

The RSA logo consists of the letters 'RSA' in white, sans-serif font, centered within a bright orange square with slightly rounded corners. The square is positioned in the upper right corner of the page.

RSA

Provisional Review of Fatal Collisions

January to December 31st 2016

31 December 2016

Údarás Um Shábháilteacht Ar Bhóithre
Road Safety Authority

Review of 2016 fatal collision statistics as of 31st December 2016

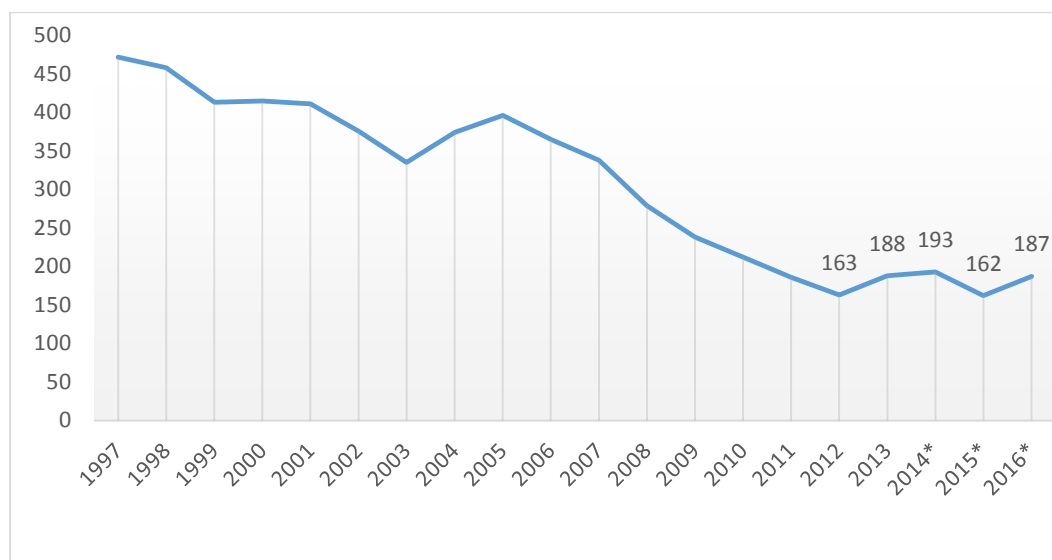
Overview

This report summarises the main trends in road fatalities that have emerged up to the 31st December 2016. This report has been prepared by the Road Safety Authority following analysis of the fatality reports provided to the RSA by An Garda Síochána. Note that the information contained in this report is provisional and subject to change until the 2016 Collision Database is formally signed off by the RSA.

As of 31st December 2016, there have been 175 fatal collisions, which have resulted in 187 fatalities on Irish roads. This represents 13% more collisions (+20) and 15% more deaths (+25) compared to provisional Garda data for the same period in 2015. This is an unwelcome increase in numbers particularly in the context of the decrease in fatalities seen in 2015 (162) compared to 2014 (193).

July 2016 was the most dangerous month for road users in 2016 with 21 fatalities recorded, but May and October were also particularly dangerous with 20 deaths recorded in each month. The monthly average to the 31st of December 2016 was 16 fatalities per month.

Figure 1. Fatalities by year, 1997-2016



*Note: 2014-2016 data is provisional and subject to change.

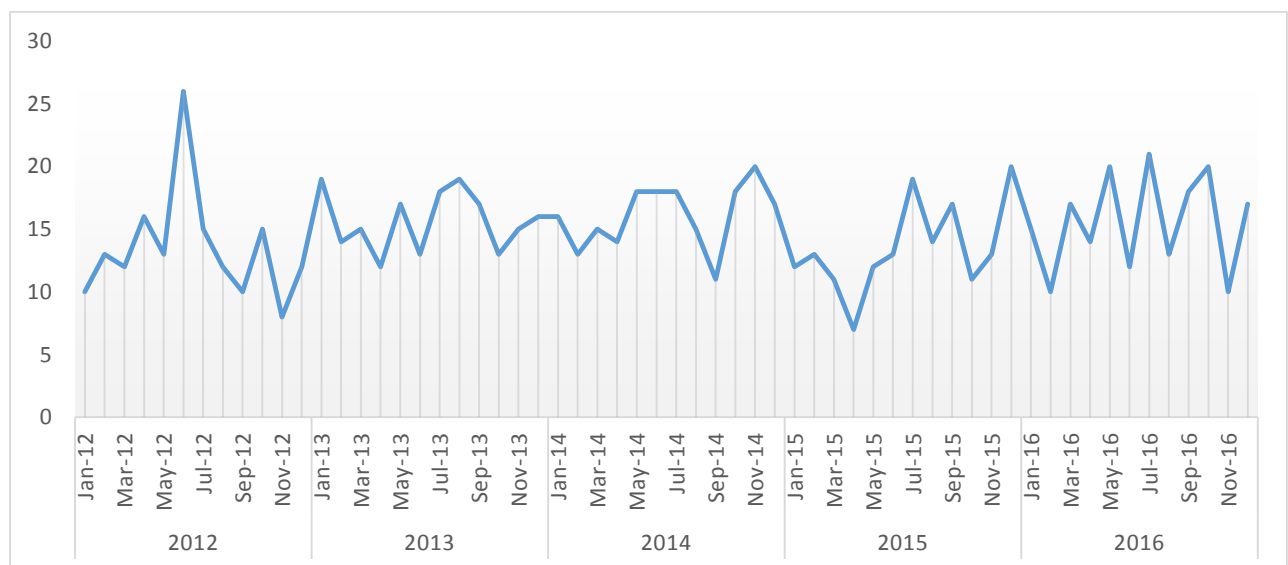
In this report, an analysis has been conducted of the following variables to help understand the current trends in fatality rates:

Section 1	Month of year	3
Section 2	Day of week	5
Section 3	Time of day	6
Section 4	Where fatalities occurred	7
Section 5	Age profile	9
Section 6	Road user type	10
Section 7	Age profile by road user type	11
Section 8	Profile of fatalities by road user group	12
Section 9	Key findings/ Summary	15

Section 1. Month of year

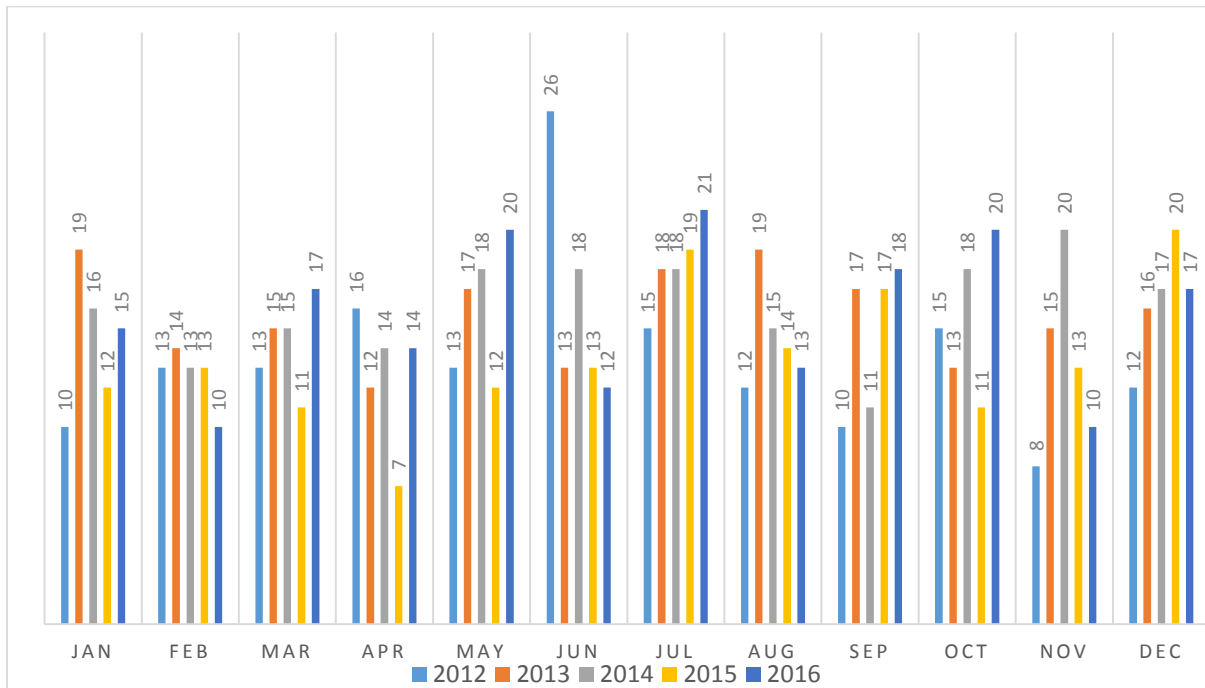
As can be seen in figure 2, which presents the monthly fatalities from January 2012 to December 2016, there can be considerable fluctuations in monthly fatalities across each year. Across the period in question, the greatest number of fatalities occurred in June 2012 (26). By contrast, November 2012 (8) and April 2015 (7) had the lowest number of monthly fatalities over this timeframe.

