

Community support for saving lives

# 2022 Annual Report

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- A total of 65,974 detections were made by the Northern Ireland Road Safety Partnership (NI RSP) in 2022, either for speeding or running a red light. This is the highest number of detections recorded in a calendar year since the scheme began.
- There was a 22% increase on the number of detections in 2021 (53,970).
- The fixed site on the Antrim Road, Belfast accounted for just under half (46%) of the 3,351 speeding detections by fixed cameras in 2022.
- The highest speed recorded by RSP in 2022 was 122mph.
- In 2022, 517 detections were made by the red light running cameras, an increase of 13% compared with 2021.
- Average speed detections decreased by 14% in 2022 when compared with 2021.
- There were 6,238 deployments of the RSP vans in 2022, an increase of 1% on the number of deployments in 2021.
- There were 665 injury collisions recorded at safety camera sites in 2022, an increase of 16% on the number recorded in 2021. There were 641 at fixed and mobile camera sites and 24 at red light running sites.



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This bulletin is an Official Statistics Publication meaning it complies with all aspects of the <u>Code of Practice</u> for Official Statistics. More information on Official Statistics is available on the <u>UK statistics authority</u> website.

## 1. Things you need to know about this release

This report presents key statistics relating to the activity of the Northern Ireland Road Safety Partnership (NIRSP) for the calendar year 2022. When making year on year comparisons, it should be noted that the lockdown measures introduced throughout 2020 and into 2021 as a result of the Covid-19 pandemic are estimated to have reduced traffic volumes by close to 75% at its lowest point.

The aim of the Partnership, with the co-operation of a number of government departments and agencies with responsibility for road safety, is:

- To support Northern Ireland's Road Safety Strategy by reducing speeding, which has a direct impact upon casualty reduction, through targeted enforcement using a range of approved detection equipment, including safety camera technology.
- To support Northern Ireland's Road Safety Strategy by the delivery of educational campaigns and initiatives including education of offending drivers.

In Northern Ireland there are three fixed speed cameras, six fixed red light running cameras and three average speed enforcement camera systems. Fixed camera sites occasionally became unserviceable, requiring repair by specialist engineers, which can affect the number of detections achieved in a given year. The Partnership is also responsible for eleven speed camera vehicles which operate at various signed locations throughout Northern Ireland.

In addition to the permanently signed locations, the Partnership also enforces at community concern sites. Community concern sites are enforced where there is a well-founded concern, raised through the local Policing and Community Safety Partnership or the PSNI District Commander, that a failure to reduce speeds will result in collisions causing death or serious injury. Once approved for enforcement, camera operators use temporary signs at these locations.

Further information about the Partnership including the location of sites can be obtained from the <u>Northern</u> <u>Ireland Road Safety Partnership website</u>

This report covers statistics relating to:

- Detections by NIRSP for speeding<sup>1</sup>
- Detections by NIRSP for red light running
- Numbers of people who have completed the speed awareness course
- Injury collision statistics at safety camera sites
- The number of times NIRSP vans were deployed at safety camera sites.

For the purpose of this report a detection is defined as when a driver is caught speeding or in breach of a red light running camera and is subsequently dealt with by any of the following:

- · completing a speed awareness course,
- being referred for a fixed penalty.
- being referred for prosecution.

The information is also available in tabular format in the accompanying spreadsheet available on the NISRA website.

Section 7 provides further background information about the NI RSP.

<sup>&</sup>lt;sup>1</sup> Figures relating to persons caught speeding by PSNI officers are not included in this report as the Northern Ireland Road Safety Partnership is a separate organisation. Figures relating to motoring offences detected by PSNI are available on PSNI website.

# 2. Summary

#### Over the last 12 months:

- The NI Road Safety Partnership made 65,974 detections, this was an increase of 22% (12,004 on the number detected in 2021.
- Mobile speed cameras accounted for 91% of all detections.
- Fixed speed cameras made 3,351 detections while the average speed cameras made 1,932 detections.
- Detections at red light running sites accounted for less than 1% of all detections (517).

