

Population and Migration Statistics (PAMS) Committee (Scotland)

Dissemination and Census Analysis

1. This paper provides an update on the work of the Dissemination and Census Analysis branch, including a progress report on the dissemination of statistical outputs from Scotland's 2011 Census.

Branch news

2. Martin Macfie joined the branch in November (replacing Robin Bennie), while Rebecca Stewart joined in January, filling the Customer Services Officer post on a permanent basis. Prash Thaker left to take up a post in Scottish Government in February, and a post has been added to the branch from elsewhere in the Division to work on cross-divisional activities. We plan to cover these latter two posts with temporary staff pending permanent appointments in the autumn.

2011 Census Outputs

3. Following the completion of publication of the main set of standard statistical outputs from Scotland's 2011 Census last year, work on producing census outputs continues to focus on:

- providing further statistics for alternative populations
- publishing ad hoc (additional and commissioned) tables of census data
- enabling more convenient researcher access to secure Scottish census microdata
- releasing analytical reports and other supporting information
- creating a 2001-2011 Census comparator spreadsheet tool
- adding tables of 1991 Census data to the Census Data Explorer

Further information on these and other topics is provided below

Statistics for alternative populations

4. While the standard outputs for the 2011 Census generally relate to the usually resident population, i.e. in terms of where people usually live, it is useful for some users to have census statistics in relation to two alternative population bases: a) Workplace population (for a given geography, statistics on the people who work there), and b) 'Daytime' population (for a given geography, statistics on all people who work or study in the area plus all people who are not working or studying but are resident in the area).

5. For both these population bases, we have incorporated data from the other UK census offices on residents of England, Wales and Northern Ireland who work in Scotland in the sets of tables at council area level which were published last November:
<http://www.scotlandscensus.gov.uk/ods-web/data-warehouse.html#additionaltab>

6. Similarly, workplace and daytime population counts at output area level were released on 24 November.

7. A finalised set of boundaries and lookups for a UK-wide workplace zone geography was released on 20 September <http://www.nrscotland.gov.uk/statistics-and-data/geography/noticeboard>. This geography provides a safe (in statistical disclosure terms) low level geography for disseminating more detailed statistics on workplace populations in Scotland. Work to create and publish detailed tables on workplace populations (for workplace zones) and daytime populations (for data zones) has been delayed due to staff shortages and other priority tasks. However, that work has now resumed and we hope to finalise tables for release by the end of July.

Additional and Commissioned tables

8. All completed ad hoc (commissioned or additional) tables are published in the Data Warehouse section of the [Census Data Explorer](#). A total of just over 300 additional and commissioned tables were published in the year to March 2017, with the great majority relating to health, migration and identity topics. Over the same period the branch also dealt with almost 900 email or telephone requests for information through its customer services request service.

Additional and commissioned tables published in 2016-17

Topic	Number
Education	-
Health	225
Housing and accommodation	6
Identity	13
Labour market	5
Language	1
Migration	23
Population and households	3
Religion	8
Origin destination (address 1 year ago)	15
Origin destination (travel to work/study)	2
Workplace population	1
Daytime population	1
Total	303

9. Commissioned census tables are requested by a wide variety of customers. The table below gives a profile by sector of customers who have made requests for commissioned tables since work on producing these for 2011 Census data began in late 2013. The sector accounting for the highest proportion of requests was academia (27% of the total) but other sectors were all well represented.

2011 Census commissioned table requests by sector (to April 2017)

Sector	Number of requests	% of total requests
Scottish Government/ NRS	20	11
NHS	15	8
Local authorities	23	13
Academia	49	27
Business/ commerce	27	15
3 rd sector	12	7
Individuals	12	7
Other	21	12
Total	169	100

Microdata

10. The 2011 Census secure microdata files continue to only be available under Approved Researcher Licence via the Virtual Microdata Laboratory (VML) managed by ONS. Further details, including information on how to access them via the VML, are available on the Scotland's Census website: <http://www.scotlandscensus.gov.uk/secure-microdata-files>

11. NRS continues to explore the possibility of lodging secure census microdata for Scotland in the National Safe Haven at the Bioquarter in Edinburgh, to provide more convenient access to this data to researchers based in Scotland. Staff from NRS and the National Safe Haven are due to meet on 6 June to discuss how best to progress this. In particular we will need to ensure that a robust set of access protocols and practices are put in place which at least match those operated by the ONS in their VML.

