

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 work of the Dissemination and Census Analysis branch continues to be impacted to an extent by the departure last summer of some experienced members of staff, along with the filling of a couple of posts by temporary members of staff on an interim basis. This has affected our capacity a bit to turn round some requests for commissioned census tables as quickly as we would like and to develop additional census outputs. However, substantial progress on providing outputs has still been made, and with a revised team structure now in place we hope to move to a more settled position on staffing over the next couple of months.

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 has focussed on:

- microdata files and statistics for alternative populations
- further origin-destination statistics
- additional and commissioned census tables
- analytical reports.

Microdata

4. We have now completed work to finalise the 2011 Census microdata products 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 five 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.

Further details on these files, including information on how to access them via the UK Data Service, are available on the [Scotland's Census](#) website.

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). They are 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). Further details, including information on how to access them via the VML, are available on the [Scotland's Census](#) website.

NRS continues to investigate alternative means of providing more local access to Scottish users of secure data, including plans to deposit Scottish census microdata in the Edinburgh BioQuarter as part of the Scottish Informatics and Linkage Collaboration¹ (SILC).

Origin Destination Statistics

5. 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.

6. Further work is being carried out to provide origin-destination statistics at additional geographies, for example travel to work flows and migration flows at data zone level were published in December on the [Scotland's Census](#) website.

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.

Alternative populations

7. 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).

8. 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 on 26 November on the [Scotland's Census](#) website.

9. NRS has also been working with ONS to extend the workplace zone geography created for England & Wales to also cover Scotland and Northern Ireland. That work has taken some time to complete but is now close to being finalised. It will provide a safe (in statistical disclosure terms) low level geography for disseminating more detailed statistics on workplace populations in Scotland. Workplace and daytime population counts at output area level are also planned for production, subject to disclosure control constraints.

Additional and Commissioned tables

10. 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.

11. All completed commissioned tables are published in the Data Warehouse section of the [Census Data Explorer](#). A total of 400 additional and commissioned tables were published in 2015-16, across the whole range of census topics. In addition the branch dealt with 600+ requests for information through its customer services request service.

Topic	Number of additional and commissioned tables published in 2015-16
Education	8
Health	96
Housing and accommodation	13
Identity	27
Labour market	36
Language	78
Migration	38
Population and households	75
Religion	13
Origin destination (address 1 year ago)	4
Origin destination (travel to work/study)	12

Census Analysis and Reports

12. NRS has published the following analytical reports since the November meeting of PAMS:

- People with a learning disability or developmental disorder (data at Scotland level) - published Nov 2015
- People with a learning disability or developmental disorder (data at council and health board area level) - published Jan 2016
- People with a learning disability or developmental disorder (further characteristics) - published April 2016

13. In addition, NRS continues to work 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:

- Gypsy/Travellers in Scotland – published December 2015

Communication and engagement

14. A number of events have been held since November 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, primarily activity supporting Scotland's Census 2021 Topic Consultation. That consultation is being discussed in another item on the agenda.

Scotland's Census website

16. The following additions and improvements have been made to Scotland's Census website:

- The [Microdata pages](#) have been refreshed to give further guidance on how best to access microdata.
- Scottish Parliamentary Constituency Profiles and Regions have been published and can be found on the [Parliamentary Profiles page](#).
- The census table index tool, which helps users to identify which tables feature a specific variable or variables, has been extended to cover the standard tables from the 2001 Census and all published additional and commissioned tables.
- A detailed report on the comparisons between 2001 and 2011 Census questions is available on the [Previous Censuses page](#).

- An Excel tool that will 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) is in final stages of QA and will be deployed shortly.

17. We promised a while ago to provide a list of other potential website enhancements, and this is included at Annex 2. In particular, we would be grateful for feedback on the following points:

- We have begun work to add tables of 1991 Census (and in due course 1981 Census) data to the Census Data Explorer; and we are also looking to switch on some additional graph/ charting functions for the standard outputs. **Do you have any preference on the relative value of these enhancements to you and/ or others users of the site, and therefore which of the two we should prioritise?**
- For the other potential enhancements listed, we will be constrained by available IT resources and so won't be able to do them all at once. **It would therefore be useful to receive any comments on the relative priority that should attach to each enhancement (or indeed if there is likely to be little or no demand at this stage).**
- **Are there any other changes or additions to the Census Data Explorer not listed that you would like to suggest?**

Dissemination of statistics on the NRS website

18. Statistical publications and other outputs continue to be disseminated via the NRS website. Publications are now listed alphabetically and also by topic to help users navigate to the publication of interest to them on the [NRS](#) website.

**NRS: Demographic Statistics: Dissemination and Census Analysis
April 2016**

Annex 1 - Awareness raising through events, training courses and conferences

Date and location	Event	NRS Lead / involvement
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
01/12/2015 COSLA - Edinburgh	Scottish Learning Disabilities Observatory (SLDO) Conference	Celia Macintyre (stall at the event)
16/03/2016 East Renfrewshire Geography CPD, Barrhead High School	Introduction to Census data and practical applications	Celia Macintyre
Upcoming events		
30/06/2016 Edinburgh University Library	UK Data Service Event	Celia Macintyre Prash Thaker
17/11/2016 Stirling	Registration Division Seminar	Celia Macintyre

Annex 2 – Scotland’s Census website: potential enhancements

Potential enhancement	Additional note/s	Current proposal for priority (A=highest; C=lowest)
<u>Standard Outputs</u>		
<i>Addition of following geographies:</i>		
2011 Intermediate zones (IZ)	Data Zone (DZ) to IZ lookup already available	C
2001 Intermediate zones	DZ to IZ lookup already available	C
2011 small and large user postcodes	The results displayed would be for the parent output area(s). Need to confirm the technical feasibility of this.	C
The ability to create a hyperlink to a table created by a user.	This could be used to share a table and/ or link analysis/ reports etc to the table.	B
A graphing/ charting function.	User would be able to create a range of graphs and charts based on a table they had just created.	A
A thematic mapping option	User would be able to create a choropleth map (i.e. using different shades/colours to indicate the value of a variable per area) from a univariate table (ie most KS and QS tables) that they have produced.	A
Addition of key tables of 1991 Census data, available for 2011 geographies	Approximately 100 univariate tables of 1991 data, supplemented by a selection of key multivariate tables (eg breakdowns of variables by sex and age).	A
Addition of key tables of 1981 Census, available for 2011 geographies	Ditto. Addition of tables of 1981 data would follow completion of work to add the tables of 1991 data.	C

<u>Area Profiles</u>		
<i>Addition of following geographies:</i>		
2011 Data zones	-	B
2011 Intermediate zones	-	B
Electoral Wards 2007	-	B
2011 large user postcodes (added to current small user postcodes search option)	The results displayed would be for the parent Output Area of the large user postcode's associated small user postcode. Currently users can only search based on small user postcodes.	C
<u>Data Warehouse</u>		
Provide option for users to select smaller 'cuts' of the data, eg subsets of tables and/or geographies	Technical challenges and available resource will constrain what can be achieved for this. But it will be helpful to gauge demand to help prioritise work and also to inform plans for disseminating outputs from the 2021 Census.	B