

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. Since May, Keith Hoy and Rebecca Stewart have left the branch to take up new posts. Hannah Smith and Eleni Boukouvala have joined the branch as Assistant Statisticians while Michael Duffy has been filling the Customer Services Officer post on a temporary basis. Other staff vacancies are being covered by temporary staff although we are shortly to begin a recruitment to fill these posts with permanent appointments.

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 tables of census data
- enabling more convenient researcher access to secure Scottish census microdata
- releasing analytical reports and other supporting information
- adding tables of 1991 and 1981 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. To date, tables at council area level have been released for these populations, along with counts at output area: <http://www.scotlandscensus.gov.uk/ods-web/data-warehouse.html#additionaltab> Work to create and publish detailed tables on workplace populations (for workplace zones) and daytime populations (for data zones) has now been completed and, at the time of writing, the tables are being given final quality assurance and

disclosure checks prior to release in early November. An analytical note on the daytime and workplace population statistics is also planned, to help users interpret the figures.

Additional and Commissioned tables

6. All completed ad hoc tables of census data are published in the Data Warehouse section of the [Census Data Explorer](#). Since the start of April this year, over 100 additional and commissioned tables have been published. The majority of these relate to topics on health, population and households and the labour market.

Additional and commissioned census tables published, April to 3 November 2017

Topic	Number
Education	1
Health	56
Housing and accommodation	0
Identity	3
Labour market	14
Language	3
Migration	8
Population and households	25
Religion	1
Origin destination (address 1 year ago)	0
Origin destination (travel to work/study)	1
Workplace population	0
Daytime population	0
Total	112

Customer Services

7. The customer services request service continues to deal with a high volume of enquiries (approx. 1,000 annually). These relate to a variety of topics and are received from a wide range of customers. The tables below provide profiles of the enquiries that have been logged so far this year, by the topic of enquiry and by the type of customer. (Note that these figures exclude a significant number of telephone enquiries and also enquiries received directly by the NRS Vital Events and Geography branches.)

NRS Statistics Customer Services: logged requests by sector, Jan to Oct 2017

Requester	Number of enquiries	% of total enquiries
Scottish Government	59	9
NHS	59	9
Local authorities	71	10
Academia	136	20
Business/ commerce	78	11
Media	38	5
3 rd sector/ Charities	12	2
Individuals	190	27
Other	50	7
Total	693	100

NRS Statistics Customer Services: logged requests by topic, Jan to Oct 2017

Topic	Number of enquiries	% of total enquiries
2011 Census	151	22
Other census	52	8
Population	156	23
Households	30	4
Vital events	167	24
Life expectancy	15	2
Geography	12	2
Migration	16	2
Website	12	2
Other	82	12
Total	693	100

8. The public sector, academia, individuals and other (including business, media and 3rd sector) account for broadly similar proportions of the enquiries received. Vital events, population and the 2011 Census represent the most commonly requested topics, together accounting for around 70 per cent of all enquiries. (Note that these figures relate to the simple number of enquiries received; they do not necessarily reflect the amount of work involved in answering them.)

Microdata and census data extracts

9. 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>

10. A proposal by NRS and staff from the National Safe Haven at the Bioquarter in Edinburgh to lodge secure 2011 Census microdata files for Scotland in the National Safe Haven (to provide more convenient access to this data for approved researchers based in Scotland) is now well developed. Robust access protocols and practices are in place which at least match those operated by the ONS in their VML. Drafts of a Data Sharing

Agreement and Privacy Impact Assessment to cover this are currently with Scottish Government lawyers for consideration.

11. An increasing number of applications by researchers to access record level census data is also being received. These applications have to go through a rigorous assessment process to that the proposed research projects meet ethical, public benefit and legal criteria. The process of specifying and providing data extracts to the secure environment at the National Safe Haven is managed by NRS, while access by researchers to the data at the National Safe Haven is controlled and monitored by ADRC-S staff. All research outputs also required to be checked by NRS before publication to ensure that they are not statistically disclosive. Where research projects seek to link census and non-census data sets, then NRS provides a trusted 3rd party data linkage services, to ensure that the final linked data sets contain no personal identifiers or local reference numbers.

Census Analysis and Reports

12. Since the May meeting of PAMS, NRS has published a further analytical note, with a range of supporting tables, on people with a learning disability or developmental disorder: http://www.scotlandscensus.gov.uk/documents/analytical_reports/Scottish_Learning_Disabilities_Observatory_Batch_8_summary.pdf . This marks 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. An overview of the analytical reports and supporting tables that have been published for this project is available at: http://www.scotlandscensus.gov.uk/documents/analytical_reports/Scottish_Learning_Disabilities_Observatory-summary_of_analytical_reports.pdf .

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 few events have been held since the May meeting to raise awareness of the uses of census data. Details of these 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. Further improvements to the website have been made or are planned. These include:

- 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. A first batch of tables of 1991 Census data were added to the CDE at the end of August, with the remainder due to be released by the end of 2017. Annex 2 provides further details of these tables.
- Providing users with a facility within the standard outputs section of the CDE to select geographical areas within a hierarchy, for example to select all data zones or electoral wards within a specific council area.
- Including a comprehensive 2011 Census data dictionary in the Supporting Information section of the Scotland's Census website, providing full details of individual variables available on the census outputs database.
- Helping 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.
- Carrying out a general refresh/ updating of individual web pages.

Dissemination of statistics on the NRS website

17. 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, these now look a bit outdated and the process of updating them is complex and time-consuming with a high risk of errors being introduced. Work has been going on over the summer to revise and update the factsheets; a separate paper provides an update on this work.

18. The Statistics & Data section of the NRS website now includes a 'Scotland's Population – Key Statistics' page to provide a single set of headline figures across the range of demographic topics, with links out to more detailed sets of statistics. <https://www.nrscotland.gov.uk/statistics-and-data/statistics/stats-at-a-glance/scotlands-population-key-statistics>

19. 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. For example, this summer's Registrar General's Annual Review of Demographic Trends was accompanied by a related [infographics report](#). The [NRS Twitter](#)

[account](#) and an [NRS blog](#) are also being increasingly used to improve the reach of our statistics.

**NRS: Demographic Statistics: Dissemination and Census Analysis
November 2017**

**Annex 1 - Awareness raising through events, training courses and conferences,
July to October 2017**

Date and location	Event	NRS Lead / involvement
20 June 2017 Edinburgh	Talk to delegation from Statistics Korea	Sandy Taylor
21 June 2017 Edinburgh	NRS seminar on migration statistics	Kirsty MacLachlan
6-8 Sep 2017 Liverpool	British Society of Population Studies annual conference	Sandy Taylor

**Annex 2 – planned set of tables of 1991 Census data to be added to Census Data Explorer
(Highlighted tables are those which have, as at 6 November 2017, already been published on the Census Data Explorer)**

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

