



Police Service
of Northern Ireland



Modelling 2011 Census Small Area Religious Composition
onto Justice and Security Act Stop & Search postcode data
from August 2020 to July 2021

PSNI Statistics Branch 18 March 2022

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Introduction

PSNI do not currently collect or process community background data in relation to the monitoring of stop and searches carried out under specific powers in Northern Ireland. PSNI is under a legal obligation to collect community background data to assist with monitoring the use of these powers and has been subject to a number of oversight recommendations advising them to put in place a methodology to do so.

This modelling exercise has been carried out at the request of the Independent Reviewer of the Justice and Security Act in Northern Ireland as an interim measure while PSNI identify the most appropriate methodology (or combination of methodologies) to collect, obtain and process 'community background' data for Stop and Searches.

Methodology

This data modelling involved mapping PSNI Stop and Search data against results from the 2011 Census for the administrative geographies known as Census Small Areas¹.

The Justice and Security Act (JSA) Stop and Search data² used for this analysis consisted of two variables 1) home postcode and 2) policing district, extracted from records of JSA Section 24 and JSA Section 21 Stops which occurred in the 12 month period 1 August 2020 to 31 July 2021. There were 4,309³ such stops in that time period, however only 72% of these records contained a valid Northern Ireland postcode.

The Census variable used was 'Religion or Religion brought up in' (hereafter referred to as religion).

Each postcode (where available) was assigned three individual values of between 0 and 1 for 'Catholic', 'Protestant' and 'Other/None' respectively, based on the Census results for the Small Area associated with that postcode. These scores provide estimates for the probability of an individual living in that postcode area having a particular religion. For example a postcode which falls into an area with a composition of 45% Catholic, 50% Protestant and 5% other would be assigned values of 0.45, 0.50 and 0.05 respectively.

These estimates are then aggregated to give overall estimates for the religion of all persons stopped within Northern Ireland for each policing district.

Because the postcode data is extracted prior to any data matching taking place the final statistical dataset is anonymous. At no stage are any estimates applied to, or held against, any personal data of individuals who had been stopped and searched/questioned under JSA powers.

Weaknesses of the analysis

Census Data – The census data used in this analysis was taken from the 2011 census. Over time the demographics of an area can change and we have no way of knowing the extent of some of these

¹ Small Areas were introduced in Northern Ireland after the 2011 Census and were generally created by amalgamating 2001 Census Output Areas.

² <https://www.legislation.gov.uk/ukpga/2007/6/contents>.

³ These are not 4,309 unique individuals as some persons may have been stopped on more than one occasion

changes until the 2021 Census results are released. The equivalent religious composition data from the 2021 Census is not due to be available until summer 2023.

Postcode coverage – Of the 4,309 Stops records, only 3,120 (72%) contain a valid Northern Ireland postcode which means that at the Northern Ireland Level we were unable to assign the religion variables to 28% of records. This coverage varies between policing district and ranges from 54% to 83% across districts (see table 1 for coverage rates by District)

Postcode Accuracy – Home postcodes are recorded by either linking to addresses on PSNI systems or through provision of a postcode by an individual who has been stopped. For those postcodes in the extracted data which were deemed to be valid Northern Ireland postcodes, no further quality assurance was carried out.

Table 1: Postcode coverage by District

District stopped in	Postcode coverage
Belfast City	77%
Lisburn & Castlereagh	73%
Ards & North Down	61%
Newry, Mourne & Down	61%
Armagh City, Banbridge & Craigavon	77%
Mid Ulster	71%
Fermanagh & Omagh	54%
Derry City & Strabane	83%
Causeway Coast & Glens	69%
Mid & East Antrim	71%
Antrim & Newtownabbey	54%
Northern Ireland	72%

Results at Northern Ireland Level

The estimated religious composition of those persons stopped and searched/questioned under JSA powers between August 2020 and July 2021 across Northern Ireland was as follows⁴:

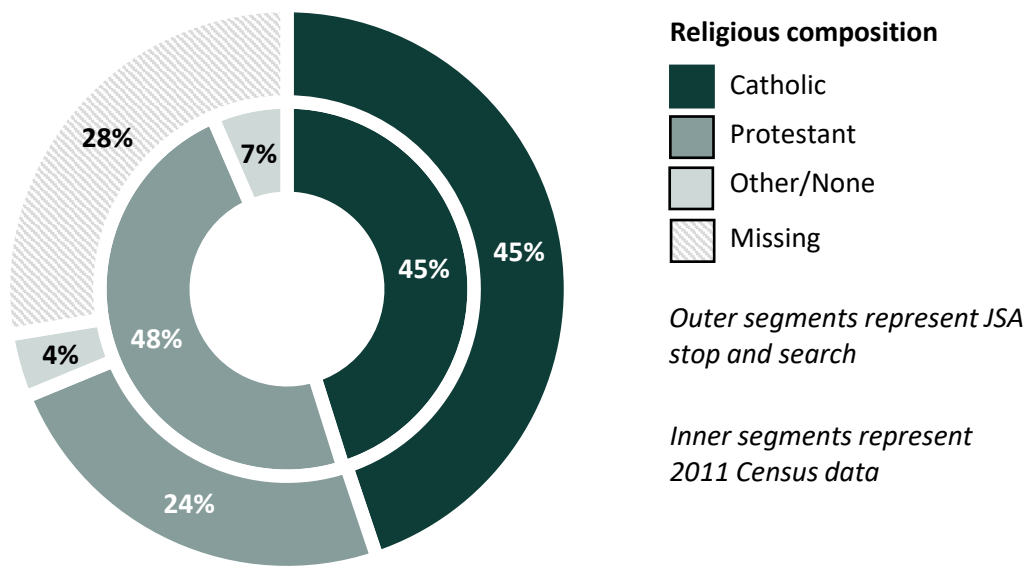
- **45% Catholic**
- **24% Protestant**
- **4% Other/None**
- **28% Missing⁵**

The religious composition of the Northern Ireland population taken from the 2011 Census was 45% Catholic, 48% Protestant and 7% Other/No religion. Figure 1 displays this comparison graphically.

⁴ Percentage figures may not sum to 100 due to rounding

⁵ Represents those missing and invalid postcodes

Figure 1: Comparing the estimated religious composition of persons stopped and searched/questioned under JSA with that of the Northern Ireland population



Results by District

Table 2: Comparing the estimated religious composition of persons stopped and searched/questioned under JSA with that of the population, broken down by the District in which the stop took place.