Figure 2. Fatalities by month January 2012 to December 2016



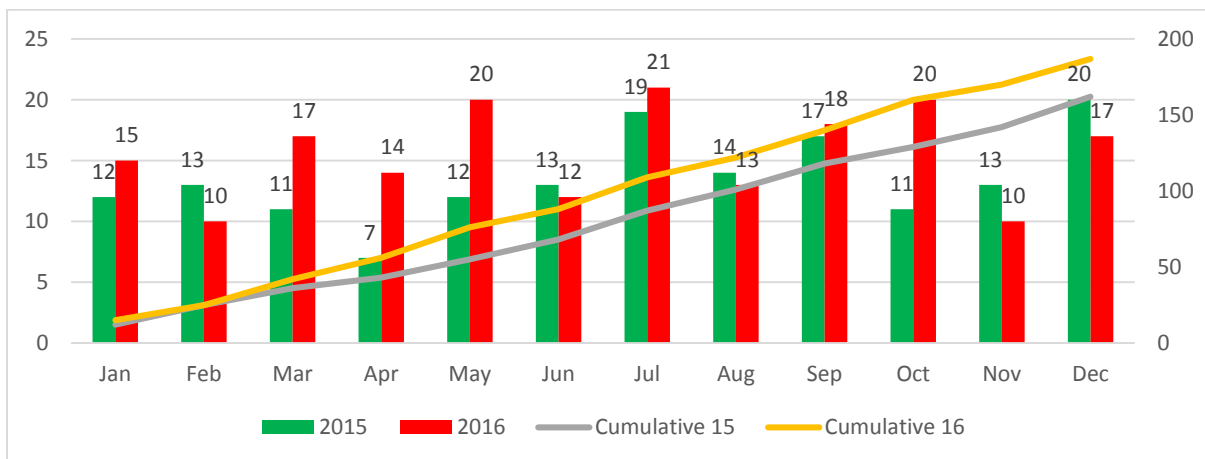
In figure 3 the fatality figures for each month of the year from 2012 to 2016 are presented. In comparison to the same months for the previous four years, February and June in 2016 have seen the lowest number of fatalities. November has also seen a reduction in fatalities (10) when compared to the previous three years. However July (21), May (20) and October (20) in 2016 have been particularly dangerous, having had the highest number of fatalities when compared to the same month in the previous four years.

Figure 3. Road deaths by month from 2012 – 2016*



The average number of deaths in 2016 (16 deaths per month) is higher than the annual monthly average seen in 2015 of 14 deaths per month.

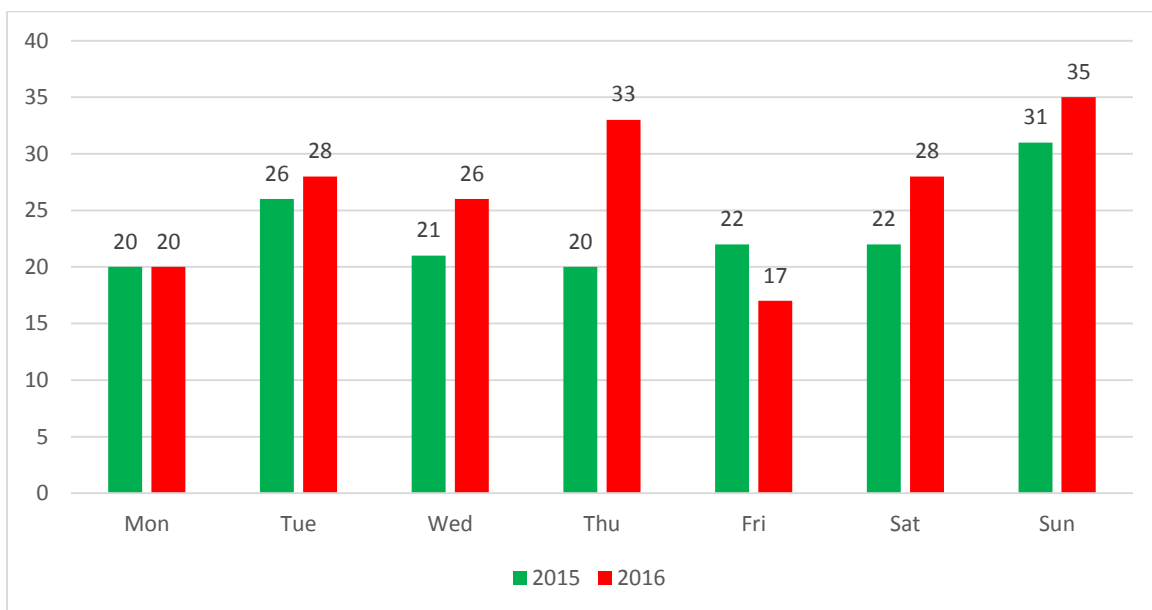
Figure 4. Road deaths by month, 2015 and January to 31st December 2016*



Section 2. Day of week

The below chart shows the distribution of fatalities by day of week for January to the 31st December 2016 compared with the same period in 2015. The additional fatalities in 2016 occurred on a Tuesday (+2), Wednesday (+5), Thursday (+13), Saturday (+6) and Sunday (+4). There was a reduction in fatalities which occurred on a Friday (-5) when compared to 2015. One-third (34%) of fatalities occurred on a Saturday and Sunday in 2016 (33% in 2015).

