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# User Guide to Road Safety Partnership Statistics in Northern Ireland

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This document is intended as a User Guide to help users of the statistics form a fuller picture of the data quality and to help users put the data into context. Please contact us via our [website](#) if you require any further information.

## Section 1 Introduction

The Road Safety Partnership (RSP) records detailed information in relation to all speeding and red light running offences detected through the road safety camera scheme in Northern Ireland. RSP statistics are collated and produced by statisticians seconded to the Partnership from the Northern Ireland and Statistics Research Agency (NISRA), who are based within the Police Service of Northern Ireland (PSNI) Statistics Branch. The figures are produced in line with the [Code of Practice for Official Statistics](#). Further information in relation to this can be found in the [PSNI Statistics Branch official statistics documentation](#).

The RSP is governed by a cross-departmental Board comprising representatives from the Police Service for Northern Ireland (PSNI), Northern Ireland Office (NIO), Department for Infrastructure (DfI), NI Court Service (NICtS) and the Department of Justice (DoJ), which is responsible for project management, direction and accountability.

The aim of the Partnership, with the co-operation of such 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, the RSP oversees all aspects of the operation of three fixed speed cameras, six fixed red light running cameras and three average speed enforcement camera systems. The Partnership is also responsible for eleven speed camera vehicles which operate at a range of locations throughout Northern Ireland. Some of these are permanently signed locations which meet specific collision criteria, while others are community concern sites enforced where there is a well-founded concern, raised through the local Policing and Community Safety Partnership (PCSP) 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.

A detection for speeding or red light running by the RSP may result in a fixed penalty notice (FPN) with endorsement of penalty points on the driving licence, or a referral for prosecution in the case of excessive speeds or failure to accept the FPN or provide the necessary documentation. Depending on the speed at which offenders were detected and their offence history, there may be an option to complete a speed awareness course as an alternative to receiving penalty points. Offences are processed by the Fixed Penalty Processing Centre (FPPC) within the PSNI.

Further information about the Partnership including the location of sites can be obtained from the [Northern Ireland Road Safety Partnership website](#).

## Section 2 Information on users

### 2.1 Users and uses of RSP statistics

RSP statistics are subject to high levels of interest, as evidenced by the numbers of information requests and wide range of users / uses of the statistics. Based on our experience, knowledge and analysis of existing uses and requests for the statistics, as well as the responses to user surveys, the following examples provide an insight to the main uses made of RSP statistics.

- **Policy making / policy monitoring**

There is a multi-agency approach to Road Safety within Northern Ireland, led by the Department for Infrastructure (DfI) which is responsible for the implementation of road safety policy including the [Road Safety Strategy to 2030](#).

Various local and national special interest groups or voluntary organisations have a particular interest in the RSP statistics that relate to their policy area, for example speeding, which they use to lobby government departments for policy or legislative change.

- **Operational monitoring**

The RSP use the detections and deployment data, alongside tailored road traffic collision statistics, to demonstrate the level of enforcement undertaken and the potential impact on road safety. Detections at specific sites can inform the impact of the camera enforcement by indicating any change in detection levels over time.

- **National media related and informing public/public interest**

The local media use the RSP statistics to inform the public on trends and issues. Some of the information is sourced directly from the RSP website while bespoke information is often obtained through information requests or under Freedom of Information (FOI) legislation. The RSP receives a number of FOI requests for information relating to RSP statistics and the numbers of these requests has been increasing year on year. The type of queries vary considerably from something very specific and localised (e.g. details of speed camera detections on a specific road) to more generic requests. The FOI requests are anonymous, however many can be attributed to the media (both national and local) through subsequent articles published.

- **In support of local community policing needs**

PCSPs use the statistics to evidence levels of detection and enforcement in their areas in order to request action from a range of sources including the police, RSP, DfI or their elected representatives.

- **Personal interest**

The wider public can request RSP speeding statistics, either directly or under FOI. One of the main purposes for this is to obtain evidence to support a need for road safety intervention in their particular area, which can be used to approach the DfI for traffic calming measures or the RSP or PSNI for further enforcement.

