

Northern Ireland
ROAD SAFETY PARTNERSHIP
Community support for saving lives



2021 Annual Report

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- A total of 53,970 detections were made by the Northern Ireland Road Safety Partnership (NI RSP) in 2021, either for speeding or running a red light. This is the highest number of detections recorded in a calendar year since the scheme began.
- This 15% increase on the number of detections in 2020 (46,731) should be viewed in the context of the Covid-19 lockdown measures introduced throughout 2020 and the subsequent impact on [traffic volumes](#).
- The fixed site on the Antrim Road, Belfast accounted for more than half (55%) of the 3,276 speeding detections by fixed cameras in 2021.
- The highest speed recorded by RSP in 2021 was 120mph.
- In 2021, 458 detections were made by the red light running cameras, an increase of 5% compared with 2020.
- Average speed detections increased by 7% in 2021 when compared with 2020.
- There were 6,163 deployments of the RSP vans in 2021, an increase of 6% on the number of deployments in 2020.
- There were 575 injury collisions recorded at safety camera sites in 2021, an increase of 7% on the number recorded in 2020. There were 551 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 [Code of Practice](#) for Official Statistics. More information on Official Statistics is available on the [UK statistics authority](#) 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 2021. When making year on year comparisons, it should be noted that the lockdown measures introduced throughout 2020 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 two 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 eight 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 [Northern Ireland Road Safety Partnership website](#)

This report covers statistics relating to:

- Detections by NIRSP for speeding¹
- 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.

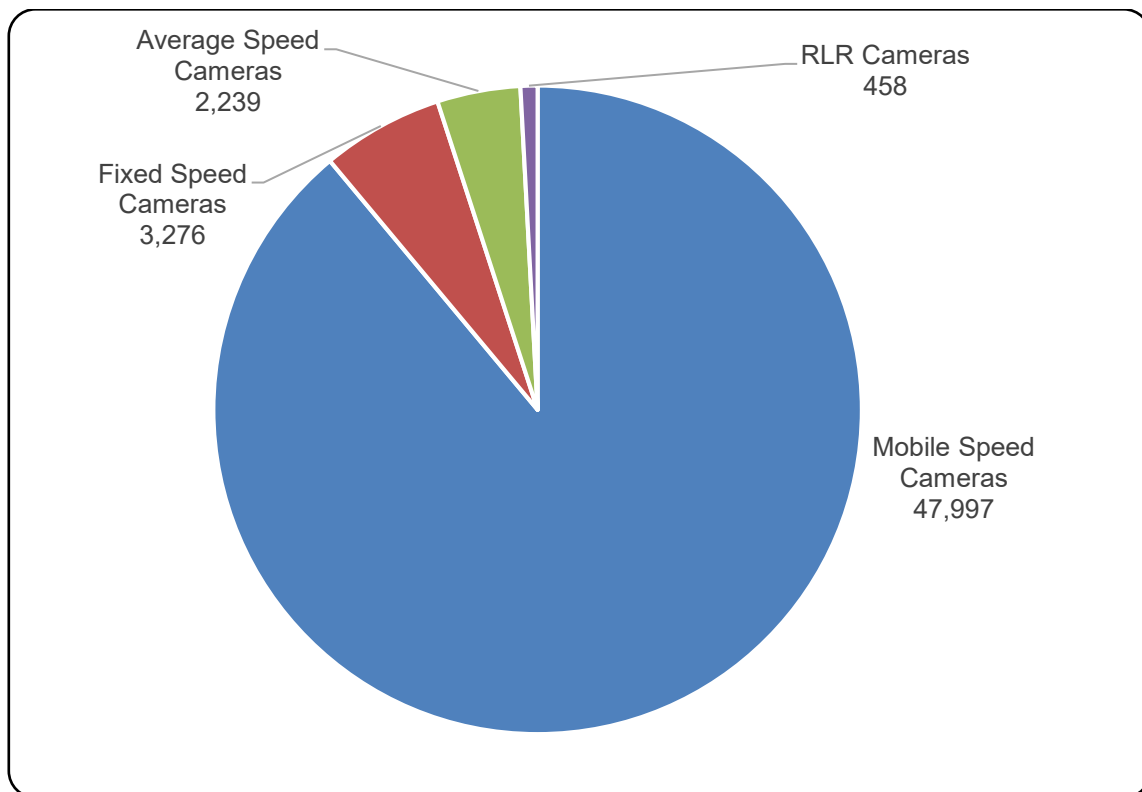
¹ Figures relating to persons caught speeding by PSNI officers are not included in this report as the Northern Ireland Road Safety Partnership is a separate organisation. Figures relating to motoring offences detected by PSNI are available on [PSNI website](#).

