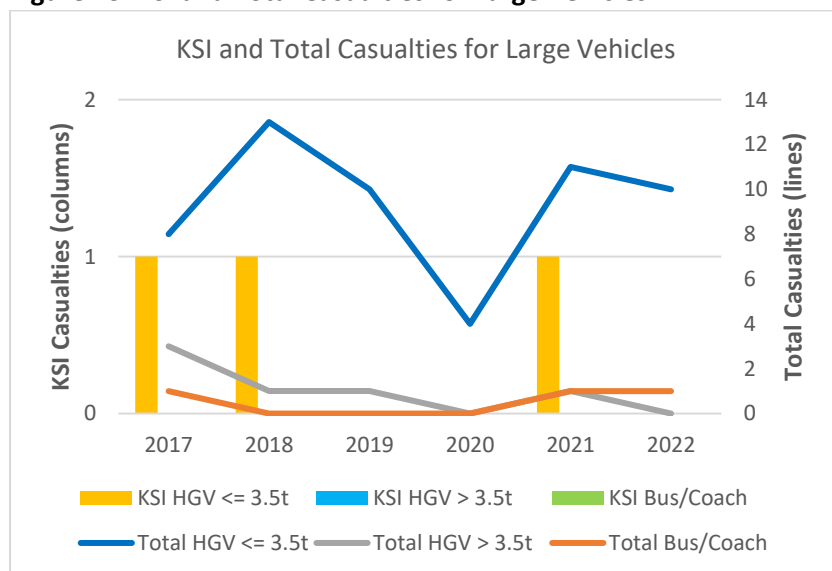
|         | 2022 |   | 2017-2021 average |     | +/- 2022 v. 5yr avg |         | 2021 |   | +/- 2022 v. 2021 |         |
|---------|------|---|-------------------|-----|---------------------|---------|------|---|------------------|---------|
|         | F    | M | F                 | M   | F                   | M       | F    | M | F                | M       |
| 65 - 74 | 4    | 7 | 3.2               | 5.2 | 25.00%              | 34.62%  | 2    | 3 | 100.00%          | 133.33% |
| 75+     | 8    | 3 | 2.4               | 4.4 | 233.33%             | -31.82% | 3    | 6 | 166.67%          | -50.00% |

## 4.2. Large Vehicles

This section looks at large vehicle driver casualties.

### For KSI casualties:

- The trend is down for all 3 categories of large vehicle.
- There are zero driver casualties in 2022.

**Figure 13. KSI and Total Casualties for Large Vehicles**

### For Total casualties:

- The trend is down for HGV's > 3.5t and Van/HGV's <= 3.5t, but up for buses/coaches.
- There are zero HGV > 3.5t driver casualties in 2022.

**Table 15 - Total Casualties by Large Vehicle Type**

|                       | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|-----------------------|------|-------------------|---------------------|------|------------------|
| Van/HGV <= 3.5t       | 10   | 9.20              | 8.70%               | 11   | -9.09%           |
| HGV > 3.5t            | 0    | 1.20              | -100.00%            | 1    | -100.00%         |
| Bus / Coach / Minibus | 1    | 0.40              | 150.00%             | 1    | 0.00%            |

## 4.3. Motorcycles

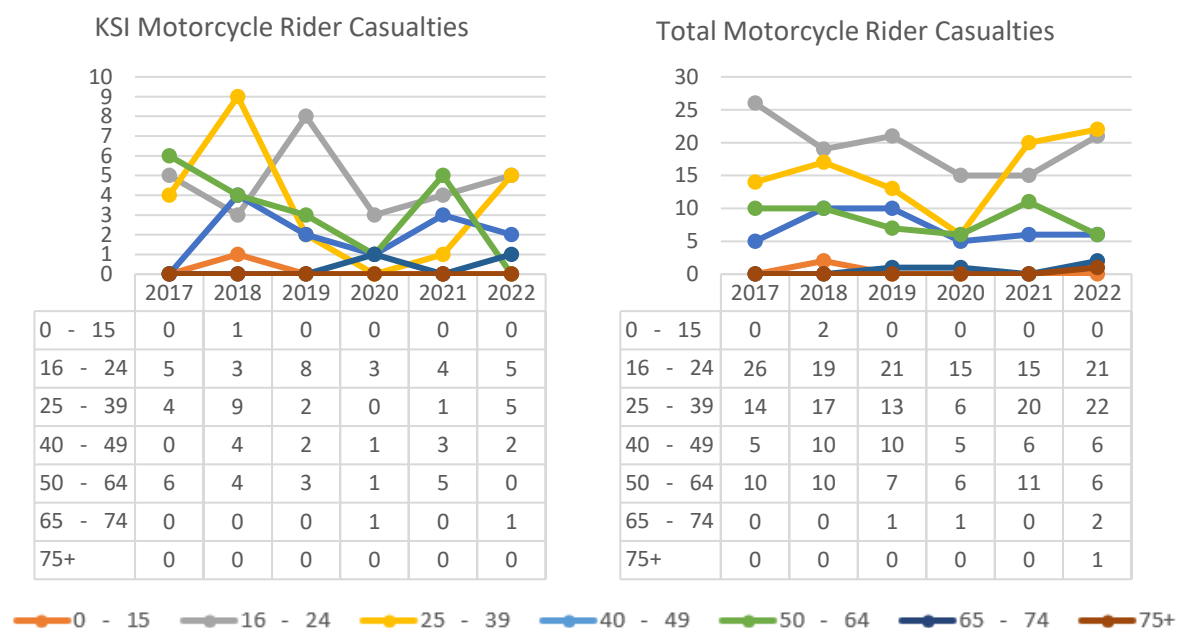
### For KSI casualties:

- Motorcycle rider KSI casualties represent 22% of Total motorcycle rider casualties and this is down on 2021 when it was 25% and on the 5-year average of 28%.

- The trend for both male and female motorcycle rider KSI casualties shows a downward trajectory.
- Female riders accounted for 1 of the Seriously Injured casualties, with male riders accounting for the remaining 12.
- 2 of the 4 fatalities for 2022 are 1 male rider in the 25-39 age group and his pillion passenger, in collision with a car.
- There is one Seriously Injured motorcycle rider in collision with a Van/HGV <= 3.5t.
- The zero KSI casualties for the 50-64 age group is statistically significant.
- There are 2 KSI casualties for the two older age groups across the whole period, with the 65-74 age group having one in each of the years 2020 and 2022, and zero for the 75+ age group.