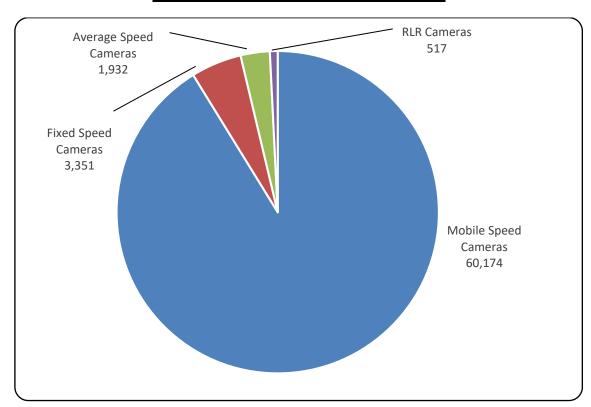


Figure 1: Detections by camera type, 2022

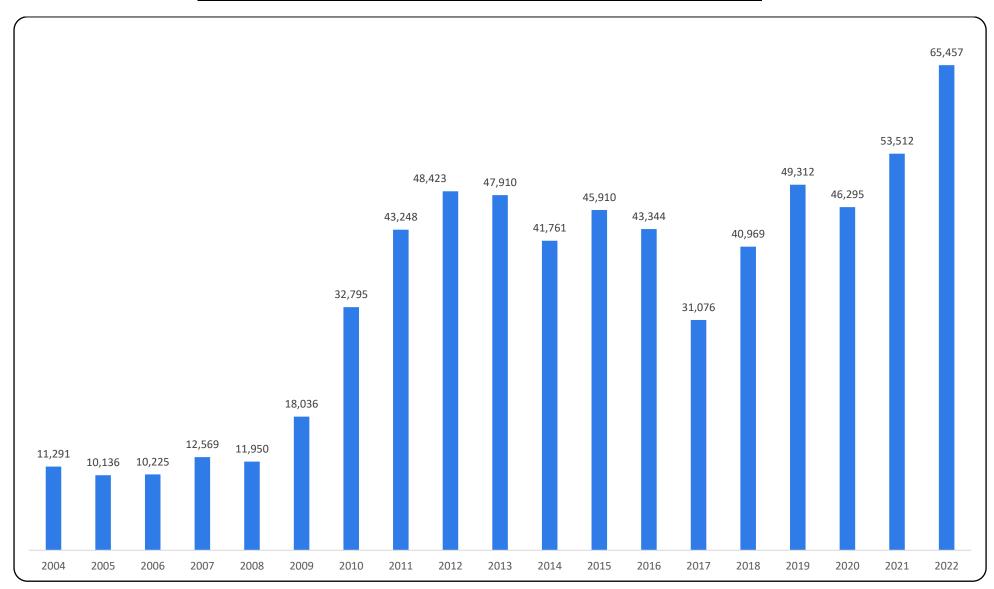
## 3. Trends

Table 1: Detections at Northern Ireland Road Safety Partnership sites 2004 - 2022