2. Summary

Over the last 12 months:

- The NI Road Safety Partnership made 53,970 detections, this was an increase of 15% (7,239) on the number detected in 2020.
- Mobile speed cameras accounted for 89% of all detections.
- Fixed speed cameras made 3,276 detections while the average speed cameras made 2,239 detections.
- Detections at red light running sites accounted for less than 1% of all detections (458).

Figure 1: Detections by camera type, 2021



3. Trends

Table 1: Detections at Northern Ireland Road Safety Partnership sites 2004 – 2021

	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

- There was almost 5 times the number of detections in 2021 when compared with 2004. The main reason for this increase was the reduction in the speed threshold at which a driver can be detected speeding in June 2010 and again in April 2012.
- Detections in 2021 were at the highest ever with 53,970 recorded, which may be attributable to an increase in operator availability and camera stability throughout the year. This was a 15% increase on 2020.
- Additional sites for enforcement were also 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.

Figure 2: Number of NI Road Safety Partnership speeding detections 2004 – 2021

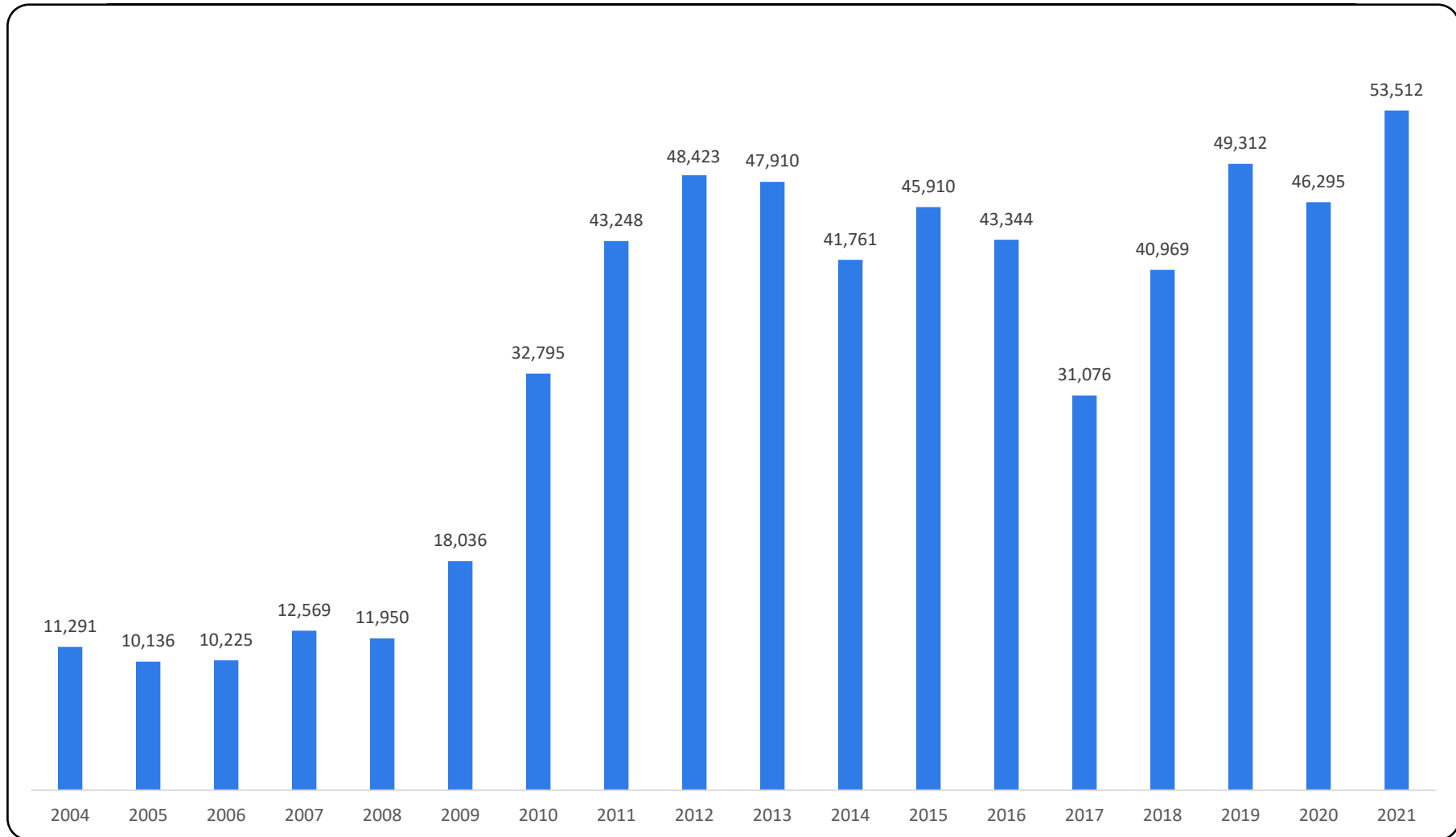
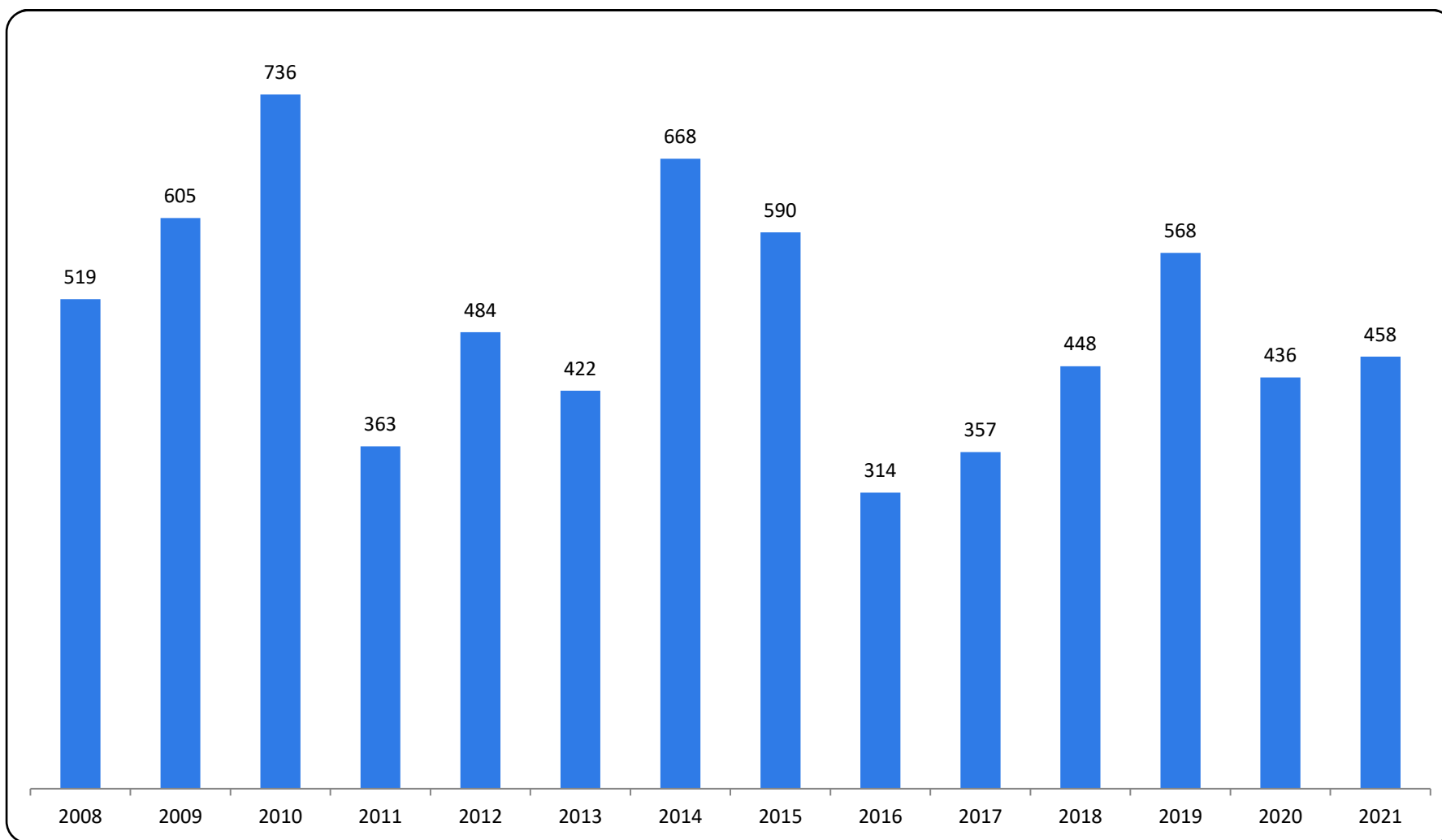