**Table 16 - Motorcycle Rider KSI Casualties by Age**

|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 16 - 24 | 5    | 4.6               | 8.70%               | 4    | 25.00%           |
| 25 - 39 | 5    | 3.2               | 56.25%              | 1    | 400.00%          |
| 40 - 49 | 2    | 2                 | -                   | 3    | -33.33%          |
| 50 - 64 | 0    | 3.8               | -100.00%            | 5    | -100.00%         |
| 65 - 74 | 1    | 0.2               | 400.00%             | 0    | -                |
| 75+     | 0    | 0                 | -                   | 0    | -                |

**Figure 14. KSI and Total Casualties for Motorcycle Riders by Age****For Total casualties:**

- Female riders accounted for 12% of the Total casualties with 7 in 2022 and male riders accounted for 88% with 51.
- The trend for Total casualties for riders shows a shallow downward trajectory for males and a shallow upward trajectory for females, resulting in a shallow downward trajectory overall.
- For 16-24-year olds, despite the increase on their 5-year average and 2021, the trend for this age group is down.
- The 25-39 age group shows a statistically significant increase on its 5-year average and the trend for this age group shows an upward trajectory. This increase is accounted for by a similar

percentage increase for male riders in this age group, whilst female riders also show an increase on their 5-year average.

**Table 17 - Motorcycle Rider Total Casualties by Age**

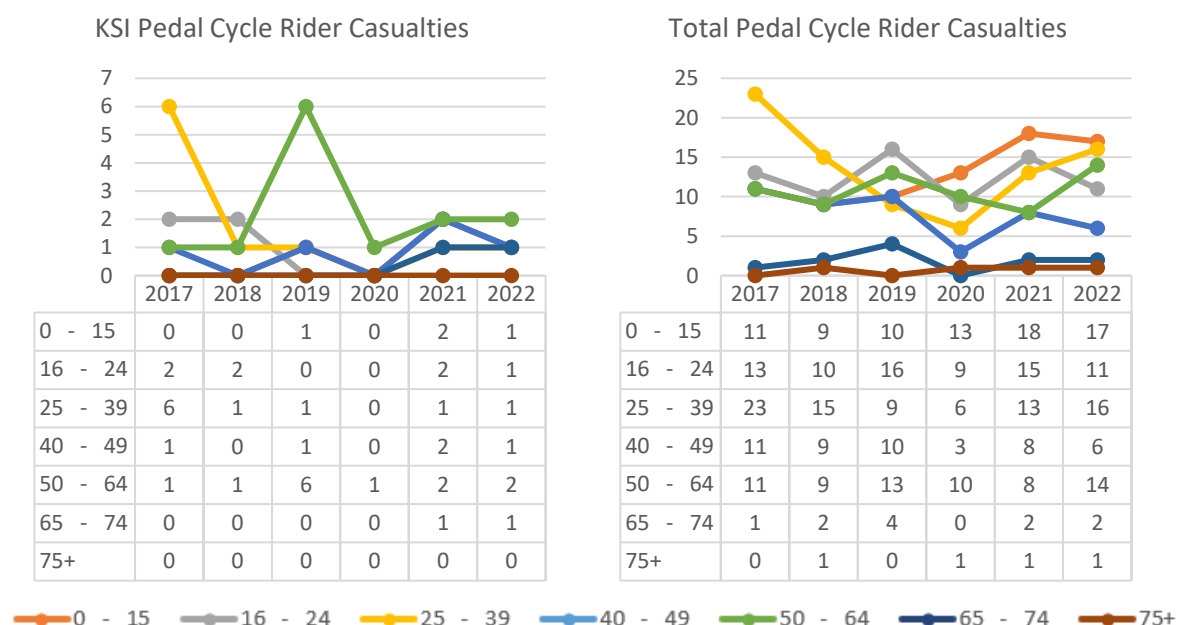
|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 16 - 24 | 21   | 19.2              | 9.38%               | 15   | 40.00%           |
| 25 - 39 | 22   | 14                | 57.14%              | 20   | 10.00%           |
| 40 - 49 | 6    | 7.2               | -16.67%             | 6    | -                |
| 50 - 64 | 6    | 8.8               | -31.82%             | 11   | -45.45%          |
| 65 - 74 | 2    | 0.4               | 400.00%             | 0    | -                |
| 75+     | 1    | 0                 | -                   | 0    | -                |

#### 4.4. Pedal Cycles

##### For KSI casualties:

- Cycle rider KSI casualties represent 10% of all cycle rider casualties and this is down on 2021 when it was 15% and on the 5-year average of 12%.
- There are 7 Seriously Injured casualties for cycle riders, 2 females and 5 males.
- The trend for female cycle rider KSI casualties shows a downward trajectory whilst for males this remains flat, resulting in a shallow downward trajectory overall.
- For 2022, for 86% of Seriously Injured cycle riders, at least one of the other vehicles involved in the collision is a car.

**Figure 15. KSI and Total Casualties for Pedal Cycle Riders by Age**



##### For Total casualties:

- Female cycle riders in the 0-15 age group sees a statistically significant increase on its 5-year average with 5 Total casualties and the trend shows an upward trajectory for both males and females in this age group.
- Consequently, female cycle riders as a group show a statistically significant increase of 78% and an increase on 2021 of 15% and a noticeable upward trajectory in the trend for this group.
- Male cycle riders show a slight downward trend resulting in a flat trajectory overall.

- For 2022, for 90% of Total cycle rider casualties, at least one of the other vehicles involved in the collision is a car.