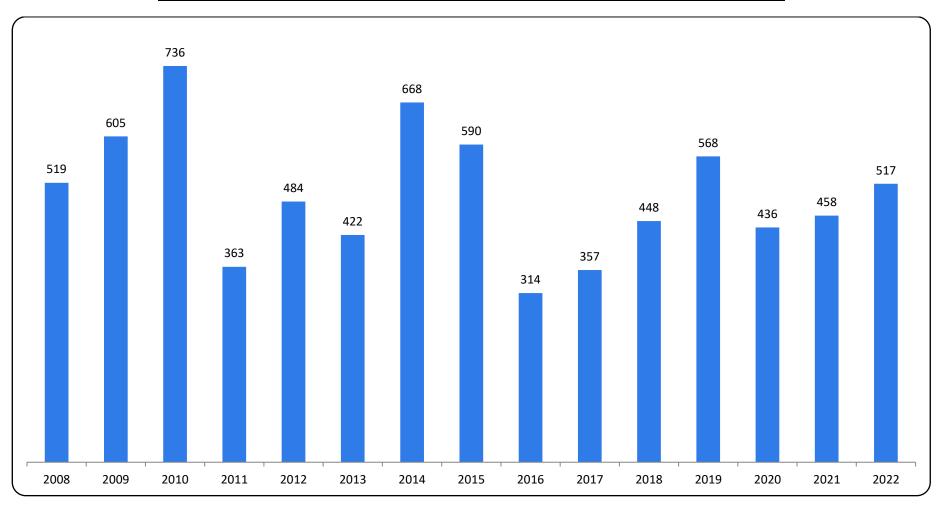
	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Cameras	Total
2004	6,915	4,376	-	-	11,291
2005	7,501	2,635	-	-	10,136
2006	7,781	2,440	4	-	10,225
2007	9,450	3,095	24	109	12,678
2008	9,642	2,300	8	519	12,469
2009	16,016	2,020	0	605	18,641
2010	26,006	6,709	80	736	33,531
2011	36,467	6,651	130	363	43,611
2012	36,546	11,413	464	484	48,907
2013	32,154	15,157	599	422	48,332
2014	30,012	11,484	265	668	42,429
2015	34,692	10,318	900	590	46,500
2016	34,308	8,100	936	314	43,658
2017	22,700	7,669	707	357	31,433
2018	31,538	5,970	3,461	448	41,417
2019	41,233	5,035	3,044	568	49,880
2020	41,012	3,188	2,095	436	46,731
2021	47,997	3,276	2,239	458	53,970
2022	60,174	3,351	1,932	517	65,974

- There was almost 6 times the number of detections in 2022 when compared with 2004. There are a
  number of factors which are likely to have contributed to this increase over time, including the
  reduction in the speed threshold at which a driver can be detected speeding in 2010 and 2012, as
  well as additional sites for enforcement added in 2010 and 2014.
- The first marked increase in the number of detections was in 2009 prior to any changes in the threshold. The main reason for this was that operators became civilianised in December 2008. Up to this point the camera vans were operated by PSNI officers.
- There were fewer deployments of mobile vans in 2017 due to staffing resources, which had a significant impact on the number of detections.
- A camera upgrade was rolled out in 2018 and was the main reason for the increase in detections in 2018 and 2019.
- Detections in 2022 were at the highest ever with 65,974 recorded, which may be attributable to an increase in operator availability and camera stability throughout the year. This was a 22% increase on 2021.

Figure 2: Number of NI Road Safety Partnership speeding detections 2004 – 2022



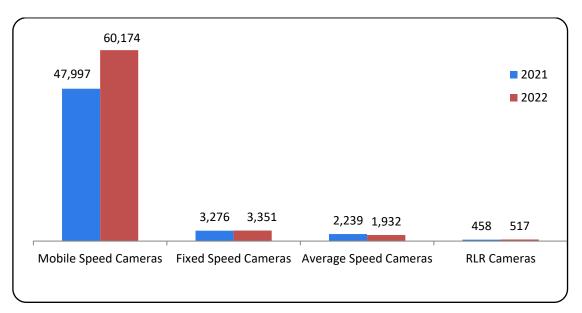




<sup>&</sup>lt;sup>2</sup> Red light running cameras introduced in November 2007, the red light running site at Glenshane Road, Londonderry launched in September 2008.

