

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

Population and Migration Statistics Update

1. Introduction

This paper summarises the recent work on population and migration statistics. The Population And Migration Statistics (PAMS) Committee is asked to note the paper and offer any comments. We would also be very keen to hear back from PAMS members about how you use our statistics and what impact they have. Written comments on the following or anything covered in this paper will also be very welcome to Esta.Clark@NRScotland.gov.uk.

- How our statistics are used and what impact they have;
- The publications and work we have planned;
- Feedback on the 2014-based sub-national population projections;
- Our other projects and work.

2. Staffing

A number of staff changes are about to happen in the team.

- Esta Clark is moving on temporary promotion for a year to Head of Census Design. Denise Patrick will be starting on 28 November to fill Esta's post.
- Luke Main and Huw Landrock have both been successful at a recent promotion board and will be moving on promotion by the end of 2016.
- Dylais Mattison is moving on temporary promotion to the Census Programme Management Office and we will be recruiting internally to fill her and also Huw and Luke's posts.

3. Publications

Publications since the last PAMS meeting:-

- Total Migration to and from an Area, 2015 update, including revised migration estimates for 2012, 2013 and 2014 (July 2016);
- Local Area Migration spread sheet update for 2015 (July 2016);
- 2015 Small Area Population Estimates (SAPE) and revised 2012 to 2014 SAPE for new 2011 data zones (August 2016);
- National Life Tables 2013-2015 Scotland table published in August with our Registrar General's Annual Report (10 August 2016);
- Three chapters for the Registrar General's Annual Report (10 August 2016);
- Country of Birth and Nationality population estimates 2015 (August 2016);
- Centenarians, including population estimates for those aged 90+, 2005 to 2015 (September 2016);
- Sub-national Population Projections for Scottish Areas 2014-based (27 October 2016).

Future publications:

- Life Expectancy for Scottish Areas 2013-2015 (29 November 2016);
- Office for National Statistics (ONS) publication: Quarterly Migration report – including International Migration for Scotland for calendar year 2015 (1 December 2016);
- Small Area Population Estimates for 2011 Data Zones for 2001 to 2010 (Spring/Summer 2017);
- 2016 Mid-year population estimates (April 2017);
- Electoral Statistics (To Be Confirmed (TBC) April 2017);
- Settlement and Locality Population Estimates Mid-2015 (Summer 2017).

4. Mid-Year Population Estimates

Work is now beginning on producing the 2016 mid-year population estimates for Scotland, council areas and NHS Board areas, which we intend to publish in April 2017. We are currently working with NHS Information Services Division (ISD) to improve the estimates migration at a council area level and intend to introduce this improvement for the 2016 mid-year estimates, we are also looking at options for making further improvement in future years.

Migration is estimated using administrative data of when people register with new GPs. This is taken from extracts of two different sources: the Community Health Index (CHI) and the NHS Central Register (NHSCR). The CHI data is used for estimating at council area and data zone levels and is constrained to NHSCR figures at a health board level.

People do not necessarily register with a doctor as soon as they move address so we allow for a lag to account for the average difference between the date of moving and the date of registering with a doctor. We currently use CHI extracts from the end of September which assumes a three month lag and an NHSCR extract from the end of August which assumes a two month lag. We are working with NHS ISD to get CHI extracts from the end of August 2015 and 2016 to ensure consistency between the two data sources and more accurate estimates of migration at a council area level.

Further details of the methodology used to estimate migration can be found in [Population section](#) of the National Records of Scotland (NRS) website and in the [Mid-Year Population Estimates for Scotland: Methodology Guide](#).

The NHSCR in England and Wales was decommissioned on 27 February 2016, and as a result, the Office for National Statistics (ONS) no longer receive NHSCR data. This was previously used by ONS to scale up estimates of internal and cross-border moves. This affects the cross-border flows from Scotland to England and Wales for the period mid-2015 to mid-2016. The Internal Migration and Research team at ONS have been evaluating the issue and their solution is to use the scaling factors applied for the affected quarters from the previous year. Applying this method to the net-cross border flow between Scotland and England and Wales for mid-2013 to mid-2014 would not have resulted in a change in estimated flow.

In collaboration with the Administrative Data team for Scotland's Census 2021 we are putting in an application to the Community Health Index Advisory Group (CHIAG) to

request two additional fields that we currently use on the CHI extract be added to the NHSCR. These fields: GP practice code and GP postcode are currently used in the imputation stages of the mid-year estimate process at council area level. Having this information available on the NHSCR would allow us to improve our imputation methodology at health board level and allow us to perform exploratory work to determine whether the postcode level information on the NHSCR could be used to produce council area estimates in the future.