**Table 18 - Pedal Cycle Total Casualties by Age**

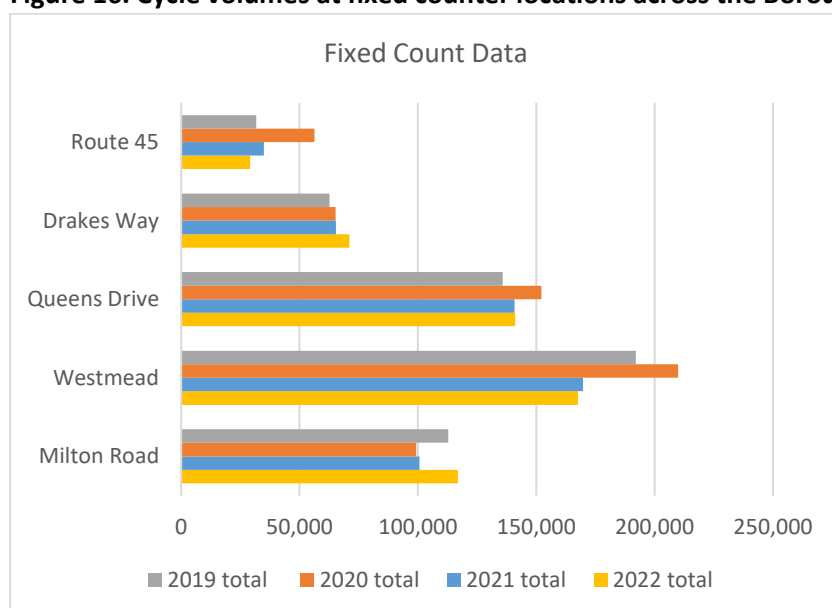
|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 0 - 15  | 17   | 12.2              | 39.34%              | 18   | -5.56%           |
| 16 - 24 | 11   | 12.6              | -12.70%             | 15   | -26.67%          |
| 25 - 39 | 16   | 13.2              | 21.21%              | 13   | 23.08%           |
| 40 - 49 | 6    | 8.2               | -26.83%             | 8    | -25.00%          |
| 50 - 64 | 14   | 10.2              | 37.25%              | 8    | 75.00%           |
| 65 - 74 | 2    | 1.8               | 11.11%              | 2    | 0.00%            |
| 75+     | 1    | 0.6               | 66.67%              | 1    | 0.00%            |

#### 4.4.1. Cycle journeys across the Borough

- The document 'National Travel Attitudes Study: Wave 5'<sup>1</sup> (2021), states that 20% of respondents cycled more than before the pandemic, whereas 39% claimed to cycle less.
- The chart below indicates that for 2022, two of the fixed counter sites on Swindon's off-road cycle network at Drakes Way and Milton Road, show an increase in cycling on each of their respective previous 3 years' figures, whilst Queens Drive sees a modest increase when compared to 2021.
- For Westmead and Route 45, 2022 has the lowest cycle volumes of any of their respective available years' data.
- The total recorded cycle movements at these five locations show an increase of 3% on 2021 but despite this and an increasing trend noted in 2021, there is now a shallow downward trajectory to the trend across the 4-year period of available data.

A plan showing the location of these counters can be found in Appendix A.

<sup>1</sup>(Department for Transport, 2021)

**Figure 16. Cycle volumes at fixed counter locations across the Borough**

- Strava data has also been made available, which although uses data from app users only, so will not capture every cycle journey across the Borough, does capture some on-road movements that the data in the chart above would not. The Strava data shows that cycle journeys captured by the app have decreased by approximately 17% each year post pandemic, however 2022 does have 21% more cycle journeys than 2019 (earliest year of available data).
- In contrast to the above cycle volumes findings, the Strava data shows a shallow upward trajectory to the trend across the 4-year period of available data.

Cycle journey data should be monitored going forward to provide information of on-road cycle movements, as a more robust dataset would be beneficial to inform ongoing initiatives to enhance cycle provision across the Borough.

#### 4.5. Pedestrians

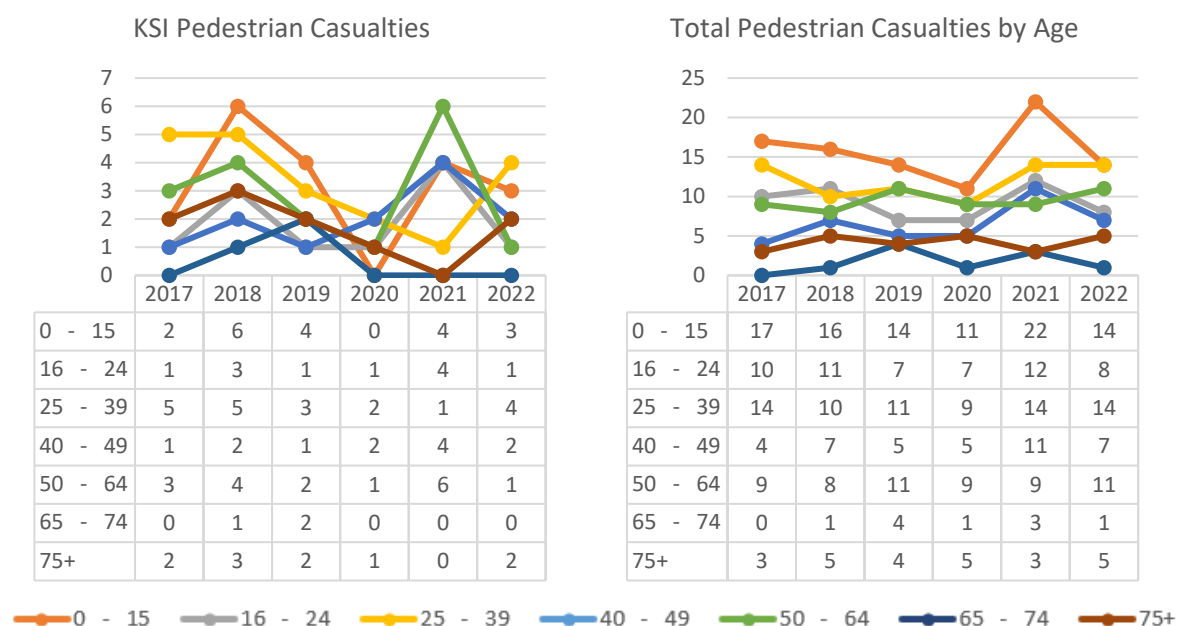
##### For KSI casualties:

- Pedestrian KSI casualties represent 22% of all pedestrian casualties and this is down on 2021 when it was 26% and on the 5-year average of 27%.
- There are 2 pedestrian fatalities, both males, one child in collision with a car and one adult male in the 25-39 age group in collision with a motorcycle. There are 11 Seriously Injured pedestrian casualties, 6 females and 5 males.
- The trend for female pedestrian KSI casualties shows an upward trajectory whilst for males the trend is markedly down, resulting in a downward trajectory overall.
- For 2022, for 12 out of the 13 KSI pedestrian casualties (92%), the vehicle involved is a car.
- For the 50-64 age group, with 1 Seriously Injured male and zero Seriously Injured female pedestrians, this a statistically significant decrease on its 5-year average.
- There are zero KSI casualties in the 65-74 age group.