## 4. Detections

Figure 4: Detections at Northern Ireland Road Safety Partnership sites, 2021 and 2022



- There were 65,974 detections by the Road Safety Partnership in 2022 (approximately 181 per day). This was an increase of 22% on the 53,970 detections made in 2021 (approximately 148 per day).
- Fixed camera detections increased by 2% when compared with 2021. The Upper Newtownards Road camera experienced downtime for most of 2021 and the Springfield Road camera experienced downtime in 2022.
- Average speed camera detections decreased by 14% in 2022 when compared with 2021.
- The number of detections at mobile camera sites increased by 25% between 2021 and 2022.
- Of the 65,457 speed related detections in 2022, a total of 33,197 drivers completed a speed awareness course. This equated to half over (51%) of the drivers detected and was a similar proportion to previous years.

#### 4.1 Fixed camera sites

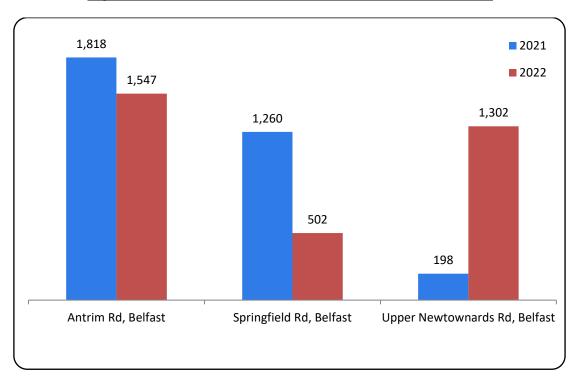


Figure 5: Detections at Fixed Camera Sites, 2021 and 2022

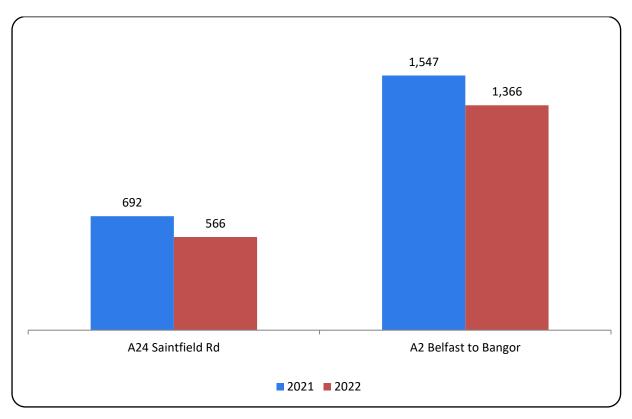
- The fixed site on the Antrim Road, Belfast accounted for 46% of the 3,351 speeding detections by fixed cameras, followed by Upper Newtownards Road, Belfast (39%). Detections on the Upper Newtownards road camera were down in 2021 due to significant camera downtime. The Springfield Road camera recorded 60% less detections in 2022 but this camera experienced significant downtime in 2022.
- July was the month with the highest number of detections at fixed camera sites (507), accounting for 15% of the total.

#### 4.2 Mobile camera sites

- Of the total detections at mobile camera sites in 2022, 27,290 were at permanently signed sites accounting for under half (45%) of these detections, while the remaining 55% were at community concern sites.
- The Shore Road, Eden to Belfast route had the most detections with 4,385 in 2022 while there were a small number of sites with no detections. There are a variety of reasons for certain sites having low level of detections including; low numbers of drivers breaching the speed threshold on sites where a higher speed limit is in force (60 mph+), the site was dormant over last 12 months or part thereof meaning that it had not met the criteria for enforcement.
- The breakdown of detections by mobile camera sites is available in the accompanying spreadsheet.

## 4.3 Average speed camera sites

Figure 6: Detections at Average Speed Camera Sites, 2021 and 2022



There were 1,932 detections along the A2 average speed sites in 2022, a decrease of 14% when compared with 2021 and the lowest total recorded since 2017.