## **2.2 User feedback**

As part of our commitment to meeting user needs we regularly consult with our users, both formally and informally, to obtain feedback on the statistics and service provided. We conduct a PSNI Statistics Branch customer satisfaction survey every two years which includes questions at individual output level.

[User satisfaction survey results](#) are available on the Official Statistics section of the PSNI website.

Our policy in relation to customer service and user engagement is available in the [PSNI Statistics Branch official statistics documentation](#) and highlights our aims and standards for dealing with key users and requests from members of the public.

## **Section 3 Recording processes, data quality and data availability**

### **3.1 Data Sources and Collection Methods**

As per the [PSNI Statistics Branch official statistics documentation](#) included in the Official Statistics section of the PSNI website, information on RSP speeding offence detections is collected using the organisations own administrative and management sources. Historically, the main IT system involved in the collation of the FPNs was the Vehicle Procedures / Fixed Penalty Office (VP/FPO) system. This was replaced in December 2016 and data relating to FPNs and speed awareness courses are now extracted from the StarDome system. Offences referred for prosecution are extracted from the PSNI Occurrence Management System (NICHE). These operational systems provide administrative datasets which are analysed and reported by the RSP statisticians.

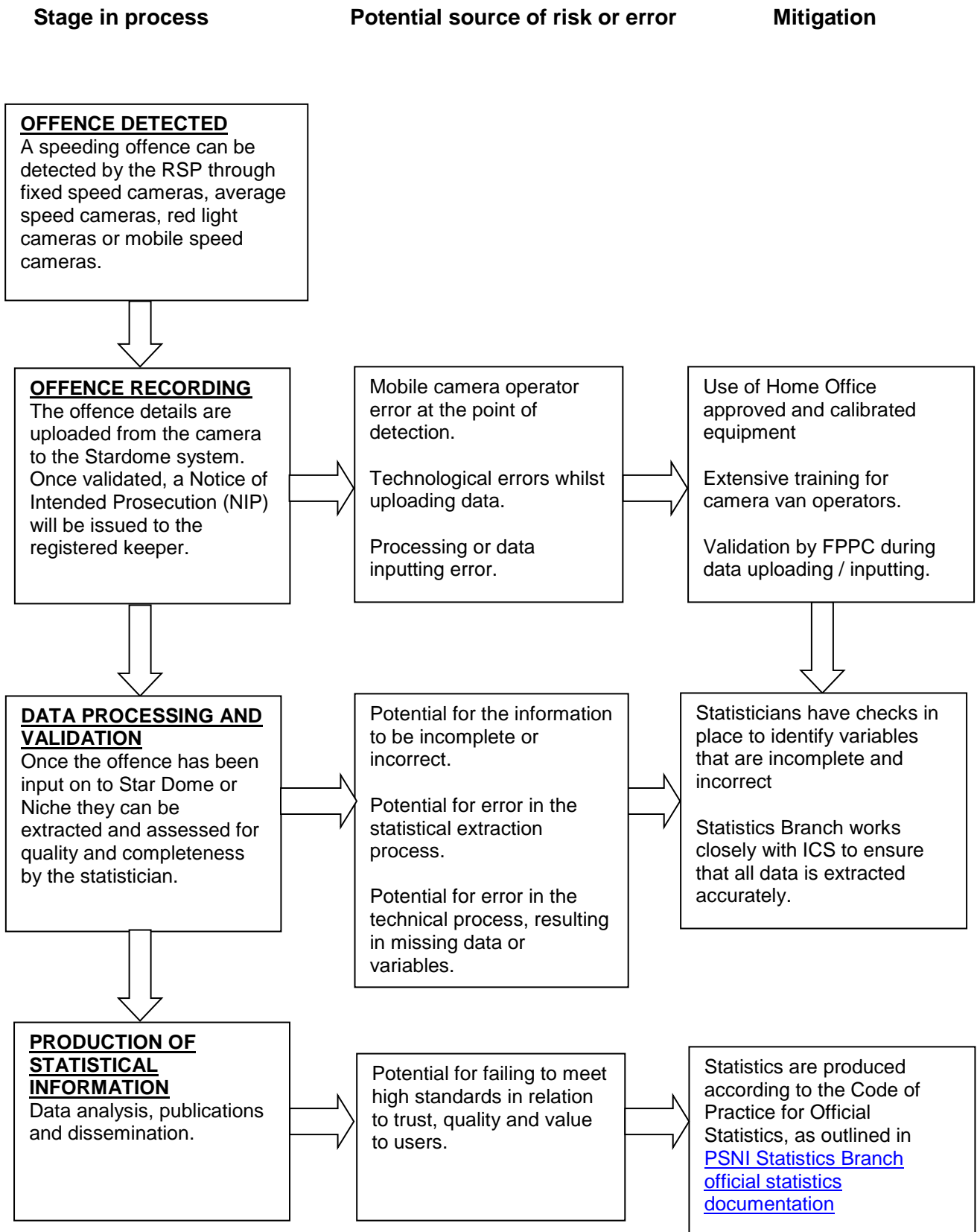
Information and Communication Services (ICS) write script, in consultation with the statisticians, in order to extract only the required information, from both StarDome and Niche, for statistical processing. Statisticians download the information using SPSS on a regular basis for ongoing validation and analysis.