Census Analysis and Reports

12. Since the November meeting of PAMS, NRS has published two further analytical notes, and a range of supporting tables, on people with a learning disability or developmental disorder, in December 2016 and March 2017. One further analytical note on this topic is due to be published shortly, marking the conclusion of a collaborative analytical project between NRS and the Scottish Learning Disabilities Observatory which has been running over the last couple of years.

13. In addition, NRS continues to work in partnership with analysts in Scottish Government and elsewhere to make the most of the available Census data. For example, in support of Brexit-related analytical work NRS recently released demographic and census profiles of residents in each council area who were born in the European Economic Area: <https://www.nrscotland.gov.uk/statistics-and-data/statistics/stats-at-a-glance/profile-of-european-economic-area-eea-born-residents-in-scotland>

Communication and engagement

14. A number of events have been held since the November meeting to raise awareness of the uses of census data. Details of these, together with some upcoming events, are listed at Annex 1.

15. The majority of communications and engagement since November has focused on Scotland's Census 2021. An update on work on the 2021 Census was published on the Scotland's Census website on 13 April:

<http://www.scotlandscensus.gov.uk/news/scotlands-census-2021-update>.

Scotland's Census website

16. A number of additions and improvements have been made to the Scotland's Census website, including:

- an Excel tool to compare selected 2001 and 2011 Census data at council area level
<http://www.scotlandscensus.gov.uk/scottish-council-areas-2001-and-2011-census-profile-comparator-tool>
- updated guidance for researchers on how to access census data
<http://www.scotlandscensus.gov.uk/census-results>
- publication of a report on data quality for coverage records
http://www.scotlandscensus.gov.uk/documents/methodology/Coverage_report.pdf
- publication of some tables with key census population and household estimates for the new electoral wards which came into effect in May 2017
<http://www.scotlandscensus.gov.uk/ods-web/data-warehouse.html#additionaltab> (tables AT_574_2011, AT_575_2011 and AT_576_2011).

17. Further improvements to the website are planned or under consideration, including:

- streamlining the format of the listings of additional and commissioned tables to make them more readable
- adding tables of 1991 Census data (and in due course 1981 Census data) to the Census Data Explorer (CDE). These tables would be made available for a range of 2011-based geographies, including council area, health board, electoral ward and postcode sector. Annex 2 lists the set of tables of 1991 Census data it is proposed to add to the CDE. The list highlights a selection of 10 tables for which table builds have been fully developed and which we plan to release as an initial batch by the end of July. Subject to successful implementation of this we would then plan to roll out the remaining tables in further batches later in the year.)
- a comprehensive 2011 Census data dictionary, providing full details of individual variables available on the census outputs database
- to help users navigate more easily to the table(s) of interest to them, we would like to supplement the Census Table Index spreadsheet tool with a built in search function within the website. For instance this would be designed so that users can search for a specific string in the text (e.g. student) and be able pull off the relevant tables which contain the word "student", and not just those contained within table headings.

Each table to have a unique URL when it is downloaded from the CDE website in Excel

- a general refresh/ updating of individual web pages.

Dissemination of statistics on the NRS website

18. NRS statistical publications can be found on the [Statistics page](#) of the NRS website. The Scottish Government's [Open Data Strategy](#) was published in February 2015. This sets out the SG's ambition for making public data open and available for others to use and re-use. This recognises the value and potential of data, and recognises that its better use can help deliver improved public services and wider social and economic benefits. Under the strategy NRS has, with effect from January 2017, an obligation to publish our data as [3* standard](#) (CSV) Open Data. Further background on this can be found within the [NRS Open Data Publishing Plan](#). In practice the statistical data published by NRS has for some time been made available in CSV format (generally in addition to versions in Excel).

