

Community support for saving lives

2019 Annual Report

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- A total of 49,880 detections were made by the Northern Ireland Road Safety Partnership (NI RSP) in 2019, either for speeding or running a red light. This was a 20% increase on the number of detections in 2018 (41,417). This was mainly attributed to an increase in detections by the mobile vans.
- The fixed site on the Upper Newtownards Road, Belfast accounted for over one third (36%) of the 5,035 speeding detections by fixed cameras in 2019.
- The highest speed recorded by RSP in 2019 was 114mph.
- In 2019, 568 detections were made by the red light running cameras across Northern Ireland, an increase of 27% compared with 2018.
- Average speed detections decreased by 12% in 2019 when compared with 2018.
- There were 5,437 deployments of the RSP vans in 2019, an increase of 44% on the number of deployments in 2018.
- There were 735 injury collisions recorded at safety camera sites in 2019, a decrease of 2% on the number recorded in 2018. There were 718 at fixed and mobile camera sites and 17 at red light running sites in 2019.



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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 2019. The aim of the Partnership is:

- To support Northern Ireland's Road Safety Strategy to 2020 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 to 2020 by the delivery of educational campaigns and initiatives including education of offending drivers.

In Northern Ireland there are four fixed speed cameras, six fixed red light running cameras and one average speed enforcement camera system. Fixed camera sites occasionally became unserviceable and needed to be repaired 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 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.

Section 7 provides further background information about the NI RSP.

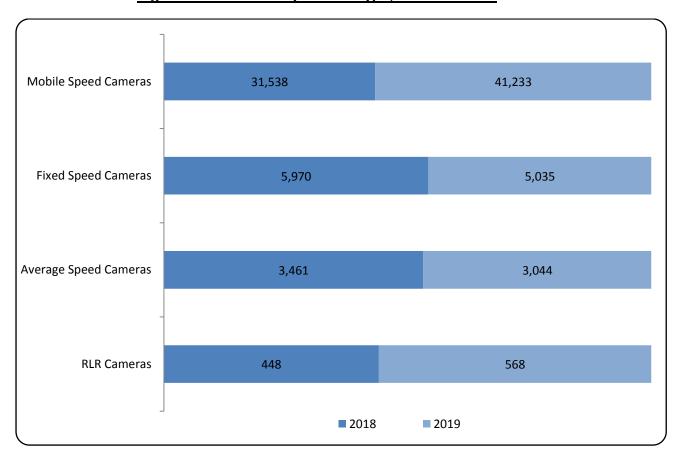
¹ Figures relating to persons caught speeding by PSNI officers are not included in this report as the Northern Ireland Road Safety Partnership is a separate organisation. Figures relating to motoring offences detected by PSN are available on <u>PSNI website</u>.

2. Summary

Over the last 12 months:

- The overall number of Road Safety Partnership detections increased by 20% (8,463).
- Fixed camera detections decreased by 16% (935).
- Average speed camera detections decreased by 12% (417).
- Detections at red light running sites increased by 27% (120)

