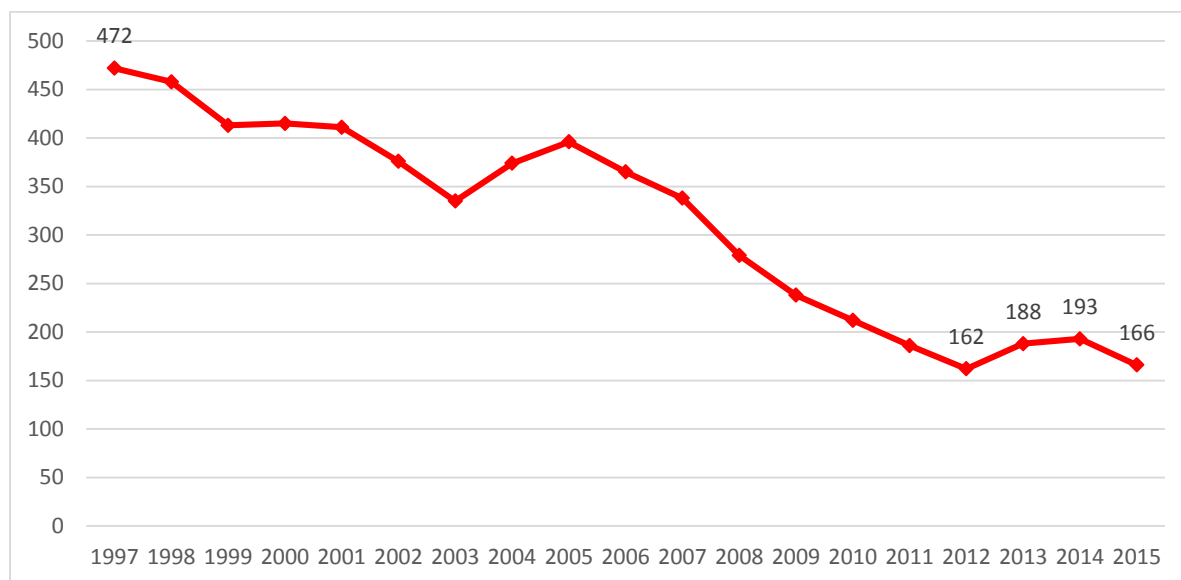


A review of 2015 fatal collision statistics as of 31 December 2015

This report summarises the main trends in road fatalities that have emerged in 2015. This 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 2015 Collision Database is formally signed off by the RSA.

As of 31 December 2015, there have been 159 fatal collisions, which have resulted in **166 fatalities** on Irish roads. This represents 20 (11%) fewer collisions, and 27(14%) less deaths compared to provisional Garda data for the same period in 2014. It is also the second lowest number of road deaths since records began. This decrease is welcome, particularly in the context of the increases in fatalities seen in 2013 and 2014, when fatalities increased from a low of 162 in 2012 to 193 in 2014.

Fatalities by year, 1997-2015



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

1. Month of year
2. Day of week
3. Time of day
4. Age profile
5. Road user group
6. Age profile by road user group
7. Profile of fatalities by road user group
8. Key findings

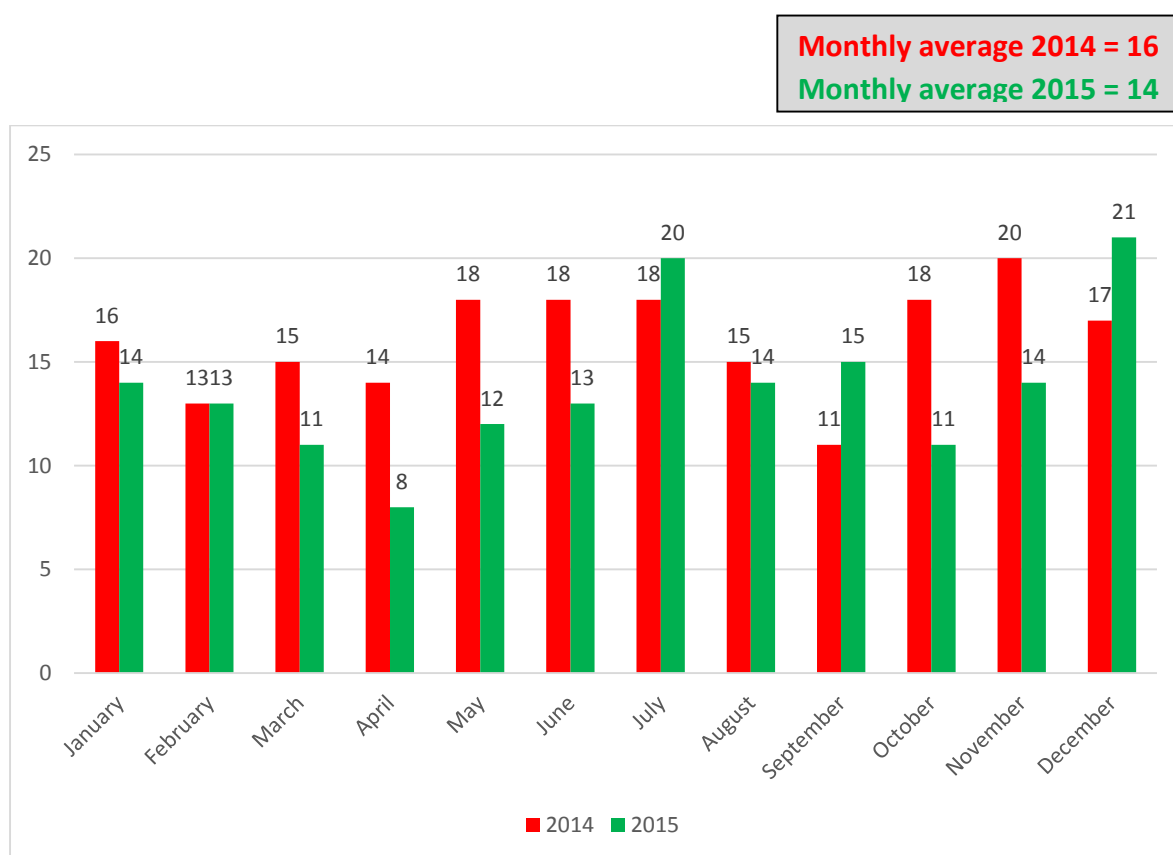
Upon finalisation of the 2015 collision database, a more detailed review of the contributory factors will be possible.