5. Small Area Population Estimates

[Mid-2015 Small Area Population Estimates \(2011 Data Zone based\)](#) were published on 25 August 2016. We have also published the mid-2012 to mid-2015 population estimates by sex, single year of age and council areas, and would appreciate any feedback on this format.

We have also corrected the errors that mainly affected the age distribution for the mid-year population estimates and published the [Corrected mid-2012, mid-2013 and mid-2014 Small Area Population](#) alongside the most recent mid-2015 estimates. Please note that mid-2011 population estimated were not affected by the age distribution errors and did not require correction.

We are working towards producing a consistent back series of Small Area Population Estimates for mid-2001 to mid-2010 by 2011 Data Zone boundaries. We will be distributing the details of the methodology approach via correspondence at a later date.

The Office of National Statistics (ONS) are changing the way the refugees and asylum seekers are accounted for in international migration for population estimates. A point for PAMS committee to consider is whether the local authorities would be able and willing to share the refugees and asylum seekers' allocation at data zone level in order to improve input data quality for small area population estimates, we will also be speaking to the Home Office to see if they have further information that would help.

PAMS are invited to help with data zone information for refugees.

6. Review of 2014-based Sub-National Population Projection Method

[2014-based Sub-National Population Projections for Scottish areas](#) were published on 27 October 2016. Thank you to everyone who helped with the quality assurance process. The methodology document outlining the new methodology is available in the [Sub-National Population Projections](#) area of our website.

We have also produced two interactive data visualisations to allow users to view the population structures of selected areas in [population pyramids](#) and to explore the [variant population projections](#) for selected areas. We welcome feedback from PAMS on these visualisations, we would like to know whether these are useful.

PAMS members are invited to provide feedback on the new projections.

7. Sub-council area population and household projections

On 23 March we published for the first time [population and household projections for 301 sub-council areas](#) across Scotland. This was a one-off separately funded piece of work. We have discussed the possibility of repeating this work for the 2014-based projections with several organisations, but due to a lack of resources, we are unlikely to be able update the sub council projections next year. However, feedback at the launch event and since publication has been really positive so we will be sending out a short survey by the end of the year to find out how they are being used and how useful they have been. We are also very happy to come and speak at events or to teams/areas about these or other projections if that would be helpful.

8. Centenarians and estimates for the population aged 90+

On 29 September we published Centenarians and population estimates for those aged 90+. For the second time, we also published a report with data being developed for single year of age population estimates for those aged over 90 for council areas in Scotland. The [report and data](#) are available on our website.

We are going to send out a survey in the near future to PAMS members to assess how the sub-national publication is used. If you are using these estimates or thinking about using them then we would greatly appreciate it if you respond to the survey.

9. Other research and improvement work

We are also continuing to improve our estimates through a range of work including:

- Internal Migration, including comparing address 12 months ago information from the 2011 Census with our migration estimates. This work was completed but will need to be updated to use the corrected population estimates. We will aim to publish the paper on our website by the end of the year.
- Explore the Higher Education Statistics Agency (HESA) data and how it can improve our estimates of student migration and continue to pursue additional data sources to improve our estimates. This work was on hold whilst we corrected our population estimates and we need to upgrade a migration processing system to take account of changes in data supply before this work can start.
- Review the methodology and processes used to create population estimates of settlements and localities. This work was on hold whilst we corrected our population estimates and will now be taken forward next year.

10. Improving our dissemination: infographics and data visualisation

With other teams in NRS we have continued to develop new infographics and data visualisations for our releases, including two interactive visualisations for the sub-national population projections: [population pyramids](#) and [population variant projections](#).

We will be continuing to develop these visual summaries and interactive content as we go forward. We have also continued to make use of Twitter and have tweeted links to news releases, infographics and key messages on the days we release statistics.

Follow us on Twitter: @NatRecordsScot | <http://twitter.com/NatRecordsScot>

11. Update on development of statistics.gov.scot

Gregor Boyd from the Scottish Government's Office of the Chief Statistician and Strategic Analysis will attend the meeting to provide an update on development of the statistics.gov.scot website and request any feedback and comments from the PAMS Committee. Please refer to the separate PAMS paper for more details.

12. UK Statistics Authority Assessment

The UK Statistics Authority have designated our Population Statistics as National Statistics and the letter of designation is now on the UK statistics authority website.

The full assessment report can be found on the [UK Statistics Authority website](#).

NRS Population and Migration Statistics branch
8 November 2016