Cyclist Injury Trends 2006-2018
With an in-depth review of 2016

Research
Department

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Údarás Um Shábháilteacht Ar Bhóithre
Road Safety Authority

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1. Introduction

This report provides an overview of trends in cyclist injuries that occurred in road traffic collisions on Irish public roads from 2006-2018 and an in-depth review of cyclist injuries in 2016. Throughout this report, where reference is made to "cyclist injuries", this refers to all injuries, both serious and minor combined[1].

The Road Safety Authority (RSA) has a statutory remit to report on all fatal, serious and minor injury collisions on public roads that were reported to An Garda Síochána and where records were subsequently transferred to the RSA. As part of this work, the Road Traffic Collision Database is maintained by the RSA, in collaboration with An Garda Síochána. Prior to 2014, the RSA populated this database with collision data received from An Garda Síochána via a paper form detailing the collision circumstances. The RSA now receives an electronic copy of road traffic collision (RTC) data on a daily basis from An Garda Síochána, which are primarily based on information collected at the scene of the collision. As part of the RSA quality control procedures, this data undergoes a validation procedure designed to ensure the quality and accuracy of the final dataset. The validation procedure introduces a time lag to the date at which the RSA can publish analyses based on the RTC dataset. As a result, data from the Road Traffic Collision Database are used in the current report to provide an overview of the 971 cyclist injuries that occurred in 2016.

Data from the Road Traffic Collision Database is used to summarise individual and location specific characteristics such as the age and gender of injured cyclists, road and junction type, as well as light conditions and road character. The times in which cyclist injuries occurred are also reported, according to hour of day, day of the week, and month. The report also outlines driver and cyclist actions and vehicle[2] manoeuvres that preceded cyclist collisions.

[1] **Minor injury collision**: Where there are no deaths or serious injuries. The definition of a "minor injury" is an injury of a minor character such as a sprain or bruise.

Serious Injury: Where there are no deaths, but a person or persons are seriously injured. The definition of "serious injury" is an injury for which the person is detained in hospital as an 'in-patient', or any of the following injuries whether or not detained in hospital: fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock requiring medical treatment.

[2] Note that the term "vehicle" constitutes any mode of transport other than by foot; e.g. pedal cycle, motorcycle, car. In this sense a single vehicle collision involving an injured cyclist is one in which the cyclist's pedal cycle is the only vehicle involved in the collision.

2. Summary of key findings

This section presents a selection of key findings from the current report.

Characteristics of injured cyclists and times of occurrence

- Just over 7 in 10 cyclists (73.7%) injured in 2016 were male, while almost 6 in 10 (57.1%) were between the ages of 25-49.
- The primary periods of the day in which cyclist injuries occurred were during the morning and evening commuting periods (8:00-8:59 and 17:00-18:59).
- There was an increase in the incidence of cyclist injuries from the months of May through to September (48% of injuries occurred in this 5-month period).

Road characteristics and collision circumstances

- More than 8 in 10 cyclist injuries (85.4%) took place on two-way single carriageways and more than 8 in 10 (86.7%) were on urban roads.
- Over half of cyclist injuries (51.1%) in 2016 occurred at junctions. Almost 1 in 4 of all cyclists injured in 2016 (24.7%) were injured in collisions that took place at a T-junction.
- Almost half of cyclists injured (47%) were wearing a helmet at the time of the collision, while just over 4 in 10 (41%) were not. In just over 1 in 10 cases (12%), it was not known whether the injured cyclist was wearing a helmet.

Multivehicle collisions

- Just over 9 in 10 cyclists (91.3%) were injured in a multivehicle collision in which at least one other vehicle was involved.
- Less than 1 in 10 cyclists injured in 2016 (7.9%) were injured in a single vehicle collision in which no other person or vehicle was involved.
- Of the cyclists injured in multivehicle collisions, over 8 in 10 (84%) were injured in a collision with a car.
- Of the cyclists injured in multivehicle collisions, over 1 in 10 (11%) were injured in a collision with a goods vehicle (both light and heavy goods vehicles).

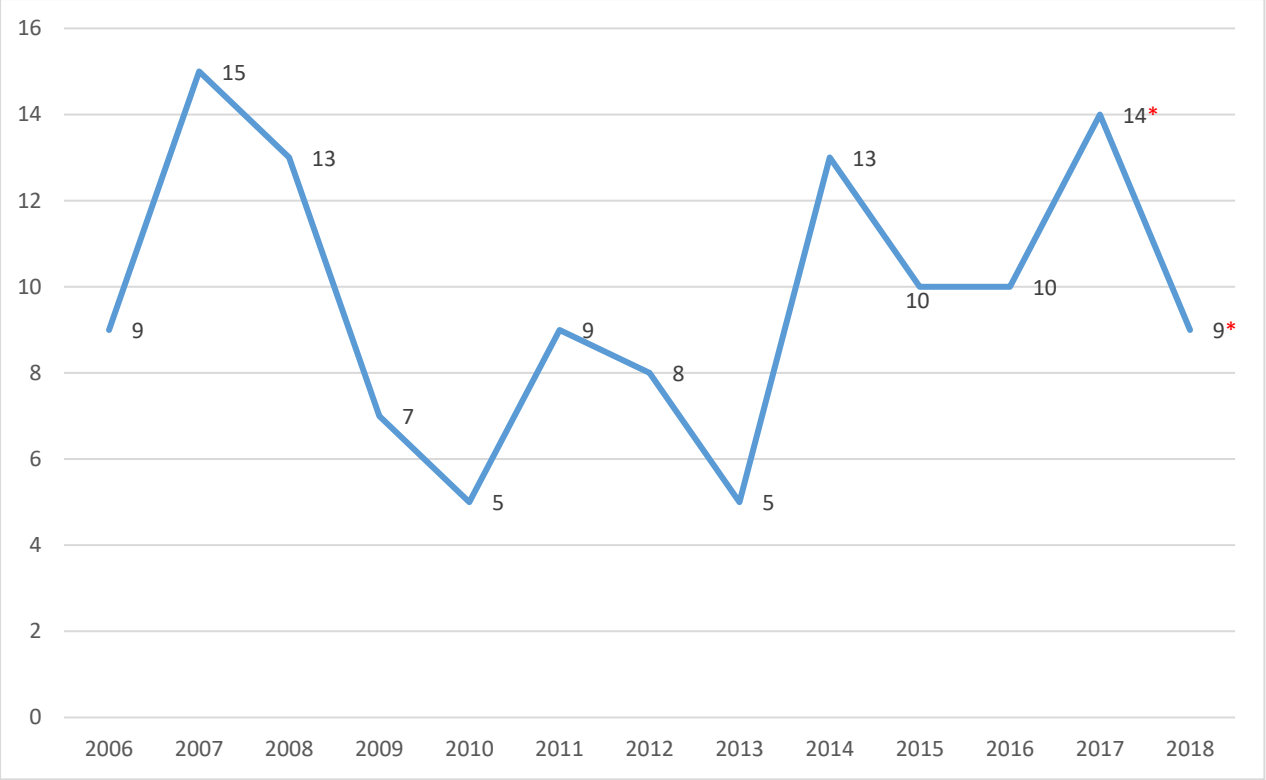
Vehicle manoeuvres and driver actions

- The manoeuvre of cars and goods vehicles most associated with cyclist injuries in 2016 was driving forward; approximately 2 in 5 in each case (40.3% and 38.8% respectively).
- For cars, the second manoeuvre most associated with cyclist injuries in multivehicle collisions was turning right (just over 1 in 5 injuries - 20.5%). For goods vehicles, the opposite was true, and left turns were more associated with cyclist injuries (1 in 5 injuries - 20%).
- In over 2 out of 5 cyclist injuries (41.4%) in collisions with cars, it was reported that the car driver failed to observe prior to the collision.
- In 2 out of 5 cyclist injuries (40%) in collisions with goods vehicles, it was reported that the goods vehicle driver failed to observe prior to the collision.
- In just under 1 in 5 cyclist injuries (19.8%) in a collision with a car, it was reported that the cyclist failed to observe.
- In just over 1 in 5 cyclist injuries (22.4%) in a collision with a goods vehicle, it was reported that the cyclist failed to observe.

3. The long-term trend in cyclist fatality and injury numbers

Figure 1 shows cyclist fatalities over the period 2006-2018[3]. Cyclist fatalities were highest in 2007 (15) and at their lowest in 2010 and 2013 (5). The average annual number of deaths over this thirteen-year period was ten per year.

Figure 1: Trend in cyclist fatalities, 2006 – 2018

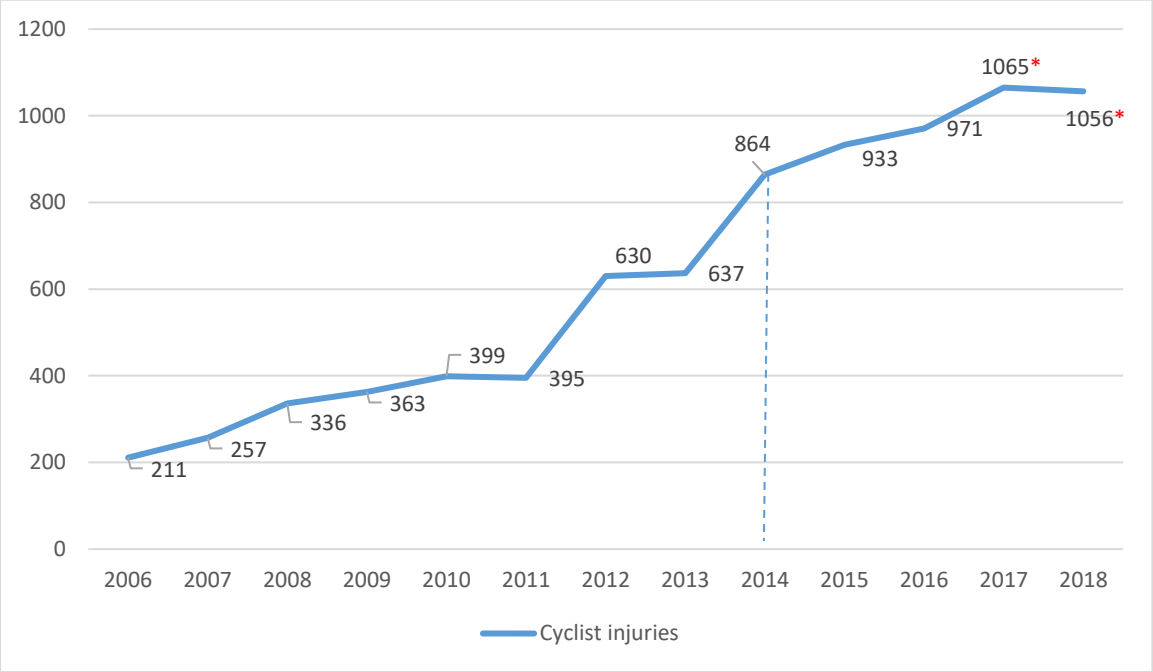


**Note: Data for 2017 and 2018 is provisional and subject to change.*

Figure 2 shows the pattern in cyclist injury numbers for the 2006-2018 period. It is apparent that the number of cyclist injuries on Irish roads has increased during this timeframe. However, these data must be understood in the context of a lack of exposure data for cyclists, and also in the context of a methodology change to the delivery mechanism for collision data, introduced by An Garda Síochána and the RSA in 2014.

