

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

### 2011 Census Outputs

1. This paper provides a progress update on the statistical outputs from Scotland's 2011 Census. It recaps on previously published results and outlines plans for the future release of standard output tables and other census products. The paper is mainly for information, but views from PAMS members are sought specifically on:
  - Supplementary tables to include in standard outputs ([paragraph 4](#))
  - Online survey about uses and planned uses of census data ([paragraphs 23 and 24](#))
  - Feedback on Scotland's Census website and Census Data Explorer ([paragraph 25](#))
  - Restructuring of the Census Data Explorer Data Warehouse ([paragraph 26](#)).

### Standard outputs

2. Release 1 provided census population and household estimates for Scotland, council areas, inhabited islands, data zones, output areas and postcodes. Release 2 represented the publication of the key results across the range of topics covered by the census for all levels of census output geographies.
3. Release 3 includes more detailed census results in cross-tabulations. Since the last PAMS meeting in May, a further 9 phases of this release have been published (3D – 3L). The remaining two phases of release are scheduled for publication on 18 December (Release 3M) and 29 January (Release 3N).
4. Release 3N will complete publication of all the planned standard output tables. However, we are reviewing these against the standard outputs produced for England & Wales by ONS, the standard outputs produced for the 2001 Census and requests for commissioned tables. For example, Office for National Statistics (ONS) released a batch of supplementary tables in September and some of these may be useful in Scotland as well. A list of these tables is provided as [Annex A](#).

**Action Requested:** Suggestions from PAMS members for any additional supplementary tables to include in the standard outputs would be welcome; it would be helpful to receive these by 19 December.

5. Since May, a number of additional tables of census results, mainly at Scotland level, have also been published on the [Scotland's Census](#) website.
6. The completion of Release 3 will mark the end of the publication of the main set of standard outputs from the 2011 Census.

## Other census products

### Microdata

7. A Teaching File comprising a 1% sample of non-disclosive, individual-level records was published on 25 June, available for download under Open Government Licence from the [Scotland's Census](#) website.  
More detailed microdata files of individual and household records are planned to be made available later, either under licence (safeguarded) or via a VML-type (secure) environment. Further consideration is being given to the dissemination channels and conditions of access for these safeguarded and secure microdata products.
8. Under current plans we aim to release the safeguarded and secure census microdata products early in 2015, once Release 3 has been completed and once SDC assessment of the safeguarded files has been finished.

### Origin-destination statistics

9. 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). These flows can be cross-tabulated by other variables of interest (for example, method of travel).
10. Much of the origin destination data from the 2011 Census will be published at the UK level, providing flows for usual residents of Scotland, England, Wales and Northern Ireland. Separate travel to study flow statistics are planned for Scotland, following completion of some specific quality assurance work on this data.
11. The first batch of this data is now available from the [Nomis](#) website (published 25<sup>th</sup> July 2014). There were 11 tables in this release, including three tables on the topic of workplace covering the whole of the UK. (The other eight tables on the topics of migration and students include four tables for merged local authorities in England and Wales, and four tables covering local authorities in Northern Ireland.) Migration and workplace tables covering the whole of the UK will be released later in the year. Further information on publication plans and access arrangements for UK-wide origin destination statistics can be found at the Office for National Statistics website [www.ons.gov.uk](http://www.ons.gov.uk).
12. Similar to the microdata products, consideration is being given to the dissemination channels and conditions of access for these at 3 levels – open, safeguarded and secure.
13. We will offer further information and seek views from PAMS in due course.

### Alternative populations

14. The standard outputs for the 2011 Census generally relate to the usually resident population, i.e. in terms of where people usually live. However, a number of tables are also planned for publication in relation to two alternative population bases:

**a) Workplace population**

For a given geography, the estimate of people who work there, for example people who travel into a city to work. It will be a geographic redistribution of the usual resident population who are in work, allocated to their place of work.

**b) 'Daytime' population**

This is a population estimate of all people who are working or studying in the area plus all people who are not working or studying but are resident in the area.

### **Commissioned tables**

15. A number of requests for commissioned tables have been received over the last few months. Requests relating to univariate (Release 2) type outputs are being dealt with now. Other requests involving cross-tabulations of data are on hold until Release 3 has been completed, though some preparation for them is being carried out as resources and pressure of other work permits.