## 4.4 Red light running camera sites

Table 2: Detections at red light running camera sites, 2022

Red light running camera site	2022
Castle St, Belfast	17
Glenshane Rd, L'Derry	98
Middlepath St, Belfast	69
Millfield at Peter's Hill, Belfast	82
Nelson St, Belfast	245
York St, Belfast	6
Total	517

• In 2022, 517 detections were made for red light running by the six such cameras across Northern Ireland, compared with 458 detections in 2021 – an increase of 13%. Some of the cameras were out of action for a period of time throughout 2022, requiring specialist engineers to repair, which resulted a lower number of detections at these sites.

## 4.5 Speed limit

Table 3: Speeding detections by speed limit, 2022

Speed Limit (mph)	Number of detections	Highest speed recorded (mph)
30	43,998	90
40	11,307	108
45	143	98
50	2,518	105
60	5,660	122
70	1,831	118
Total	65,457	

- Two-thirds (67%) of all speed related detections were on 30mph roads.
- The highest speed recorded in 2022 was 122mph, which was detected on the A26 Frosses Road, Ballymoney (a 60mph road).

## 4.6 Age of drivers

Table 4: Age of drivers detected by camera type, 2022

Age of Driver	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Camera	Total
Under 25	4,533	533	267	62	5,395
25 - 39	17,435	1,071	738	175	19,419
40 - 54	18,963	929	565	125	20,582
55 - 69	13,464	572	228	86	14,350
70+	3,961	105	31	31	4,128
Unknown	1,818	141	103	38	2,100
Total	60,174	3,351	1,932	517	65,974

- Where age was known, almost one third of all persons detected by the RSP in 2022 were aged 40-54 (32%), a further 30% were aged 25-39, which was similar to the age breakdown in 2021.
- Persons aged under 25 accounted for 8% of all those detected, where the age was known, however they accounted for 17% of all those detected by the fixed speed cameras.

## 4.7 Time of day

Table 5: Detections by time of day, 2022

Time of Day	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Camera	Total
0000-0259	0	566	152	53	771
0300-0559	0	312	114	21	447
0600-0859	2,798	566	265	65	3,694
0900-1159	20,457	495	313	83	21,348
1200-1459	22,828	322	242	80	23,472
1500-1759	10,273	223	233	71	10,800
1800-2059	3,818	357	358	65	4,598
2100-2359	0	510	255	79	844
Total	60,174	3,351	1,932	517	65,974

 More than one in three detections in 2022 was between 12pm and 3pm, followed by a further 32% between 9am and 12pm.

## 5. Deployment

There are currently 11 highly visible mobile speed camera vans that operate 7 days a week throughout Northern Ireland at approximately 90 permanently signed locations as well as community concern sites.

Table 6: Number of deployments by day of week and month of year, 2022

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
January	50	89	87	70	79	69	48	492
February	35	71	76	74	72	68	64	460
March	36	44	83	87	94	58	54	456
April	40	93	93	90	76	83	77	552
May	49	110	114	94	102	84	54	607
June	37	92	93	118	116	77	59	592
July	56	91	84	75	72	98	71	547
August	40	102	113	104	80	65	55	559
September	33	67	85	82	103	84	46	500
October	45	72	73	70	74	64	74	472
November	56	75	94	102	74	71	45	517
December	26	60	83	82	93	77	63	484
Total	503	966	1,078	1,048	1,035	898	710	6,238

- There were 6,238 deployments of the NIRSP vans in 2022, an increase of 1% on the number of deployments in 2021.
- The highest number of deployments was on a Tuesday with 1,078, accounting for 17% of all deployments, while Sunday had the lowest number with 503 (8%).