As well as detections, statisticians report on the number of deployments of the mobile safety camera vans by location, time, duration etc. This information is recorded manually by camera van operators at the point of deployment on a form which is submitted to the FPPC, where it is input into an Excel spreadsheet before being shared with the statisticians for validation and reporting.

### **3.2 Quality Assurance**

As with all administrative systems, statistics are a by-product of the process and are heavily reliant on the information being entered correctly by staff across the RSP and PSNI. To address this risk, highly skilled and experienced statisticians have developed a wide range of quality assurance measures and data validation checks to ensure that the statistics are as accurate and meaningful as possible, within the given resource and time constraints. Figure 1 outlines the high levels process, risks and mitigation involved.

• **Figure 1 Process, risks and mitigation**



### 3.3 Validations

On a monthly basis and more regularly when finalising the end of year data, Statistics Branch undertakes a range of quality assurance checks on the fixed penalty notice and speed awareness offence data to ensure that the statistics produced are of high quality, accurate and meaningful. SPSS is used to identify missing or inaccurate data and those detections which are not in a final state. These are sent to FPPC administrative staff, who will review the offence to complete the required information and take appropriate action to move the offence to a final state where possible. All validations are completed on the source system so that the same errors are not returned in the next round of validations.

Examples of the data quality checks include:

- All essential fields are populated to ensure reports can be published
- Checks to ensure appropriate speed is input against the speed limit
- Checks to ensure offender age is appropriate for the FPN that has been issued
- Check there's a reason for cancellation
- Checks to ensure there are no duplicates on the system
- Checks for missing date of birth and / or gender for offender
- Check to ensure correct offence code has been used

In addition, Statistics Branch clean the speed camera van deployment spreadsheet on a monthly basis. Information in relation to where and when the speed vans are in operation is recorded by the operators on a paper form which is submitted after each deployment to the FPPC. Administrative staff in the FPPC manually enter the details into an Excel spreadsheet and save it into a folder where it is accessed by Statistics Branch and the following types of validation completed:

- Ensure there are no missing details e.g. date, time, duration, safety camera site, total detections
- Check to ensure deployment time and duration are feasible
- Check for typos in operator name
- Match with the official list of safety camera sites to ensure the site number has been recorded correctly

Any errors identified are reported to FPPC for clarification and to rectify in the source spreadsheet.

### 3.4 Risks to data quality and associated mitigations during the recording process

The detailed processes underlying the main stages outlined in Figure 1 above have evolved over the years and will continue to evolve as changes to systems and structures are introduced. The NISRA statisticians who compile the RSP statistics have always been closely involved in any change processes to ensure that they take into account any statistics that need to be derived from these systems. Detailed



internal procedures manuals are maintained to document changes and ensure continuity and contingency in the event of new members of staff.

