



# Analysis of serious injury collisions and serious injuries on Irish roads (2014-2017)

RSA and An Garda Síochána Road Safety Appeal  
28<sup>th</sup> November 2019

## Introduction



- This analysis investigates the extent and circumstances of serious injury collisions and serious injuries on Irish roads from 2014 to 2017.
- The analysis presents individual specific characteristics, such as the type, age and gender of road users seriously injured, as well as incident specific information, such as time of day and day of week of serious injury collisions.

## Data source for analysis



- Data from the Irish Road Traffic Collision Database, based on collision records transferred from An Garda Síochána to the RSA, have been used for the analysis in this presentation.
- The analysis is based on aggregate data from 2014-2017 for serious injury collisions.

Time Period	Serious Collisions	Serious injuries
2014 - 2017	3,087	3,518

*Data for 2017 are provisional and subject to change.*

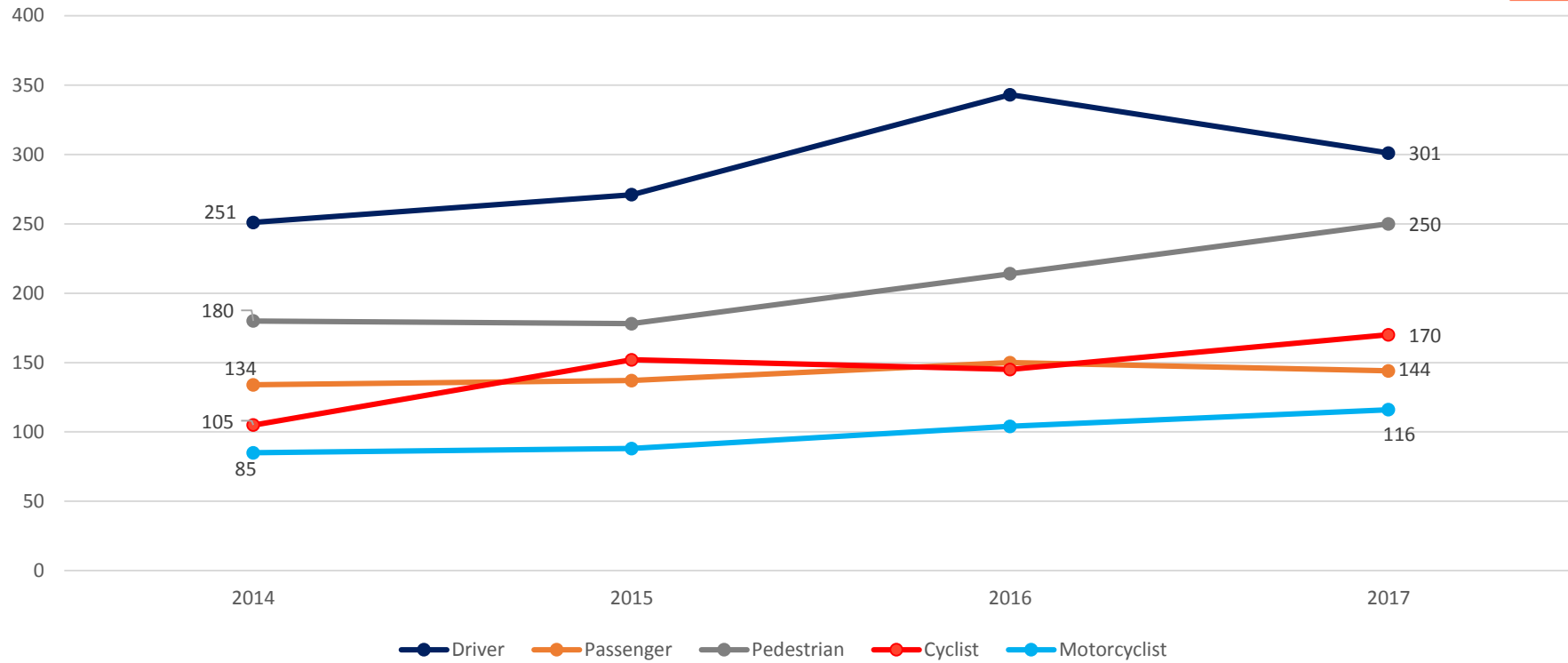
## Presentation outline



RSA

- Trend in serious injuries
- Profile of seriously injured road users: road user type, gender and age
- Profile of collisions: time, day of week, location.