Figure 5. Road deaths by day of week, January to 31st December 2015 and 2016



Section 3. Time of day

The following graph shows the distribution of road deaths by hour of day from January to December 31st 2016. Sixteen percent of fatalities occurred between 4pm and 6pm (29) in 2016. One quarter of fatalities occurred between the hours of 4pm and 8pm (47). There were 35 fatalities between midnight and 6am (19%). Of the 29 fatalities that occurred between 4-6pm, the mid week days were the most dangerous with the majority of these fatalities occurring on a Tuesday (7), Wednesday (6) and Thursday (6).

Figure 6. Road deaths by time of day, January to 31st December 2016

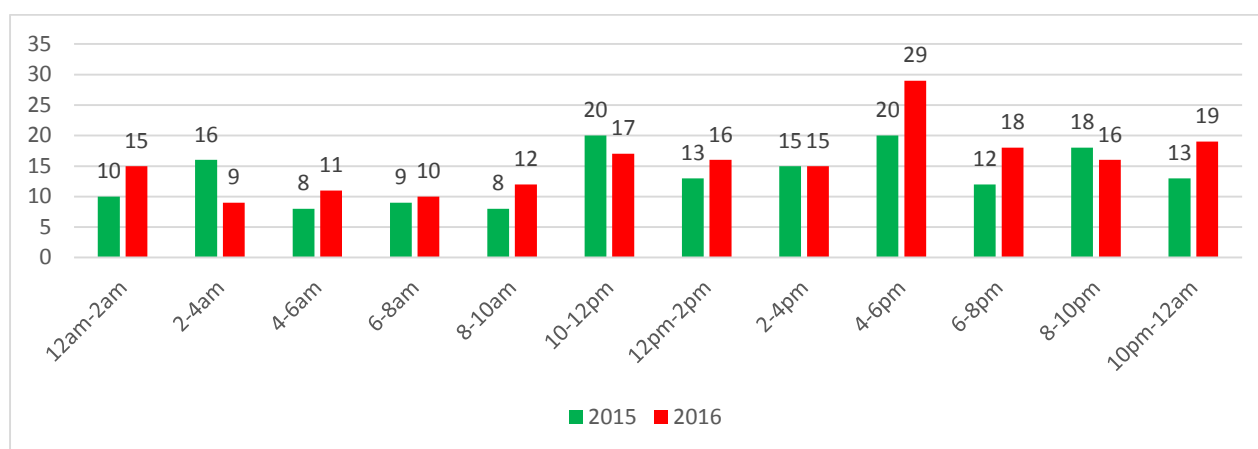
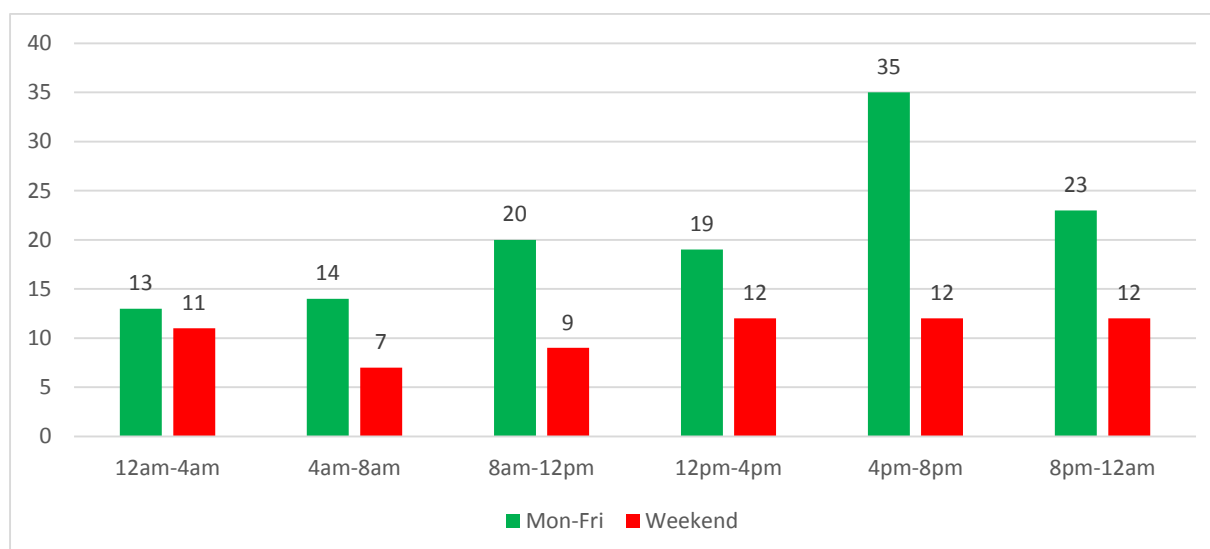


Figure 7 provides a further breakdown of time by the weekday vs weekend and shows a peak from 4pm to 8pm (35) followed by 8pm to Midnight (23) on weekdays.