Month of year

The figure below shows the monthly trend in fatalities for January to December 2015 and 2014. Note that the figures for both 2014 and 2015 are provisional.

The monthly trend in fatalities in 2015 has improved overall on 2014 figures. Eight months were safer than 2014. Increases were seen in July (+2), September (+4) and December (+4) compared to 2014. October (-7) had the greatest decrease in fatalities compared to 2014. The average monthly fatality rate for 2015 (14) is lower than the 2014 (16) average figure. April saw the lowest number of monthly fatalities (8) since November 2012.

Road deaths by month, 2014 and 2015



December (21) had the highest number of road deaths in 2015, 13 of whom were drivers and passengers and 8 of whom were vulnerable road users. It saw the highest number of drivers (11) and pedestrians (5) killed in any single month in 2015. July (20) was also a particularly dangerous month, there were 11 drivers and passengers killed and 9 vulnerable road users. Of the 22 motorcyclists who died in 2015, 18% were killed in July, making it the most dangerous month for motorcyclists.

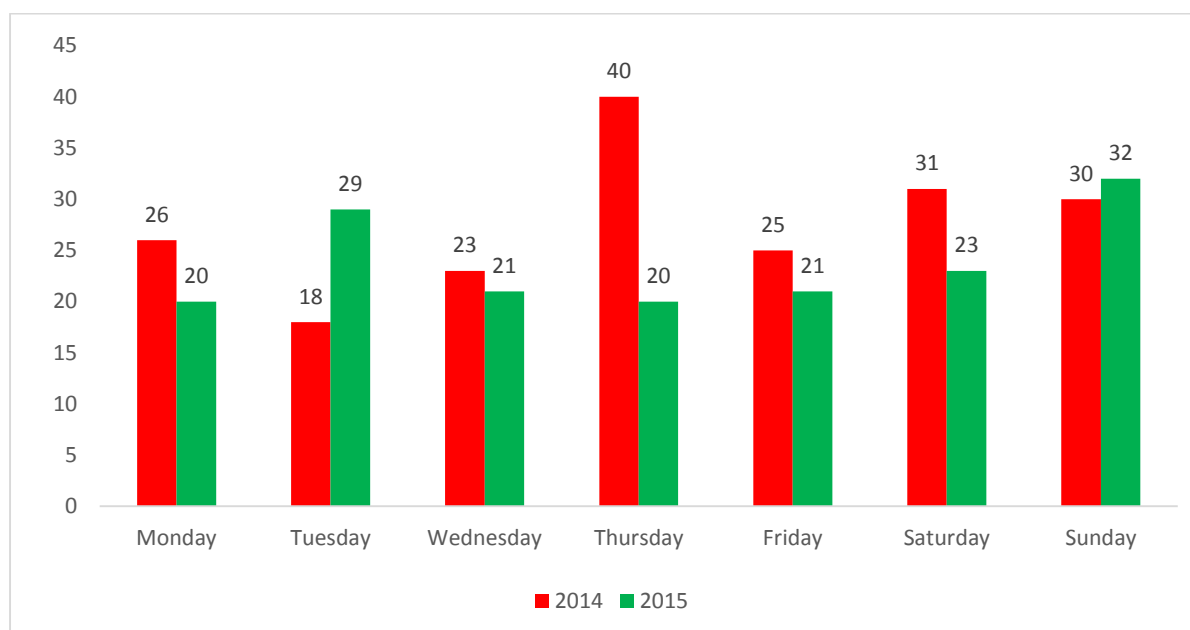
Day of week

Sunday was the most dangerous day on Irish roads in 2015, with a total of 32 lives lost. There was also a weekday peak on Tuesday (29).