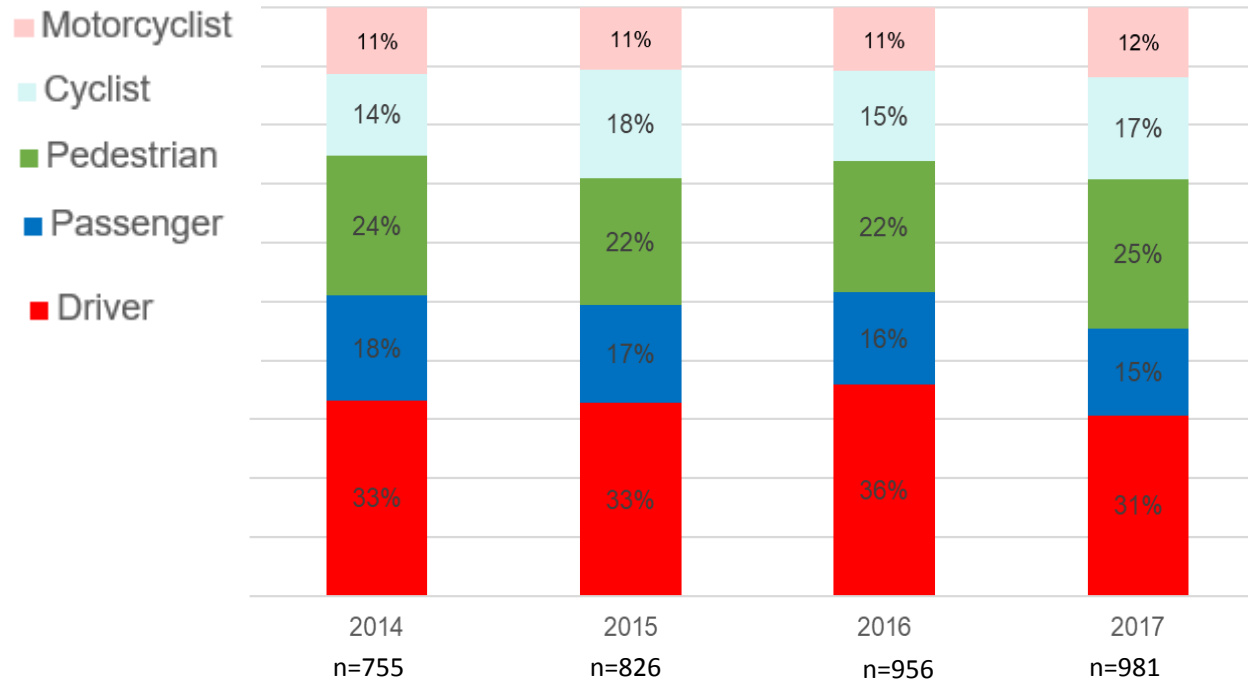
# Trend in road user serious injuries 2014-2017



	2014	2015	2016	2017	Total
Driver	251	271	343	301	1166
Passenger	134	137	150	144	565
Pedestrian	180	178	214	250	822
Cyclist	105	152	145	170	572
Motorcyclist	85	88	104	116	393
<b>Total</b>	<b>755</b>	<b>826</b>	<b>956</b>	<b>981</b>	<b>3518</b>

Note; caution is advised on interpreting these figures. The increase in serious injuries over the years may not be as a result of an increase in collisions. It may also be attributed to an improvement in data capture which occurred over this period.

# Share of road users seriously injured

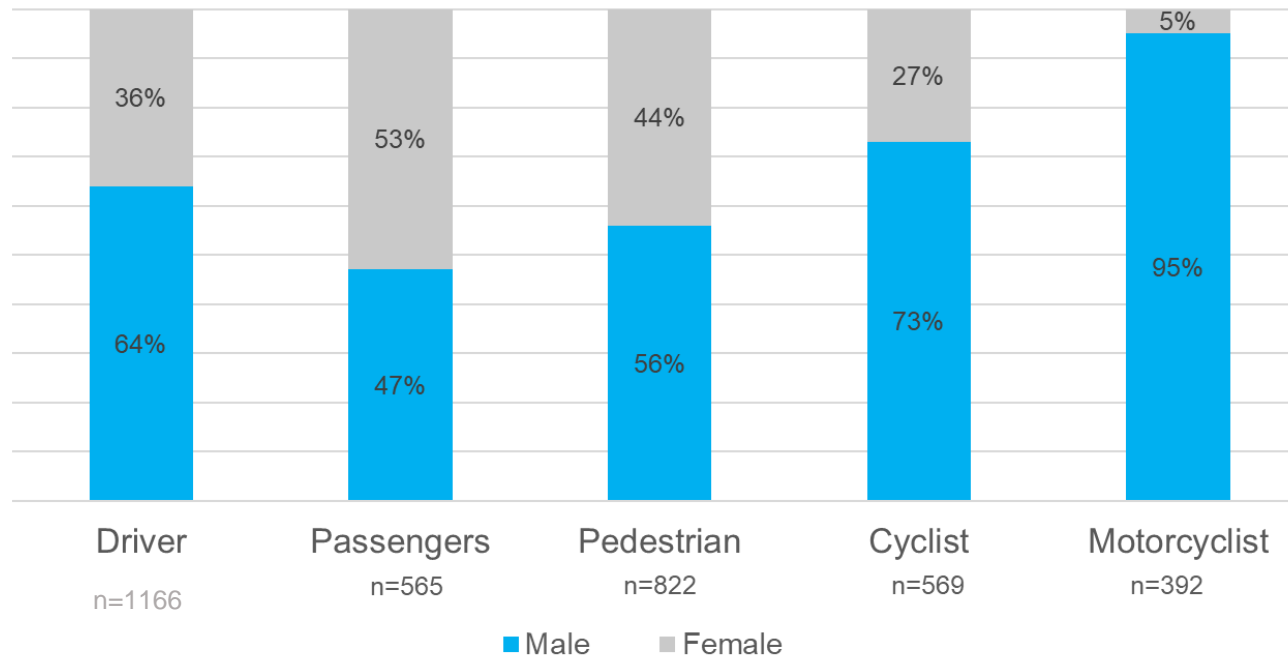


- The proportion of road users seriously injured annually is largely consistent across the period.
- In each year, drivers make up the majority of injured road users.