### **3.5 Data management roles and responsibilities**

The NISRA statisticians are based within PSNI and are given access to PSNI's internal systems, once they have been appropriately vetted and trained. The source data and any associated data files are held on secure servers within PSNI and access to systems is controlled and auditable to ensure compliance with relevant legislation. Individual staff member's access to these systems is monitored and periodically checked by the PSNI. Having the statisticians working alongside the suppliers of the data and having close working relationships with IT colleagues means that statistics staff are involved in any relevant process/system design or change.

Changes to the PSNI's systems or processes that might affect the quality of the statistics are discussed in advance and managed through the relevant channels. Communication with IT colleagues takes place on a regular basis at many levels and ensures that data quality is maintained. The statisticians have access to data which is extracted from the Star Dome system via bespoke data extracts created by the IT department. Automated processes ensure that these statistical extracts are updated on a daily basis. Access to these extracts enables Statistics Branch to produce reports for validation, publication and to respond to ad hoc requests for information.

Statistics Branch also has a close working relationship with those responsible for road safety within the organisation, primarily Roads Policing Policy Branch and has a central point of contact within the Branch. In addition, Statistics staff work closely with the RSP manager and FPPC staff for sharing of information or changes such as new sites or data issues. This allows Statistics Branch to raise any issues directly with the senior officers and staff for action where required. This collaborative relationship ensures that appropriate and accurate information required for evidence based policy making is provided but also ensures the support and guidance of senior personnel where required.

### **3.6 Timeliness**

A balance needs to be obtained between the requirement for figures to be as up-to-date as possible and the requirement to publish figures which are of appropriate quality and completeness for use.

There is a lag of around six months between the end of the year and publication of the annual bulletin. This is to allow for the processing of any outstanding tickets, or more commonly for case files to be completed to ensure that full coverage is attained and the final figures are as accurate as possible.

### 3.7 Comparability

Long-term trends are included in the publication with all changes in relation to RSP processes clearly detailed to inform comparability over time. Sources of speeding offences data for other domains include [An Garda Síochána - Republic of Ireland](#) and [England and Wales](#).

### 3.8 Accessibility

In line with the Code of Practice for Official Statistics, all publication dates are pre-announced on the [UK publication hub](#).

[Road Safety Partnership statistics](#) for Northern Ireland are published on the NISRA website. The information is published in report format, with accompanying Excel tables and an Open Document Spreadsheet to promote reuse, as permitted under the terms of the Open Government Licence. This user guide is published to provide detailed information on the statistical process and data quality.

Publications are distributed via a range of channels including email distribution lists, social media and internal PSNI systems. Disaggregated Road Safety Partnership data is available on the [NI Open Data Portal](#) and bespoke information is available free of charge on request.

More information on how Statistics Branch promotes accessibility is available in the [PSNI Statistics Branch official statistics documentation](#).

### 3.9 Confidentiality

The PSNI's Statistics Branch complies with the requirements of the Code of Practice for Official Statistics. Further information can be found in the [PSNI Statistics Branch official statistics documentation](#) on the PSNI website. This document includes details of the arrangements for maintaining confidentiality of statistical data including physical security, technical security, staff training, statistical disclosure control and sharing of data with a third party.

## Section 4 Strengths and limitations of the data

- **Strengths**

The RSP statistics relating to the safety camera scheme in Northern Ireland are the main source of official information in trends and statistics relating to disposals issued for such detections. The administrative data systems provide access to all of the data, which is input electronically, therefore improving the coverage and quality of the source data.

- **Limitations**

Figures for speed camera detections relate to those that took place within Northern Ireland, they do not include NI residents detected in the Republic of Ireland or in Great Britain.

The figures do not include speeding statistics detected by the PSNI.

Fixed and red light running camera sites occasionally became unserviceable, requiring repair by specialist engineers, which affects the length of time they are in operation and subsequently the number of detections achieved in a given year. While this is highlighted in the statistical report, Statistics Branch do not have access to the detail of any such outages.

## **ANNEX 1 Further Information**

### **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.