

### Factors in Road Traffic Collisions

Identifying the factors that contribute to each collision help frame how collisions happen which in turn can inform public education, new technologies and enforcement. The following report outlines those contributing factors of KSI collisions in Northern Ireland. During my time at the Northern Ireland Assembly's Research and Information Service (RaISe), I personally undertook this research as part of a six-week summer Q-step work placement

#### Objectives

The following report explores the various contributory factors that frame a road traffic collision and focuses on persons killed or seriously injured (KSI) as a result. These factors include trends and progress overtime, when collisions occur, location of collisions, together with road, environment, human and vehicle factors

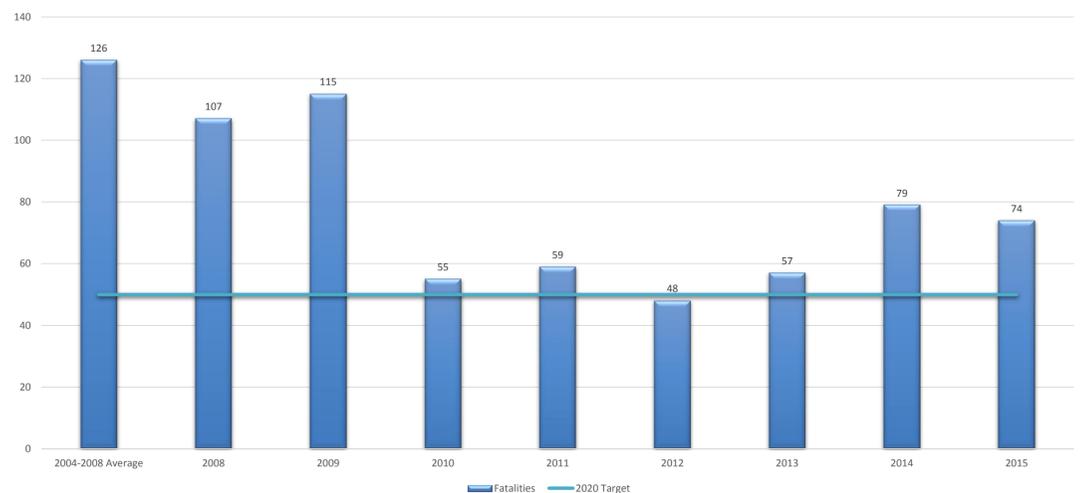
The data contained in this research consists of the number of killed or serious injury (KSI) collisions that were reported to and recorded by the Police Service of Northern Ireland

#### Trends and Progress

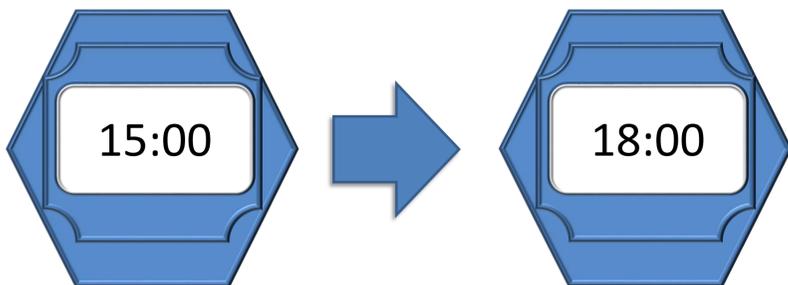
- There were 6,056 KSI collisions 2008 to 2015
- This is a 30% decrease in persons killed or seriously injured from 2008 to 2015.
- 553 collisions were fatal and 5,503 caused serious injury.
- Of those 6,056 collisions, 594 people were killed and 6,668 people suffered serious injury.



The Road Safety Strategy 2020 aims to reduce the number of fatalities in road collisions by at least 60% from the 2004 to 2008 average of 126 to fewer than 50 by 2020. Although this target had been achieved in 2012 with 48 fatalities, there was a consecutive increase in 2013 and 2014, before declining again in 2015 to 74 fatalities – 24 above target level.



#### When do Accidents occur?



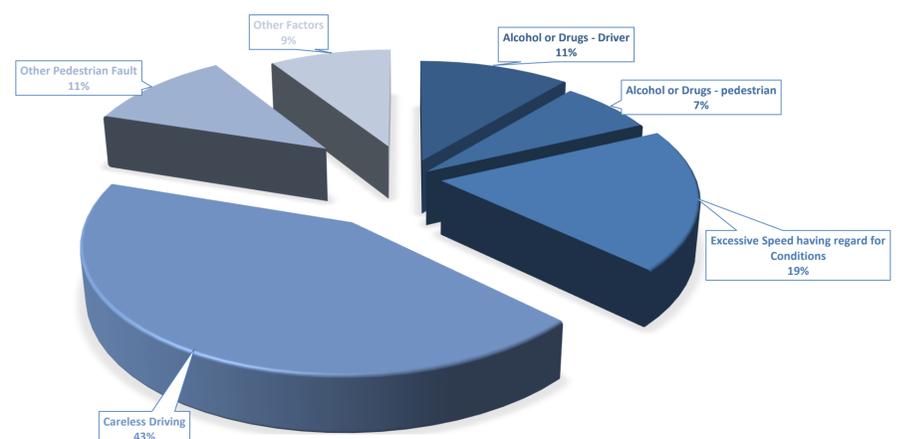
- The greatest number of road traffic collisions occurred between 3pm and 6pm were almost a quarter (24.1%) of all fatal and serious accidents in 2015 took place
- The most dangerous time to be on the road in 2015 was between the hours of 5 and 6pm on a Friday and 6 and 7pm on a Tuesday, both recording 13 KSI collisions.
- Sunday evenings were also particularly high with 10 KSI collisions happening between 5 and 6pm and 9 and 10 pm.

#### High Risk Road, Environment Factors

The highest risk factors regarding the road and natural environment KSI collisions are more likely to occur on:

- Single carriageways with a speed limit of 60mph/80kph
- No junction controls in the vicinity
- Dry road conditions and
- Good weather and visibility.

#### Human Causation Factors



The most significant human causation factor for fatal road traffic collisions is careless driving with 43% of all fatal collisions, this is followed by excessive speed (19%), alcohol or drugs in the driver's system accounted for 11% of all fatalities in 2015.

As alluded to in the introduction, quantitative search, particularly when identifying the causes of road traffic collisions, can aid in the public education, new technologies and enforcement that can prevent or at least greatly reduce future road traffic collisions. Each statistic represents a human being, and in the case of killed or seriously injured collisions, is an untold story of heartbreak and despair, reaping devastating havoc on families across Northern Ireland. Although as the latest trends show, there is good progress being made. This is a testament to the hard work of researchers like those within RaISe who along with member's of the Assembly, identify areas in society that need improved and work hard to achieve it. It was a privilege to be apart of that process if only for a short time, but no doubt this has greatly enhanced my skill set provided by my time at Queens