### **Additional output geographies**

16. Standard results from the 2011 Census are currently available through the Census Data Explorer (CDE) for a range of 16 output geographies, from Scotland down to census output area. Some additional geographies now exist: new Health Boards Areas came into force on 1 April 2014; population estimates for mid-2012 settlements and localities were published by NRS in July 2014; and a revised set of (2011 Census-based) data zones was released by Scottish Government on 6 November. The geographies for the new Health Board Areas and the 2011-based Data Zones will be added to the CDE once Release 3 has been completed. Lookups of 2011 output areas to the new 2011-based data zones (and intermediate zones), to mid-2012 settlements and localities (2012) and to Health Board Areas (2014) are all now available within the geography- [Our Products](#) section of the National Records of Scotland (NRS) Website and these can be used in the interim by users looking to compile census statistics for these geographies. (As the new health boards are exact groupings of council areas, users can also already derive census results for them by aggregating figures for the relevant council areas.) There are no current plans to add the mid-2012 settlements or localities to the CDE.

### **Census Analysis and Reports**

17. In May, a paper was circulated for comments which set out the activities which National Records of Scotland (NRS) is involved in to promote analysis of Census 2011 data. An update is provided here on the various strands of work.

### **Analysis programme**

18. National Records of Scotland (NRS) have been working on the following analytical reports.

- Living arrangements and concealed households – in draft awaiting allocation of resources

- Migration – characteristics of recent migrant groups – being progressed jointly by analysts from Scottish Government Strategy Unit . This also includes work to support the work of the COSLA Migration Matters project.
  - Internal migration patterns – in preparation . Will be published after the origin destination tables are published on 25<sup>th</sup> November.
  - 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
  - Travel to work - published additional tables alongside publication of the origin destination tables by Office for National Statistics (ONS) available on [Scotland's Census](#) website.
  - Inhabited islands – a set of tables have been created which update the published tables in the 2001 report on this topic. A draft bulletin is currently being produced, a publication date will be preannounced in the next month.
19. 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 on the following areas. There has been progress on the following topics
- Analysis of equalities –There was a publication of a report and x accompanying tables published in October.  
Scottish Government website - [www.scotland.gov.uk](http://www.scotland.gov.uk)  
Scotland's Census website - [www.scotlandsensus.gov.uk](http://www.scotlandsensus.gov.uk)
  - Analysis of Gaelic language . This work is being progressed as part of a pilot study to allow access to Census data to accredited researchers to the ADRC-S safe setting, supported by the Chief Statistician in Scottish Government . The processes to allow this access are being developed, but in the meantime the researchers are accessing detailed Census tables through the Scottish Longitudinal Study safe setting, with a view to producing a descriptive report on patterns of Gaelic in March 2015. The researchers will be consulting with key stakeholders as part of this process.
  - Data sharing agreement with Transport Scotland to provide detailed flow data for use in updating the Transport Model for Scotland.
  - Meeting with Scottish Government analysts through the Demographic Analysts Working Group to identify other potential uses of Census data.

### **Metadata developments**

20. Following a number of enquiries from users relating to some small areas geographies, the quality assurance team have produced reports on two issues. The results of this work will be published on the quality assurance section of the Census 2011 website in the next few weeks.
- a) Comparison of postcode and output area based 2001-based datazones.

Census results for 2001-based datazones are built up from 2011 output areas. The demography team carried out comparisons of 2011 and 2001 Census estimates, using estimates built up from postcodes [www.nrscotland.gov.uk](http://www.nrscotland.gov.uk).

These estimates were used as the basis of the revisions to the small area population estimates. A spreadsheet will be published which compares these two versions of the 2011 Census estimates of population and households by datazone and summarises the overall findings.

b) Impact of adjustments to published census estimates to avoid disclosure through slivers. Part of the process of preventing the disclosure of information about individual people and households in the published census results includes checking the potential for overlap between the boundaries of different higher geographies for which Detailed Characteristics tables are produced. While these overlapping areas (or 'slivers') are relatively rare, differencing the outputs for different geographies would have the potential to reveal detailed characteristics about individual people or households within the sliver. In order to avoid disclosing information about individuals or households within these 'slivers', a number of census output areas were manually reassigned to a neighbouring area in one of the higher geographies involved. While this manual adjustment helps to protect the confidentiality of information about individual people and households, we recognise that figures in the Detailed Characteristics tables published for the affected areas on the Census Data Explorer will not match exactly to those that would have been created by combining the figures for output areas aggregated to the unmodified set of area boundaries for that geography. In order to help users we have documented the areas affected by this process. It affects around sixty areas which are electoral wards, Scottish Parliamentary constituencies and UK Parliamentary constituencies.

