



**Paper Title: Scotland's Census 2021 update**

**Presented by: Esta Clark, Head of Statistical Design, Scotland's Census 2021**

<b>Security marking</b>	Not sensitive
<b>Can this be shared wider than PAMS?</b>	Yes
<b>Aims</b>	To update PAMS members on the latest developments from Scotland's Census 2021
<b>What is required from PAMS members</b>	Comments/feedback on any of the points raised in the paper

## Population And Migration Statistics (PAMS) Committee (Scotland)

### Scotland's Census 2021 update

Preparing for the census in 2021 is continuing and considerable progress has been made since the last PAMS meeting in November. We have been focusing on learning from the rehearsal we held in October 2019, as well as continuing to develop our statistical and operation designs, working with key stakeholders and our suppliers.

#### Key achievements include:

- The Census (Scotland) Order coming into force on 12 March 2020
- The Census (Scotland) Regulations due to come into force on 16 June 2020
- The questions as agreed by Scottish Ministers for 2021 can be found here [\(link\)](#)
- Census Rehearsal 2019 Evaluation report published on our website [\(link\)](#)
- Key contracts are now in place for the contact centre and for mobile devices, a user interface for manual coding and for the Census Coverage Survey (CCS).
- Methodology sessions were held to give a high level overview of the methods to be used to process the data before it is published. [\(link\)](#)
- An External Methodology Assurance Panel has been established and the first meeting took place in May 2020. Papers etc will be published in due course.
- Work is continuing to develop our new outputs website.
- Our National Statistics Accreditation Phase 1 report will be published on our website on the 15<sup>th</sup> of June.
- We are currently developing our approach to operational readiness and continuing to develop our operational processes including our enumeration strategy and public assistance strategy.

The rest of this paper describes some of these areas in more detail and provides some more information on other areas of census development which PAMS may find of interest.

**PAMS are asked to note progress and to feedback any comments and/or queries.**

#### Question development and legislation

1. The Census (Scotland) Order 2020 came in to force on 12 March 2020 (available [here](#)). The Census (Scotland) Regulations 2020 were laid before the Scottish Parliament on 7 May 2020, and are due to come in to force on 16 June. The regulations include detail of the proposed electronic (online) question sets and the paper questionnaires (available [here](#)). These cover households, individuals living in households, communal establishments and individuals living in communal establishments.

We continue to work on developing support for people to complete their census questionnaires, including BSL users, translated guidance in community languages, and allowing people to complete their online questionnaire in Gaelic.

### **Census Statistical Methodology and Data Processing**

2. We are currently working on testing our statistical methods and processes using the 2019 rehearsal data. This involves testing each process individually. More information on the methodology can be found on our website [here](#).

### **Coding of responses**

3. Methods for coding responses from census returns have been developed further since the end of 2019 under the following areas:
  - Our coding specification for census live was finalised at the beginning of May. It contains the final coding indexes and classifications that responses will be coded to. These indexes and classifications will be used in the online questionnaire and by our paper coding supplier to code responses.
  - Scanning of responses on paper forms and conversion to coded values through our “automated coding” project –improvements to matching written responses to standard codes have been made.

### **Census Coverage Survey**

4. The Census Coverage Survey (CCS) is a sample survey that occurs around six weeks after Census. It is interviewer led through door step, face-to-face interviews. Participation is voluntary and the survey contains a small subset of the Census questionnaire. It is the second largest social survey after Census, targeting over 53,000 households, to be conducted in Scotland and is vital in accurate production of population estimates.

Good progress has been made in the last 6 months putting the key elements in place for a successful CCS. This has included finalising the statistical design and methodology. More information on which will be published in the papers for the External Methodology Assurance Panel. A lot of progress being made in the operational aspects of CCS, where along with Census, we now have key procurements in place for elements such as mobile devices, contact centre, print and logistics.

The work continues at pace and progress is being made on a weekly basis to continue implementing further key elements to deliver a successful CCS.

### **Administrative Data**

5. NRS aim to publish the first set of administrative based population estimates later in 2020. These will be published as experimental statistics under the Code of Practice for

Official Statistics, and will allow a discussion with users about the use of administrative data within the field of demographic statistics. Ongoing evaluation and assessment with users will then take place to determine the suitability and quality of admin-based population estimates, and help shape future work. The Admin Data team plans to undertake further stakeholder engagement to talk about this publication and the project's direction in 2020/21.

### **National Statistics Accreditation**

6. At the National Records of Scotland (NRS) we have a responsibility to ensure the results of the 2021 Census in Scotland are correct, accurate and adhere to the [Code of Practice for Statistics](#) as determined by the UK Statistics Authority.

The conduct of the 2021 Census operation will be scrutinised by the Office for Statistics Regulation (OSR), the regulatory arm of the UK Statistics Authority, against the Code of Practice for Statistics.

Preparing for the National Statistics Accreditation ensures we review our work across the programme, seek to embed continuous improvement into everything we do and focus on achieving the highest levels of trustworthiness, quality and value. Achieving National Statistics Accreditation ensures the people of Scotland can have the utmost confidence in Scotland's Census 2021.

The first step towards measuring our progress against the Code of Practice was the report "[How the National Records of Scotland is ensuring Census 2021 is trustworthy, high quality and of value to users](#)", published 12 June 2019, and formed our evidence-based submission for phase 1 of the OSR assessment.

The [Office for National Statistics \(ONS\)](#), and [Northern Ireland Statistics and Research Agency \(NISRA\)](#) also provided evidence to demonstrate how their respective census undertakings are meeting the Code of Practice for Statistics.

Our National Statistics Accreditation Phase 1 report will be published on our website on the 15th of June. This report is the final evidence we will submit in phase 1 of the accreditation process.