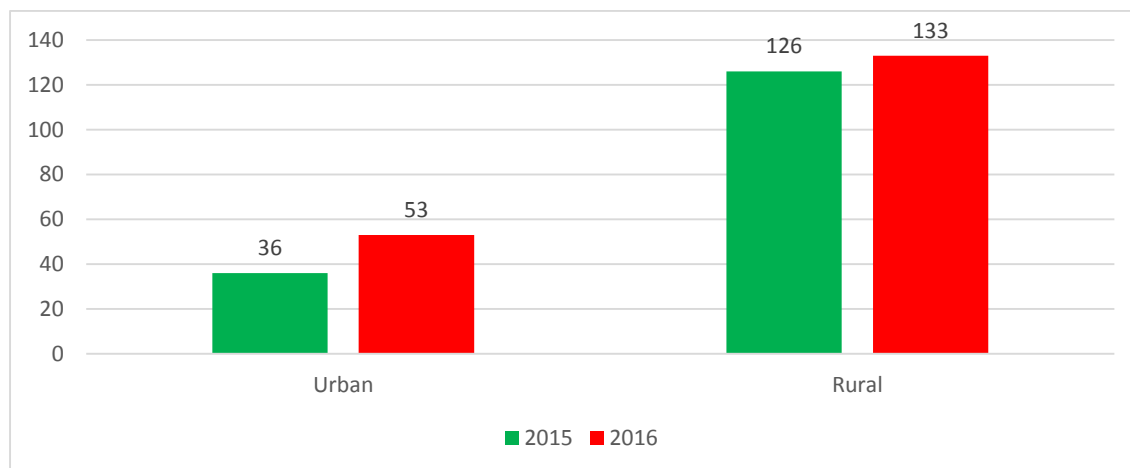
Figure 7. Road deaths by time of day and weekday vs weekend, January to December 31st 2016



Section 4. Where fatalities occurred

As can be seen in figure 8 below, in both 2015 and 2016 there have been more fatalities in rural areas than in urban areas. Rural areas consist of roads where the speed limit is 80km/h and greater.

Figure 8. Fatalities by urban and rural areas, January to December 31st 2015 and 2016*



*There is one unknown speed limit in 2016 at time of print

It can be seen in table 1 below that there has been an increase in fatalities in the speed limit zones of 50km/h (+60%), 60km/h (+43%), 100km/h (+8%) and 120km/h (+17%) between 2015 and 2016.

Table 1. Fatalities by speed limits, January to December 31st 2015 and 2016

Speed Limit (km/h)	2015	2016	% change
< =30	4	3	-25%
50	25	40	+60%
60	7	10	+43%
80	58	59	+2%
100	62	67	+8%
120	6	7	+17%
Unknown	0	1	
Total	162	187	

The highest number of fatalities in 2016 were in Dublin (21) and Cork (21), followed by Limerick (16) (see table 2). Cork (10) and Limerick (8) had the highest number of driver fatalities. Dublin had the highest number of vulnerable road user (VRU) (pedestrian, motorcyclist and pedal cyclist) fatalities (17); ten pedestrians, five motorcyclists and two pedal cyclists were killed in Dublin. Louth had the highest number of pedal cyclists killed (3).