19. For a number of years, NRS has updated a set of council area factsheets as each of its main statistical releases has been published. However, we feel they look a bit outdated and the process of updating them is complex and time-consuming with a high risk of errors being introduced. We are therefore considering a couple of replacement options: a) a more streamlined version using an Excel-based tool similar to the one developed for the [2001/2011 census profile comparator tool](#), and b) a more infographic-based version, styled along the same lines as the Infographics supplement now produced for the annual RGAR publication. We plan to develop these options further prior to coming back to get the views of PAMS.

20. More generally, NRS has been looking to develop infographics and other data visualisations to improve the dissemination of its statistics as well as in the presentation of publications. This information is covered in other branch updates. The [NRS Twitter account](#) and an [NRS blog](#) are also being increasingly used to improve the reach of our statistics.

**Annex 1 - Awareness raising through events, training courses and conferences,
November 2016 – June 2017**

Date and location	Event	NRS Lead / involvement
17/11/2016 Stirling	Registration Division seminar	Celia Macintyre
November 2016	GLOW recording for teacher staff development using Census Data Explorer	Celia Macintyre
Feb 2017	Talk on historical census data to Old Edinburgh Club	Celia Macintyre
20 Jun 2017	Talk to delegation from Statistics Korea	Sandy Taylor
21 Jun 2017	NRS seminar on migration statistics	Kirsty MacLachlan

**Annex 2 – planned set of tables of 1991 Census data to be added to Census Data Explorer
(Highlighted tables are those planned for an initial release)**

KS101SC - Usual resident population
KS102SC - Age structure
KS103SC - Marital and civil partnership status
KS105SC - Household composition
KS201SC - Ethnic group
KS204SC - Country of birth
KS401SC - Dwellings, household spaces and accommodation type
KS402SC - Tenure
KS404SC - Car or van availability
KS405SC - Communal establishment residents
KS501SC - Qualifications and students
KS601SC - Economic activity
KS602SC - Economic activity - Males
KS603SC - Economic activity - Females
KS604SCb - Hours worked
KS605SC - Industry
KS606SC - Industry - Males
KS607SC - Industry - Females
KS608SC - Occupation
KS609SC - Occupation - Males
KS610SC - Occupation - Females
KS611SC - National Statistics Socio-economic Classification
KS612SC - National Statistics Socio-economic Classification - Males
KS613SC - National Statistics Socio-economic Classification - Females
QS101SC - Residence type
QS102SC - Population density
QS103SC - Age by single year
QS104SC - Sex
QS108SC - Living arrangements
QS112SC - Household composition - People
QS113SC - Household composition - Households
QS116SC - Household type
QS202SC - Multiple ethnic groups
QS203SC - Country of birth

QS211SC - Gaelic language skills
QS303SC - Long-term health problem or disability
QS401SC - Accommodation type - People
QS402SC - Accommodation type - Households
QS403SC - Tenure - People
QS404SC - Tenure - Household Reference Persons aged 65 and over - Households
QS405SC - Tenure - Households
QS406SC - Household size
QS407SC - Number of rooms
QS408SC - Occupancy rating (rooms)
QS409SC - Persons per room - Households
QS410SC - Persons per room - People
QS415SC - Central heating
QS417SC - Household spaces
QS418SC - Dwellings
QS501SC - Highest level of qualification
QS601SC - Economic activity
QS602SC - Economic activity of Household Reference Persons
QS603SC - Economic activity - Full-time students
QS604SCb - Hours worked
QS605SC - Industry
QS606SC - Occupation
QS607SC - National Statistics Socio-economic Classification
QS608SC - National Statistics Socio-economic Classification of Household Reference Person - People aged under 65
QS609SC - National Statistics Socio-economic Classification of Household Reference Person - All people
QS610SC - National Statistics Socio-economic Classification of Household Reference Person (aged under 65)
QS611SC - Approximated social grade - Household Reference Persons aged 16 to 64
QS701SC - Method of travel to work
QS613SC - Approximated social grade - People aged 16 to 64
QS703SC - Distance travelled to work

Other tables

- Exclusive use of bath/shower
- Exclusive use of inside WC
- Combination of amenities
- Lowest floor level of accommodation