**Table 19 - Pedestrian KSI Casualties by Age**

|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 0 - 15  | 3    | 3.2               | -6.25%              | 4    | -25.00%          |
| 16 - 24 | 1    | 2                 | -50.00%             | 4    | -75.00%          |
| 25 - 39 | 4    | 3.2               | 25.00%              | 1    | 300.00%          |
| 40 - 49 | 2    | 2                 | -                   | 4    | -50.00%          |
| 50 - 64 | 1    | 3.2               | -68.75%             | 6    | -83.33%          |
| 65 - 74 | 0    | 0.6               | -100.00%            | 0    | -                |
| 75+     | 2    | 1.6               | 25.00%              | 0    | -                |



**Figure 17. KSI and Total Casualties for Pedestrians by Age****For Total casualties:**

- Female pedestrian Total casualties account for the greater proportion with 52%, this is a shift away from previous years, when males accounted for more in each of the previous 5 years.
- Thus, the trend for male Total pedestrian casualties follows the same pattern as for KSI casualties and is down but the upward trajectory for females counteracts this and the trend is up overall for Total casualties.
- For 2022, for 88% of Total pedestrian casualties, the vehicle involved is a car.
- For the 16-24-year olds, although the overall decrease is not statistically significant, there is a statistically significant decrease for males in this age group.

**Table 20 - Pedestrian Total Casualties by Age**

|         | 2022 | 2017-2021 average | +/- 2022 v. 5yr avg | 2021 | +/- 2022 v. 2021 |
|---------|------|-------------------|---------------------|------|------------------|
| 0 – 15  | 14   | 16                | -12.50%             | 22   | -36.36%          |
| 16 – 24 | 8    | 9.4               | -14.89%             | 12   | -33.33%          |
| 25 – 39 | 14   | 11.6              | 20.69%              | 14   | -                |
| 40 – 49 | 7    | 6.4               | 9.37%               | 11   | -36.36%          |
| 50 – 64 | 11   | 9.2               | 19.57%              | 9    | 22.22%           |
| 65 – 74 | 1    | 1.8               | -44.44%             | 3    | -66.67%          |
| 75+     | 5    | 4                 | 25.00%              | 3    | 66.67%           |

**4.6. E-scooters**

E-scooter collisions have been recorded in STATS19 since 2020, using information captured as free text alongside the 'other vehicle' category.

The findings from this Department for Transport document, 'Reported road casualties Great Britain: e-Scooter factsheet 2022', show that there is a broadly upward trend and that e-scooter riders are more likely to be Killed or Seriously Injured in collisions involving this mode of transport than the other parties, although it is also to be noted that the main types of other road users involved in collisions involving e-scooters are pedestrians and cyclists, i.e. other vulnerable road users.

Furthermore, the report shows that for Great Britain, the proportion of KSI casualties to total casualties, resulting from a collision involving an e-Scooter, for 2022, is just under one-third, retaining the proportion reported for 2021.

For Swindon, in contrast to its 2021 figures, when a third of its resulting casualties were in the KSI category, in 2022 Swindon's recorded collision data counters both the previous year and this year's national trends with:

- Zero recorded KSI casualties where an e-scooter was involved in the collision.
- 7 Slight injuries recorded, resulting from 7 collisions, 4 with cars, 2 with pedestrians and 1 loss of control with no other parties involved.
- This is a reduction in both the number of collisions, by 13% on 2021 and casualties, by 22% on 2021.

Thus far, the only discernible patterns to these types of collisions are that: driver / riders are male; and there is a 'failure to look properly'.

Despite the apparent picture for Swindon, in the context of the national picture and the anecdotal accounts of the rising popularity of e-scooters as a mode of transport, the Swindon data for this category of road users will continue to be monitored and reported.

## 5. Environmental and other factors

### 5.1. Data Clock Analysis

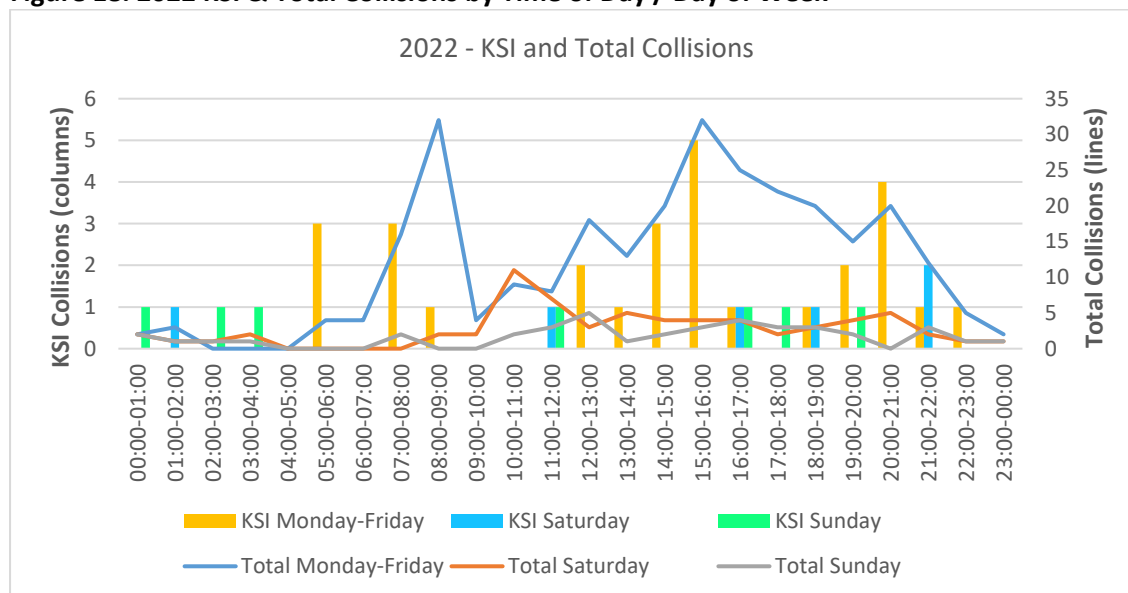
A Data Clock Analysis has been undertaken on all of the collisions that occurred in 2022. The colour scale is applied to highlight those time/day segments at the lower and higher end of the scale. The values are shaded proportionally with the lowest shaded green, midpoint yellow and highest in red.