[3] Data for 2017 and 2018 is provisional and subject to change

Figure 2: Trend in cyclist injuries, 2006 -2018



*Note: Data for 2017 and 2018 is provisional and subject to change.

The number of cyclist injuries increased steadily from 211 in 2006, to 395 injuries in 2011, an 87% increase. Cyclist injuries increased further from 395 in 2011 to 630 in 2012, a 59% increase (RSA, 2012)[4].

While the number of cyclist injuries remained stable between 2012 and 2013, there was a notable increase in injuries recorded in 2014, rising from 637 in 2013 to 864 in 2014 (a 36% increase). Injuries continued to rise in 2015 and in 2016, albeit at a slower rate; an 8% increase in 2015, up from 864 to 933, and a 4% increase in 2016, from 933 to 971. In 2017 the number of cyclist injuries rose by 10% to 1,065, then fell slightly in 2018 by 1% to 1,056.

Increases in injury numbers for all road users from 2014 onwards can be attributed, in part, to a change in the delivery mechanism of collision records from An Garda Síochána to the RSA as well as enhancements to the data validation process in the RSA. A more detailed account of the methodology change can be found in the Appendix. As a result of these changes, 2014 should be considered a break in the time series for the data on the number of injuries.

Having access to accurate risk exposure data for different road user groups (e.g. drivers, cyclists, pedestrians etc.) in Ireland is crucial to allow the RSA to put any changes in fatality and injury trends in the context of travel volumes, so that it can be determined whether these changes are in line with, or contrary to, expected levels. Ireland currently does not have

[4] Cyclist injuries, a review of 2012 casualties. Road Safety Authority, 2014. Available at: http://www.rsa.ie/Documents/Fatal%20Collision%20Stats/Analysis_of_road_user_groups/Review_of_Cyclist_Injuries_2012.pdf

robust national exposure data for cyclists in order to reliably compare cyclist travel patterns on a year-on-year basis over this 10-year period[5] [6].

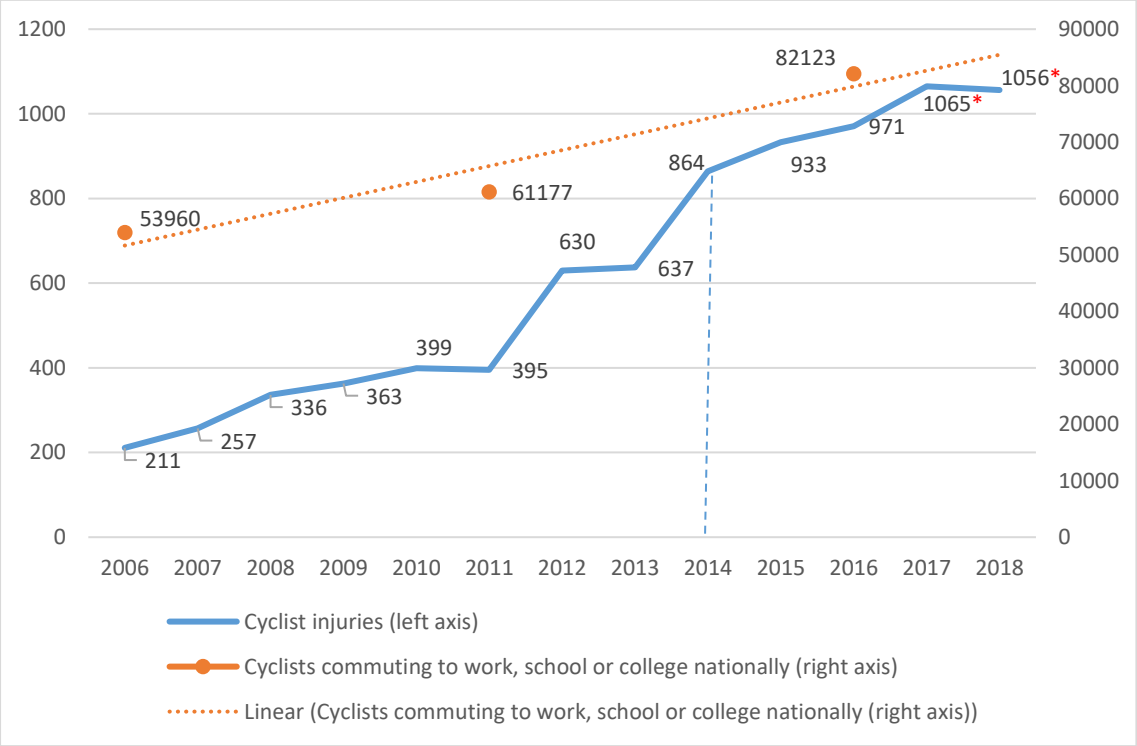
[5] The International Transport Forum produced a discussion paper in 2018, "Exposure-Adjusted Road Fatality Rates for Cycling and Walking in European Countries". Annual travel distances were estimated based on available information for 14 countries for cycling, including Ireland. In the case of Ireland, a single risk exposure estimate for cyclists for 2012 and 2014 was calculated. More routinely calculated risk exposure values are needed to contextualise changes in cyclist injuries and fatalities in Ireland over time.

[6] To enhance our understanding of RTC fatality/injury risk in Ireland across different time periods, the RSA are currently undertaking work to identify travel patterns of various road user groups in Ireland and generate risk exposure estimates. This work is being completed under Action 137 of the government Road Safety Strategy (2013-2020).

Figure 3 uses data from the Central Statistics Office Census Reports of 2006, 2011 and 2016. The Census survey asked respondents to indicate their mode of transport for commuting to work, school or college. There was a 13.4% increase in the number of people cycling to work, school or college between 2006 and 2011 (nationally), rising from 53,960 to 61,177 (CSO, 2011)[7]. The 2016 Census report showed that the number of cyclists commuting to work, school or college rose to 82,123 in 2016 (CSO, 2016)[8]. This constituted a 34.2% increase since 2011.

Overall in the 10-year period 2006-2016, the number of cyclists commuting to work, school or college increased by 52% (n=28,163). In the absence of robust national exposure data for cyclists, this data provides some evidence to confirm the increased popularity of cycling which may account, to some extent, for the upward trend in cyclist injury figures.

Figure 3 Trend in cyclist injuries and CSO census data on cycling as a mode of transport, 2006 -2018



*Note: Data for 2017 and 2018 is provisional and subject to change.

[7] Available at: https://www.cso.ie/en/census/census2011reports/
[8] Available at: https://www.cso.ie/en/releasesandpublications/ep/p-cp6ci/p6cii/p6mtw/

The share of cyclist injuries as a proportion of the total number of injuries among all road user types has increased from 2007-2018, as set out in Figure 4[9]. Cyclist injuries represented 3% of the total in 2007, and 14% of all injuries in 2017 and 2018.

Figure 4: Share of injuries for all road users, 2007 – 2018

**Note: Data for 2017 and 2018 is provisional and subject to change.*

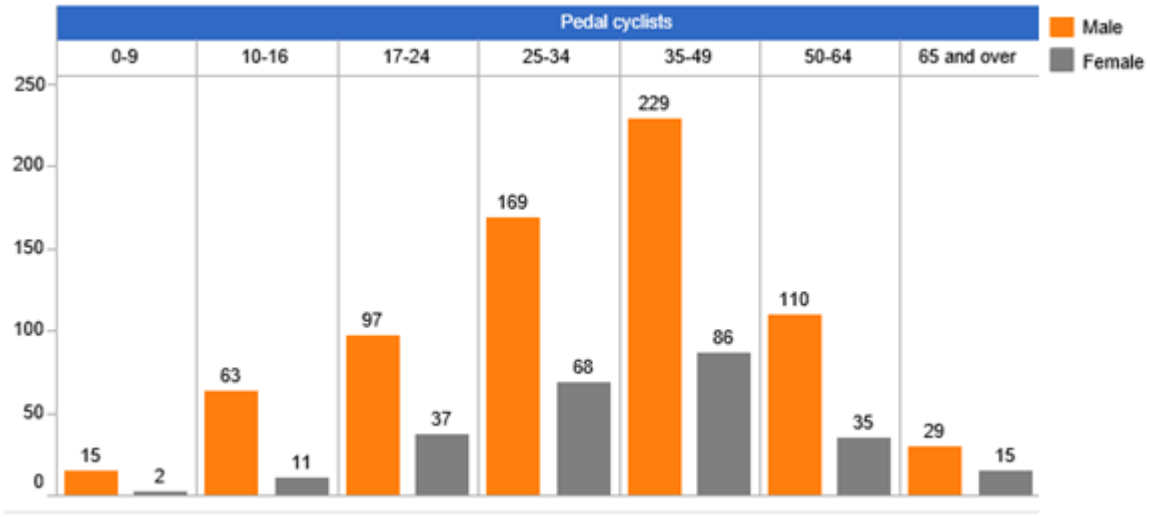
[9] Other road users include goods vehicle users, public service vehicle users and road users such as drivers of tractors and other miscellaneous vehicles.

4. Characteristics of injured cyclists and times of occurrence

4.1 Gender and age

The majority of injured cyclists in 2016 were in the 35-49 years age bracket (33%; 229 male, 86 female) followed by the 25-34 age bracket (25%; 169 male, 68 female).

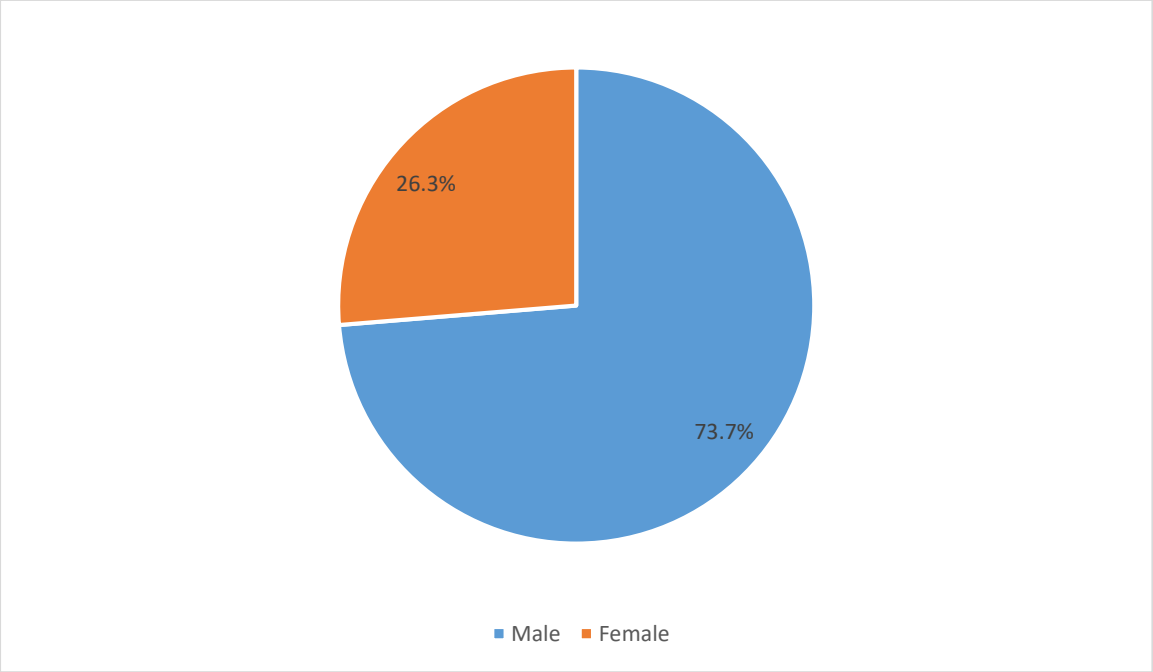
Figure 5: 2016 cyclist injuries by age and gender[10]



[10] The RSA collision database places the number of cyclists injured in 2016 at 971. Figure 5 depicts a breakdown of cyclist injuries totalling 966, where both sex and age of an injured cyclist is known.

