

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. The Dissemination and Census Analysis branch has undergone significant staff turnover during the summer, with a number of long-serving members departing to other posts in Scottish Government and elsewhere. The resulting loss of knowledge and expertise has inevitably had an impact on the work of the branch as new staff get up to speed and become familiar with census and other data sources. In particular there have been some delays in completing some of the additional census products and in dealing with requests for commissioned census tables and general customer service enquiries. However, good progress is now being made in tackling this backlog of work.

2011 Census Outputs

3. Following the completion of publication of the main set of standard statistical outputs from Scotland's 2011 Census earlier this year, work on producing census outputs has focussed on:
 - microdata files and statistics for alternative populations
 - further origin-destination statistics
 - additional and commissioned census tables
 - analytical reports.
4. Standard output tables for 2011-based Data Zones are now available via the refreshed version of the [Data Warehouse](#) section in the Census Data Explorer.
5. Guidance has also been added to the [Scotland's Census](#) website on how users can use look-up tables to aggregate census statistics for other geographical classifications such as the Scottish Government (SG) urban-rural classification and Scottish Index of Multiple Deprivation (SIMD) deciles.
6. Since May, some further [additional tables of census results](#), mostly at Scotland level, have been published on the Scotland's Census website. These were generally tables made available to support the publication of analytical reports on a range of topics, including migration, equality, household composition, inhabited islands, Gaelic and people not in employment, education or training:

Other census products

Microdata

7. We are now close to finalising work on creating safeguarded and secure 2011 Census microdata data sets for Scotland.

Safeguarded files

These files contain a similar level of detail to the 2001 small area microdata and individual small area record files. There are two safeguarded files, each comprising a 5 per cent sample of individuals:

- a file at Scotland level; and
- a file at a grouped local authority level, which will have less detailed variables than the Scotland level file. (We are grateful for the comments received from a number of local authorities in relation to the optimum groupings of local authorities.)

The files have now been sent to the UK Data Service (UKDS), together with codebooks and other supporting information. We expect the files to be made available to users by UKDS in November. As with the corresponding 2011 census microdata files for England and Wales and Northern Ireland, the safeguarded census microdata files for Scotland will be available under the same terms and conditions of access and use that applied to the microdata from previous censuses.

Secure files

These comprise a 10 per cent sample of individuals and a 10 per cent sample of households. The two samples do not overlap and provide the most detail for the characteristics included - they are generally similar to the 2001 Controlled Access Microdata Sample (CAMS). Work on finalising these files and their supporting documentation is nearly complete. They will be made available only under Approved Researcher Licence, through a secure setting, with access initially via the Virtual Microdata Laboratory (VML) managed by Office for National Statistics (ONS). The National Records of Scotland (NRS) continues to investigate alternative means of providing more local access to Scottish users of secure data, potentially via the Edinburgh BioQuarter as part of the Scottish Informatics and Linkage Collaboration¹ (SILC).

Footnote

1) The Scottish Informatics and Linkage Collaboration (SILC)

SILC is a collaboration between many academic and public bodies to ensure that Scotland realises the benefits that can be derived through the legal, ethical and carefully controlled use of administrative, survey and other types of data.

At its inception, SILC brings together the Farr Institute, the Scottish Administrative Data Research Centre (ADRC) and the electronic Data Research and Innovation Service (eDRIS) along with Scottish Government investment and expertise to create a joined-up hub of innovation in data linkage. It is anticipated that others operating within the data linkage arena will join the collaboration. SILC will operate in-line with the 'Guiding Principles for Data Linkage' to ensure that citizens' privacy is maintained whilst simultaneously ensuring that research which is in the public interest is supported.

Origin Destination Statistics

8. Origin destination statistics are census data which deal with movement/ flow of people; either as migration (from their address one year prior to the census) or travel to work or study (from their current address to their workplace address or place of study). Much of the origin destination data from the 2011 Census is published at the UK level, providing flows for usual residents of Scotland, England, Wales and Northern Ireland. More information on the detailed content and access arrangements for UK-wide origin destination statistics can be found on the [ONS](#) website, with a table finder tool now available on the [Nomis](#) website to help users search through an index of the tables.
9. Three tables of travel to study statistics, which are a Scotland-specific census product, were published on 28 August. Two additional travel to work tables (at intermediate zone level) and three additional migration tables (at council area level) were published in June/July. These can be found in the [Additional and commissioned tables](#) section of the Scotland's Census website.
10. Further work is planned to provide origin-destination statistics at additional geographies, for example travel to work flows at data zone level have successfully passed disclosure checks and will be made available shortly.

Alternative populations

11. 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)
 - 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).
12. For both these sets of statistics, we are incorporating data from the other UK census offices on residents of England, Wales and Northern Ireland who work in Scotland. The workplace and daytime (or 'workday') population statistics published by ONS for England & Wales exclude residents of Scotland and Northern Ireland who work in England or Wales. However, we think that for the corresponding statistics for Scotland it would be better to include residents of the rest of the UK who work in Scotland if at all possible. Publication of a set of tables for each of these population bases, initially at council area level, is scheduled for 26 November.

13. ONS has extended the workplace zone geography it created for England & Wales to cover Scotland (and Northern Ireland). This provides a safe (in statistical disclosure terms) low level geography for disseminating more detailed statistics on workplace populations. The set of workplace zones proposed for Scotland are currently being reviewed for disclosure, while ONS is also considering some detailed feedback comments on them which have been provided by local authorities.