**Table 21 - 2022 – Data Clock Analysis**

| Time of Day | KSI Collisions |    |   |    |   |    |    | Total Collisions |    |    |    |    |    |    |
|-------------|----------------|----|---|----|---|----|----|------------------|----|----|----|----|----|----|
|             | M              | Tu | W | Th | F | Sa | Su | M                | Tu | W  | Th | F  | Sa | Su |
| 00:00-01:00 | 0              | 0  | 0 | 0  | 0 | 0  | 1  | 2                | 0  | 0  | 0  | 0  | 2  | 2  |
| 01:00-02:00 | 0              | 0  | 0 | 0  | 0 | 1  | 0  | 0                | 0  | 0  | 0  | 3  | 1  | 1  |
| 02:00-03:00 | 0              | 0  | 0 | 0  | 0 | 0  | 1  | 0                | 0  | 0  | 0  | 0  | 1  | 1  |
| 03:00-04:00 | 0              | 0  | 0 | 0  | 0 | 0  | 1  | 0                | 0  | 0  | 0  | 0  | 2  | 1  |
| 04:00-05:00 | 0              | 0  | 0 | 0  | 0 | 0  | 0  | 0                | 0  | 0  | 0  | 0  | 0  | 0  |
| 05:00-06:00 | 0              | 0  | 2 | 0  | 1 | 0  | 0  | 0                | 0  | 2  | 1  | 1  | 0  | 0  |
| 06:00-07:00 | 0              | 0  | 0 | 0  | 0 | 0  | 0  | 0                | 1  | 1  | 1  | 1  | 0  | 0  |
| 07:00-08:00 | 1              | 0  | 1 | 0  | 1 | 0  | 0  | 4                | 5  | 5  | 0  | 2  | 0  | 2  |
| 08:00-09:00 | 0              | 0  | 0 | 0  | 1 | 0  | 0  | 10               | 4  | 6  | 2  | 10 | 2  | 0  |
| 09:00-10:00 | 0              | 0  | 0 | 0  | 0 | 0  | 0  | 2                | 0  | 1  | 1  | 0  | 2  | 0  |
| 10:00-11:00 | 0              | 0  | 0 | 0  | 0 | 0  | 0  | 3                | 0  | 1  | 1  | 4  | 11 | 2  |
| 11:00-12:00 | 0              | 0  | 0 | 0  | 0 | 1  | 1  | 2                | 0  | 0  | 1  | 5  | 7  | 3  |
| 12:00-13:00 | 0              | 0  | 1 | 0  | 1 | 0  | 0  | 3                | 4  | 5  | 1  | 5  | 3  | 5  |
| 13:00-14:00 | 0              | 0  | 0 | 0  | 1 | 0  | 0  | 2                | 5  | 2  | 2  | 2  | 5  | 1  |
| 14:00-15:00 | 1              | 1  | 0 | 0  | 0 | 0  | 0  | 4                | 5  | 3  | 1  | 7  | 4  | 2  |
| 15:00-16:00 | 1              | 1  | 0 | 3  | 0 | 0  | 0  | 4                | 5  | 10 | 10 | 3  | 4  | 3  |
| 16:00-17:00 | 1              | 0  | 0 | 0  | 0 | 1  | 1  | 6                | 2  | 5  | 9  | 3  | 4  | 4  |
| 17:00-18:00 | 0              | 0  | 0 | 0  | 0 | 0  | 1  | 8                | 5  | 3  | 3  | 3  | 2  | 3  |
| 18:00-19:00 | 0              | 0  | 0 | 0  | 1 | 1  | 0  | 3                | 2  | 4  | 4  | 7  | 3  | 3  |
| 19:00-20:00 | 0              | 1  | 0 | 0  | 1 | 0  | 1  | 2                | 4  | 2  | 4  | 3  | 4  | 2  |
| 20:00-21:00 | 1              | 1  | 0 | 0  | 2 | 0  | 0  | 4                | 3  | 5  | 4  | 4  | 5  | 0  |
| 21:00-22:00 | 0              | 1  | 0 | 0  | 0 | 2  | 0  | 0                | 5  | 4  | 2  | 1  | 2  | 3  |
| 22:00-23:00 | 0              | 1  | 0 | 0  | 0 | 0  | 0  | 0                | 1  | 0  | 2  | 2  | 1  | 1  |
| 23:00-00:00 | 0              | 0  | 0 | 0  | 0 | 0  | 0  | 1                | 0  | 0  | 0  | 1  | 1  | 1  |

**For KSI collisions:**

- When combining the weekday data, peaks occur around school finish time (3-4pm).
- The next highest peaks also occur on weekdays around mid-evening and then the AM and PM peak hours.
- The highest peak for any single day is Thursday, school finish time (3-4pm).

**Figure 18. 2022 KSI & Total Collisions by Time of Day / Day of Week****For Total collisions:**

- For combined weekdays, Total collisions broadly follow a similar pattern to those of KSI collisions, with highest peaks occurring on weekday AM and PM peak hours.
- The highest peak hour for any single day is between 10am and 11am on a Saturday.

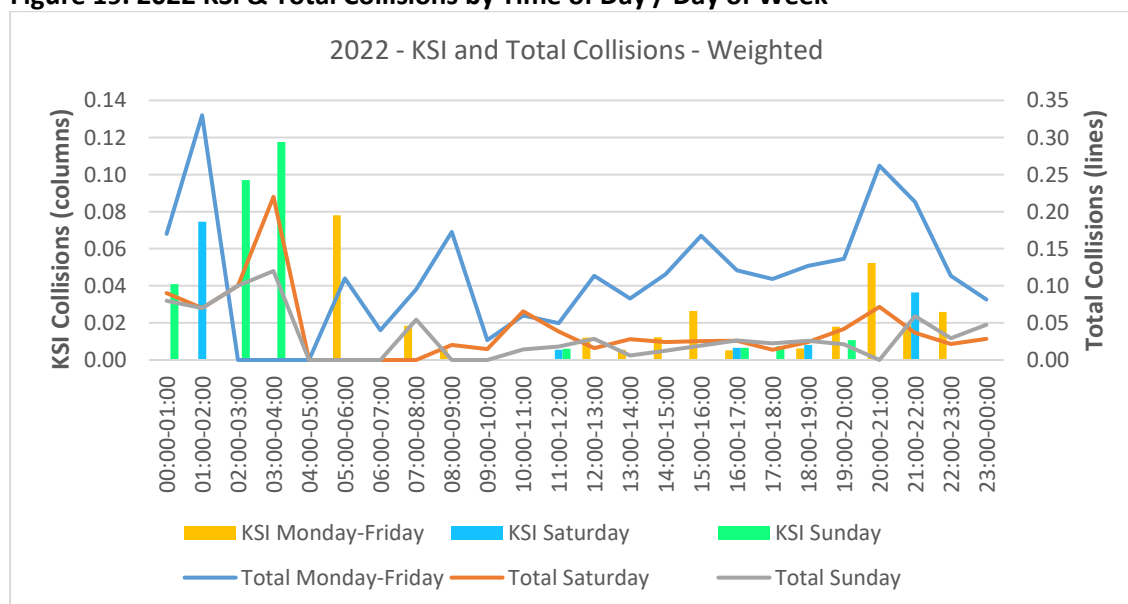
As well as collision totals, the data provides an alternative aspect by applying a weighting to the figures based on the Department for Transport traffic distribution table for 2022 (TRA0307). The weighting is applied by simply dividing the collision figure for each time/day segment by the equivalent Department for Transport traffic distribution figure. It should be noted that the distribution figures in TRA0307, include all roads across the whole of Great Britain, and therefore trunk roads are considered too.