Base: *Serious injuries* (2014-2017, n=3518)

*Data for 2017 are provisional and subject to change.*

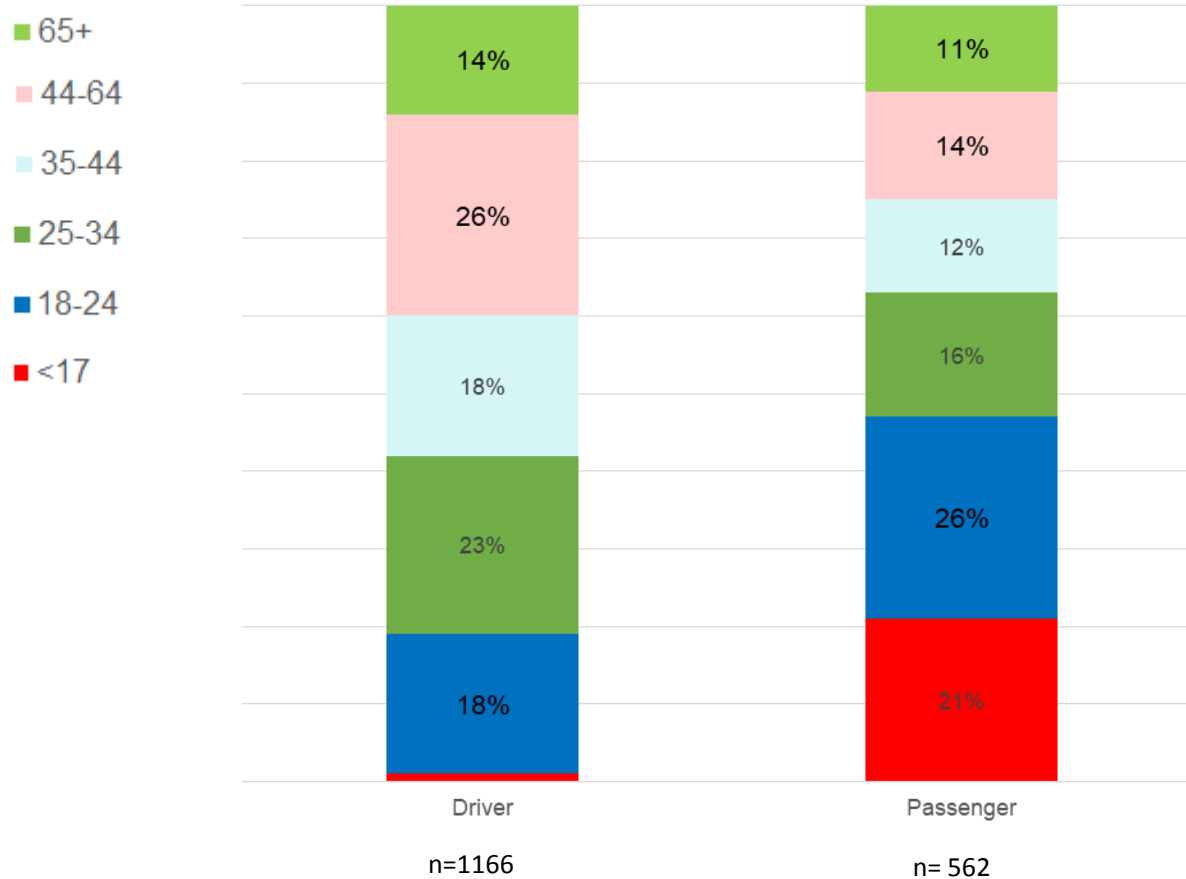
# Gender breakdown of seriously injured road users



- Males make up the greater portion of seriously injured road users for all but one group (passengers).

*Base: Serious injuries by gender (2014-2017, n=3514)  
Data for 2017 are provisional and subject to change.*

# Seriously injured road users by age

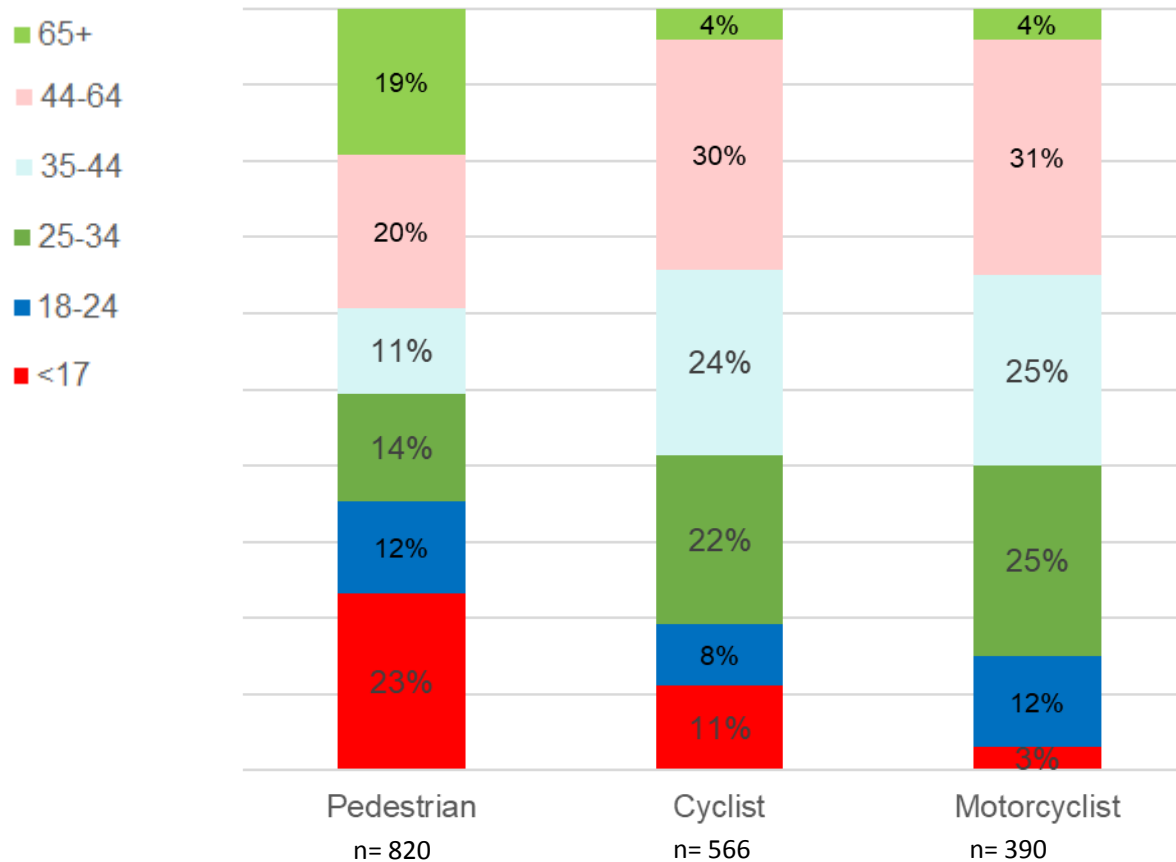


- 47% of seriously injured passengers are 24 or younger.
- 41% of seriously injured drivers are aged 18-34.