### **External Methodology Assurance Panels (EMAPS)**

7. External Methodology Assurance Panels (EMAPs) are short-life advisory working groups comprising subject matter experts and academics to support and facilitate the independent peer review of the proposed statistical methodology for Scotland's Census 2021.

We established the EMAPs working group in May 2020, with a membership of seven Scotland-based academics and subject matter experts. Our first EMAP panel was held virtually on 27th May 2020 where panel members reviewed three of our statistical methodologies. Feedback was very positive about our proposed methodologies and useful suggestions were made by the panel for small tweaks to we could consider making to our approach. Fundamentally, the panel were content that the proposed methodologies they reviewed at the first session were fit for purpose. In the following few weeks, the three methodology papers, along with a short summary of the panel

discussion and final conclusion for each methodology paper, will be available on Scotland's Census 2021 website.

## Census Statistical Disclosure Control and Outputs

### 8. New stakeholder events slides and survey published online

Work on planning census outputs is continuing, due to the current situation we have had to cancel our stakeholder events and instead [published some information online](#).

If you would like to be kept informed of upcoming stakeholder events or any online updates and surveys please get in touch via email (to [ScotlandsCensus@nrscotland.gov.uk](mailto:ScotlandsCensus@nrscotland.gov.uk))

### 9. 2021 Census microdata

At this stage, NRS are planning to produce a suite of 2021 Census Microdata products that will be largely similar to those produced for the 2011 Census with one additional file.

The 2011 Microdata products were as follows:

- Microdata Teaching File - Anonymised records on a limited set of variables for a random 1% sample.
- Secure Microdata Files - Two, non-overlapping random samples of 10% of individuals and 10% of households.
- Safeguarded Microdata Files - Two, non-overlapping random samples of 5% of individuals

For additional information on the 2011 Census Microdata products and to find out how these can be accessed, please see our Microdata page on the Scotland's Census website.

For 2021, we are planning to produce a similar set of Microdata products and are not planning alterations to sample sizes. The content and level of detail on variables for each of the 2021 Microdata files will also be broadly similar to 2011, although the 2021 files will incorporate new variables relating to the new questions that will be asked during Scotland's Census 2021 subject to statistical disclosure control. In addition to these products, NRS is also planning to produce a Safeguarded Household file from 2021 data. The Safeguarded Household Microdata file will contain a subset of the variables included in the Secure Household file and work is currently underway to the content and level of detail that will be available in this new product for 2021.

Currently access to the Secure and Safeguarded products requires approval from NRS staff and, for the Secure files, access is only permitted in secure locations. As such, we are also working in collaboration with our colleagues at the other UK-Census offices, ONS and NISRA, to explore ways for streamlining access to the Secure and Safeguarded Microdata products.

### 10. Scotland's Census 2021 Release schedule

We have published a provisional high level release schedule for Census 2021 data:

Date	Topic
<b>March 2022</b>	First release: Summary rounded population table by age, sex and Council Area
<b>Autumn 2022</b>	Unrounded and potentially unperturbed population statistics by a range of topics and council area. These variables also released in the flexible table builder but only for higher level geographies
<b>Winter 2022/2023</b>	Predefined tables by topic, age and sex for unchanged/largely unchanged questions for all standard geographies down to output area. These variables will also be released in the flexible table builder and available to standard geographies down to output area.
<b>March 2023</b>	Final predefined outputs for new questions by topic, age and sex for all standard geographies down to output area. These variables also released in the flexible table builder and available to standard geographies down to output area.
<b>Autumn 2023</b>	Microdata and origin destination data
<b>2024</b>	Workplace and daytime

*Exact timings and content subject to statistical disclosure control and UK harmonisation considerations.*

We are looking to add more detail to this plan adding what variables will be included in each release, to assist in this we are looking for views from users in what data they use most from 2011 census outputs and what information they require most from the 2021 census. We are also working with the Office for National Statistics (ONS) and Northern Ireland Statistics and Research Agency (NISRA) to harmonise where appropriate to allow comparisons to be made at UK levels, though it won't be possible to completely harmonise due to differing timescales for releases.

## 11. Derived variables

A derived variable (DV) is a function developed to capture extra pieces of information from Scotland's 2021 Census, that may not be readily available from the standard set of questions. These will be incorporated into the Census workflow and disseminated in our tabular outputs (i.e. Standard Tables and Flexible Table Builder) for stakeholders to extract the data required for their work.

We are working internally and with Office for National Statistics (ONS) and Northern Ireland Statistics and Research Agency (NISRA) to design our derived variables for Scotland's 2021 census, a large number of derived variables designed were included in the previous census outputs and these will remain largely the same.

## 12. LC and DC postcode sectors

A postcode sector comprises all the unit postcodes that have the same identifier except for the last two characters. Special postcode sectors are created for census output to ensure sectors conform to a minimum threshold and do not cross Council Area boundaries. Two versions of these postcode sector geographies were created.

LC sectors have a minimum threshold of 20 households and 50 persons, the same minimum threshold as Census Output Areas.

DC sectors have a minimum threshold of 400 households and 1,000 persons. Any Local Characteristic (LC) sector that failed to meet the thresholds was merged with its smallest adjacent neighbours(s) within the same council area until the DC sector requirements were satisfied.

In October 2019 we held stakeholder events where we asked users for their views on the geographies available for the 2011 census outputs (available [here](#))

From this event our proposed next steps included removing LC and DC Postcode Sector from the geographies used for standard outputs and in the flexible table builder.

If you have used these geographies for your analysis please get in touch, we will work with users to ensure that you are still able to access data that will meet your needs.

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