Commissioned tables

14. As noted above, staff turnover in the branch and other priority publication work has resulted in some delays in dealing with requests for commissioned census tables. We appreciate the frustration this can cause to users and are now making good headway in clearing the backlog of requests. All completed commissioned tables are published in the Data Warehouse section of the Census Data Explorer; since May, a total of 160 additional and 71 commissioned tables have been published.

Census Analysis and Reports

15. NRS has published the following analytical reports since May:

- Migration: statistical profile of migrants from out with the European Economic Area groups – published July 2015
- Household composition for specific groups in the population – published August 2015
- Inhabited islands – published September 2015
- Gaelic² (part 1) – September 2015
- Gaelic (part 2) – October 2015

16. The current status of other analytical topic reports is as follows:

- Learning disability and development disorder – analytical note in draft
- Living arrangements and concealed households – in draft awaiting allocation of resources
- Overview of health statistics in Census – no progress as other organisations working extensively with health statistics
- Characteristics of the private rented sector – on hold awaiting allocation of resources

Footnote

2) Based on work carried out by accredited researchers from the University of Edinburgh, who consulted with key stakeholders and accessed detailed census tables through the Scottish Longitudinal Study (SLS) safe setting.

17. In addition, NRS are working in partnership with analysts in Scottish Government and other users to encourage them to analyse the available Census data, and also to contribute to the production of descriptive analytical reports. There has been progress on the following topics:

- Health inequality and ethnicity – published August 2015
- People not in education, employment or training – published October 2015

Metadata

18. The Scotland's Census website continues to be updated with a range of supporting information to help users access and understand the range of statistical outputs produced from the 2011 Census. The census table index tool, which helps users to identify which tables feature a specific variable or variables is being extended to cover the standard tables from the 2001 Census.

19. Further planned enhancements include a summary report on the comparability of questions asked in the census; an Excel tool to enable users to compare 2001 and 2011 Census data at council area level (where the questions asked in the census allow such comparisons to be sensible made); and supporting information relating to the safeguarded and secure microdata products.

Communication and engagement

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

21. NRS published [Scotland's Census 2011 General Report](#); this was laid before the Scottish Parliament in October 2015. This document reviews the entire 2011 Census operation from the early planning and consultation through to the production and dissemination of outputs and evaluation. It provides a wealth of detail about how Scotland's Census 2011 was carried out and what we have learned to take forward in our planning for the next census.

22. In June 2015 we conducted a User Satisfaction Survey seeking views from users about various aspects of Scotland's Census 2011 (such as access, what more outputs we could provide). We were keen to evaluate what NRS did well and what could be improved upon. In total, 85 responses were received during a four week period. A full analysis will be published shortly but overall the results have been positive.

23. Following positive feedback from users, NRS recently secured funding to support the inclusion of Scotland's Census data on 'DataShine', the highly regarded visualisation tool from University College London (UCL). [Datashine Scotland](#) utilises the DataShine framework to map the various Key and Quick Statistics from Scotland's Census 2011. In addition, on [DataShine Scotland Commute](#) you can access visuals showing

travel-to-work-flows between each Council Area, split out by direction and mode of transport.

Scotland's Census website

24. New features added to the website in the last few months include:

- New [Scotland's Census 2021 pages](#) giving information on [Consultation for 2021](#) and [News and Events about 2021](#)
- Inclusion of Scotland's Census 2001 data on the [Area Profiles](#) and [Standard Outputs](#) sections of the site (which means the Scotlands Census Results Online (SCROL) website has now been decommissioned)
- Ability to search for census tables on [Standard Outputs](#) using the table Identifier (ID), table title or a string of text from within the table title
- Restructuring of the [Data Warehouse section](#) of the site simplifying the way in which users can download the data
- New layout of the [Maps and Charts](#) section to improve navigation
- New [How to use the Census Data Explorer\(CDE\) section](#) which we hope will help you navigate the CDE and find what data you are looking for
- New [UK Parliamentary Constituencies](#) as a geography for Area Profiles (Scottish Parliamentary Constituencies and Scottish Parliamentary Regions will also be added as geographies for Area profiles in the very near future)

**NRS: Demographic Statistics: Dissemination and Census Analysis
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Annex 1 - Awareness raising through events, training courses and conferences

Date and location	Event	NRS Lead / involvement
13 April 2015, Edinburgh Centre for Carbon Innovation	Making the most of travel flow data	Celia Macintyre
24 April 2015, Edinburgh University	Exploring the Scottish Census workshop	Celia Macintyre
10 June 2015 Aberdeenshire Council	Making the most of the Census	Celia Macintyre
10 July 2015 Scottish Government, Edinburgh	Scotland's Census - What's available and what next?	Celia Macintyre
2 October 2015 EEO-AGI(S) seminar University of Edinburgh	Census 2011 – How NRS are making the most of the data	Celia Macintyre
5 October 2015 Midlothian Science Festival, Loanhead Library	Census online: What can it tell us	Celia Macintyre
31 October 2015 North Inch Community Campus, Perth	Scottish Association of Geography Teachers National Conference & Publishers' Exhibition	Celia Macintyre
Upcoming events		
17/11/2015 Europa Building Glasgow	Scotland's Census 2021 Topic Consultation Event	Celia Macintyre
19/11/2015 Aberdeen - Woodhill House	Scotland's Census 2021 Topic Consultation Event	Celia Macintyre

24/11/2015 New Register House - Edinburgh	Scotland's Census 2021 Topic Consultation Event	Celia Macintyre
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