Table 2: County breakdown by the number of fatalities

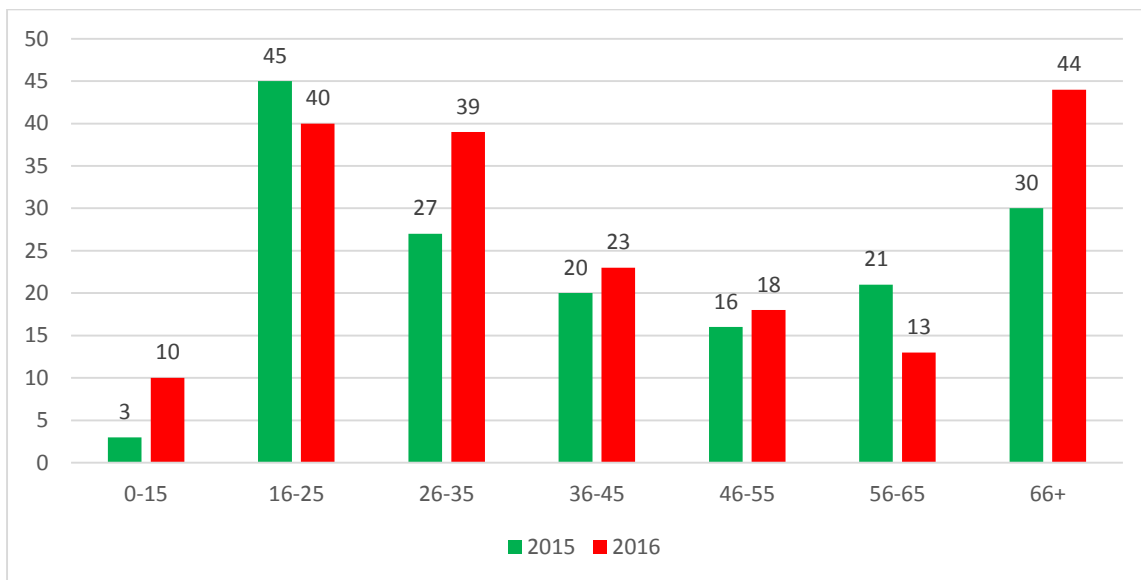
County	Fatalities
Carlow	0
Cavan	4
Clare	4
Cork	21
Donegal	11
Dublin	21
Galway	10
Kerry	7
Kildare	7
Kilkenny	6
Laois	4
Leitrim	1
Limerick	16
Longford	3
Louth	7
Mayo	4
Meath	11
Monaghan	5
Offaly	4
Roscommon	7
Sligo	2
Tipperary	13
Waterford	9
Westmeath	4
Wexford	4
Wicklow	2
Total	187

Section 5. Age profile

The highest risk age groups in 2016 are those aged 66 and older (24% of all road users killed), 16-25 (21%) and those aged 26-35 (21%).

In 2016, there have been more deaths among those aged 0-15 (+7), 26-35 years (+12), 36-45 years (+3), 46-55 years (+2) and those aged 66 years and older (+14) than in 2015. However, reductions have been seen in those aged 16-25 years (-5), and aged 56-65 years (-8).

Figure 9. Deaths by age group, January to December 31st 2015 and 2016.



Section 6. Road user type

As can be seen in the graph and table below driver and passenger fatalities represent two thirds of fatalities (64%) in 2016, while VRU's represent just over one third (36%).

There has been an increase in driver fatalities (+15%) and passenger fatalities (+41%). Overall, this represents a net increase in vehicle occupant fatalities from 98 in 2015 to 120 in 2016 (+22%). There has been an increase among pedestrians (+2) and pedal cyclists (+1).