Base: *Serious injuries of drivers and passengers (2014-2017, n=1,728)*  
*Data for 2017 are provisional and subject to change.*



# Road users seriously injured by age



- Those aged <17 made up the largest share of seriously injured pedestrians (23%).
- Amongst cyclists and motorcyclists, those aged 44-64 made up the largest share of seriously injured road users (30% and 31% respectively).

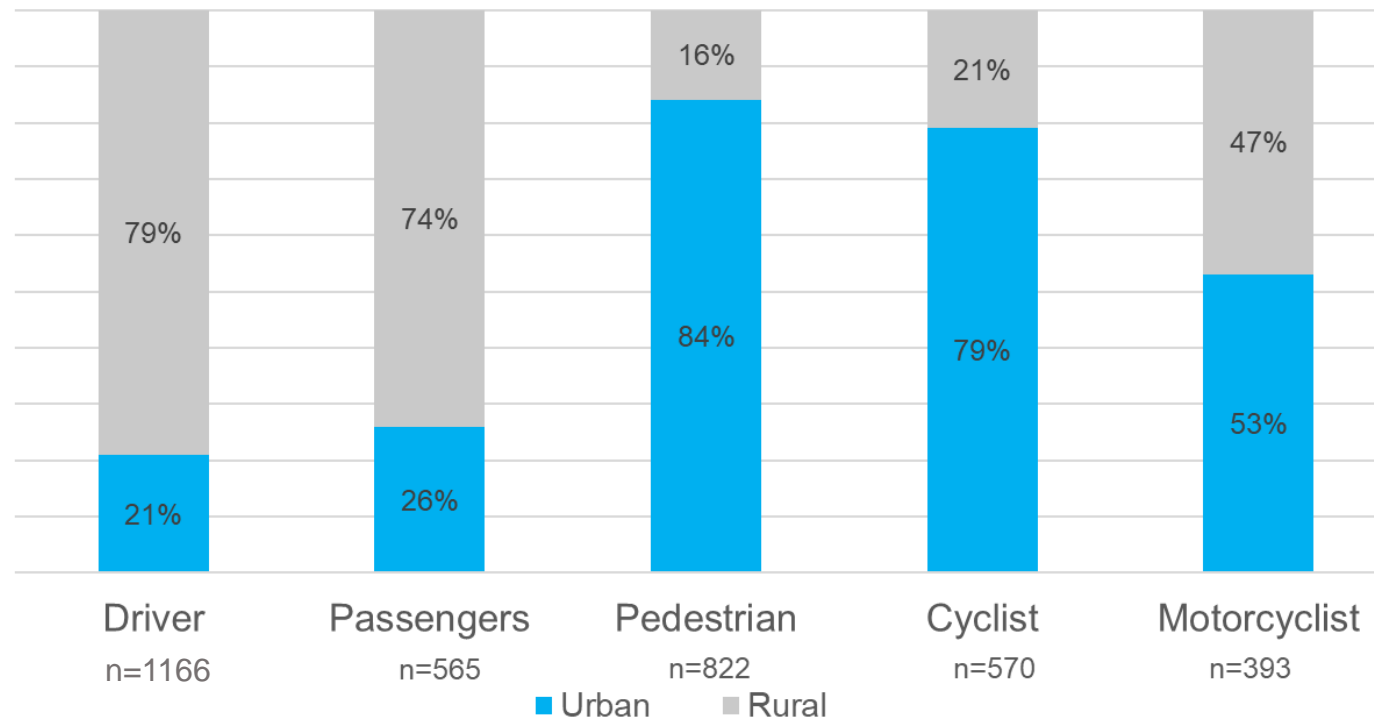
Base: *Serious injuries of vulnerable road users (2014-2017, n=1,776)*

*Data for 2017 are provisional and subject to change.*

# Seriously injured road users on urban and rural roads



Urban road: speed limit  $\leq 60$ km/h  
Rural road: speed limit  $\geq 80$  km/h