The below chart shows the distribution of fatalities by day of week for January to 31 December 2015 compared to 2014.

In 2015 there was a decrease in the number of fatalities occurring over the weekends (Friday, Saturday and Sunday; -10) compared to 2014. During the week, Tuesday (29) had the highest number of fatalities compared to Thursday in 2014 (40).

Road deaths by day of week, 2014 and 2015

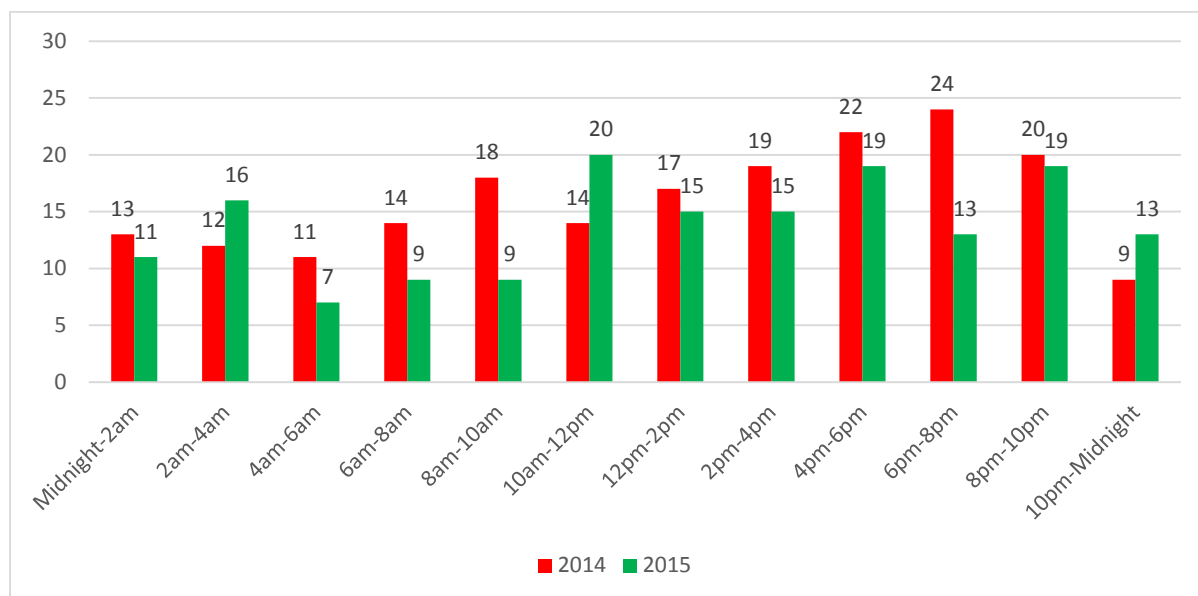


Time of day

The following graph shows the distribution of road deaths by hour of day from January to 31 December 2015 and 2014.

The highest number of fatalities in 2015 occurred between 10am and 12pm (20) and 4pm and 6pm (19) and 8pm and 10pm (19). Another peak can be seen during the early hours of the morning between 2am and 4am (16).

Road deaths by time of day, 2014 and 2015



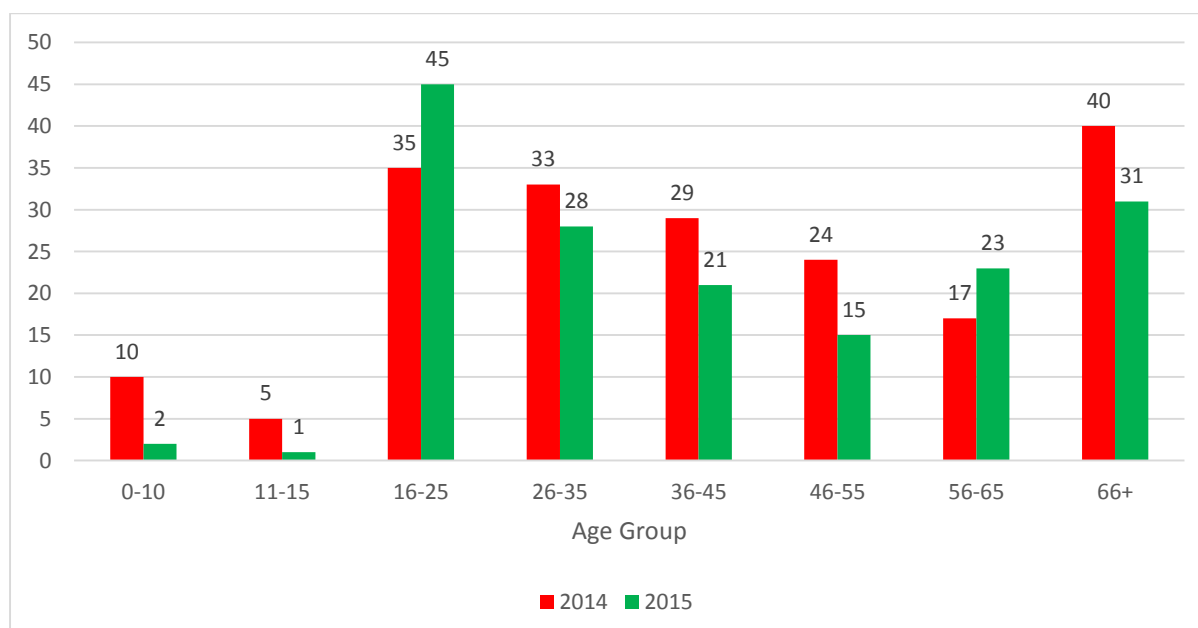
Note: Midnight – 2am = midnight up to 1.59am; 2am – 4am = 2am up to 3.59am