21. The quality assurance team are continually developing the published metadata on the variables and classifications page. In addition to this, the team will be meeting with users of the detailed record based data (microdata) in order to scope out a project to develop more detailed metadata for these users.

### **Uses of Scotland's Census data**

22. A number of events have been held since May to raise awareness of the uses of census data. Details of these are listed at [Annex B](#).
23. Following on from the Census Conference in June and as more of the data becomes available, we now need to hear from more users about their uses and planned uses of the data. This will help us to improve the accessibility of the data, support future uses, realise the census' benefits and ultimately help NRS plan for 2021. We have developed a short online survey to try and capture these uses and user experiences and whilst one or two on PAMS have completed it, we need more. It only takes a couple of minutes to complete and more info is available from the [Scotland's Census](#) website.
24. Likewise, if you are using the data and would like your work to feature on the site, please get in touch: [scotlandscensus@gro-scotland.gsi.gov.uk](mailto:scotlandscensus@gro-scotland.gsi.gov.uk)

### **Scotland's Census website**

25. It is over a year now since we revamped the Scotland's Census website and launched the Census Data Explorer. We are very keen to hear views from you all about the resource and how we should develop it in the months and years ahead. We are considering how to seek views in a more systematic way (e.g. a feedback popup on the site for instance) but if you have any specific thoughts or ideas, please get in touch: scotlandscensus@gro-scotland.gsi.gov.uk

### **Data Warehouse**

26. In the meantime, we are very keen to consider the structure of the Data Warehouse. We are conscious that the way it is currently structured - by release – isn't as helpful for users as it potentially could be. As we come to the end of Release 3, we need to consider how to organise the data and make it available in the future. **Note:** Any views from PAMS on this would be most welcome.

**NRS: Demographic Statistics: 2011 Census Outputs  
November 2014**

**Annex A – Candidate tables for adding to standard outputs in the Census Data Explorer**

DC/LC4109SC – Car or van availability by sex by age

DC/LC5103SC – Household composition by highest level of qualification

DC6127SC – Approximated social grade by household composition

DC/LC6210SC – Economic activity by country of birth

DC/LC7402SC – Distance travelled to work by car or van availability

**Annex B - Awareness raising through events, training courses and conferences**

Date and location	Event	NRS Lead / involvement
<b>May</b>		
2 May - Edinburgh, The Dome, (NRH)	International Longevity Centre - UK Event - The demographic implications of Scottish independence	Chaired by Tim Ellis, Kirsty MacLachlan
9 May - Glasgow	Glasgow Centre for Public Health	Celia Macintyre presentation
9 May – University of Aberdeen	Identity in Scotland today (University of Aberdeen May festival event)	Amy Wilson presentation
12 May - Edinburgh	PAMS Committee meeting	Kirsty MacLachlan
20 May - Edinburgh Victoria Quay	SG Equality Unit Event	Amy Wilson
<b>June</b>		
25 June - Edinburgh	Scotland's Census Conference	Tom Wallace
21 June - Balloch	Geography Teachers skills workshop	Celia Macintyre presentation
<b>August</b>		
26/27 Aug - London	Royal Geographical Society - with IBG. Annual International Conference 2014	Celia Macintyre presentation
<b>September</b>		
3 Sep - Edinburgh Ladywell House	National Bureau of China visit	Kirsty MacLachlan
8-10 Sep - Winchester	BSPS Annual Conference,	Celia Macintyre
24 Sep - Edinburgh	Centre for Population change seminar - 2011 Census special products	Celia Macintyre
30 Sep - Edinburgh University	Understanding migration in Scotland— origin destination data and micro data in the 2011 census, a guide for potential users	Celia Macintyre
<b>November</b>		
4 Nov - Edinburgh	The Scottish Longitudinal Study Development & Support Unit (SLS-DSU)	Susan Carsley
17-21 Nov - Glasgow	How to get to 100 – and enjoy it	Kirsty MacLachlan