Figure 1: Detections by camera type, 2018 and 2019



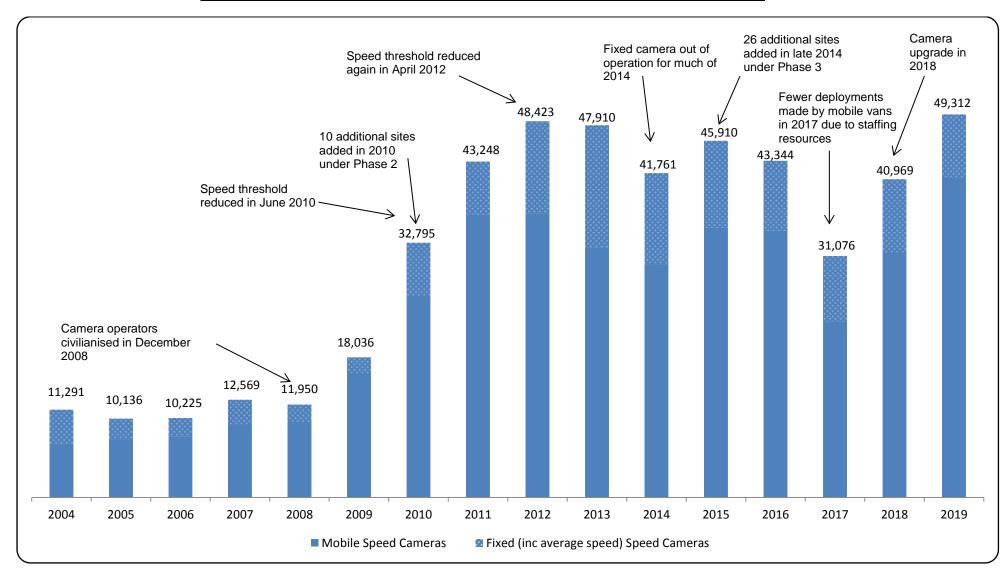
3. Trends

Table 1: Detections at Northern Ireland Road Safety Partnership sites 2004 - 2019

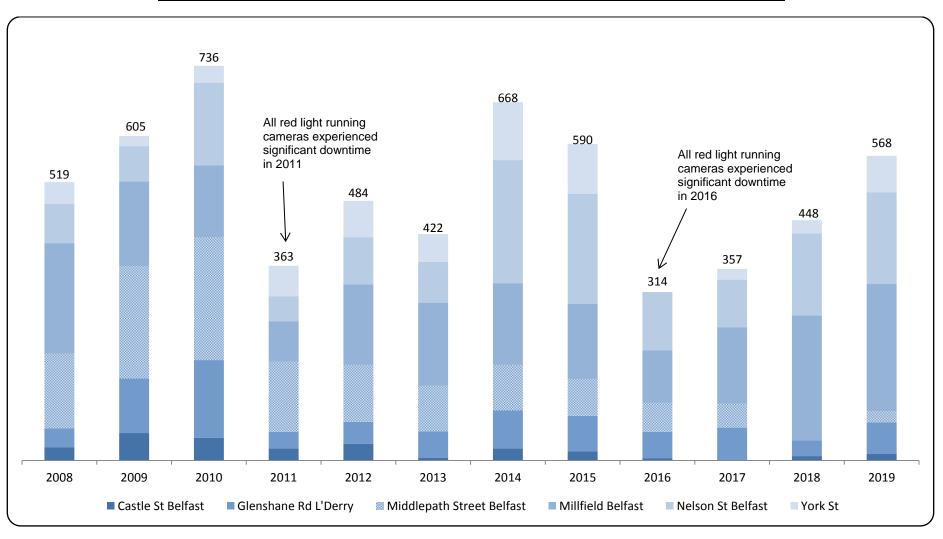
	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Cameras	Total
2004	6,915	4,376	-	-	11,291
2005	7,501	2,635	-	-	10,136
2006	7,781	2,440	4	-	10,225
2007	9,450	3,095	24	109	12,678
2008	9,642	2,300	8	519	12,469
2009	16,016	2,020	0	605	18,641
2010	26,006	6,709	80	736	33,531
2011	36,467	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

- There was more than 4 times the number of detections in 2019 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. Additional sites for enforcement were also added in 2010 and 2014 (see Figure 2 below).
- 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. Prior to this the camera vans were operated by PSNI officers.
- By way of further context, Driver and Vehicle Agency (Department of Infrastructure) reported that the number of vehicles licensed in Northern Ireland increased by 9% over the period 2015 to 2019. In contrast, total detections at NI RSP sites increased by 7% over the same period. The chart below provides further information on factors contributing to changes in detection levels over recent years.