## 6. Injury road traffic collisions

- There were 665 injury collisions recorded at safety camera sites in 2022, an increase of 16% on the number recorded in 2021. Injury collisions overall in Northern Ireland increased by 9% in the same period<sup>3</sup>.
- There were 80 fatal or serious (KSI) injury collisions recorded at safety camera sites in 2022, a 7% increase on the 75 recorded in 2021.
- The <u>Draft Road Safety Strategy for Northern Ireland to 2030</u> was published by the Department for Infrastructure in October 2022 and contains a series of road safety targets to be achieved by 2030. The work of the RSP is to support the NI Road Safety Strategy (RSS) by using targeted enforcement to reduce the casualties on the roads. Looking at the collisions recorded at RSP sites over the period 2018 2022 there was a reduction in KSI collisions of 8% when compared with 2014 2018 (the baseline used in the NI RSS to 2030). In Northern Ireland as a whole, the total number of KSI collisions decreased by only 0.2% when the same five year periods are compared.
- The more recent trend data should be viewed in the context of reduced traffic volumes as a result of the Covid-19 pandemic, which were evidenced throughout 2020 in particular. It is also possible that a regression to the mean effect may have contributed to the reduction (see section 7 for more detail). However, research in the UK indicates that when these factors are controlled for, safety cameras make a substantial contribution to the reduction in collisions (thought to be a reduction of around 20% fewer collisions depending on area and camera type).

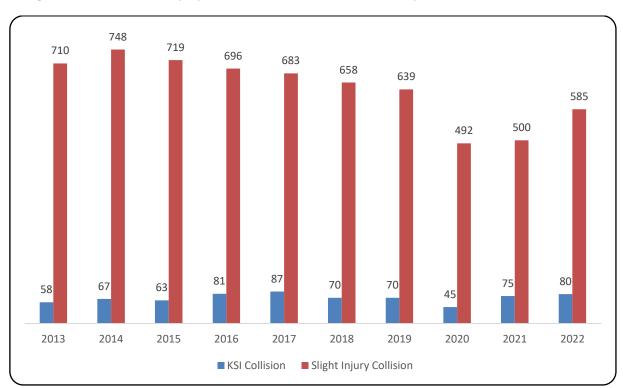


Figure 7: Number of injury road traffic collisions at safety camera sites, 2013 – 2022

<sup>&</sup>lt;sup>3</sup> Injury road traffic collision statistics

### 7. Notes

The Northern Ireland Road Safety Partnership (NIRSP) was established in July 2003 as the Northern Ireland Safety Camera Scheme. The aim of the scheme is to reduce the number of casualties on Northern Ireland's roads through targeted enforcement at sites with a history of collisions using safety cameras.

The partnership includes both mobile and fixed speed cameras which record vehicles passing in excess of a pre-defined speed, camera systems which measures average speed travelled between two cameras and red light running (RLR) cameras which record vehicles that pass through red traffic lights - hence the collective term 'safety' cameras.

The Partnership covers only those detections made by safety cameras and not detections made by PSNI officers using other speed measuring devices, e.g. Laser, Radar or Vascar.

The enforcement of the RSP sites is conducted by operators employed on behalf of the organisation. The operators are trained in using the mobile cameras and operate in vans that are marked with the Northern Ireland Road Safety Partnership logo. Detections from fixed cameras and from red light running cameras under the scheme are also operated by the Northern Ireland Road Safety Partnership (and not the PSNI). The detection figures contained in this report relate solely to those enforced by the Northern Ireland Road Safety Partnership and exclude any other detections recorded by the PSNI for motoring offences outside the scheme.

Currently, there are approximately 90 permanently signed locations at which the mobile speed camera vans can deploy, 3 fixed speed cameras, 3 average speed systems and 6 red light running cameras.

The Northern Ireland Road Safety Partnership involves the co-operation of a number of government departments and agencies.

On the basis of common interest in the Partnership, delivery is overseen by the Partnership Board consisting of representatives from –

- Police Service of Northern Ireland
- Department for Infrastructure
- Department of Justice
- Northern Ireland Courts and Tribunal Service
- Northern Ireland Policing Board

#### **Average Speed Camera System**

Average speed systems are highly visible and are mounted on over-hanging poles in pairs. The system measures the average speed at which a vehicle travels between the two cameras.