Age profile

The following graph shows the distribution of road deaths by age from January to 31 December 2015 and 2014.

To date in 2015, the greatest number of fatalities on Irish roads were among those aged 16-25 (45) and those aged 66 and older (31). Compared to 2014, there have been more deaths among those aged 16-25 (+10) and those aged 56-65 (+6). There have been fewer deaths in all other age ranges, in particular among children aged 15 years and younger (-12).

All deaths by age group, 2014 and 2015



Road user group

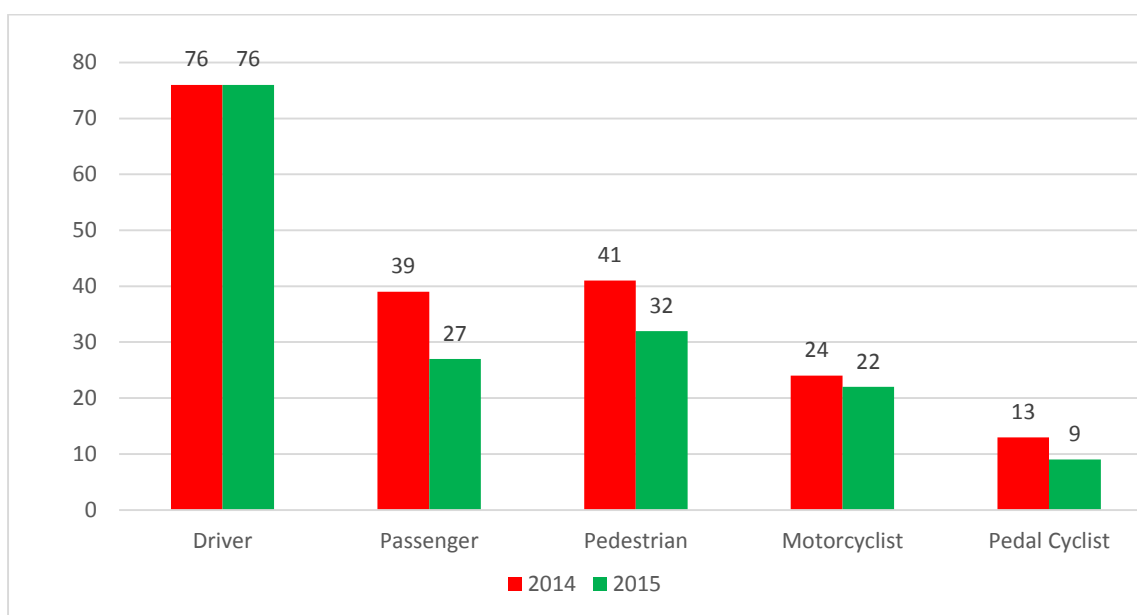
The following graph shows the distribution of road deaths by road user type from January to 31 December 2015 and 2014.

As can be seen there has been a decline across all road user groups in 2015 compared to 2014. The greatest change in profile observed was a 31% decline in passenger fatalities, down from 39 to 27.

While there was an increase in deaths among vulnerable road users (pedestrians, motorcyclists, and pedal cyclists) in 2014, there was an overall 19% reduction among these road user groups in 2015. The most notable decrease evident among pedestrians (-9), with motorcyclists and pedal cyclists remaining high risk.

