

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. PAMS 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 anything covered in this paper will also be very welcome to esta.clark@NRScotland.gov.uk.

PAMS members are invited to provide feedback either at the meeting or in a subsequent e-mail on:-

- How our statistics are used and what impact they have;
- The publications and work we have planned;
- Our plans for the sub-national population projections;
- Our other projects and work.
- Whether a meeting of the Projections Sub-Group would be useful in May/June to discuss the new Sub-national projections methodology or if comments by correspondence on a paper with the methodology and the impact of the changes using the 2012-based projections would be sufficient.

2. Staffing

There have been a number of changes within the team.

- Three new people have joined the team since the last PAMS meeting, Huw Landrock (Mid-Year estimates), William Howes (Centenarians, Electoral statistics, Sub-Council Area Projections) and Maya Clayton (Small Area Population Estimates).
- Gail Sinclair and Angela Adams both left the team at the end of March 2016.

3. Publications

Publications since the last PAMS meeting:-

- Office for National Statistics (ONS) publication: Quarterly Migration report – including International Migration for Scotland for calendar year 2014 (26 November 2015);
- Local Area Migration spread sheet update (26 November 2015);
- National Population Projections Scotland, additional variants (26 November 2015)
- Small Area Population Estimates for Mid-2014 for 2001 Data Zones (3 December 2015);
- 2012-based Sub-Council Area Population and Household Projections (23 March 2016);
- 2015 Mid-year population estimates and corrected 2012, 2013 and 2014 mid-year population estimates for Scotland, Councils and NHS Board areas (28 April 2016);

Future publications:-

- Sub-national Population Projections for Scottish Areas 2014-based (July 2016);
- Total Migration to and from an Area, 2015 update, including revised migration estimates for 2012, 2013 and 2014 (July 2016);
- Local Area Migration spreadsheet update for 2015 (July 2016);
- 2015 Small Area Population Estimates (SAPE) and corrected 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 (RG's) Annual Report (August 2016);
- Three chapters for the Registrar General's Annual Report (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);
- Life Expectancy for Scottish Areas 2013-2015 (October 2016);
- Small Area Population Estimates for 2011 Data Zones for 2001 to 2010 (Spring 2017)
- Settlement and Locality Population Estimates Mid-2014 or Mid-2015 (March 2017 To Be Confirmed (TBC))

4. Mid-Year Population Estimates

We published the 2015-Mid Year Estimate on 28 April and we also corrected the Mid-2012, 2013 and 2014 population estimates for the errors which mainly affected the age distributions for the mid-year population estimates for Scotland, councils and NHS Board estimates on the same day. More information about the errors and the approach we took to correct them can be found in the [Population section](#) of the National Records of Scotland (NRS) website and in papers [PAMS \(15\) 17](#) and [PAMS \(15\) 18](#). Corrections to 2011 Data Zone population estimates for 2012, 2013 and 2014 will follow in August 2016. We do not plan to correct the small area population estimates for 2001 Data Zones.

For mid-2015 onwards an improved method for estimating internal migration within the UK has been introduced. We are now using a direct extract of anonymised records from the NHS Central Register (NHSCR) to calculate the migration at a NHS board level. This improvement, the first stage of further planned improvements, has been accelerated due to the implementation of the April 2014 NHS Board area boundary changes on the NHSCR system. Internal migration information for the 2014 mid-year population estimates was not affected by changes in board area boundaries and the methodology used for mid-2014 and years prior to mid-2014 is detailed in the [Mid-Year Population Estimates for Scotland: Methodology Guide 2014](#) on the NRS website. Information about the impact of the boundary changes compared with our previous migration data source is contained in Annex A of [Paper 4 PAMS \(14\) 16](#) from the November 2014 meeting of the Population and Migration Statistics Committee (PAMS). The improvements made to the methodology, the data source from NHSCR and the impacts of these changes are detailed in [Paper 10 PAMS \(15\) 10](#) from the May 2015 meeting of the Population and Migration Statistics Committee (PAMS), available on the NRS website.