**Table 22 - Data Clock Analysis – Collisions Weighted by Time by Day Traffic Distribution**

| Time of Day | KSI Collisions |      |      |      |      |      |      | Total Collisions |      |      |      |      |      |      |
|-------------|----------------|------|------|------|------|------|------|------------------|------|------|------|------|------|------|
|             | M              | Tu   | W    | Th   | F    | Sa   | Su   | M                | Tu   | W    | Th   | F    | Sa   | Su   |
| 00:00-01:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0.04 | 0.17             | 0    | 0    | 0    | 0    | 0.09 | 0.08 |
| 01:00-02:00 | 0              | 0    | 0    | 0    | 0    | 0.07 | 0    | 0                | 0    | 0    | 0    | 0.33 | 0.07 | 0.07 |
| 02:00-03:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0.10 | 0                | 0    | 0    | 0    | 0    | 0.1  | 0.1  |
| 03:00-04:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0.12 | 0                | 0    | 0    | 0    | 0    | 0.22 | 0.12 |
| 04:00-05:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0    | 0                | 0    | 0    | 0    | 0    | 0    | 0    |
| 05:00-06:00 | 0              | 0    | 0.05 | 0    | 0.03 | 0    | 0    | 0                | 0    | 0.05 | 0.03 | 0.03 | 0    | 0    |
| 06:00-07:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0    | 0                | 0.01 | 0.01 | 0.01 | 0.01 | 0    | 0    |
| 07:00-08:00 | 0.01           | 0    | 0.01 | 0    | 0.01 | 0    | 0    | 0.02             | 0.03 | 0.03 | 0    | 0.01 | 0    | 0.05 |
| 08:00-09:00 | 0              | 0    | 0    | 0    | 0.01 | 0    | 0    | 0.06             | 0.02 | 0.03 | 0.01 | 0.06 | 0.02 | 0    |
| 09:00-10:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0    | 0.01             | 0    | 0.01 | 0.01 | 0    | 0.01 | 0    |
| 10:00-11:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0    | 0.02             | 0    | 0.01 | 0.01 | 0.03 | 0.07 | 0.01 |
| 11:00-12:00 | 0              | 0    | 0    | 0    | 0    | 0.01 | 0.01 | 0.01             | 0    | 0    | 0.01 | 0.03 | 0.04 | 0.02 |
| 12:00-13:00 | 0              | 0    | 0.01 | 0    | 0.01 | 0    | 0    | 0.02             | 0.03 | 0.03 | 0.01 | 0.03 | 0.02 | 0.03 |
| 13:00-14:00 | 0              | 0    | 0    | 0    | 0.01 | 0    | 0    | 0.01             | 0.03 | 0.01 | 0.01 | 0.01 | 0.03 | 0.01 |
| 14:00-15:00 | 0.01           | 0.01 | 0    | 0    | 0    | 0    | 0    | 0.02             | 0.03 | 0.02 | 0.01 | 0.04 | 0.02 | 0.01 |
| 15:00-16:00 | 0.01           | 0.01 | 0    | 0.02 | 0    | 0    | 0    | 0.02             | 0.03 | 0.05 | 0.05 | 0.01 | 0.03 | 0.02 |
| 16:00-17:00 | 0.01           | 0    | 0    | 0    | 0    | 0.01 | 0.01 | 0.03             | 0.01 | 0.02 | 0.04 | 0.01 | 0.03 | 0.03 |
| 17:00-18:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0.01 | 0.04             | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 |
| 18:00-19:00 | 0              | 0    | 0    | 0    | 0.01 | 0.01 | 0    | 0.02             | 0.01 | 0.03 | 0.02 | 0.04 | 0.02 | 0.03 |
| 19:00-20:00 | 0              | 0.01 | 0    | 0    | 0.01 | 0    | 0.01 | 0.02             | 0.04 | 0.02 | 0.03 | 0.03 | 0.04 | 0.02 |
| 20:00-21:00 | 0.01           | 0.01 | 0    | 0    | 0.02 | 0    | 0    | 0.06             | 0.04 | 0.07 | 0.05 | 0.05 | 0.07 | 0    |
| 21:00-22:00 | 0              | 0.02 | 0    | 0    | 0    | 0.04 | 0    | 0                | 0.09 | 0.07 | 0.03 | 0.02 | 0.04 | 0.06 |
| 22:00-23:00 | 0              | 0.03 | 0    | 0    | 0    | 0    | 0    | 0                | 0.03 | 0    | 0.05 | 0.04 | 0.02 | 0.03 |
| 23:00-00:00 | 0              | 0    | 0    | 0    | 0    | 0    | 0    | 0.05             | 0    | 0    | 0    | 0.03 | 0.03 | 0.05 |

**For KSI collisions:**

- The highest peaks, taking into account the traffic distribution figure for each hour of the day, now occur in the early hours on Sundays which mirrors the picture seen in 2021.
- The next highest peaks occur on Saturdays in the early hours and weekday early mornings.
- The highest peak for any single day is Sunday, between 3am and 4am, which again mirrors the picture seen in 2021.