Almost three quarters of cyclists injured in 2016 were male (714 males, 255 females).

Figure 6: 2016 cyclist injuries by gender

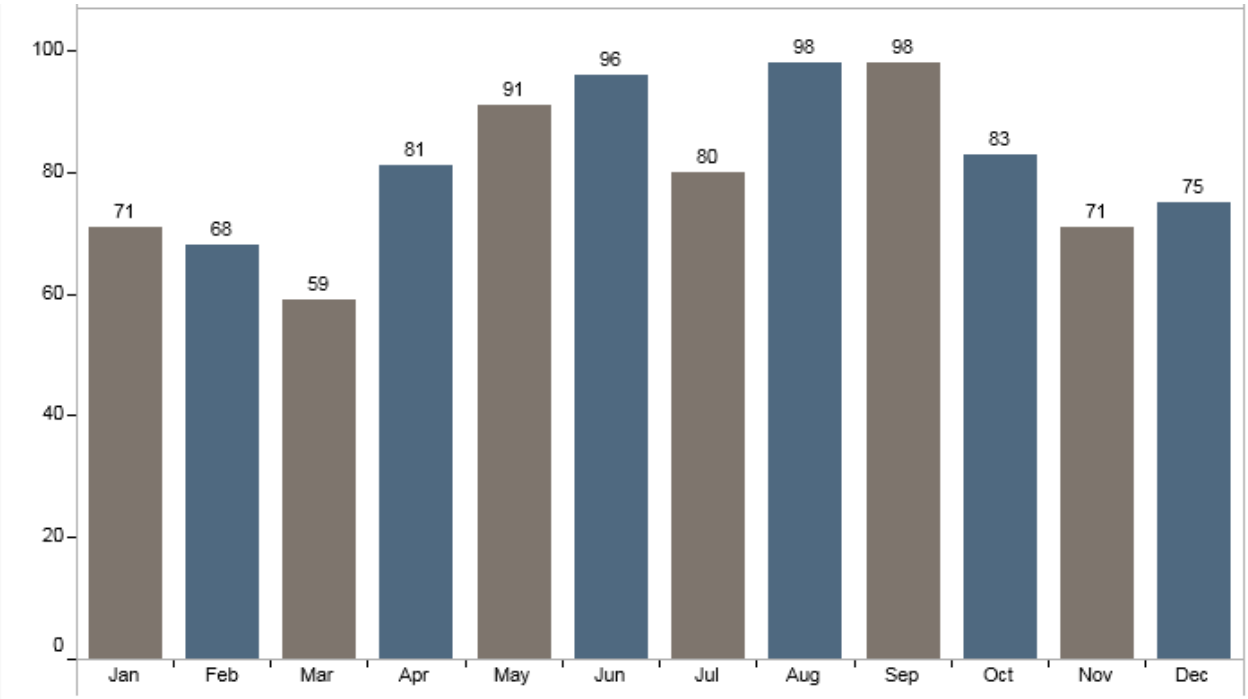


Figures based on 969 cyclist injuries recorded in 2016 where gender known

4.2 Month, day and hour

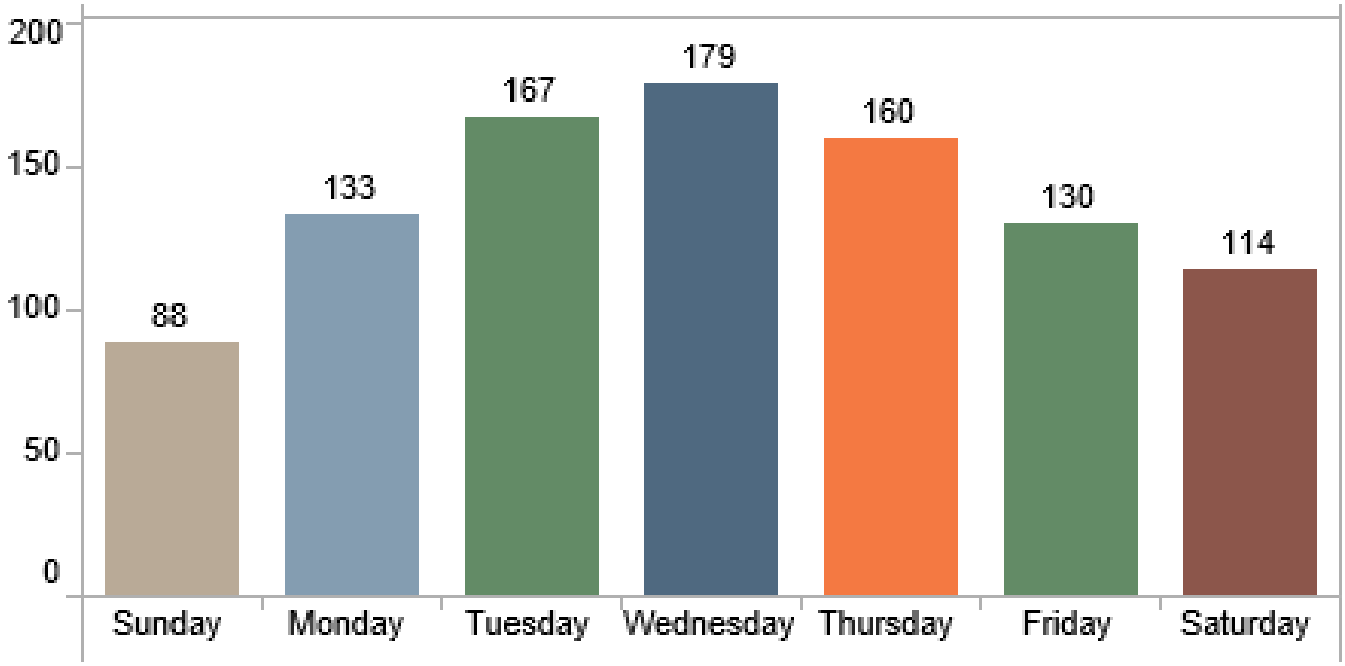
Cyclist injuries were elevated from May through to September and were lower from months October through to April.

Figure 7: 2016 cyclist injuries by month



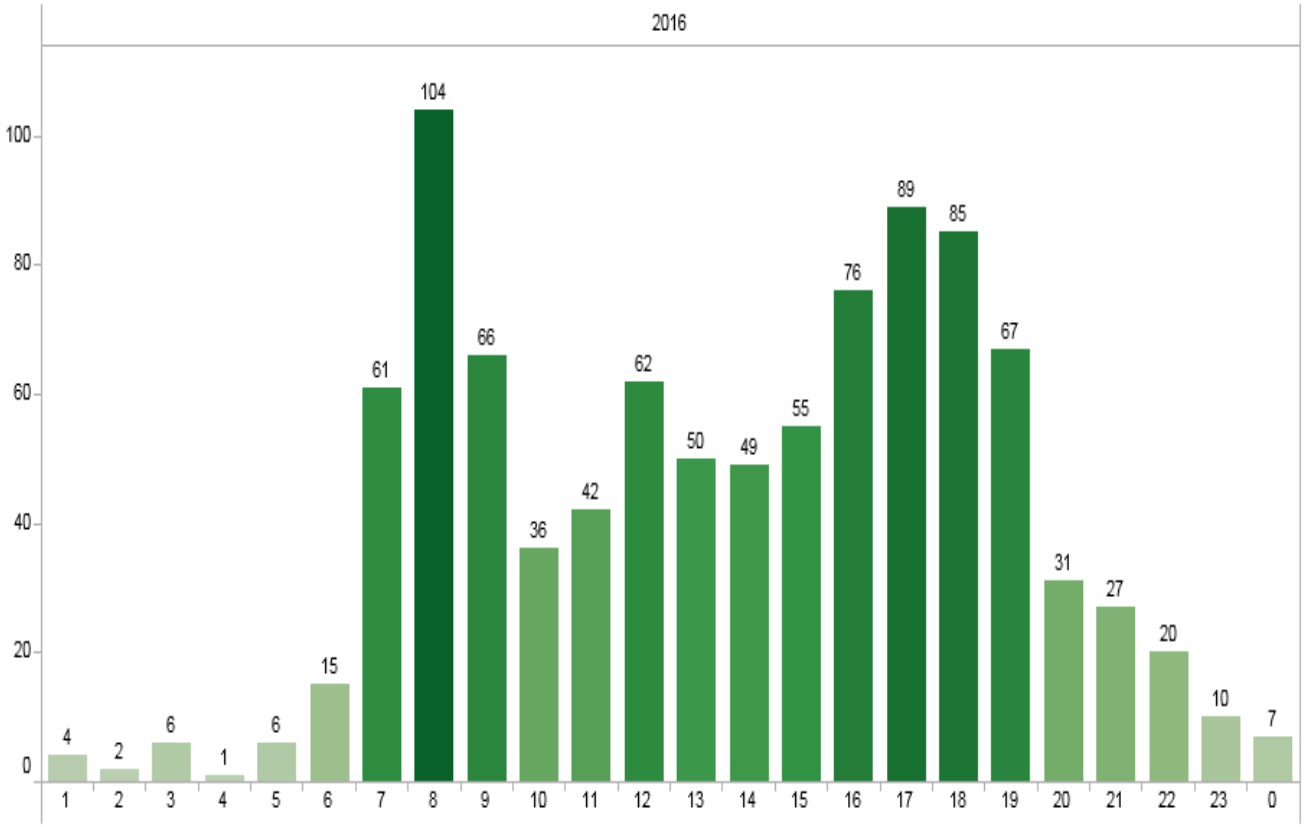
Cyclist injuries were highest on weekdays, peaking mid-week, on Wednesday (18%; 179). Over half (52%; 506) of cyclist injuries occurred on Tuesday, Wednesday and Thursday.

Figure 8: 2016 cyclist injuries by day of week



The time of day associated with the greatest number of cyclist injuries was during the morning commuting period at 8:00-8:59. The next highest incidence of cyclist injuries was between 17:00-17:59. Including the hour before and after each of these periods, 07:00-09:59 accounts for 231 cyclist injuries (23.8%) while 16:00-18:59 accounts for 250 (25.7%).

Figure 9: 2016 cyclist injuries by hour



Note that each band shown in Figure 9 represents one hour, in the range of 0– 59 minutes. For example, 104 injuries occurred from 08:00 – 8:59.

In the National Roads Network Indicator report (Transport Infrastructure Ireland, 2016) the morning peak period is specified as 6.30am to 9.30am with the evening peak covering between 3:30pm and 6:30pm[11]. The report calculates peak traffic hours to have a level of traffic some 30% to 50% above off-peak levels.