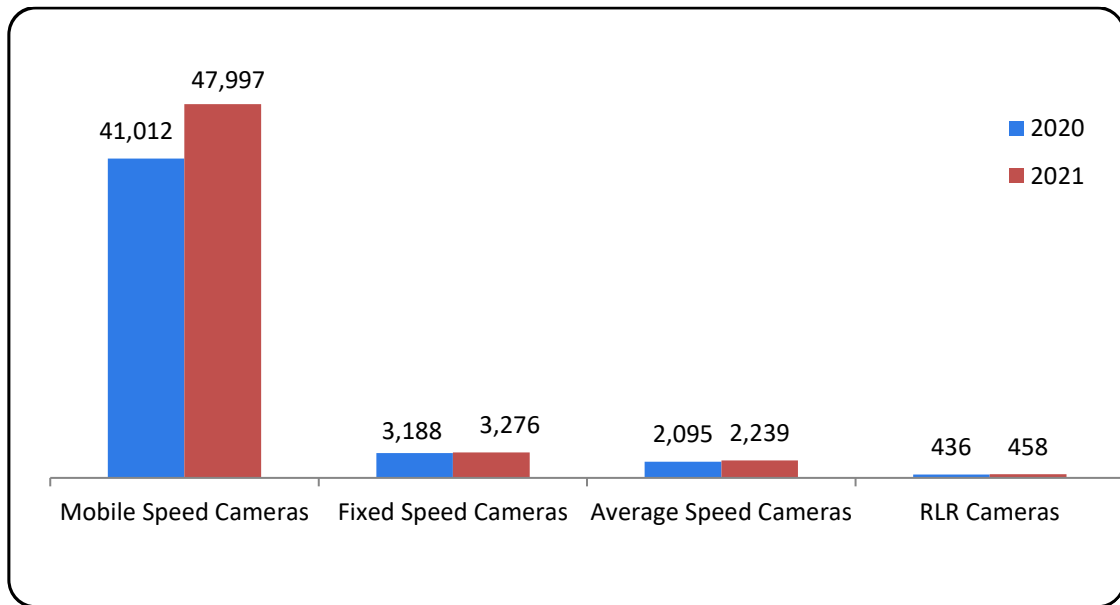
Figure 3²: Number of NI Road Safety Partnership red light running detections: 2008 – 2021



² Red light running cameras introduced in November 2007, the red light running site at Glenshane Road, Londonderry launched in September 2008.