### **Fixed Safety Cameras**

Fixed safety cameras measure the speed of a vehicle at a given point. The cameras, which are marked yellow, are mounted at the roadside on grey coloured poles.

## **Fixed Red Light Running Cameras**

Fixed red light running cameras, which are located at junctions governed by traffic lights which have a high incidence of collisions, are similar in appearance to fixed safety cameras.

### **Mobile Safety Camera Vehicles**

There are currently eleven mobile safety camera vehicles which utilise the latest digital photographic and laser technology to accurately measure and record vehicle speeds. The vehicles, which are clearly marked and highly visible, are used on designated routes throughout Northern Ireland.

## **Community Concern Sites**

Community concern sites are enforced where there is a well-founded concern, raised via the Policing and Community Safety Partnerships (PCSPs) or the PSNI District Commander, that a failure to reduce speeds will result in KSI (killed or seriously injured) collisions and that the location poses a significant risk to road safety. Once approved for enforcement, camera operators use temporary signs at these locations.

### Reliability of evidence

All speed detection equipment operated by the Northern Ireland Road Safety Partnership is type approved by the Department for Infrastructure for Northern Ireland (DfI) in accordance with the provisions of Article 23 of the Road Traffic Offenders (Northern Ireland) Order 1996 before it can be used for enforcement purposes.

In order to obtain type approval, the equipment is subjected to rigorous testing to the standards set by the Home Office Scientific Development Branch.

The type approval provides a public reassurance of the equipment's accuracy and reliability. In addition, there are a range of strict procedures for operating the equipment that further assures accuracy of operation and information providing an audit trail of evidence.

## **Human Rights Act**

In keeping with the Human Rights Act 2000, the registered keeper of a vehicle can be required to give the details of who was driving at the time the vehicle was speeding. This is not a breach of the individual's right to a fair trial.

#### **Speed Awareness Courses**

Drivers, depending on the speed at which they were detected, may be offered an opportunity to attend a speed awareness course as an alternative to penalty points. The course, which is available at eight locations throughout Northern Ireland and delivered and managed by an appointed contractor, however due to the COVID-19 pandemic the courses moved to an online platform from June 2020. Courses must be attended within a period of 120 days from the date of detection. This method of disposal was introduced in June 2010. Certain restrictions apply to who can qualify for the speed awareness course option.

#### **Regression to the Mean Effect**

This is a statistical term that refers to the fact that road traffic collisions are random events and their incidence at any location can vary over time. Due to the very nature of how safety camera sites are identified (i.e. based on their high KSI collision history over the previous 3 years) some of the sites selected could have an abnormally high level of KSI collisions by chance (randomly). Therefore when identified as a safety camera site and enforced, the same high level of KSI collisions in unlikely to be repeated in subsequent years and it is argued that KSI collisions would decrease at these sites as they 'regress to the mean' regardless of safety camera enforcement.

- The NI Road Safety Partnership were unable to quantify the contribution of the RTM due to lack of access to all the required data variables in order to replicate the complex statistical modelling approach adopted by the Department of Transport (DfT) in their examination of the RTM effect in 2005<sup>4</sup>.
- No individual force in England & Wales would be likely to estimate the RTM effect in their evaluation of their own schemes.
- In the absence of a measure for the RTM effect in Northern Ireland, the Partnership believe that the findings of the 4 Year Evaluation Report conducted in England & Wales and other similar research would be equally applicable to the scheme in Northern Ireland: i.e. 'Whilst regression-to-mean effects does appear to account for some of the reduction in collisions at cameras, the safety effects of cameras still remain substantial'.
- Whilst the effect of safety cameras in reducing collisions in Northern Ireland cannot be calculated, attempts have been made to minimise the RTM effect, by increasing the time period used to identify RSP safety camera sites (5 year collision histories are used instead of the 3 year period normally adopted across the rest of the UK).

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<sup>&</sup>lt;sup>4</sup> The National Safety Camera Programme Four Year Evaluation Report December 2005