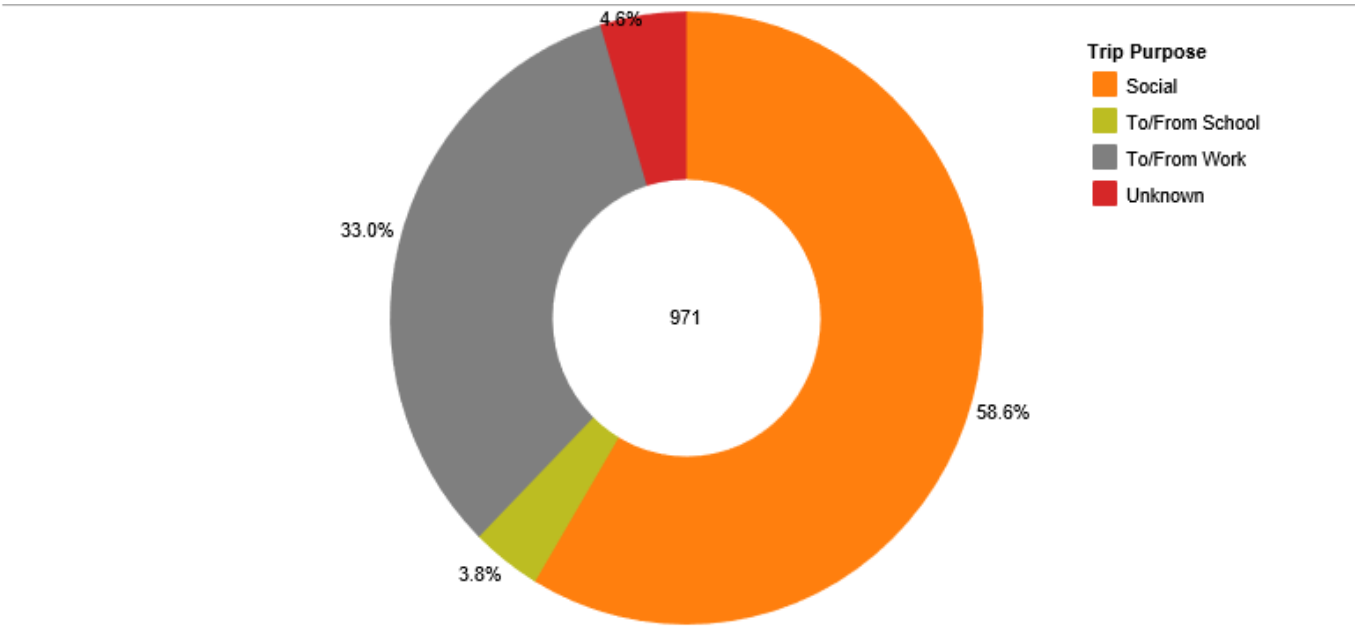
[11] Available at: https://www.tii.ie/tii-library/strategic-planning/nra-road-network-indicators/TII-National-Road-Network-Indicators-2016.pdf

5. Road characteristics and circumstances of cyclist injuries

5.1 Trip purpose

58.6% of cyclist injuries occurred during cycling trips that were for social purposes, which amounted to 569 injured persons. A third of those injured (320) were commuting to/from work and 3.8% (37) were commuting to/from school.

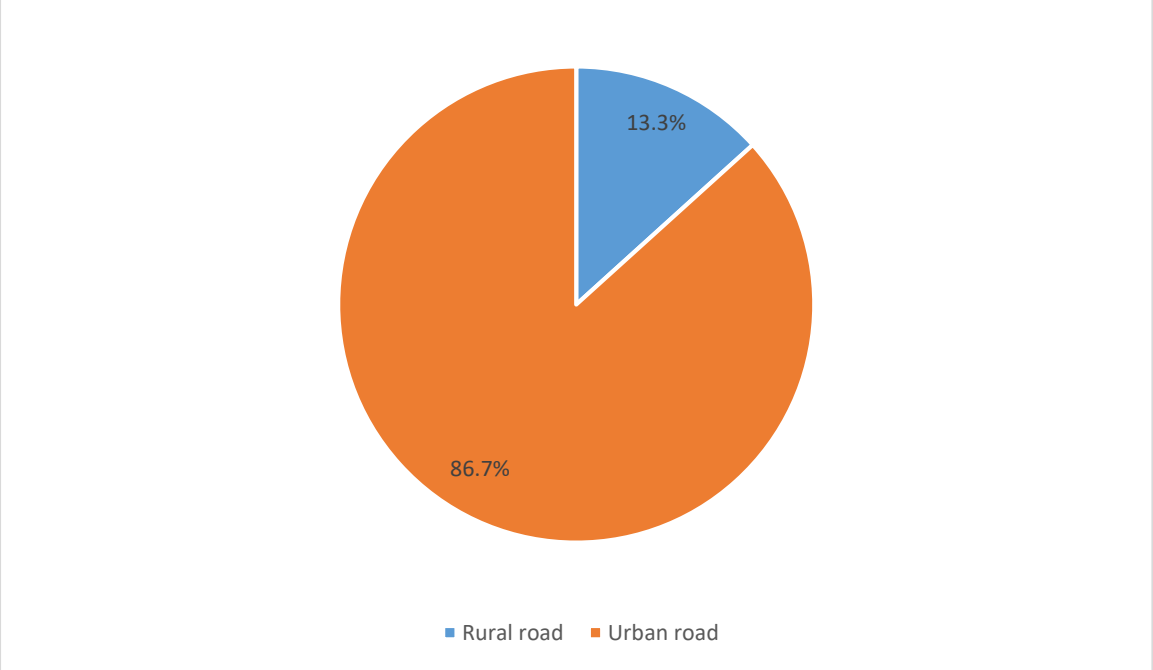
Figure 10: 2016 cyclist injuries by trip purpose



5.2 Speed limits

The definition for an urban road used by the RSA is a road with a 60 km/h speed limit or less. Such roads accounted for 86.7% (841) of cyclist injuries, with 13.3% (129) taking place on rural roads (i.e. those with a speed limit of 80km/h and above).

Figure 11: 2016 cyclist injuries by urban/rural location



Figures based on 970 cyclist injuries recorded in 2016 where speed limit on road of collision known

As set out in Table 1 below, the vast majority of cyclist injuries (74%; 714) took place on roads with a posted speed limit of 50km/h. Roads with a speed limit of 80km/h also accounted for a substantial number of cyclist injuries (10%; 99).

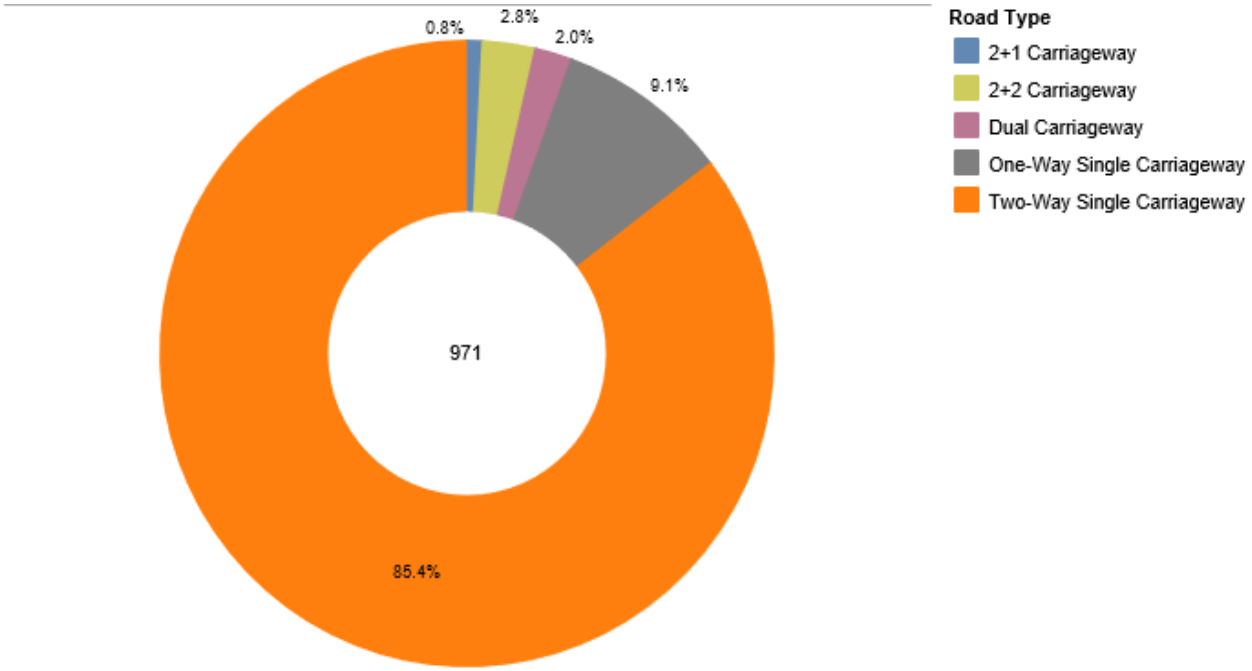
Table 1: 2016 cyclist injuries by speed limit of road

Speed limit	Cyclist injuries	%
Unknown	1	0.1%
<= 30 km/h	74	8%
50 km/h	714	74%
60 km/h	53	5%
80 km/h	99	10%
>=100 km/h	30	3%
Total	971	100%

5.3 Road type

The majority of cyclist injuries occurred on two-way single carriageway roads (85.4%; 829), while one-way single carriageways accounted for 9.1% (88) of injuries. 2+2 carriageways accounted for 2.8% (27) of cyclist injuries, with dual carriageways and 2+1 carriageways accounting for 2% (19) and 0.8% (8) respectively.

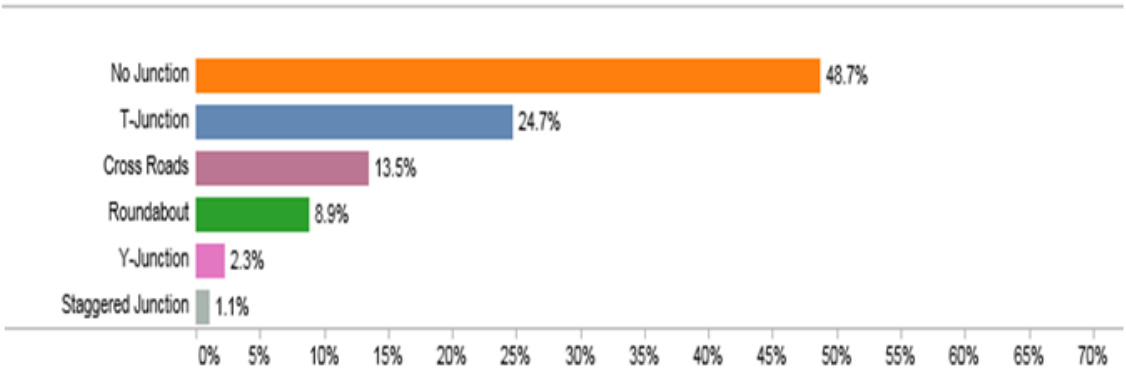
Figure 12: 2016 cyclist injuries by road type



5.4 Junction types and controls

Junctions were associated with just over half (51.1%; 496) of cyclist injuries, while 48.7% (473) occurred on stretches of road with no junction. T-junctions were the junction type associated with the largest proportion of cyclist injuries (24.7%; 240), followed by crossroads (13.5%; 131), roundabouts (8.9%; 86), Y-junctions (2.3%; 22) and staggered junctions (1.1%; 11). Those junctions that accounted for less than 1% of cyclist injuries nationally in 2016 are not displayed (level crossing, slip road, on-off ramp).