Figure 2: Number of NI Road Safety Partnership speeding detections 2004 - 2019







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

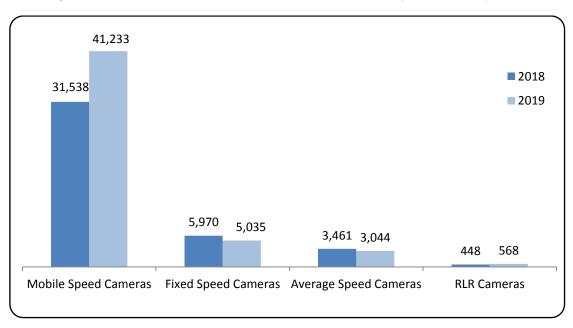


Figure 4: Detections at Northern Ireland Road Safety Partnership sites

- There were 49,880 detections by the Road Safety Partnership in 2019 (approximately 137 per day). This was an increase of 20% on the 41,417 detections made in 2018 (approximately 113 per day).
- Fixed camera detections decreased by 16% when compared with 2018. The fixed cameras on Saintfield Road experienced significant downtime throughout 2019.
- Average speed camera detections decreased by 12% in 2019 when compared with 2018.
- The number of detections at mobile cameras sites increased by almost one third (31%) between 2018 and 2019. This can be attributed to the increase in the number of deployments of safety camera vans and resulting detections in 2019.
- Of the 49,312 speed related detections in 2019, a total of 25,967 drivers completed a speed awareness course. This equated to over half (53%) of the drivers detected and was a similar proportion to previous years.

4.1 Fixed camera sites

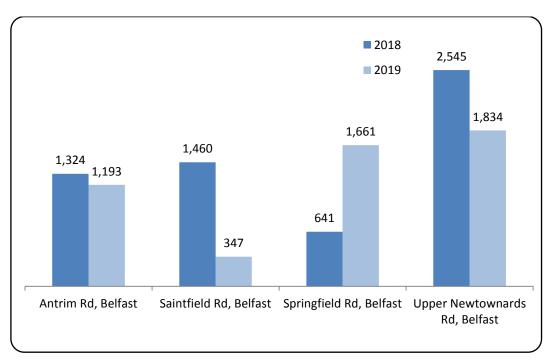


Figure 5: Detections at Fixed Camera Sites

- The fixed site on the Upper Newtownards Road, Belfast accounted for 36% of the 5,035 speeding detections by fixed cameras, followed by Springfield Road, Belfast (33%), Antrim Road, Belfast (24%) and Saintfield Road, Belfast (7%).
- The low number of detections at the Saintfield Road, Belfast site (a 76% decrease on the number of detections in 2018) can be attributed to roadworks in the area for a large part of 2019.
- June was the month with the highest number of detections at fixed camera sites (707), accounting for 14% of the total.

4.2 Mobile camera sites

- Of the total detections at mobile camera sites in 2019, 25,774 were at permanent sites accounting for over three fifths (63%) of these detections, while the remaining 37% were at community concern sites.
- The Frosses Road / Crankill Road route had the most detections with 2,540 in 2019 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.

4.3 Red light running camera sites

Table 2: Detections at red light running camera sites, 2019

Red light running camera site	2019
Castle St, Belfast	12
Glenshane Rd, L'Derry	59
Middlepath St, Belfast	21
Millfield at Peter's Hill, Belfast	237
Nelson St, Belfast	171
York St, Belfast	68
Total	568

 There was an increase of 27% on the number of detections at red light running sites in 2019 when compared with 2018. The largest increase was at the site on York St, Belfast as it had experienced a lot of downtime throughout 2018.

4.4 Speed limit

Table 3: Speeding detections by speed limit, 2019

Speed Limit (mph)	Number of detections	Highest speed recorded (mph)
30	27,915	78
40	8,170	87
50	3,062	94
60	9,893	114
70	272	105
Total	49,312	

- Over half (57%) of all speed related detections were on 30mph roads.
- The highest speed recorded in 2019 was 114mph, which was detected on the A29 Dunman dual carriageway, Cookstown (a 60mph road).

4.5 Age of drivers

Table 4: Age of drivers detected by camera type, 2019

Age of Driver	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Camera	Total
Under 25	3,309	705	426	80	4,520
25 - 39	12,433	1,667	1,186	170	15,456
40 - 54	13,510	1,511	858	140	16,019
55 - 69	8,249	811	358	97	9,515
70+	2,652	138	83	25	2,898
Unknown	1,080	203	133	56	1,472
Total	41,233	5,035	3,044	568	49,880

- Where age was known, one third of all persons detected by the RSP in 2019 were aged 40 54 (33%), a further 32% were aged 25 39, which was similar to the age breakdown in 2018.
- Persons aged under 25 accounted for 9% of all those detected, where the age was known, however they accounted for 16% of all those detected by the red light running cameras.