The improved methodology has had a small impact on both the within Scotland migration estimates and the in-migration from the rest of the UK. It has resulted in a slightly lower net

migration gain from the rest of the UK. If this method had been implemented for the years to mid-2013 and mid-2014 there would have been approximately 1,500 (3.1 per cent) and 1,800 (3.6 per cent) fewer rest of UK to Scotland moves estimated for these years. We have investigated these differences extensively and have no reason to suspect that we are missing genuine rest of UK to Scotland moves. Further information on this in relation to the year to mid-2013 is detailed in [Paper 10 PAMS \(15\) 10](#) from the May 2015 meeting of the Population and Migration Statistics Committee (PAMS).

5. Population Projections Scotland

The 2014-based projections for Scotland were published in October 2015. In late 2015 ONS consulted on a number of proposals including whether the national population projections should be carried out every three years instead of every two. ONS have now published their [UK Statistics Authority business plan April 2016 to March 2020](#) and due to feedback from users will continue to publish population projections every two years. This means that NRS will continue to publish national and sub-national population projections every two years.

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

2014-based Sub-National Population Projections for Administrative areas within Scotland are currently planned to be published in July 2016. We have now finished coding the new SAS system and have almost finished testing it. We have run 2012-based projections, principal and variants and are currently quality assuring the results. We are aiming to write out shortly with a paper comparing the results from the new method with the published results for the 2012-based projections to get some feedback on any differences. After that we will be writing to council, NHS Board Chief Executives and PAMS Local Authority (LA) side members in May/June with proposals for the international migration assumptions for council areas in Scotland and we will also include more information on how cross-border and within Scotland migration rate assumptions will be set. We were planning to hold the next meeting of the Projections Sub-Group to discuss the impact of the change in method. **PAMS members are invited to say whether a meeting would be useful in May/June or if comments by correspondence on a paper with the methodology and the impact of the changes using the 2012-based projections would be sufficient.**

7. Sub-council area population and household projections

Thank you to everyone who helped us to quality assure the 2012-based sub-council area population and household projections and to those who came to the seminar on 23 March. The report can be found on our website as well as the slides from the event. 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, if we were to repeat the work we would need to secure funding to do so. Feedback at the launch event and since publication has been really positive. If you have used these projections we would really like to hear from you. We will be sending out a short survey in about five months time to find out how they are being used and how useful they have been, but please don't wait until then to get in touch with us. We are also very happy to come and speak at events or to teams/areas about the projections if that would be helpful.

8. Centenarians and estimates for the population aged 90+

On 30 September alongside Centenarians and population estimates for those aged 90+ we published a new 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 and we welcome comments on the methods and results.

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 in September 2016.
- 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.

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 a [new infographic supplement](#) for the national population 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. UK Statistics Authority Assessment

The UK Statistics Authority have designated our Population Statistics as National Statistics subject to meeting the requirements.

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

We have met most of the requirements and are in the process of finishing the remaining requirements in order to meet the June assessment board meeting. Our progress on meeting the requirements is available in Annex A to this paper.

NRS Population and Migration Statistics branch
4 May 2016

Assessment Action Plan update

National Records of Scotland

[Assessment Report 311](#)

1. Background

On 30th July 2015, the UK Statistics Authority published a report on the Assessment of compliance with the Code of Practice for Official Statistics for Population Estimates and Projections for Scotland ([Assessment report 311](#)). This report forms part of a broader assessment of population statistics across the UK that are produced by the Office for National Statistics (ONS); the Welsh Government; Northern Ireland Statistics and Research Agency (NISRA) and National Records of Scotland (NRS). The previous assessment of these sets of statistics was included in Assessment report 113.