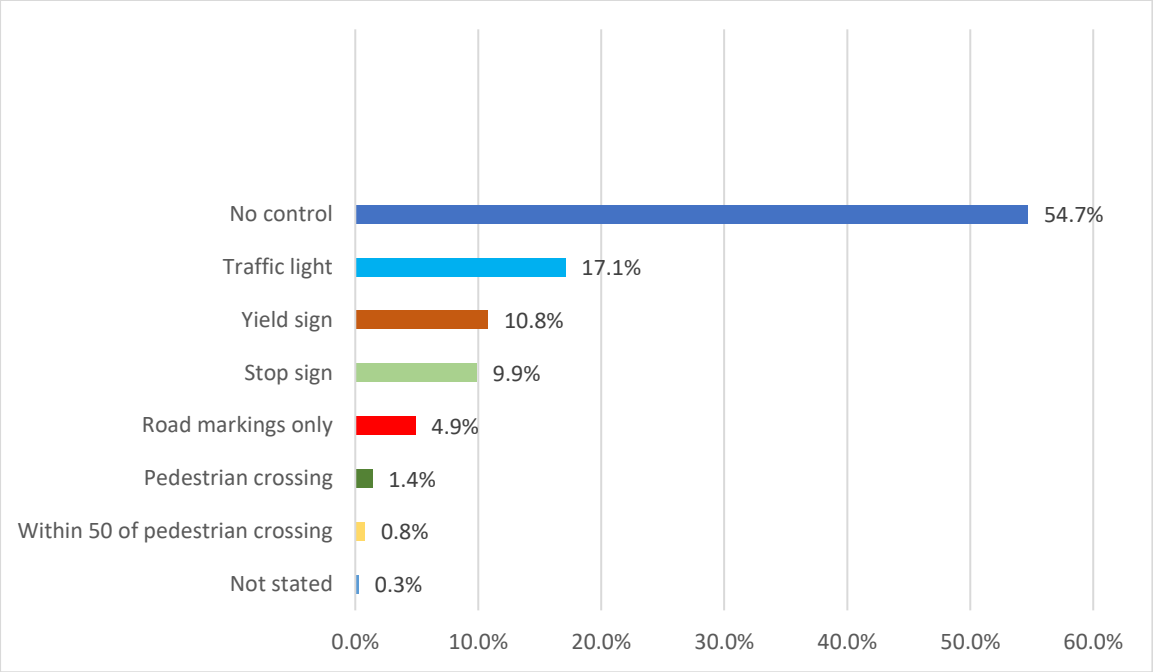
Figure 13: 2016 cyclist injuries by junction type



Figures based on 971 cyclist injuries recorded in 2016

For almost half of the cyclist injuries recorded in 2016, there was a junction control in place at the location where the injury occurred. The most prevalent types of control recorded were traffic lights (17.1%; 166), yield signs (10.8%; 105) and stop signs (9.9%; 96).

Figure 14: 2016 cyclist injuries by junction control[12]



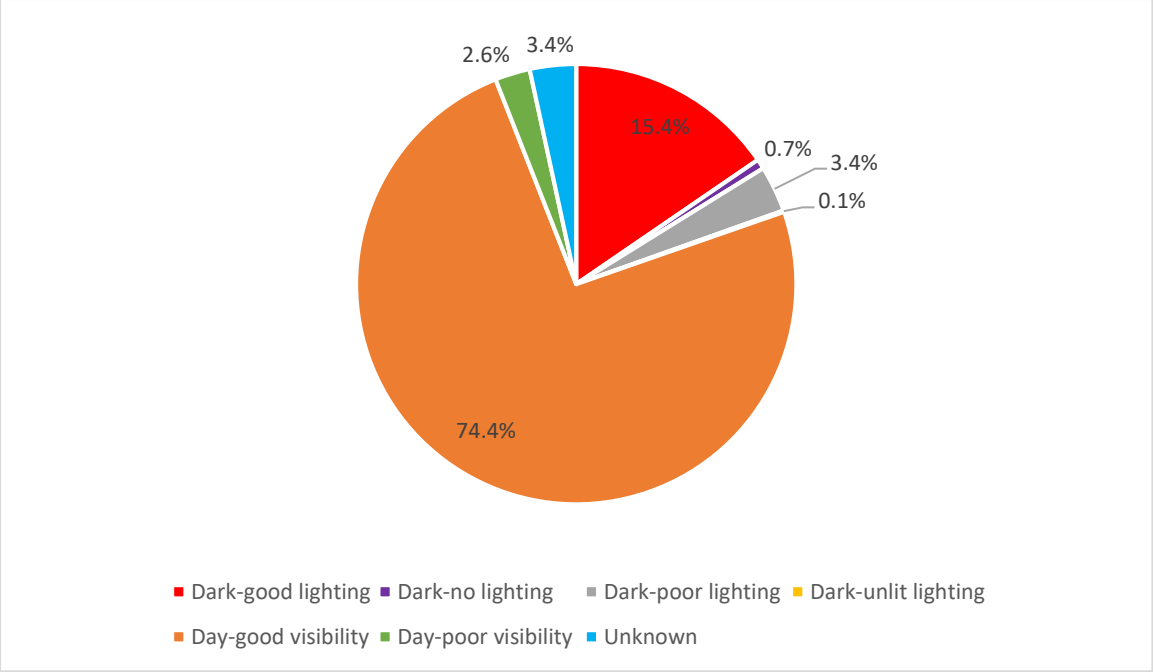
Figures based on 971 cyclist injuries recorded in 2016

[12] Junction type and junction control correspond in the majority of cases, however it can arise that a junction control exists where no junction exists (e.g. a pedestrian crossing on a straight section of road).

5.5 Light conditions

The percentage of cyclist injuries taking place during daylight hours of good visibility was 74.4% (722). The remainder of cyclist injuries arose predominantly during dark conditions with good lighting (15.4%; 150). Dark conditions with poor lighting accounted for 3.4% (33) of cyclist injuries. Overall, 76.9% (747) of cyclist injuries occurred during daylight hours, with 19.7% (191) taking place in dark conditions.

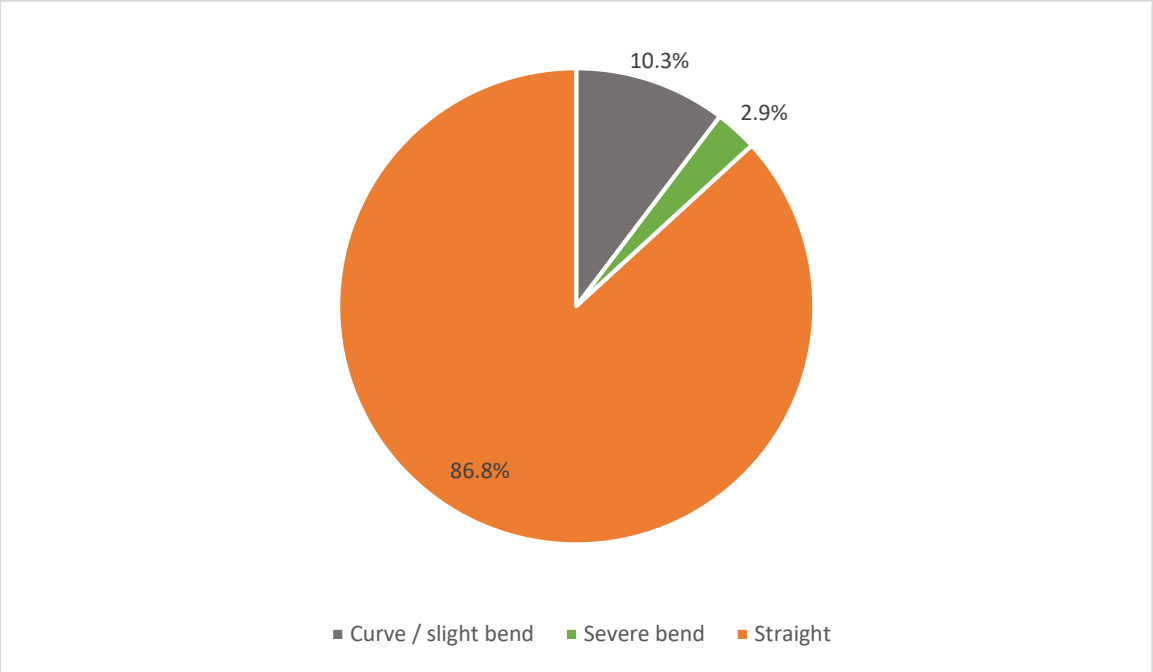
Figure 15: 2016 cyclist injuries by light conditions



5.6 Road character

In terms of road character, 86.8% (842) of cyclist injuries occurred on a straight section of road, with 10.3% (100) taking place on sections of road with a slight bend. Severe bends accounted for 2.9% (28) of cyclist injuries.

Figure 16: 2016 cyclist injuries by road character

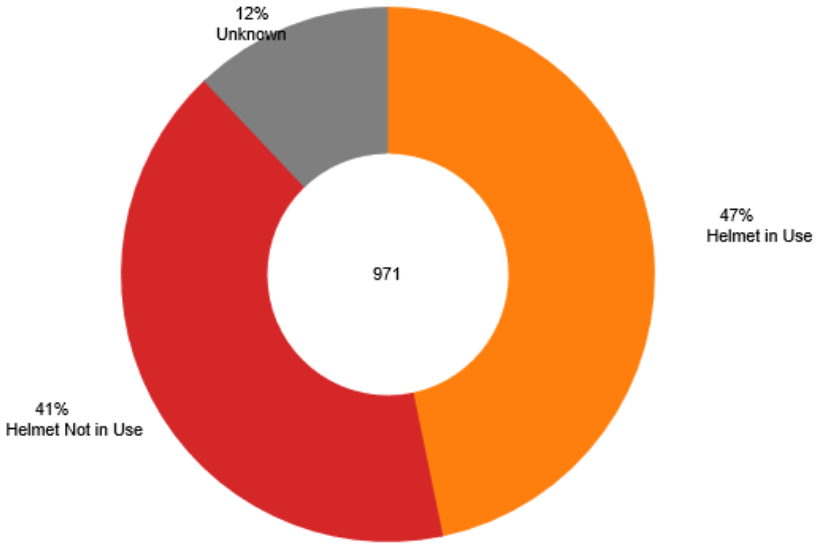


Figures based on 970 cyclist injuries recorded in 2016 where road character known

5.7 Helmet usage

As shown in Figure 17, 47% (456) of cyclists injured were wearing a helmet at the time of the collision. 41% (398) were not wearing a helmet at the time of the collision and in 12% (117) of cases it was not known whether the injured cyclist had been wearing a helmet.

