Project Edward – where are we with zero road deaths?

Last week was Project EDWARD week (17th – 21st October) (EDWARD stands for Every Day Without A Road Death). The week is a means of showcasing the importance of road safety and new and innovative, as well as traditional, policing as a means of reducing deaths on the road. Project Edward usually runs in September in the UK, however due to the passing of Queen Elizabeth II it was postponed this year. It is a sad reflection of the continued danger on the roads that days without a road death are to be celebrated as an exception to the norm. Last year deaths on GB roads averaged 4.3 per day, which was an increase on the previous year's average of 4 per day. Although 2020 was a year in which road traffic drastically reduced on GB roads due national lockdowns in response to the COVID19 crisis. There was a statistically significant reduction of road deaths during the period of national lockdowns with a 17% reduction in fatalities and a 41% reduction in fatalities when compared to the 3 year average for the period 2017-19. The average number of deaths per year in 2019 was 4.8 deaths, thus the 2021 figure is a reasonable reduction on the longer-term average of deaths per day on our roads.

Whilst the averages indicate the extent of the problem and sheer determination needed to address the attritional scale of it, project EDWARD offers a week of hope to try to control or influence road safe behaviour.

The day on which a road traffic collision causes death and the day of the death resulting from that collision will frequently be different. In what follows, the statistics on road traffic collisions (vehicles) are used since these represent the days in which

fatalities were caused (rather than the days in which the fatalities occurred.). Unfortunately, data is not available on the date and time of casualty fatalities. In what follows therefore the figures are an underestimation of actual death since any one road collision can cause multiple fatalities. In 2021 there were 1558 fatalities caused by 1474 road traffic collisions, an average of 1.05 deaths per collision (a figure that is relatively static across the previous 5 years).

Focusing solely on the average death rate however misses the fluctuations that do occur over the years in road fatalities. Table 1 below sets out the number of days on GB roads without a road traffic collision (RTC) causing death.

Table 1 Number of days without a fatal road traffic collision per year

Year	Days without RTC causing a Road Death
2017	9
2018	5
2019	4
2020	13
2021	12
Total	43

The 8th of February has twice been a day without road traffic collision causing a road death (8th Feb 2021 and 8th Feb 2018) otherwise there have been no repeated days in the last 5 years. The longest period between days without a fatal RTC was from 15th June 2018 until 21s May 2019. There were 340 consecutive days of fatal RTCs, totalling 1639 fatal collisions (an average of nearly 5 fatal RTCs per day). The second longest period was 143 days from 16th July 2021 to 7th December 2021 resulting in 709 fatal collisions (5 fatal collisions per day) and the third longest period was between 18th June 2019 and 6th November 2019 with 140 days with 672 fatal collisions (4.8

fatal collisions per day). It should be remembered that these represent the number of collisions; the actual number of deaths will be higher.

There have been no consecutive days without a fatal RTC over the previous 5 years, although in 2021 there was one period where only 1 day split the zero fatal RTC days – 23rd May 2021 and 25th May 2021, on the 22nd there were 2 fatal collisions. This is a shocking statistic, although in the context of the amount death on the road it is, sadly, not surprising.

As regards the distribution of zero RTC fatalities across the days of the week they are as follows.

Days of the week	RTC Fatal Incidents 2017-21	Number of zero RTC Fatal Incident days 2017-2021
Monday	1060	9
Tuesday	1002	8
Wednesday	1063	8
Thursday	1080	7
Friday	1160	7
Saturday	1286	2
Sunday	1219	2

Saturday and Sunday are the days least likely to have zero road death day and the most likely to have a road death. Average traffic volume on Saturdays and Sundays are below the average across the week thus more fatal collisions seem to be occurring on the days in which there is less traffic. Potential reasons for this include reduced volume of traffic allows for greater speed (A factor seen during the covid19 pandemic where excessive speed was an issue in the first lock down). Further potential factors include increased recreational pedestrian footfall, increased obstructions on the road from parked vehicles, potential reduced road policing enforcement at the weekend and

the type of driver driving at a weekend (a social / fun young driver rather than a commuter / professional). A final factor may be related to medical treatment post-crash and the <u>so called "weekend effect" in hospital treatment</u>, <u>although the evidence for that effect is contested</u>. Further analysis is needed to see if the serious and slight injury statistics are the reverse of the fatality statistics for days of the week. That would indicate that the "weekend effect" may have some truth as regards RTCs.