Figure 10. Deaths by road user type, January to 31st December 2015 and 2016*

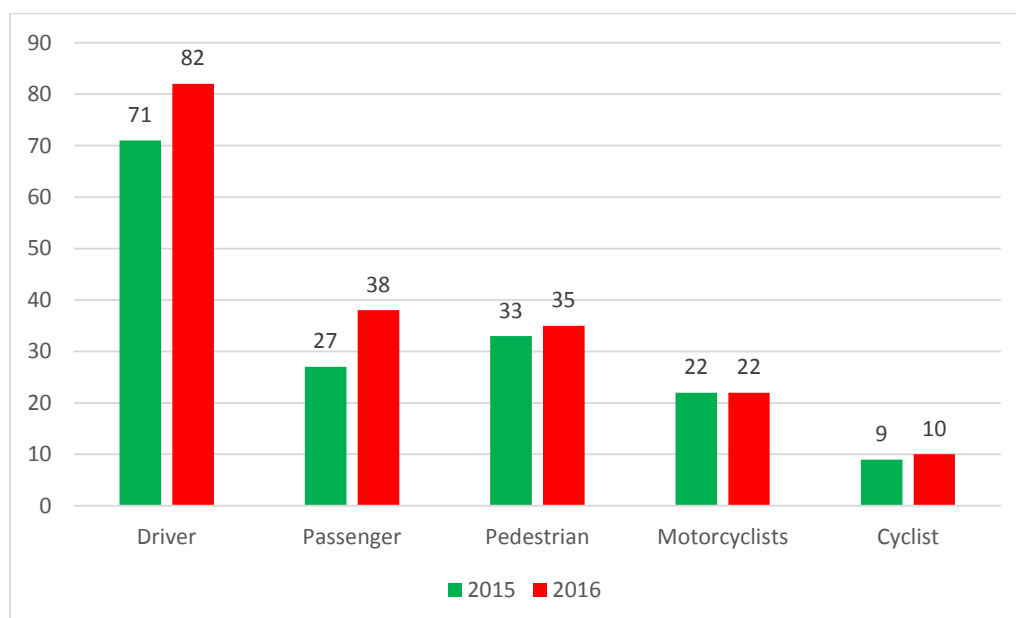


Table 3. Road User Fatalities as of 31st December 2015 and 2016*

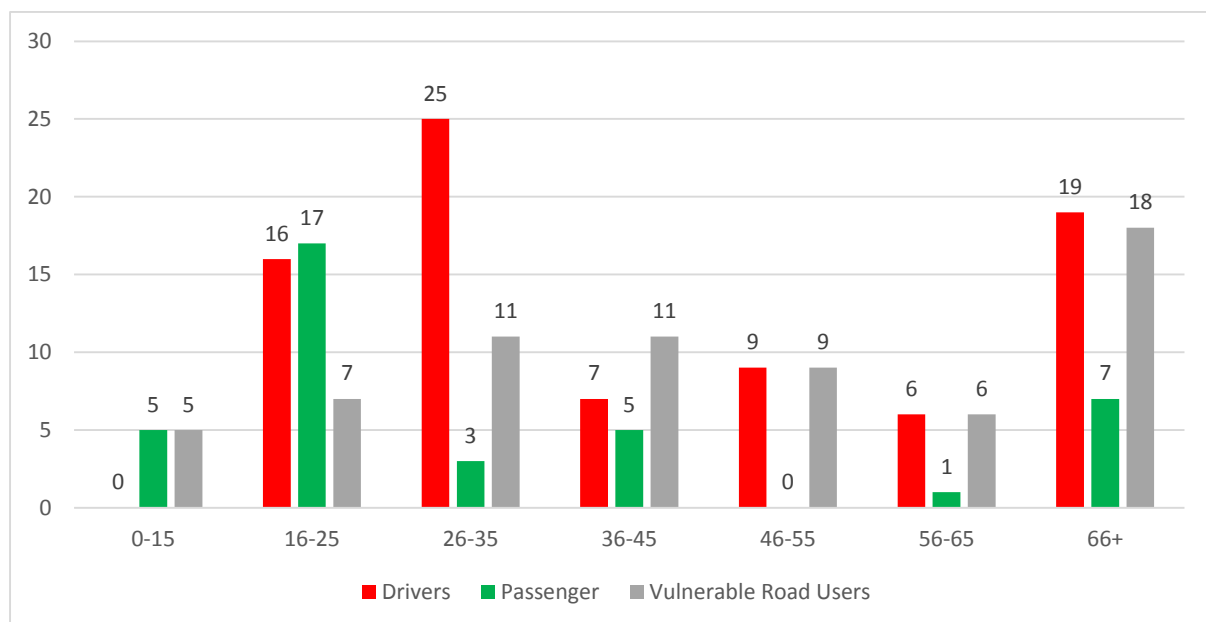
Road User Type	2015	2016	% change
Driver	71	82	+15%
Passenger	27	38	+41%
Pedestrian	33	35	+6%
Motorcyclists	22	22	
Cyclist	9	10	+11%
Total	162	187	

*Note: the motorcyclist figure is inclusive of one pillion passenger

Section 7. Age profile by road user type

When looking at age profile by road user, it can be seen that of the drivers killed the highest risk age group was those aged 26-35 (25) followed by those aged 66 and older (19). In relation to VRU fatalities the groups which were most at risk were again those aged 66 and older (18). Passenger fatalities were highest among the 16-25 age group (17) followed by the 66 and older age group (7).

Figure 11. Deaths by age group of drivers, passengers and vulnerable road users, January to 31st December 2016



Section 8. Profile of fatalities by road user group

Profile of Driver Fatalities:

As of 31st December, there were 82 driver fatalities in 2016.

Gender: The majority of driver fatalities were male (64 of the 82 drivers).

Age: In 2016 the majority of fatalities among drivers were those aged 16-25 (16), aged 26-35 (25) and those aged 66 years and above (19).

Speed limit: The majority of fatalities occurred on higher speed roads; four fatalities occurred on 60km/h roads, seven on 50km/h roads, thirty fatalities occurred on 80km/h roads, thirty-seven were on 100km/h roads and three on 120km/h roads. One occurred in a 30km/h speed zone.

Road type: Forty fatalities occurred on national roads, thirty on regional roads, nine on local roads and three on a motorway.

Time of day: Seventeen driver fatalities took place between midnight and 6am, nineteen driver fatalities between 6am and 12pm, twenty-five fatalities between 12pm and 6pm and twenty-one fatalities between the hours of 6pm and midnight.

Month of year: There were eleven driver fatalities in July, eight in January, March and December, seven in May, August, September, six in February and April, five in June and October and four fatalities in November.

Seatbelt use: Where known, 15 drivers killed were reported as not wearing a seatbelt (18%); 34 drivers (41%) were confirmed as wearing a seatbelt.