4. Detections

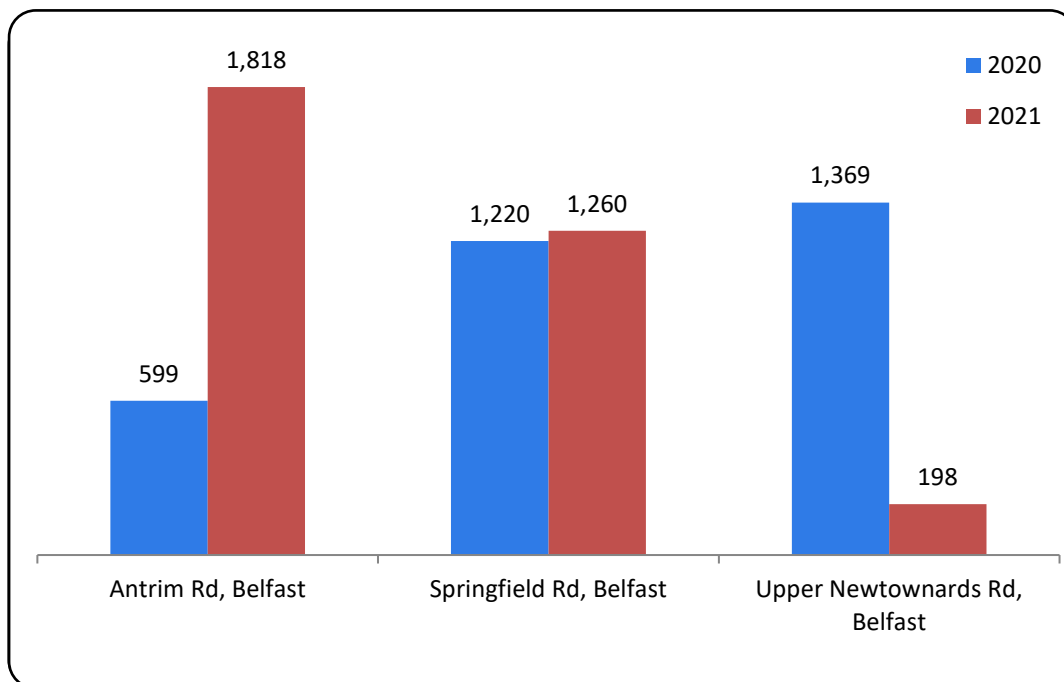
Figure 4: Detections at Northern Ireland Road Safety Partnership sites, 2020 and 2021



- There were 53,970 detections by the Road Safety Partnership in 2021 (approximately 148 per day). This was an increase of 15% on the 46,731 detections made in 2020 (approximately 128 per day).
- Fixed camera detections increased by 3% when compared with 2020. Two of the three fixed cameras experienced significant downtime throughout 2020 while the Upper Newtownards Road camera experienced downtime for most of 2021.
- Average speed camera detections increased by 7% in 2021 when compared with 2020.
- The number of detections at mobile camera sites increased by 17% between 2020 and 2021.
- Of the 53,512 speed related detections in 2021, a total of 27,930 drivers completed a speed awareness course. This equated to over half (52%) of the drivers detected and was a similar proportion to previous years.

4.1 Fixed camera sites

Figure 5: Detections at Fixed Camera Sites, 2020 and 2021



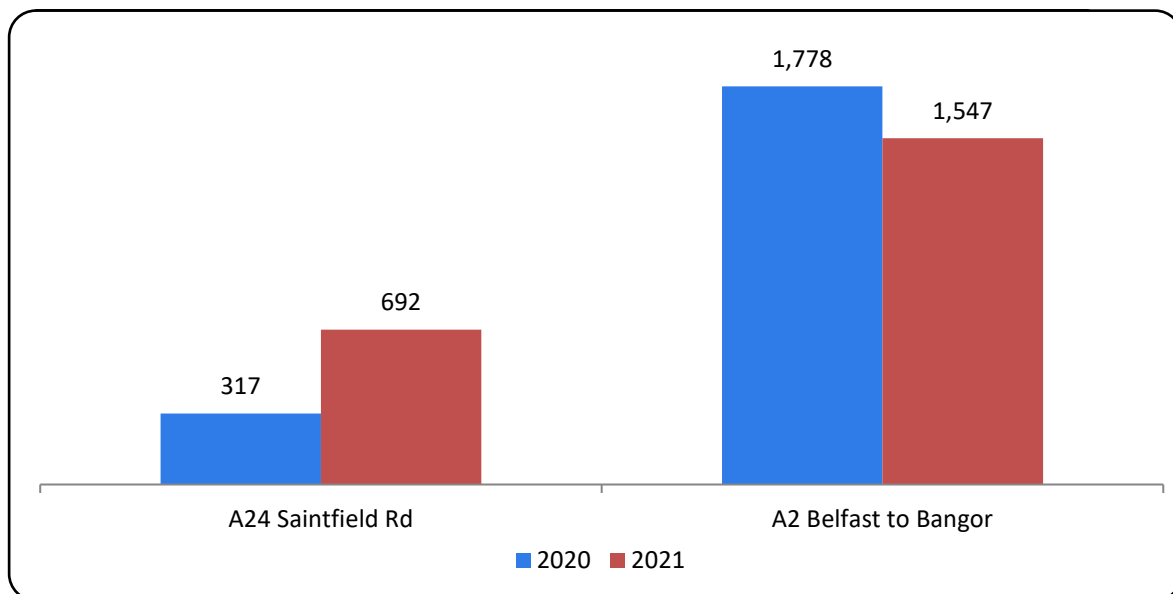
- The fixed site on the Antrim Road, Belfast accounted for 55% of the 3,276 speeding detections by fixed cameras, followed by Springfield Road, Belfast (38%). As a result of significant downtime during 2021, the Upper Newtownards Road, Belfast accounted for only 6% of fixed camera detections.
- July was the month with the highest number of detections at fixed camera sites (369), accounting for 11% of the total.