**Figure 19. 2022 KSI & Total Collisions by Time of Day / Day of Week**

**For Total collisions:**

- Taking into account the traffic distribution figure for each hour of the day, Total collisions also peak in the early hours for combined weekdays and for Saturdays.
- The next highest peaks occur on weekdays, around mid-evening, and AM and PM peak hours.
- The highest peak for any single day is Friday, between 1am and 2am.

**5.2. Fatal Four**

The 'Fatal Four' are considered to be the main behavioural factors that contribute to fatal or serious injuries on our roads. They are:

- Not wearing a seatbelt;
- Driving whilst impaired;
- Mobile phone usage whilst driving, or otherwise distracted;
- Inappropriate speed.

As noted by the Department for Transport in their analyses, it may be difficult for a police officer, attending the scene after an accident has occurred, to identify certain factors that may have contributed to a cause of an accident, and therefore this data is different in nature from the factual information referred to elsewhere in this document and this should be kept in mind.

**5.2.1. Seatbelts**

The context of measuring the wearing of seatbelts and whether this is a causal factor in casualty figures is that, it is recorded by the reporting police officer based on the information available within a short time of the collision occurring, rather than a detailed investigation and, is only mandatory to be collected for fatalities. Thus, the completeness of the information cannot be guaranteed and a significant percentage of casualties are recorded as 'unknown'. In addition, there are also a further significant percentage where casualties are not in a car or other vehicle where a seatbelt would be required to be worn and these are recorded as 'not applicable'.

The Department for Transport (DfT) for 2022 reports 21% of all car occupant fatalities as not wearing a seatbelt. Swindon has zero car occupant fatalities in 2022.

**KSI casualties:**

- There is a total of 5 vehicle driver Seriously Injured casualties in 2022 where the wearing of a seatbelt would be applicable. Zero are recorded as not wearing a seatbelt and 2 are recorded as wearing a seatbelt. This leaves 3 vehicle drivers where their seatbelt status is unknown.
- The attribution of not wearing a seatbelt is broadly in line with the data from 2021 when only 1 KSI casualty could be attributed to not wearing a seatbelt.

**Total casualties:**

- There is a total of 215 vehicle driver Total casualties in 2022 where the wearing of a seatbelt would be applicable. 11 casualties, 5% of vehicle driver casualties, were recorded as not wearing a seatbelt, whilst 114, 53% of vehicle driver casualties, were recorded as wearing a seatbelt. This leaves 90 vehicle drivers, 42%, where their seatbelt status is unknown.
- The attribution of not wearing a seatbelt shows a small increase for 2022 when compared to 2021, when 1% of its Total vehicle driver casualties was attributed to not wearing a seatbelt.

**5.2.2. Distraction / Impairment / Speed**

Officers do not need to carry out a full investigation of the collision before allocating contributory factors, they usually use professional judgement about what they can see at the scene. Not all

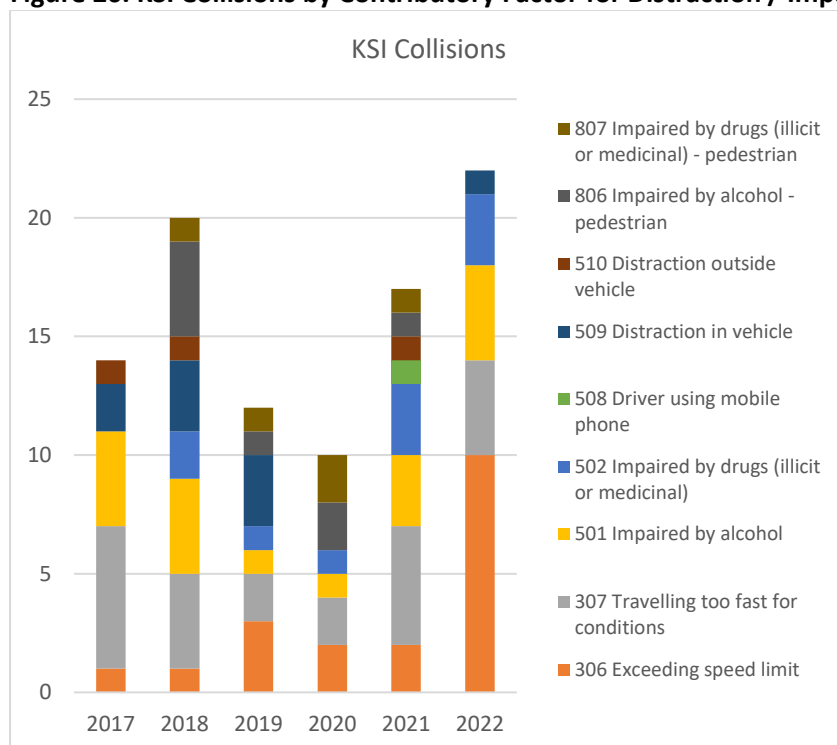
collisions are included in the contributory factor data, only collisions where police attended the scene and reported at least one contributory factor.

Further, it should be noted that where causal factors are attributed, 'Exceeding the speed limit' is the only one of those listed below in the top 4 for Swindon and ranks third in that list. The other 3 are, in order of ranking, 'Failed to look properly', 'Driver / rider careless / reckless / in a hurry' and 'Loss of control'.

#### KSI casualties:

- For Swindon, where a contributory factor in the list below has been attributed as a causal factor, excess speed is attributed to more than half of the KSI collisions and 2022 does show an increase on each of the previous 5 years.

**Figure 20. KSI Collisions by Contributory Factor for Distraction / Impairment / Speed**



#### Total casualties:

- Total casualties broadly follow the same pattern, in that, where a contributory factor has been attributed as a causal factor, excess speed is attributed to just over half of those listed above.

### 5.3. Areas of deprivation

In March 2018, Public Health England published a report ('Reducing unintentional injuries on the roads among children and young people under 25 years'). The report stated that children and young people who live in more deprived areas are at greater risk than those from the most affluent. It further went on to state that *"Among pedestrians in the 5 to 9 years age group, the rate of fatal and serious injuries to children living in the 20% most deprived areas is six times higher than to children in the 20% least deprived"*. For Swindon, the average of the previous 5 years shows that the rate of fatal or serious injuries to pedestrians in the 5-9 age group living in the 20% most deprived areas was three times that of those living in the 20% least deprived areas. Whereas, for 2022, 2 of the 3 pedestrians are in the 5-9 age group, 1 from a more deprived area and 1 from a less deprived area and thus, the rate is the same.