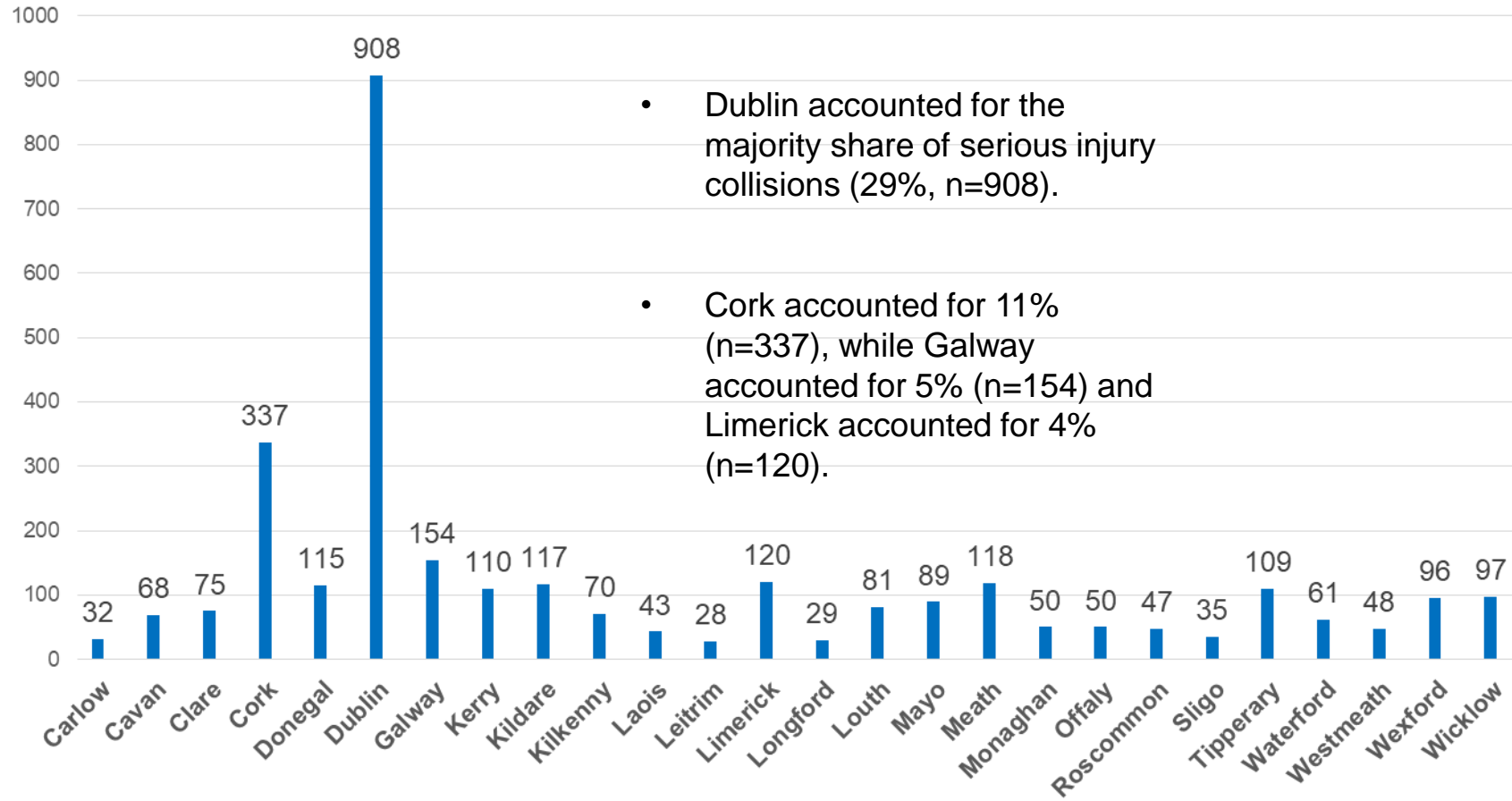
- Rural roads accounted for a greater proportion of driver and passenger serious injuries than urban roads.
- For vulnerable road users, the opposite pattern emerged, especially regarding pedestrians and cyclists.

Base: Serious injuries (2014-2017, n=3516).  
Data for 2017 are provisional and subject to change.



# Collision Profile

# Serious injury collisions by county



Base: Serious injury collisions (2014-2017, n=3,087).

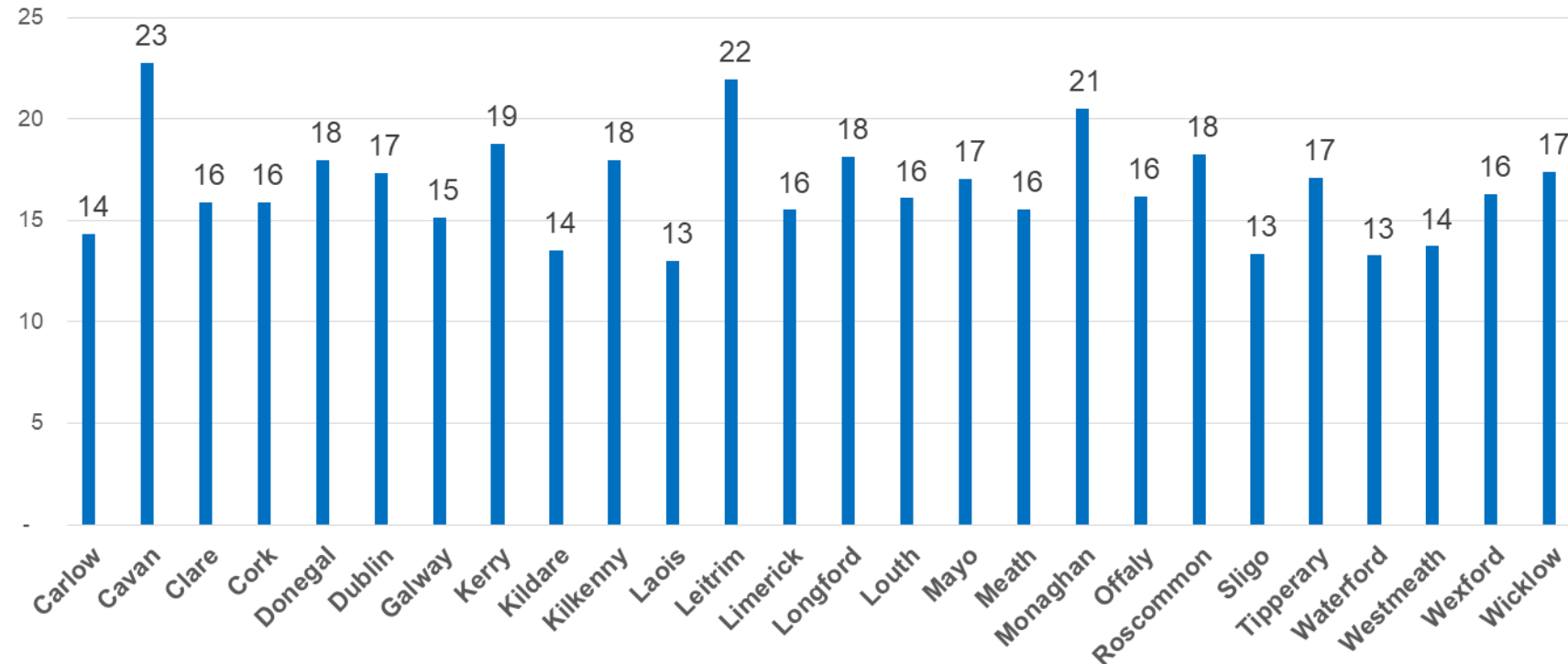
Data for 2017 are provisional and subject to change.