4.6 Time of day

Table 5: Detections by time of day, 2019

Time of Day	Mobile Speed Cameras	Fixed Speed Cameras	Average Speed Cameras	RLR Camera	Total	
0000-0259	0	725	199	59	983	
0300-0559	0	372	212	50	634	
0600-0859	2,173	778	466	73	3,490	
0900-1159	15,122	774	483	62	16,441	
1200-1459	14,627	644	401	90	15,762	
1500-1759	6,239	484	326	88	7,137	
1800-2059	3,072	540	547	78	4,237	
2100-2359	0	718	410	68	1,196	
Total	41,233	5,035	3,044	568	49,880	

 One in three detections in 2019 was between 9am and midday, followed by a further 32% between midday and 3pm.

5. Deployment

There are currently 8 highly visible mobile speed camera vans that operate 7 days a week throughout Northern Ireland at over 80 permanently signed locations as well as community concern sites.

Table 6: Number of deployments by day of week and month of year, 2019

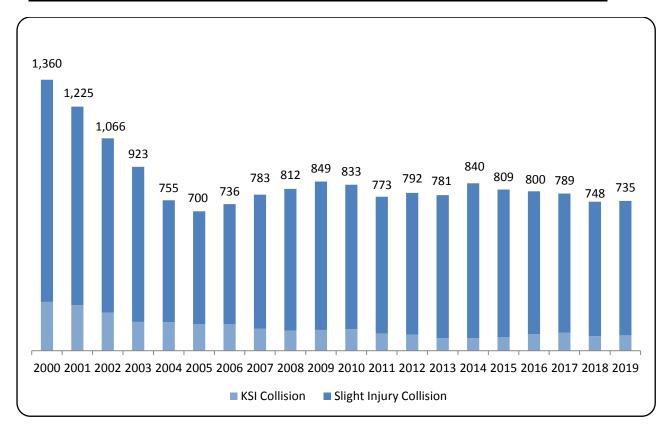
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
January	25	47	44	49	62	47	36	310
February	33	76	60	65	69	64	53	420
March	48	79	87	67	74	102	80	537
April	28	82	79	72	73	68	61	463
May	51	79	72	97	89	93	57	538
June	42	75	85	71	74	67	57	471
July	54	74	48	65	67	58	39	405
August	57	79	75	76	75	78	70	510
September	37	69	58	63	68	72	61	428
October	48	77	95	93	97	51	56	517
November	40	71	76	82	62	97	78	506
December	48	72	65	49	31	47	20	332
Total	511	880	844	849	841	844	668	5,437

- There were 5,437 deployments of the NIRSP vans in 2019, an increase of 44% on the number of deployments in 2018. This can be attributed to an increase in the number of full time camera operators employed by the Partnership in 2019.
- The highest number of deployments was on a Monday with 880, accounting for 16% of all deployments, while Sunday had the lowest number with 511 (9%).

6. Injury road traffic collisions

- There were 735 injury collisions recorded at safety camera sites in 2019, a decrease
 of 2% on the number recorded in 2018. There were 718 at fixed and mobile camera
 sites and 17 at red light running sites in 2019, compared with 714 at fixed and mobile
 camera sites and 34 at red light running sites in 2018.
- There were 77 fatal or serious (KSI) injury collisions recorded at safety camera sites in 2019, a 5% increase on the 73 recorded in 2018.
- 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 2015 2019 there was a reduction in KSI collisions of 37% 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 also a general decrease (29%) in KSI collisions in Northern Ireland when the same five year periods are compared.
- While these general reductions in KSI collisions at safety camera sites/routes are welcome, it is recognised that not all of the reduction is due solely to the use of safety cameras as there has been a general decrease in KSI collisions in Northern Ireland as a whole in the period in question. 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 6: Number of injury road traffic collisions at safety camera sites, 2000 - 2019



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 over 80 permanently signed locations at which the mobile speed camera vans can deploy, 4 fixed speed cameras, 1 average speed system 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, 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 2005³.
- 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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³ The National Safety Camera Programme Four Year Evaluation Report December 2005 http://www.dft.gov.uk/pgr/roadsafety/speedmanagement/nscp/nscp/coll_thenationalsafetycameraprog/thenationalsafetycameraprogr4598