For children in the 0-15 age group in Swindon:

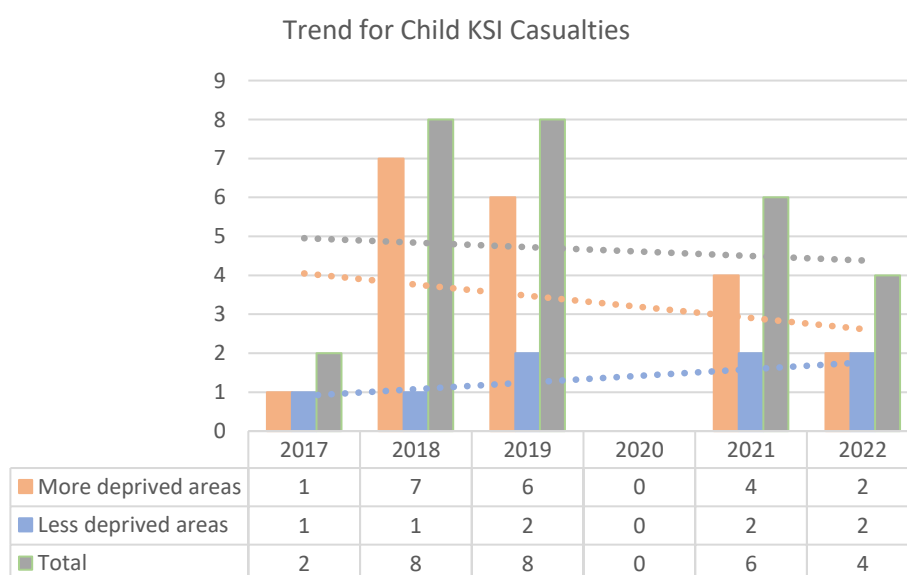
- In 2022, there are 4 KSI casualties, 3 of which are pedestrians. The data shows that for each year across this six-year period (2017-2022), child pedestrians, regardless of their home postcode, are generally more at risk than those in cars or on cycles and account for half, or more, of the child KSI casualties in each year. The single child fatality for 2022 is a pedestrian in the 10-14 age group from a more deprived area.

**Table 23 - Child (0-15) KSI Casualties (where children live)**

|                      | Average figures for the previous 5 years<br>(2017-2021) |                         |                           |                          | 2022                      |                         |                           |                          |
|----------------------|---|-------------------------|---------------------------|--------------------------|---------------------------|-------------------------|---------------------------|--------------------------|
|                      | More<br>deprived<br>areas                               | 20%<br>most<br>deprived | Less<br>deprived<br>areas | 20%<br>least<br>deprived | More<br>deprived<br>areas | 20%<br>most<br>deprived | Less<br>deprived<br>areas | 20%<br>least<br>deprived |
| Collisions           | 3.4   | 1.8                     | 1.2                       | 0.4                      | 2                         | 1                       | 2                         | 1                        |
| Casualties           | 3.6   | 1.8                     | 1.2                       | 0.4                      | 2                         | 1                       | 2                         | 1                        |
| - 5-9 years          | 1   | 0.6                     | 0.2                       | 0.2                      | 1                         | 1                       | 1                         | 1                        |
| Pedestrians          | 2.2   | 1.4                     | 1                         | 0.4                      | 2                         | 1                       | 1                         | 1                        |
| - 5-9 years          | 0.8   | 0.6                     | 0.2                       | 0.2                      | 1                         | 1                       | 1                         | 1                        |
| Cyclists             | 0.4   | -                       | 0.2                       | -                        | -                         | -                       | 1                         | -                        |
| - 5-9 years          | 0.2   | -                       | -                         | -                        | -                         | -                       | -                         | -                        |
| Passengers           | 0.8   | 0.2                     | -                         | -                        | -                         | -                       | -                         | -                        |
| Motorcycle<br>riders | 0.2   | 0.2                     | -                         | -                        | -                         | -                       | -                         | -                        |

- As with the findings noted above for the 5-9-year old child pedestrians, children as a group, who live in more deprived areas in Swindon have, in previous years, been more likely to be Killed or Seriously injured than those that live in less deprived areas. However, 2022 has seen a decrease on 2019, the most recent equivalent pre-pandemic year, and no increase on 2021, and 2022 continues the trends identified last year, with child KSI casualties in the more deprived areas being downward and, in the less deprived areas being slightly upward, resulting in an overall downward trend for all child KSI casualties.

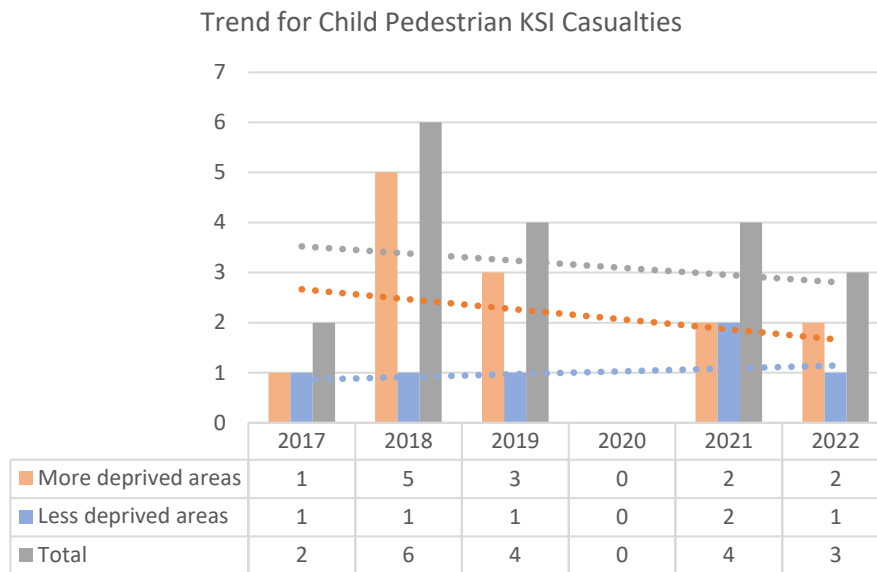
**Figure 21. Child (0-15 years) KSI Casualties by Deprivation Areas (grouped)**



**Note:** There were zero child KSI casualties recorded in 2020

- The same trends are evident for child pedestrians too, as they largely mirror those for all child KSI casualties noted above.

**Figure 22. Child (0-15) Pedestrian KSI Casualties by Deprivation Areas (grouped)**





Appendix A - Location of permanent cycle counters in the Borough