# Average number of serious injury collisions by county

(2014-2017) relative to hundred thousand of population



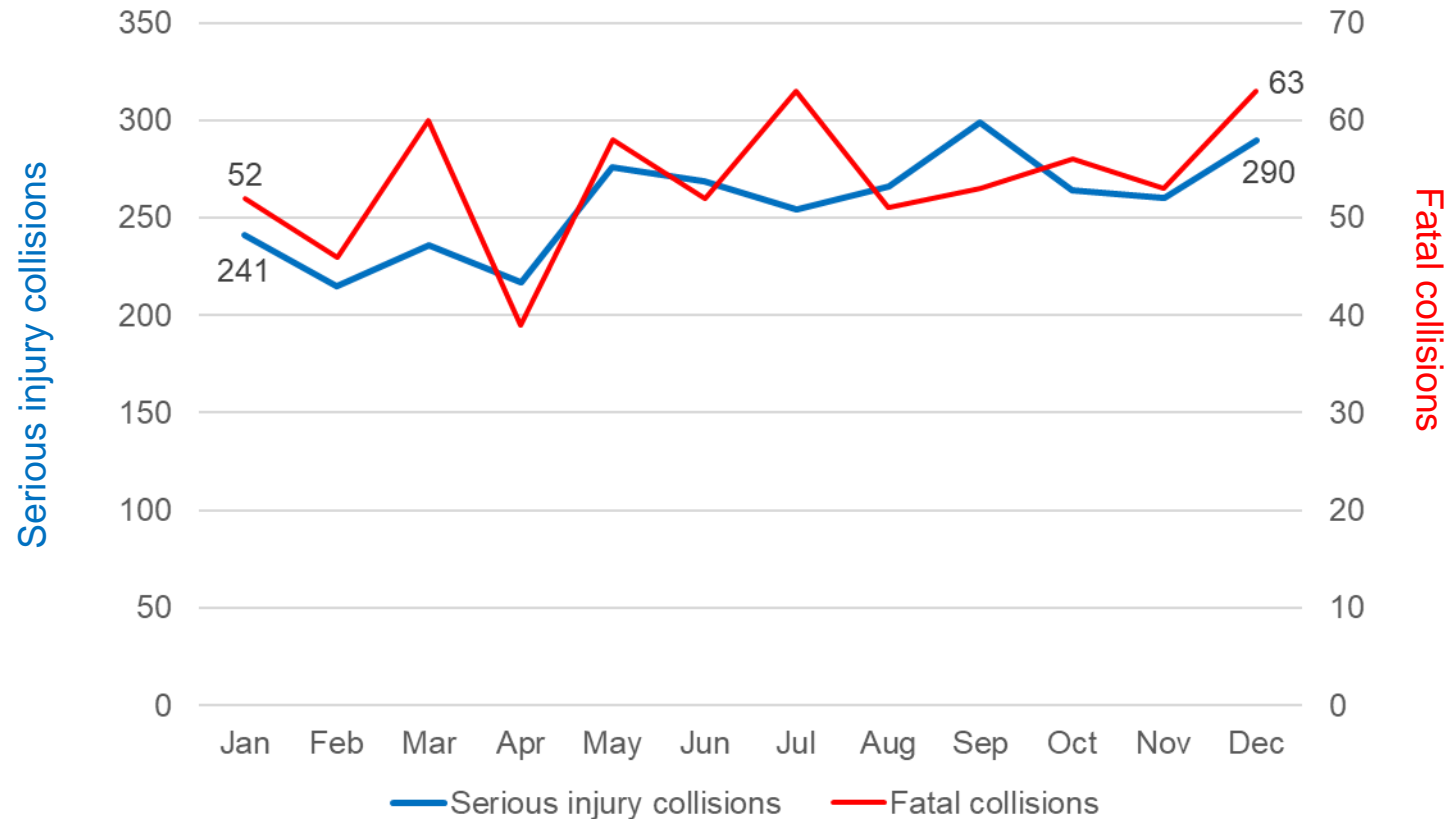
- Cavan (23), Leitrim (22) and Monaghan (21) were the counties with the highest average annual number of serious injury collisions per hundred thousand of population.



Population figures based on county population average using CSO census population data for 2011 and 2016.

RSA collision data for 2017 are provisional and subject to change.