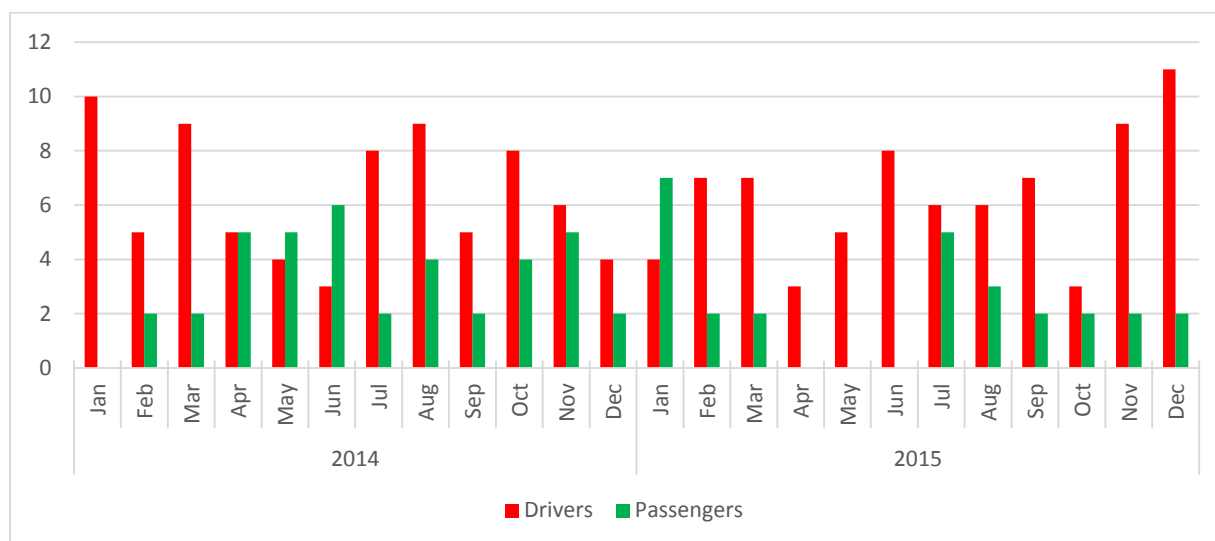
Driver and passenger fatalities represent just over three in every five fatalities (62%) in 2015, and vulnerable road users (pedestrians, motorcyclists and pedal cyclists) represent almost two in five (38%). Driver fatalities remain the same, however, there has been a decline in passenger fatalities (-12). This represents a net decline in vehicle occupant fatalities of 10% (115 to 103) between 2014 and 2015.

Deaths by road user type, 2014 and 2015



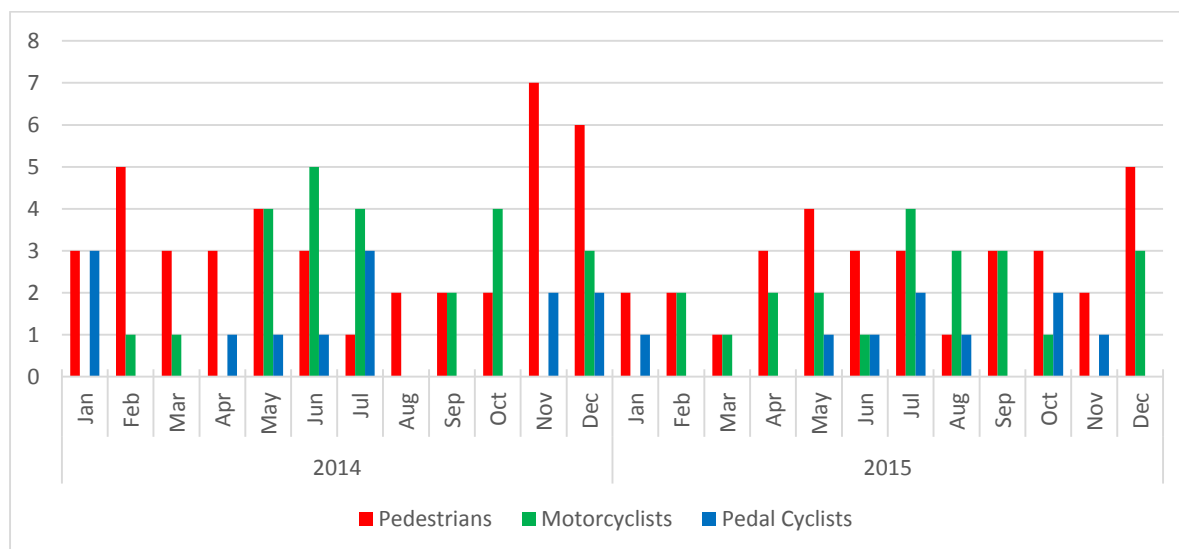
The chart below shows the monthly distribution of driver and passenger fatalities in 2014 and 2015. The peak in driver deaths seen in January (10) 2014 was reflected in the number of fatalities in December (11) in 2015. The highest number of passenger deaths in 2015 occurred in January (7). There were three months (April, May, and June) in 2015 with no passenger deaths compared to one month (January) in 2014.

Driver and passenger fatalities by month, January to 31 December 2014 and 2015



A review of monthly trends in fatalities among vulnerable road users is shown below. The highest number of pedestrian deaths in 2015 happened in December (5) but this is lower than the peak in numbers seen in November (7) and December (6) 2014. The peak in motorcyclist fatalities in 2015 occurred in July (4). The overall trend of increased motorcyclist fatalities over the summer months in 2014 shifted to late summer and autumn in 2015. There were five months in 2015 with no pedal cyclist fatalities the same as in 2014.