Single vehicle collisions: Of the driver fatalities, 32 occurred in single vehicle collisions with the remainder involving at least one other vehicle or road user.

County: The highest number of driver fatalities occurred in Cork (10).

Profile of Passenger Fatalities:

As of 31st December there were 38 passenger fatalities in 2016.

Gender: There were twenty male passengers killed and eighteen female passengers.

Age: Older and younger people were most vulnerable; there were twenty-two people killed who were 25 years and younger and seven people killed aged 66 and over.

Speed limits: More fatalities occurred on higher speed roads (26); twelve happened on 80km/h roads, twelve on 100km/h roads and two on 120km/h. Eight passenger fatalities occurred on a road with a 50km/h speed limit and four on a 60km/h speed limit.

Road type: There were fifteen fatalities on national roads, fourteen fatalities on regional roads, seven on local roads and two on a motorway.

Month of year: July had the highest number of passenger fatalities (8), followed by May (6).

Seating position: Where known, there were more front seat passengers killed than rear seat (24 front, 14 rear).

Seatbelts: Where known, twelve passengers were not wearing seatbelts (32%) and thirteen were (34%).

Single vehicle collisions: Thirteen of the fatalities occurred in single vehicle collisions (34%).

Profile of Pedestrian Fatalities:

As of the 31st of December there were 35 pedestrian fatalities in 2016.

Gender: 26 of the pedestrian fatalities were male and nine were female.

Age: The age groups with the highest risk were those aged 66 and older (13), followed by those aged 36-45 (6).

Speed limit: Sixteen fatalities occurred on roads with a 50km/h speed limit and one on a road with a 60km/h speed limit; in eight cases it was 80km/h, and in nine it was 100km/h. One speed limit is unknown at time of print.

Road type: Seventeen fatalities occurred on national roads, six on local roads and twelve on regional roads.

Time of day: More pedestrian fatalities occurred in hours of darkness (23) compared to twelve during daylight. Nineteen pedestrian deaths occurred between the hours of 9pm and 9am.

County: 10 pedestrian fatalities occurred in Dublin.

Profile of Motorcycle Fatalities:

As of December 31st, there were 22 motorcycle fatalities in 2016 (inclusive of one pillion passenger).

Gender: Twenty of the motorcyclists killed were male (91%).

Age: Nine motorcyclists were aged 18-34; eight were aged 35-49; five were aged 50+.

Speed limits: In eight cases the speed limit was 100km/h or greater, in six cases it was 80km/h, in six cases it was 50km/h, and in one case a motorcyclist was killed in a 30km/h speed zone and one in a 60km/hr zone.

Road type: Eight fatalities occurred on regional roads, seven on national roads, one occurred on a motorway and six on a local road.

Vehicles & other drivers involved: Of the 22 collisions, ten were single vehicle.

Month: There were four motorcyclist fatalities in October and three motorcyclist fatalities in each of March, May, June and December.

Time of day: Half (11) of the collisions took place between the hours of 3pm and 9pm.

Profile of Cyclist Fatalities:

As of December 31st , there were ten cyclist fatalities in 2016.

Gender: Eight cyclist fatalities were male.

Age: Four of the cyclists killed were aged 56 years and older, two of the cyclists were under 15 years old and four cyclists were aged between 16-45.

Speed limits: Four collisions occurred on roads with a 50km/h speed limit or less, six on a road with a 80km/h speed limit or more.

Light conditions: Eight collisions occurred during daylight conditions and two collisions occurred during hours of darkness.

County: Three cyclist fatalities occurred in Louth, two occurred in each of Dublin and Cork, and one cyclist fatality occurred in each of Kerry, Offaly and Westmeath.

Section 9. Summary

The key findings of this provisional review of 2016 fatalities from January – 31st of December can be summarised as follows: In 2016 there have been 187 fatalities in 175 fatal collisions

- There has been an increase in fatalities across drivers (+11), passengers (+11), pedestrians (+2) and pedal cyclists (+1) compared to the same period in 2015.
- The highest risk age groups in 2016 are those aged 66 and older (24% of all road users killed), 16-25 (21%) and those aged 26-35 (21%).
- Fatalities among those aged 26-35 are higher in 2016 than the same period in 2015 (+12) but lower among those aged 16-25 (-5). Fatalities among the age group 66 and older have also increased in 2016 (+14) compared to the same period for 2015.
- July was a particularly dangerous month with 21 deaths followed by May (20) and October (20).
- The highest number of fatalities occurred from 4pm-6pm (29) followed by 10pm to midnight (19) and 6-8pm (18).
- Sunday (35) had the highest number of fatalities, followed by Thursday (33), Saturday (28) and Tuesday (28).
- Dublin (21) and Cork (21) had the highest number of fatalities overall.
- Non-wearing of seatbelts remains a concern for both drivers and passengers (23%).