4.2 Mobile camera sites

- Of the total detections at mobile camera sites in 2021, 29,401 were at permanently signed sites – accounting for over three fifths (61%) of these detections, while the remaining 39% were at community concern sites.
- The Shore Road, Eden to Belfast route had the most detections with 5,127 in 2021 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, 2020 and 2021



- A new average speed camera system was launched on A24 Saintfield Road, Belfast in August 2020 and made 317 detections to the end of 2020. In 2021, it made a total of 692 detections.
- There were 1,547 detections along the A2 average speed sites in 2021, a decrease of 13% when compared with 2020 and the lowest total recorded since 2017.

4.4 Red light running camera sites

Table 2: Detections at red light running camera sites, 2021

Red light running camera site	2021
Castle St, Belfast	9
Glenshane Rd, L'Derry	27
Middlepath St, Belfast	11
Millfield at Peter's Hill, Belfast	148
Nelson St, Belfast	194
York St, Belfast	69
Total	458

- In 2021, 458 detections were made for red light running by the six such cameras across Northern Ireland, compared with 436 detections in 2020 – an increase of 5%. As in 2020, some of the cameras were out of action for a period of time in 2021, 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, 2021

Speed Limit (mph)	Number of detections	Highest speed recorded (mph)
30	34,948	73
40	9,273	90
45	60	90
50	2,515	90
60	5,885	120
70	831	114
Total	53,512	

- Almost two-thirds (65%) of all speed related detections were on 30mph roads.
- The highest speed recorded in 2021 was 120mph, which was detected on the A29 Dunman Dual Carriageway, Cookstown (a 60mph road).

4.6 Age of drivers

Table 4: Age of drivers detected by camera type, 2021

Age of Driver	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Camera	Total
Under 25	4,156	423	407	72	5,058
25 - 39	14,754	1,069	836	146	16,805
40 - 54	15,217	1,024	590	130	16,961
55 - 69	10,199	536	243	80	11,058
70+	2,836	102	34	14	2,986
Unknown	835	122	129	16	1,102
Total	47,997	3,276	2,239	458	53,970

- Where age was known, almost one third of all persons detected by the RSP in 2021 were aged 40-54 (32%), a further 32% were aged 25-39, which was similar to the age breakdown in 2020.
- Persons aged under 25 accounted for 10% of all those detected, where the age was known, however they accounted for 19% of all those detected by the average speed cameras.

4.7 Time of day

Table 5: Detections by time of day, 2021

Time of Day	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Camera	Total
0000-0259	0	243	176	42	461
0300-0559	0	121	107	21	249
0600-0859	2,653	394	333	51	3,431
0900-1159	15,195	561	295	67	16,118
1200-1459	14,842	556	277	91	15,766
1500-1759	10,547	496	277	71	11,391
1800-2059	4,739	507	446	62	5,754
2100-2359	21	398	328	53	800
Total	47,997	3,276	2,239	458	53,970

- Almost one in three detections in 2021 was between 9am and 12pm, followed by a further 29% between 12pm and 3pm.