# Serious injury and fatal collisions by month



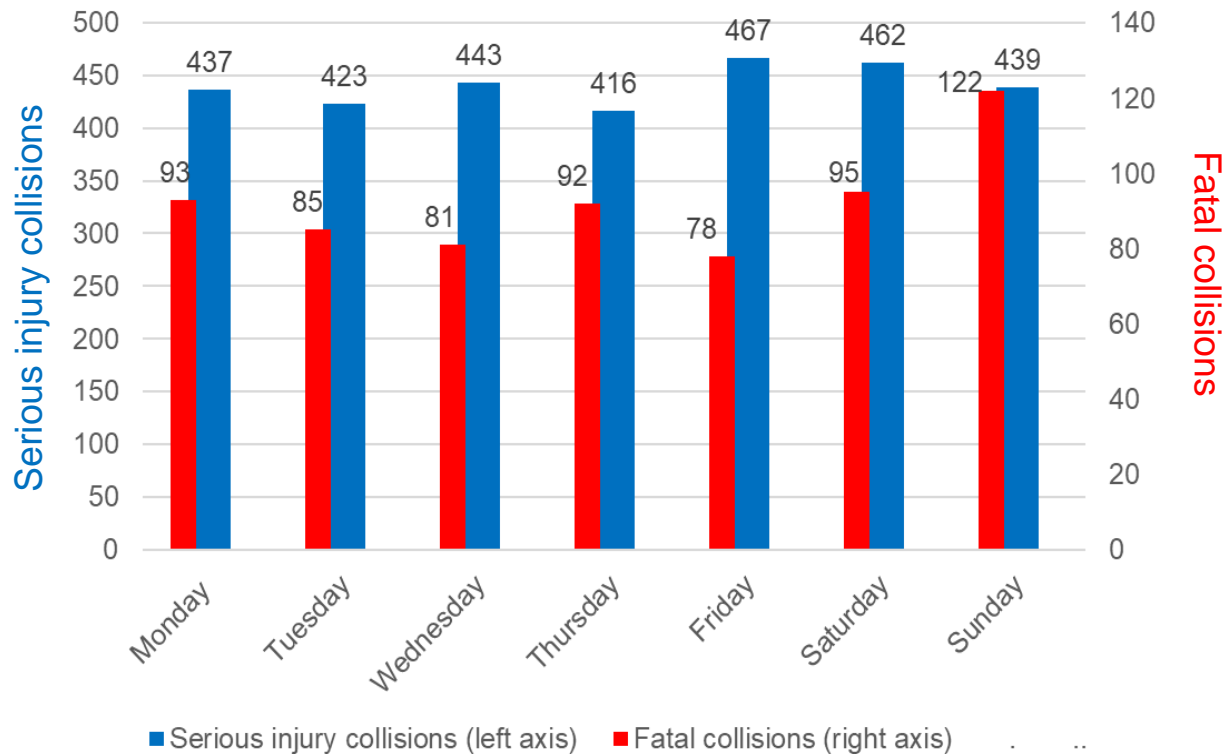
- Serious injury collisions over the 4-year period were highest in September (299) and lowest in February (215).
- Unlike fatal collisions, serious injury collisions do not show a peak in the Spring or Summer months.
- Instead a slight upward trend throughout the months of the year can be observed for serious injury collisions.

Base for serious injury collisions: (2014-2017, n=3,087).

Base for fatal collisions: (2014-2017, n=646).

Data for 2017 are provisional and subject to change.

# Serious injury and fatal collisions by day of week



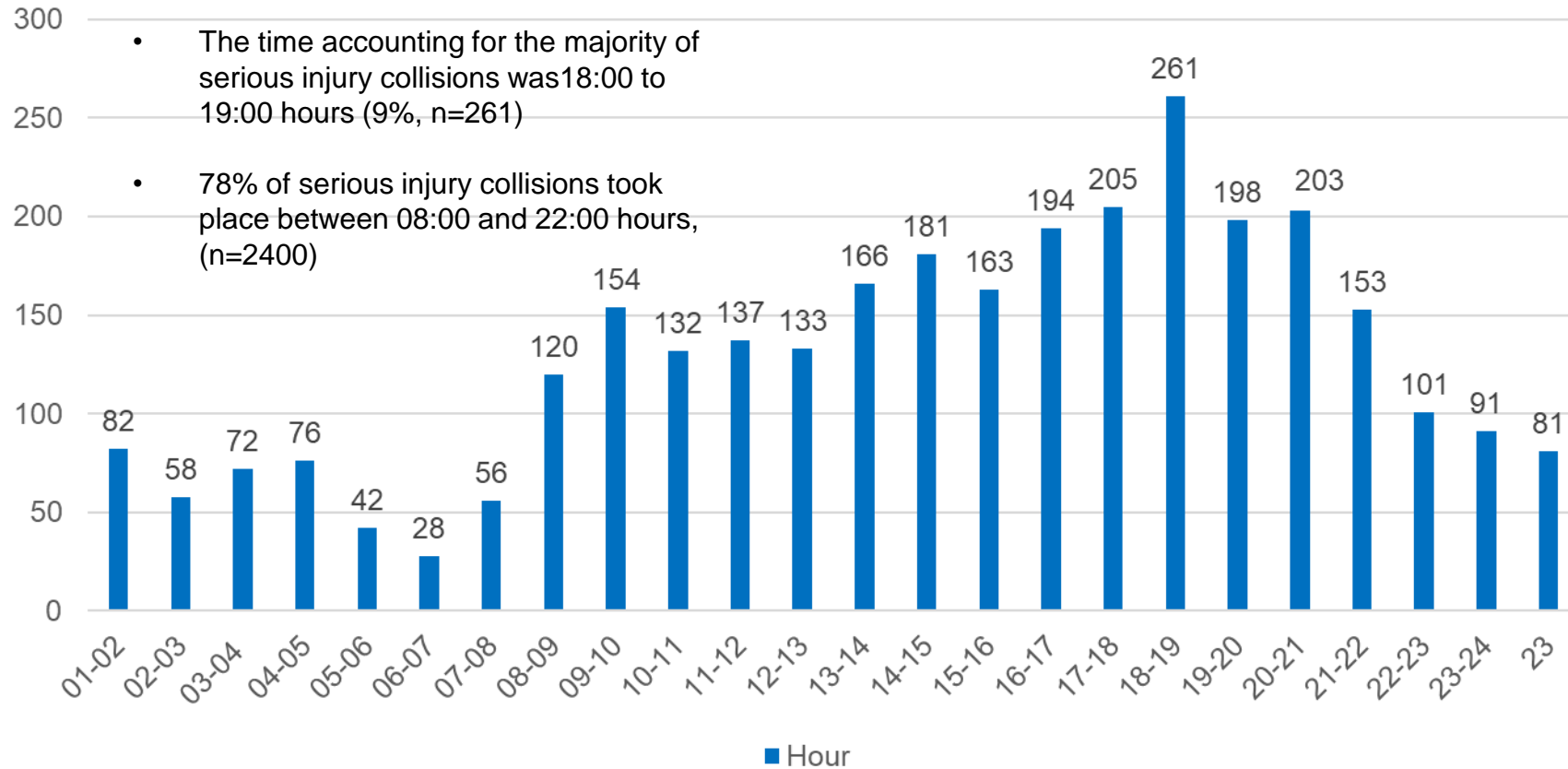
- Serious injury collisions show a slight increase in occurrence during the weekend, namely Friday and Saturday.