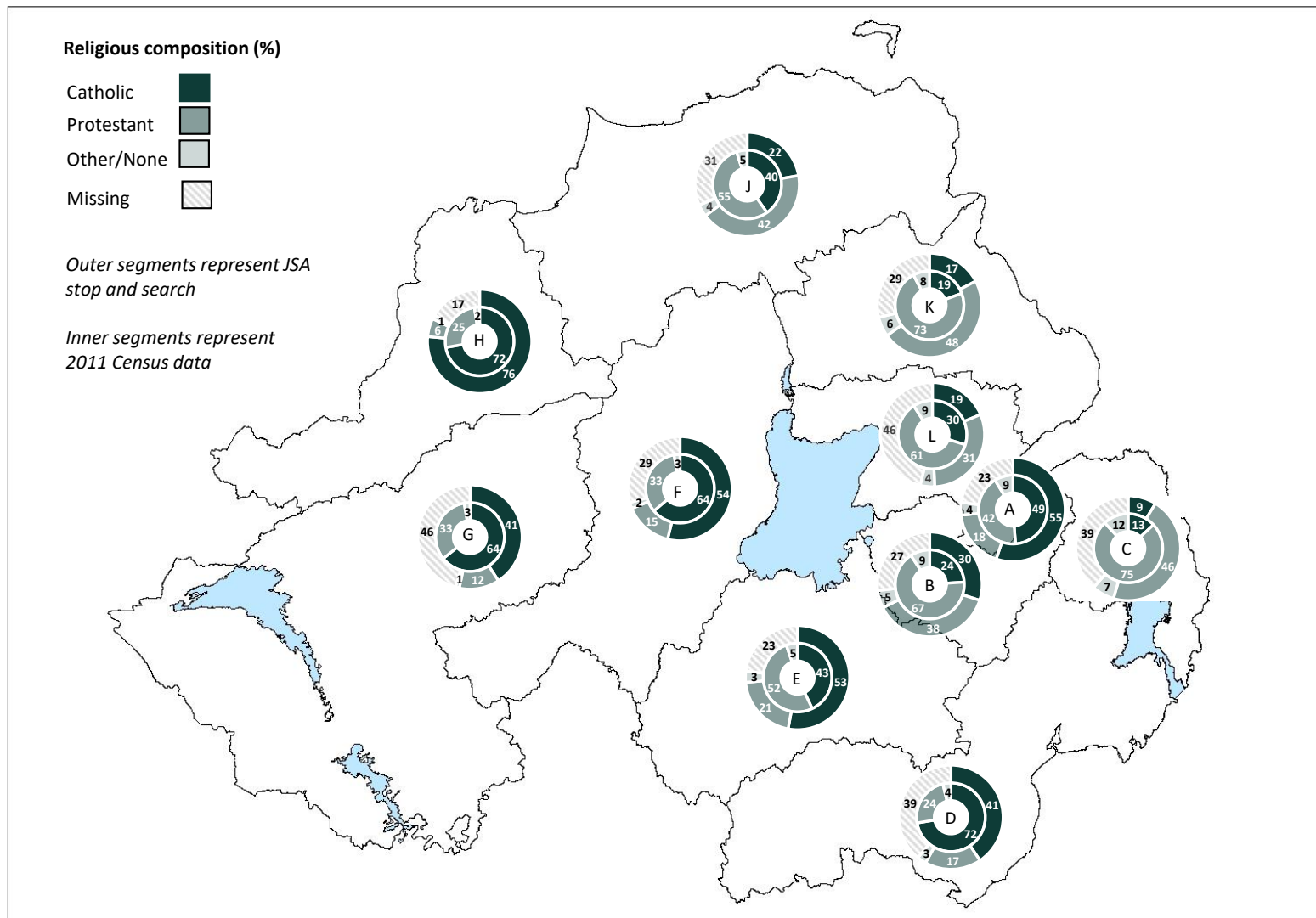
District stopped in	Estimated religious composition of those stopped/searched ¹				Religious composition of the population of that District ²		
	Catholic	Protestant	Other/None	Missing	Catholic	Protestant	Other/None
Belfast City (A)	55%	18%	4%	23%	49%	42%	9%
Lisburn & Castlereagh (B)	30%	38%	5%	27%	24%	67%	9%
Ards & North Down (C)	9%	46%	7%	39%	13%	75%	12%
Newry, Mourne & Down (D)	41%	17%	3%	39%	72%	24%	4%
Armagh, Banbridge & Craigavon (E)	53%	21%	3%	23%	43%	52%	5%
Mid Ulster (F)	54%	15%	2%	29%	64%	33%	3%
Fermanagh & Omagh (G)	41%	12%	1%	46%	64%	33%	3%
Derry City & Strabane (H)	76%	6%	1%	17%	72%	25%	2%
Causeway Coast & Glens (J)	22%	42%	4%	31%	40%	55%	5%
Mid & East Antrim (K)	17%	48%	6%	29%	19%	73%	8%
Antrim & Newtownabbey (L)	19%	31%	4%	46%	30%	61%	9%
Northern Ireland	45%	24%	4%	28%	45%	48%	7%

¹JSA Section 24 & 21 Stops between August 2020 and July 2021

² 2011 Census results

Figure 2 displays these comparisons graphically.

Figure 2: Comparing the estimated religious composition of persons stopped and searched/questioned under JSA with that of the population, broken down by the District in which the stop took place¹



¹ Refer to Table 2 for District Names