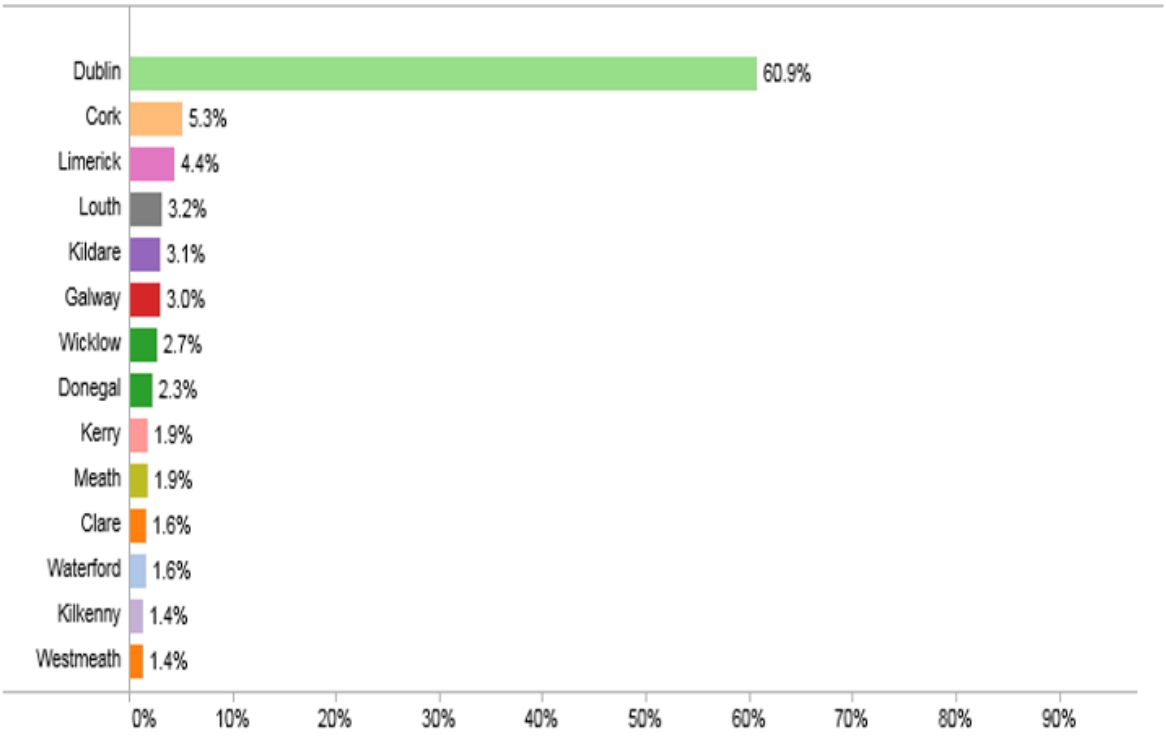
Figure 17: 2016 cyclist injuries by helmet usage



6. Cyclist injuries by county

Dublin accounted for the majority share of cyclist injuries (60.9%; 591). The following 9 counties in which cyclist injuries were most common accounted for 27.6% of cyclist injuries: Cork (51), Limerick (43), Louth (31), Kildare (30), Galway (29), Wicklow (26), Donegal (22), Kerry (18) and Meath (18). Counties with less than a 1% share of national cyclist injuries in 2016 are not displayed in Figure 18. These range from Laois (0.8%) to Roscommon (0.2%)

Figure 18: 2016 cyclist injuries by county



Figures based on 971 cyclist injuries recorded in 2016

Table 2 shows the number of individuals, by city/town, that used a bicycle to commute to work, school or college on census day in April 2016. The majority of cyclists commuting to work, school or college do so in large urban areas and their suburbs. The results shown in Table 2 are analogous to those of Figure 18; higher levels of cyclist activity in major urban areas are reflected in the scale of cyclist injuries that arise at the county level.

Table 2 CSO 2016 census: population that select bicycle as means of travel to work, school or college[13]

National total	82,123
Dublin City and suburbs	54,061
Cork City and suburbs	3,275
Galway City and suburbs	2,879
Limerick City and suburbs	1,561
Dundalk	932
Swords	553
Celbridge	531
Waterford City and suburbs	529
Kilkenny	502

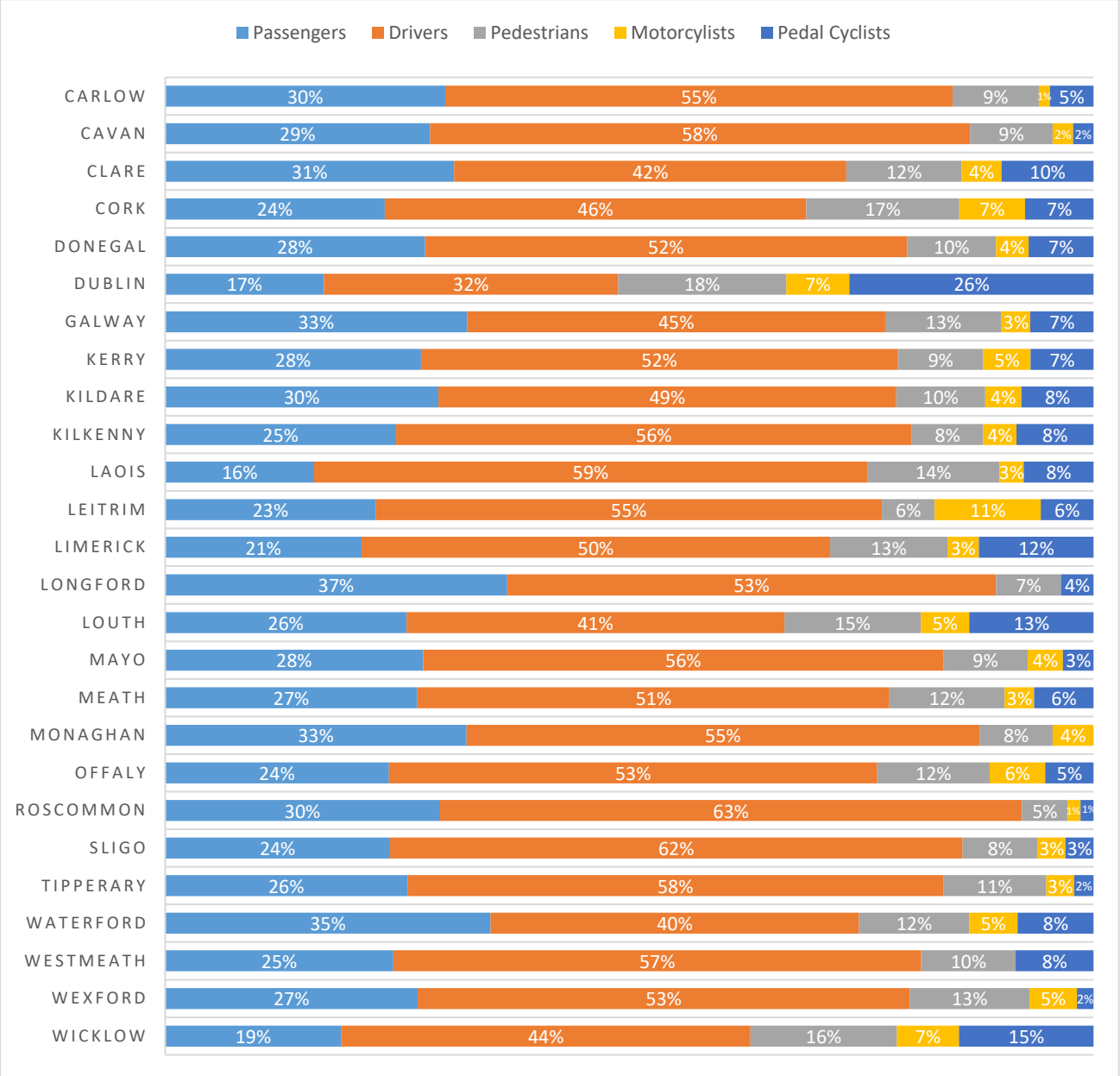
Source: CSO

Note: Towns with less than 500 commuting cyclists on Census day 2016 are omitted from the table

[13] Available at: https://statbank.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?MainTable=E6013&TabStrip=Select&PLanguage=0&FF=1

Figure 19 shows the percentage share of injuries by road user type for each county. In Dublin, over a quarter (26.3%) of those injured were cyclists. Other counties of note are Wicklow, Louth and Limerick where the incidence of cyclist injuries is greater than 10% of each county's traffic-injury total.

Figure 19: 2016 share of injuries by road user type and county 2016



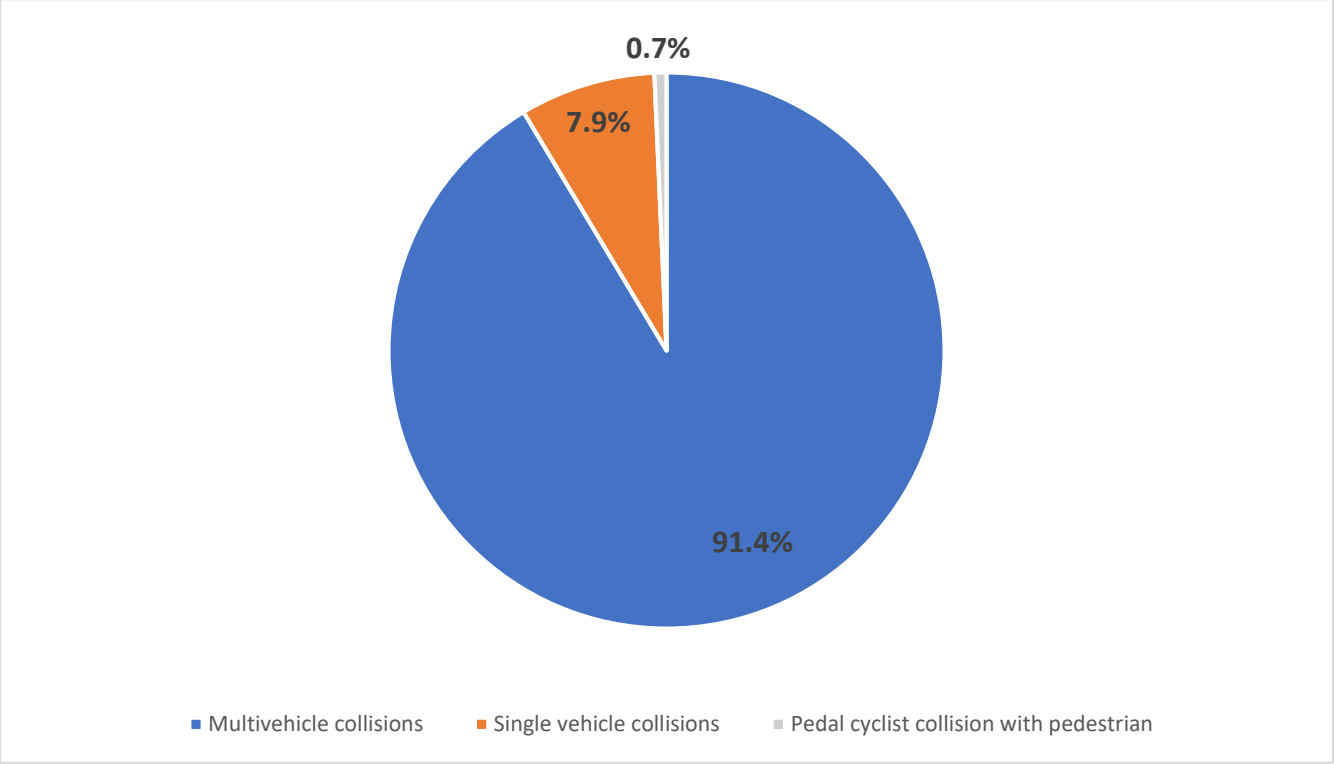
Figures based on 7,773 road user injuries recorded in 2016

7. Multivehicle and single-vehicle collisions

In the vast majority of cases, cyclists were injured in collisions with at least one other vehicle.