Project EDWARD and 0 fatal RTCs

Project Edward has, for the past two years run as a week (working week) long event; prior to 2020 Project Edward was a single day event. Project Edward runs in September (with the exception of this year). September is the month with the 5th most fatal RTCs (714). The choice of October this year was a good choice since it has been the month with the most fatal RTCs over the last five years (770).

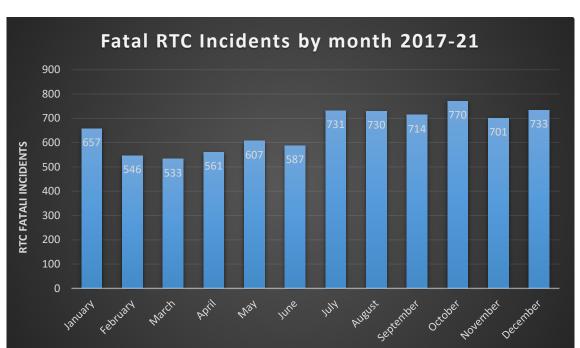


Figure 1 Fatal RTC's by Month 2017-21

Given the distribution of road deaths over a calendar week highlighted above, it may be worth the organisers considering running the project over a weekend also. Unfortunately, there have been no zero fatal collision days during Project EDWARD operations. The number of fatal RTC Collisions are noted in table 2.

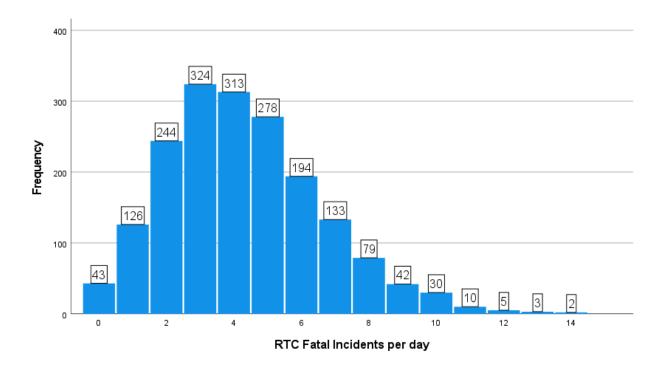
Table 2 Number of RTC Fatal Collisions during Project Edward events

Project Edward Dates	RTC Deaths
13-17 th September 2021	24
14 – 18 th September 2020	19
26 th September 2019	3
19 th September 2018	4
19 th September 2017	7

The average number of RTC fatal collisions per day in 2021 was 4.3, however the average figure masks the variation across the year in the number of RTC fatalities per day. Between 1st January 2017 and 31st December 2021 there were 8347 fatal RTCs over 1826 days, giving an average of 4.6 per day. The actual number of fatal RTCs per day on the road ranged from 0 deaths to 14.

The worst days, in the previous 5 years, have been 7th January 2019 and the 20th September 2020, in which there were 14 fatal RTCs on each day. The frequency table below demonstrates the spread of lives lost during the period 2017-2020.

Figure 2 Histogram of fatal RTCs per day 2017-2021



There were 50 days between 1st January 2017 and 31st December 2021 in which there were 10, or more, fatal RTCs per day.

At the end of this year's Project Edward we can only hope that next year's fatal RTC figures look better. There is reason to hope. I recently attended the UKROED national conference in Manchester and it was pleasing to see the level of determination on the part of the police and road safety professionals to address serious and fatal road injury. Furthermore there has been an increase in collaboration between the police, road safety professionals, charities in the road safety sector and the academic community. Whilst the analysis above is quite sobering, we should not lose track of the fact that road deaths are decreasing, albeit since 2012 that pace has slowed. Since the founding of RoadPeace, 30 years ago this year, there has been a 62% reduction in the number of fatalities, from 3855 per year (10.5 per day) to 1474 (4) in 2021.

I think the message of every Project Edward event is the same, we have lots to do, but we are making progress. Perhaps this year will be the year of two consecutive days without a road death.

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