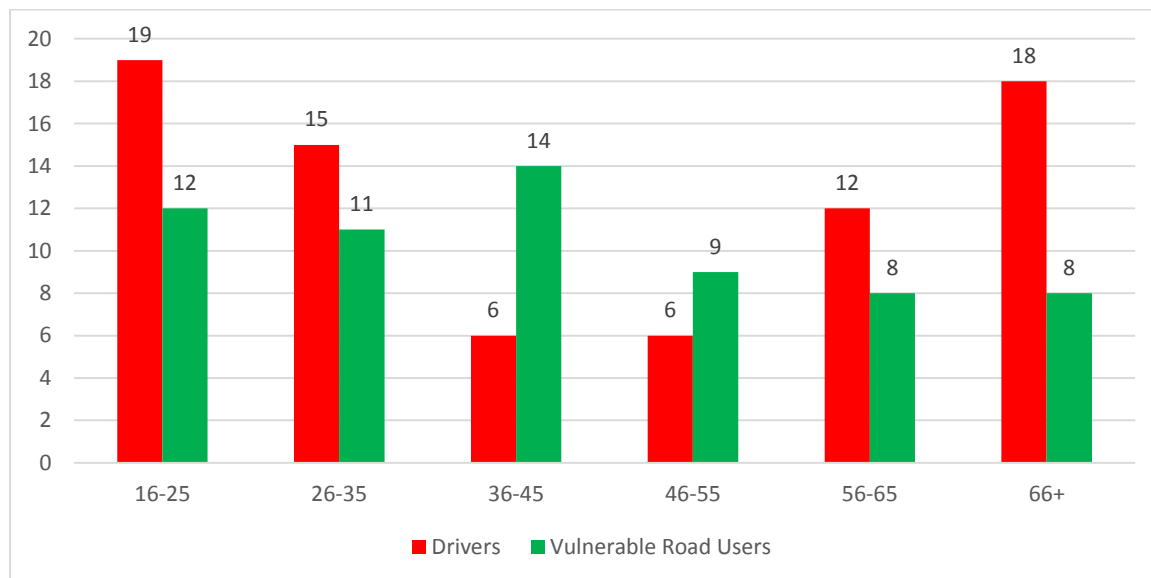
Pedestrian, motorcyclist, and pedal cyclist fatalities by month, January to 31 December 2014 and 2015



Age profile by road user group

Looking at drivers and those in the category of vulnerable road users (pedestrians, motorcyclists, and pedal cyclists) aged 16 and older, among the high risk age group of 16-25's, there were more drivers than vulnerable road users (+7) killed. This was also the case for older road users, those aged 66 and older, where there were more driver deaths than vulnerable road user deaths (+10). Vulnerable road users in the age group 36-45 (14) were more at risk than drivers in this age category.

Deaths by age group of drivers and vulnerable road users aged 16 and over, 2015



Profile of driver fatalities

Driver deaths remain the same in 2015 as in 2014, with a total of 76 drivers killed.

Gender: A review of driver fatalities indicates that the majority of these fatalities were among men (76%).

Age profile: The age profile of the drivers killed is shown below and indicates that younger drivers were the most vulnerable accounting for 25% of all drivers killed in 2015. Those aged 66 and older were next highest at risk with 24% followed by those aged 26-35 accounting for 20% of all drivers killed in 2015.

Age group	Number	%
16-25	19	25
26-35	15	20
36-45	6	8
46-55	6	8
56-65	12	16
66-75	9	12
76 and over	9	12
Total	76	

County: The highest number of driver fatalities occurred in Cork (9).

Road Type: The greater majority of driver fatalities occurred on rural roads, in particular those with a speed limit of 80km/h or 100km/h (60), as shown below.

Speed limit	No of fatalities
30 km/h	1
50 km/h	6
60 km/h	6
80 km/h	31
100 km/h	29
120 km/h	3
Total	76

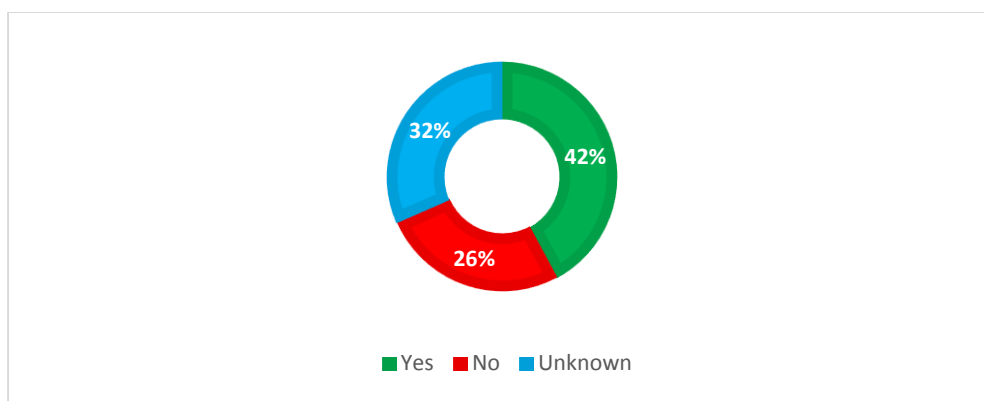
Time of day: Between the hours of 12pm and 2pm (9) and again 4pm to 6pm (9) were the hours of greatest risk for driver fatalities in 2015.