Base for serious injury collisions: (2014-2017, n=3,087).

Base for fatal collisions: (2014-2017, n=646).

Data for 2017 are provisional and subject to change.

# Serious injury collisions by hour of occurrence

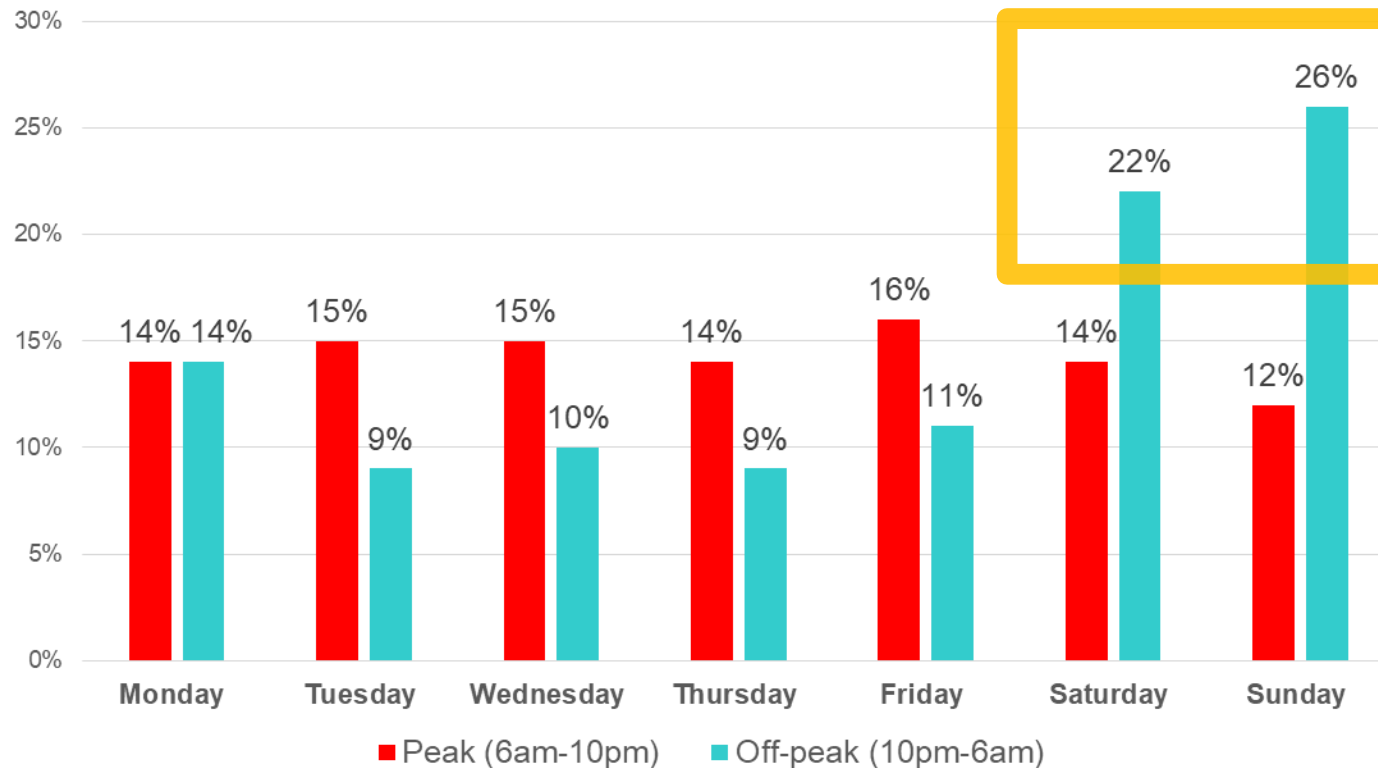


Data for 2017 are provisional and subject to change.

Data from 2016 indicates the percentage share of total daily traffic from midnight to 6am on national routes can range from less than 0.5% to 2% at a given time point\*. No traffic data available at this level for regional and local routes.  
 \*TII National Road Indicators 2016



# Serious injury collisions by day of week, peak vs off-peak



24% of serious injury collisions that took place on Saturday and Sunday occurred between the hours 10pm and 4am.

Base: Serious injury collisions (2014-2017, n=3,087).

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# Analysis serious injury collisions on Irish roads during (2014-2017)

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