There were 77 cyclists injured (7.9% of the total) in a single vehicle collision in 2016, where no other person or vehicle was involved[14]. There were 7 (0.7%) cyclists injured in a collision with a pedestrian.

Figure 20: 2016 cyclist injuries by collision type



Figures based on sample size of 971 cyclist injuries

Of the 887 (91.3%) cyclists injured where at least one other vehicle was involved, the majority of these (over 8 in 10; 84%) were injured in a collision with a car. Just over 1 in 10 (11%) were injured in a collision with a goods vehicle. The remainder involved miscellaneous or unknown vehicles.

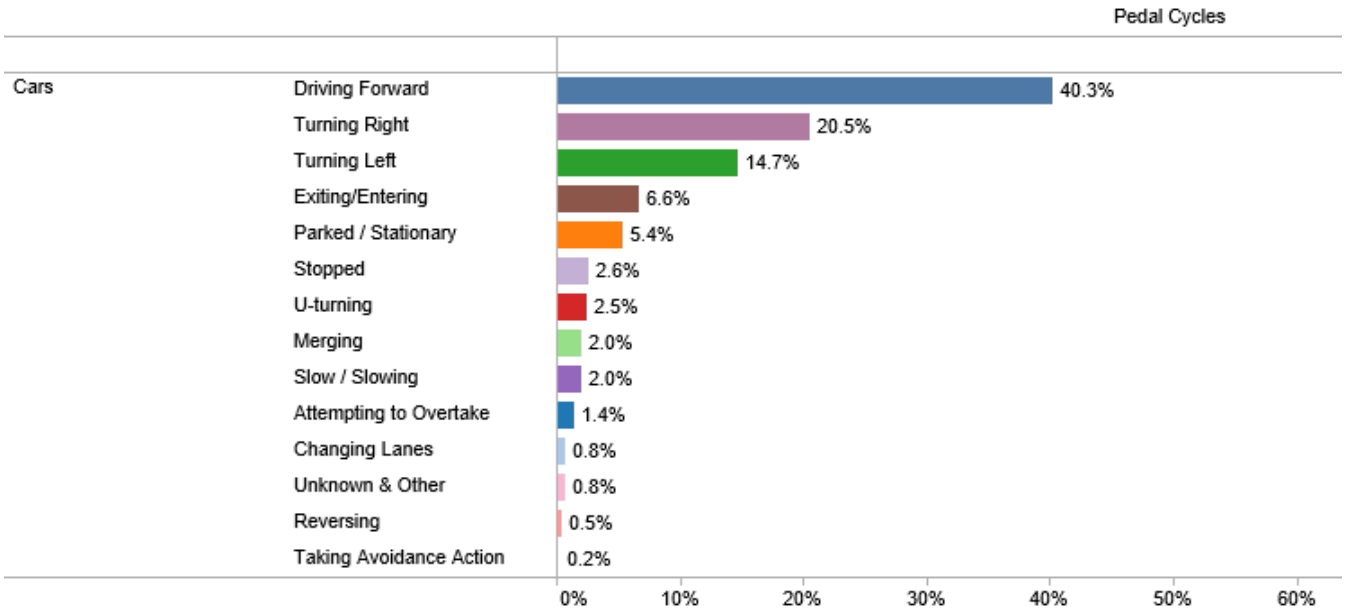
[14] A single vehicle collision in the case of a pedal cycle is one in which the pedal cycle was the only vehicle involved in the collision.

7.1 Vehicle manoeuvres

In 2016 there were 648 cyclists injured in collisions between cars and pedal cycles for which driver actions and vehicle manoeuvres were recorded. There were 85 cyclists injured in collisions between goods vehicles and pedal cycles for which driver actions and vehicle manoeuvres were recorded. Statistics and charts in Section 7.1 and 7.2 relate to these subsets of the cyclist injury data.

Where a cyclist was injured in a collision with a car, 40.3% (261) of injuries occurred when the car was driving forward. Other car manoeuvres, such as turning right (20.5%; 133), turning left (14.7%; 95) and exiting/entering[15] (6.6%; 43) were also prevalent in cyclist injury collisions.

Figure 21: 2016 cyclist injuries by car manoeuvre prior to collision with cyclist

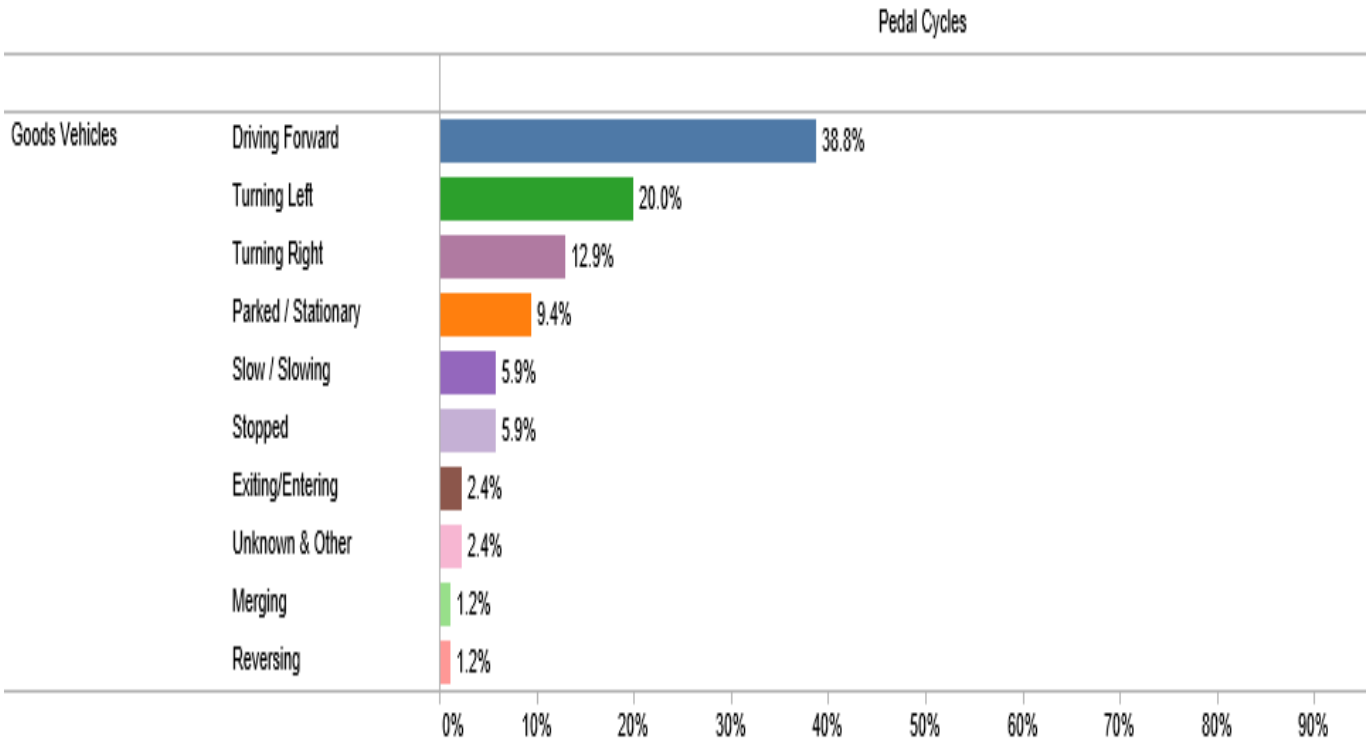


Figures based on 648 cyclist injuries in collisions between cars and pedal cycles in which vehicle manoeuvre was recorded

There were 85 cyclists injured in collisions between goods vehicles and pedal cycles in which a vehicle manoeuvre was recorded. Cyclist injuries in collisions with goods vehicles occurred predominantly when the goods vehicle was driving forward (38.8% of injuries, 33 in total). However, unlike collisions between cars and pedal cycles, where turning right was the second most common manoeuvre associated with cyclist injuries, turning left accounted for 20% of injuries (17) in collisions between goods vehicles and pedal cycles.

[15] Locations into which a vehicle can be recorded as entering and exiting are: private residence, farm/field/gate, commercial development, roundabout, footway/footpath, other entrance.

Figure 22: 2016 cyclist injuries by goods vehicle manoeuvre prior to collision with cyclist



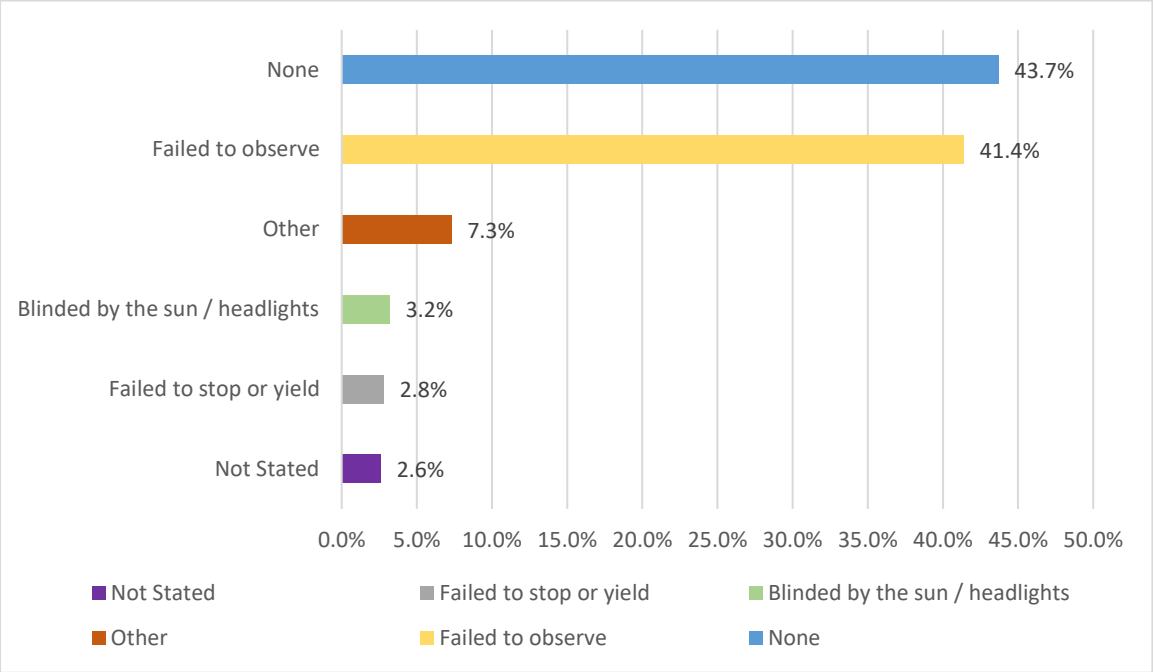
Figures based on 85 cyclist injuries in collisions between goods vehicles and pedal cycles in which vehicle manoeuvre was recorded

The manoeuvre of the pedal cycle prior to a collision is also recorded and included in the RSA collision database. For 89% of cyclists injured in a collision with a car in 2016, the pedal cycle was recorded as cycling forward prior to the collision. For 91.8% of cyclists injured in a collision with a goods vehicle, the pedal cycle was recorded as cycling forward prior to the collision.