Time	No of fatalities
Midnight-2am	5
2am-4am	6
4am-6am	3
6am-8am	6
8am-10am	6

10am-12pm	6
12pm-2pm	9
2pm-4pm	6
4pm-6pm	9
6pm-8pm	5
8pm-10pm	7
10pm-Midnight	8
Total	76

Single vehicle collisions: Of the drivers who died 39% were involved in single vehicle collisions with the remaining involving at least one other vehicle.

Seatbelts: 20 of the 76 drivers killed (26%) were not wearing seatbelts.



Profile of passenger fatalities

There was a 31% reduction in the number of passengers killed in 2015 (27) compared to 2014 (39).

Gender: Of the passengers killed 56% were male.

Age profile: The age profile of the passengers killed is shown below and indicates that those aged 16-25 were the most at risk.

Age group	No. of fatalities	%
Under 16	2	7
16-25	14	52
26-35	2	7
36-45	1	4
46-55	0	0
56-65	3	11
66 and over	5	19
Total	27	

Road Type: The greater majority of passenger fatalities occurred on rural roads, in particular those with a speed limit of 80km/h or 100km/h (24), as shown below.

Speed limit	No of fatalities
30 km/h	0
50 km/h	1
60 km/h	0
80 km/h	17
100 km/h	7
120 km/h	2
Total	27

Seating position: There were slightly more front seat passengers (15) killed than those seated in the rear (12).

Seatbelts: Where known, nine passengers were not wearing seatbelts, more of whom were rear seat passengers (6). Eleven passengers killed were recorded as wearing a seatbelt.

Profile of pedestrian fatalities

Pedestrian fatalities in 2015 fell by 22% to 32 compared to 2014 (41). The following has been noted from a review of the pedestrian fatalities to date.

Gender: There were 23 male pedestrians killed and 9 female pedestrians killed.

Age profile: The age profile of the pedestrians killed is shown below and indicates that those aged 26-35 were at most risk (22%), followed by those aged 16-25 (19%) in 2015.

Age group	No of fatalities	%
Under 16	1	3
16-25	6	19
26-35	7	22
36-45	4	13
46-55	4	13
56-65	5	16
66+	5	16
Total	32	

County: The greatest number of pedestrian fatalities occurred in Mayo (6).

Road type: Over 2 in 5 pedestrian fatalities occurred on rural roads with a speed limit of 100km/h (15).

Speed limit	No of fatalities
30 km/h	2
50 km/h	9
60 km/h	2
80 km/h	3
100 km/h	15
120 km/h	1

Total	32
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Lighting: Where the lighting is known, conditions were dark in 19 cases and of these 12 were described as dark with no lighting, the others were dark with good lighting. In 12 cases, the conditions were described by the Garda at the scene as daylight with good visibility.

Vehicle involved: In the majority of cases, a car was involved in the pedestrian fatality (24 fatalities). Heavy goods vehicles were involved in six pedestrian fatalities and jeeps in two pedestrian fatalities in 2015.

Time of day: Twelve fatalities occurred between the hours of midnight and 6am representing 38% of all pedestrian fatalities in 2015.

Time	No of fatalities	%
Midnight-6am	12	38
6am-12pm	5	16
12pm-6pm	8	25
6pm-Midnight	7	22
Total	32	

High visibility precautions: Where known, twenty four pedestrians had not taken any high-visibility precautions, of which 12 happened in hours of darkness; four pedestrians were recorded as having done so.

Profile of motorcyclist fatalities

There was an 8% reduction in the number of motorcyclists killed in 2015 (22) compared to the same period in 2014 (24).

Gender: All but one of the motorcyclists killed in 2015 were male.

Age profile: Motorcyclist fatalities are highest among those aged 16-25 (27%) and 36-45 (27%).

Age group	No of fatalities	%
16-25	6	27
26-35	4	18
36-45	6	27
46-55	5	23
56-65	1	5
Total	22	

Road type: More motorcyclist fatalities occurred on roads with an 80km/h speed limit (8) followed by 7 fatalities on roads with a 100km/h speed limit.

Speed limit	No of fatalities
50 km/h	6
60 km/h	1

80 km/h	8
100 km/h	7
Total	22

Vehicle involved: Eight of the 22 motorcyclists were killed in single vehicle collisions. Of the multi-vehicle collisions, the motorcyclist was most likely to collide with a car and in a minority of cases, another vehicle type was involved: HGV (2), Jeep (1) van (2), bus (1).

Road character: Fatal collisions were most likely to occur on straight road sections (12 fatalities).

Month of year: July was the worst month for motorcyclist fatalities with four deaths followed by August (3), September (3) and December (3).

Time of day: There were six motorcyclists killed between 9pm and 10pm and four between 11am and 12pm. A minority of fatalities (6) happened in conditions of darkness.