5. Deployment

There are currently 8 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, 2021

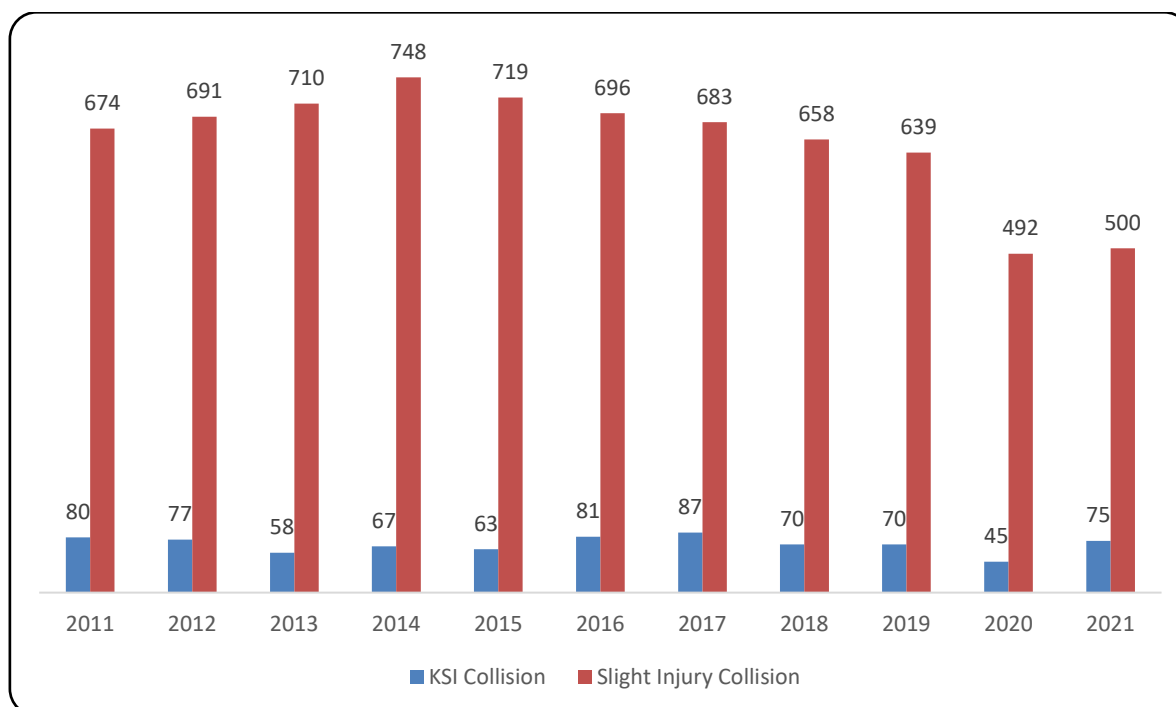
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
January	74	73	76	86	81	86	99	575
February	47	79	86	80	76	72	51	491
March	46	91	90	92	81	79	68	547
April	33	60	70	75	71	73	36	418
May	52	109	83	85	87	68	72	556
June	56	99	101	93	92	78	70	589
July	39	102	84	79	115	114	81	614
August	64	104	111	92	88	93	79	631
September	35	85	70	92	92	60	49	483
October	36	50	63	63	61	77	80	430
November	41	77	88	70	56	51	54	437
December	26	43	62	78	68	68	47	392
Total	549	972	984	985	968	919	786	6,163

- There were 6,163 deployments of the NIRSP vans in 2021, an increase of 6% on the number of deployments in 2020.
- The highest number of deployments was on a Wednesday with 985, accounting for 16% of all deployments, while Sunday had the lowest number with 549 (9%).

6. Injury road traffic collisions

- There were 575 injury collisions recorded at safety camera sites in 2021, an increase of 7% on the number recorded in 2020. Injury collisions overall in Northern Ireland increased by 11% in the same period³.
- There were 75 fatal or serious (KSI) injury collisions recorded at safety camera sites in 2021, a 67% increase on the 45 recorded in 2020.
- The latest increases should be viewed in the context of lockdown measures which were introduced throughout 2020 in relation to Covid-19 and reduced [traffic volumes](#) by close to 75% at its lowest point.
- The work of the RSP is to support the NI Road Safety Strategy (RSS) 2020 by using targeted enforcement to reduce the casualties on the roads. Looking at the collisions recorded at RSP sites over the period 2017 – 2021 there was a reduction in KSI collisions of 39% when compared with 2004 – 2008 (the baseline used in the NI RSS). However not all of this decrease can be directly attributable to the presence of safety cameras as there was a decrease of 31% in KSI collisions in Northern Ireland when the same five year periods are compared.
- 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, 2011 - 2021



³ [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, 2 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 eight 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 is 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 2005⁴.
- 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).

⁴ [The National Safety Camera Programme Four Year Evaluation Report December 2005](#)