7.2 Driver and cyclist contributory actions

In 41.4% (268) of cases where a cyclist was injured in a collision with a car, it was reported that the car driver had failed to observe. Car drivers being blinded by sun/headlights accounted for 3.2% (21) of cyclist injuries in collisions with cars. In 43.7% of cases no contributory actions by the car driver(s) involved were identified.

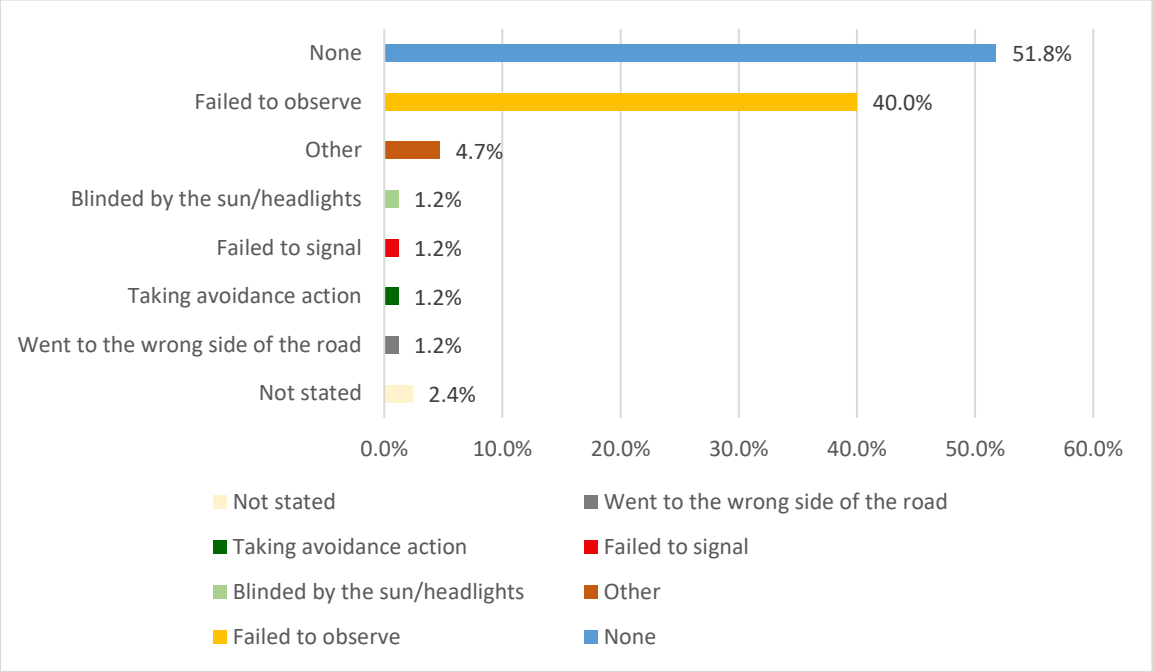
Figure 23: 2016 cyclist injuries by car driver action prior to collision with cyclist



Figures based on 648 cyclist injuries in collisions between cars and pedal cycles. Responses <1% not shown.

In 40% (34) of cyclist injuries in collisions with goods vehicles, it was reported that the goods vehicle driver failed to observe. In 40 % of cases no contributory actions by the goods vehicle driver(s) involved were identified.

Figure 24: cyclist injuries by goods vehicle driver action prior to collision with cyclist

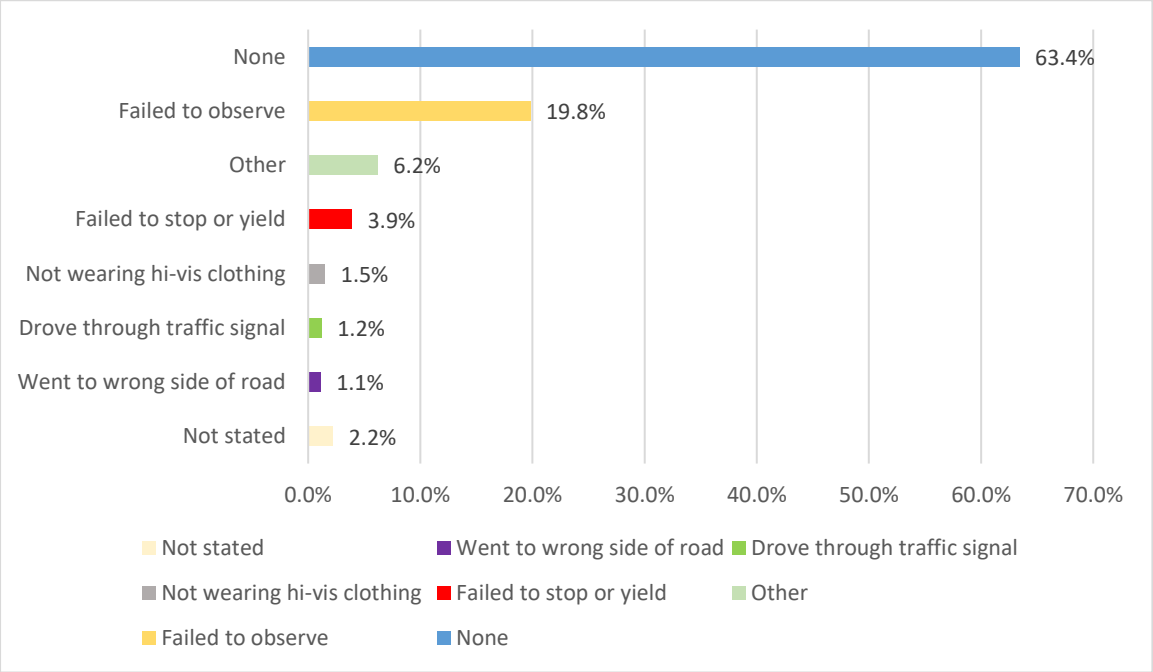


Figures based on 85 cyclist injuries in collisions between goods vehicles and pedal cycles. Responses <1% not shown.

As well as driver actions, cyclist actions prior to a collision are recorded in the RSA collision database.

In 19.8% (128) of cases where a cyclist was injured in a collision with a car, it was reported that the cyclist had failed to observe, and in 3.9% (25) of cases, it was reported that the cyclist had failed to stop or yield. In 63.4 % of cases no contributory actions by the cyclist(s) involved were identified.

Figure 25: cyclist injuries by cyclist action prior to collision with car



Figures based on 648 cyclist injuries in collisions between cars and pedal cycles. Responses <1% not shown.

In 22.4% (19) of cases where a cyclist was injured in a collision with a goods vehicle, it was reported that the cyclist had failed to observe.

Conclusion

Cyclist injury data for Ireland from 2007-2018 highlights a trend of increasing cyclist injuries, notably in 2012 and 2014. This increase is likely due in part to the growth in popularity of cycling in recent years (as highlighted by CSO census reports) and in part due to a collision data methodology change.

971 individuals were injured while cycling on public roads in Ireland in 2016. Of these, three quarters were male, and approximately half of injuries took place during morning and evening commuting times. Summer and Autumn accounted for a higher rate of cyclist injuries than other times of the year, particularly May/June and August/September.

Cyclist injuries tended to occur most frequently on two-way single carriageways, with just over half taking place at junctions. Almost half of cyclists injured in 2016 were wearing a helmet at the time of the collision.

Cyclist injuries predominantly occurred in collisions with cars, followed by collisions with goods vehicles. Single vehicle collisions involving no other vehicle or person other than the injured cyclist also gave rise to a number of injuries.

Cyclist injuries in collisions with cars were mainly associated with the car driving forward. Similarly, cyclist injuries in collisions with goods vehicles were primarily associated with the goods vehicle driving forward. Driver failure to observe was the most cited driver action preceding a cyclist injury in a collision with a car or a goods vehicle.

Cyclist failure to observe was the most common cyclist action preceding cyclist injuries in collisions with cars and goods vehicles, while cycling forward was the most common manoeuvre.

Appendix: Methodological note

Introduction

The Road Safety Authority (RSA) has a statutory remit to collect, compile, prepare, publish or distribute information and statistics relating to road safety and the functions of the Authority for national or international planning, policy research and development, monitoring and reporting purposes.

As part of this remit, the RSA provide analysis of road traffic injury incidents on an annual basis. A road collision is a collision investigated by or brought to the notice of An Garda Síochána (AGS) where the location of the collision can be determined and where it has occurred on a public road. These incidents have been reported to AGS and forwarded to the RSA. Injury collisions on private property, such as private lanes and car parks are excluded.

New Method of Receiving Collision Records

The RSA and, before that, the National Roads Authority (now Transport Infrastructure Ireland) received collision data using a paper form, called a C(T)68, from AGS. This form was sent by post to the RSA and provided details on the initial report of the collision.

Since 2014, the system by which information was provided to the RSA, was updated. The RSA now receives an electronic copy of individual traffic collision incidents on a daily basis. The paper form was previously considered the record of note for the collision whereas the electronic record is now considered the record of note for the collision.

The change to an electronic transfer of data has resulted in improvements in a number of areas of data capture which will have a positive impact on collision reporting. The improvements are that the RSA has:

- The complete set of traffic injury and material damage records recorded on PULSE which can now be used for analysis.
- Access to more fields in the electronic traffic incident record.
- Access to more up to date information about the collision.
- Two-way communication with the Garda Information Services Centre (GISC).

Enhanced Validation Process

Records received are divided into those classed as material damage and those classed as injury collisions. Once received, injury collision records are thoroughly reviewed by the Research Department of the RSA. This review utilises the information in the detailed narrative and data fields and interim updates. It looks for data anomalies and any possible data input errors.

As part of this process there is two-way communication with GISC. Feedback can then be received from GISC via an update to the incident record.

There will still be limitations to the information that can be ascertained from the electronic collision records as the level of detail contained in the collision investigation file, where one exists, is not recorded on the electronic collision record.

Injury Collisions

The definitions of fatal, serious and minor injuries outlined below have not changed from previous years. Increases seen in injury numbers in the 2014 data are likely to be due in part to enhancements in the validation process outlined. It will take around five years before any appreciable trends in the data can be confirmed. As a result, this should be considered as a break in the time series for the data on the number of injuries and injury collisions. This does not affect time series data for the number of fatalities or fatal collisions.

Collisions and Casualties

Road Collisions are classified as fatal, personal injury or material damage: casualties are classified as either killed or injured.

Fatal Collision: Where at least one person is killed because of the collision and death occurs within 30 days.

Serious Injury Collision: Where there are no deaths, but a person or persons are seriously injured.

The definition of “serious injury” is an injury for which the person is detained in hospital as an ‘in-patient’, or any of the following injuries whether or not detained in hospital: fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock requiring medical treatment.

Minor Injury Collision: Where there are no deaths or serious injuries. The definition of a “minor injury” is an injury of a minor character such as a sprain or bruise.