Time	No of fatalities
Midnight-6am	1
6am-12pm	7
12pm-6pm	7
6pm-Midnight	7
Total	22

Profile of pedal cyclist fatalities

There was a 31% reduction in the number of pedal cyclists killed in 2015 (9) compared to the same period in 2014 (13).

Gender: All but one of the nine cyclists killed were male.

Age profile: All cyclists killed were aged between 35 and 75 and 44% were aged 60 and over.

Road type: Six fatalities occurred on rural roads (80km/h speed limit or greater).

Speed limit	No of fatalities
60 km/h or less	3
80 km/h	3
100 km/h	3
Total	9

Time of day: All collisions took place between 9am and 7.30pm.

Lighting: All fatalities occurred in hours of daylight. Cyclist fatalities were most likely to occur during the day and evening. There were three fatalities between 11am and 12pm, and four fatalities between 1pm and 7pm.

Vehicle involved: In three cases, no other vehicle was involved, and all other collisions involved cars.

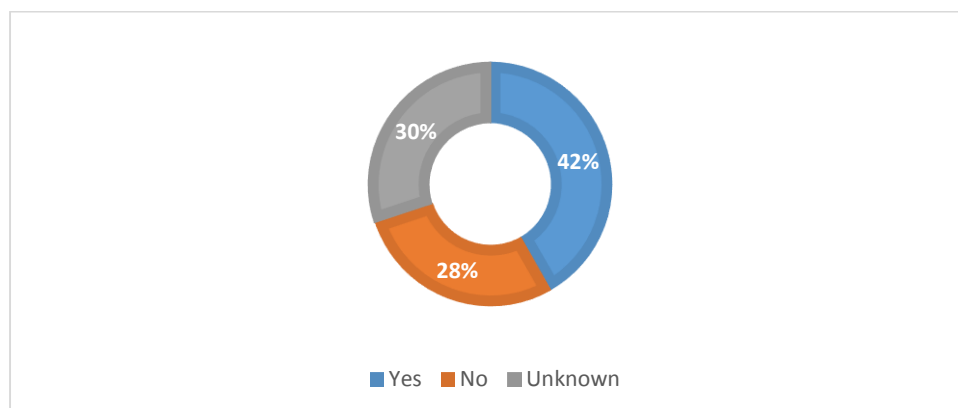
Regional Differences

The greatest decrease in fatalities since 2014 is evident in the Southern Region (-16), and decreases are evident throughout the Dublin and the South Eastern regions. Increases were seen in the Eastern (+9), Northern Regions (+5) and Western Regions (+1).

Region	2014	2015
Dublin	29	17
Eastern	31	40
South Eastern	32	18
Southern	44	28
Western	31	32
Northern	26	31
TOTAL	193	166

Seatbelt wearing rates

A review of the 2015 fatal collisions among all drivers and passengers indicates that in the case of 28% of these fatalities, a seatbelt was not worn. This suggests that 29 fatalities may have been prevented had a seatbelt been worn. Note that in a significant proportion of collisions, it was not possible for the Garda at the scene to record whether or not a seatbelt was worn, as indicated below:



Key Findings of Review of Road Fatalities 31 December 2015

As of 31 December 2015, there have been 159 fatal collisions, which have resulted in **166 fatalities** on Irish roads. This represents 20 (11%) fewer collisions, and 27 (14%) less deaths compared to provisional Garda data for the same period in 2014.

As of the 31 December 2015, 76 drivers, 27 passengers, 32 pedestrians, 22 motorcyclists and 9 cyclists were killed on Irish roads.

There have been 12 fewer vehicle occupant deaths (-10%) and 15 fewer vulnerable road user deaths (-19%).

VRU fatalities show a decline overall, but no real change for motorcyclists and pedal cyclists.

The overall reduction in fatalities observed to date can be attributed to:

- 12 fewer child fatalities in 2015 compared to 2014
- 12 fewer passenger fatalities in 2015
- 9 fewer pedestrian fatalities in 2015

Conclusions

In summary, this report indicates that there have been changes in trends in fatal collisions for Jan-December 2015 compared to Jan-December 2014. The main points for consideration are:

- Over a fifth fewer pedestrian fatalities, particularly among younger and older people.
- Almost a third fewer passenger fatalities.
- Significant number of motorcyclist fatalities, although a decline on 2014 figures.
- Increased incidence of fatal collisions on Sunday, but fewer fatalities observed overall at the weekend.
- Two key time periods 10am and 12pm and 4pm and 6pm were the most dangerous times on the road.
- December was the most dangerous month for 2015.
- The greatest decrease in fatalities since 2014 is evident in the Southern Region. However, increases were observed in the Eastern, Northern and Western Regions.
- There was a significant reduction in child fatalities (15 years and younger) in 2015 (3) compared to 2014 (15).
- Compared to 2014, there have been more deaths among those aged 16-25 and those aged 56-65.
- High incidence of 'no seatbelt' as a factor in fatal collisions