The UK Statistics Authority confirms that the population statistics for Scotland are designated as National Statistics, subject to NRS implementing five specific requirements. This paper provides an update on how NRS is addressing each of these Requirements. The UK Statistics Authority also made nine suggestions and this paper details how NRS are taking on board these suggestions.

2. Progress on meeting requirements and suggestions

Requirement	Producer response
<p>Requirement 1: Review the resources allocated to the production of these statistics, and the impact of its reliance of staff on fixed term contracts, to ensure that resources are sufficient to meet the standards of the <i>Code of Practice</i> and the obligation within it to serve the public good and publish the outcome of its review (para 3.5).</p>	<p>Considerable improvements were made to the recent advertising and recruitment process for the Scottish Government (SG)/NRS assistant statisticians resulting in all permanent post vacancies being filled. Government austerity measures mean that NRS cannot commit to all posts being filled by permanent staff; some posts are filled by fixed term appointees. The Scottish Government recently recruited permanent staff and from the end of February the Population and Migration Statistics team will only have one team member on a fixed term contract.</p> <p>The UK Statistics Authority have asked us to publish this review on our website which we will do by the end of May.</p>

<p>Requirement 2: Review its Statement of Administrative Sources (SoAS) to ensure that all the administrative data sources used to produce its population estimates and projections statistics: a) are clearly and accurately listed b) include appropriate descriptions of the quality assurance processes (para 3.6).</p>	<p>The NRS SoAS (Excel) has been reviewed, updated and published on our website at the following location: .</p>
<p>Requirement 3: Reference, or link to, relevant information about data assurance arrangements for administrative data from all population estimates and projections reports and the population statistics section of its website, taking into consideration the Authority's <i>Administrative Data Quality Assurance Toolkit</i>, including: a) vital events documentation about the quality assurance of births and deaths data b) quality assurance procedures between NRS and NHS Central Register c) 2021 Census research documentation about the quality of the administrative data sources used in the production of the population estimates (para 3.13).</p>	<p>We now have a paper on the NRS website which brings together information on the quality assurance arrangements for administrative data (PDF) used in population estimates. This paper is linked to from the Population Estimates and Population Projections sections of our website. Going forward it will also be linked to from future population related publications. Recent publications of population estimates and population projections link to the same information from the notes and definitions sections in the publications.</p> <p>The UK Statistics Authority have asked us to add more detail to the paper, summarising some of the key points from the various papers into the summary document. We aim to do this by the end of May 2016.</p>
<p>Requirement 4: Review and update quality documentation about <i>Centenarians in Scotland</i>, including information about: a) quality assurance procedures that are made on the data b) strengths and limitations of the data (para 3.17).</p>	<p>We have published a methodology document (PDF) to meet this requirement on our website at the following location: .</p>

<p>Requirement 5: a) ensure that the remaining comparison document on the population estimates and projections produced in all countries in the UK is updated and published as planned b) carry out, and publish, a review of the methodological and comparability differences and, based on knowledge of the uses of the statistics and expert input, evaluate whether the differences are justifiable</p> <p>As part of meeting this Requirement, NRS should work together with ONS, the Welsh Government and NISRA. (para 3.21).</p>	<p>a) The paper has been updated and published on the ONS website which we link to from the Sub-National Population Projections section on the NRS website.</p> <p>b) The review has been carried out. The paper will be published on the ONS website in due course, once feedback from the UK Statistics Authority has been included. The paper will then be linked to from the NRS website.</p>
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Suggestion	Producer response
1. Reference, or link to, information about the UK strategy groups on population statistics from its website (para 3.1).	These are now linked to from User Consultations, Groups and Seminars section on the NRS website.
2. Work closely with statistical producers in ONS, Welsh Government and NISRA to clarify data assurance arrangements for administrative data (para 3.14).	NRS will work with colleagues in the Welsh Government (WG), NISRA and ONS to ensure any differences in data sources or methods are reviewed routinely and continue to be justified. These issues will also be addressed in the comparison papers discussed under Requirement 5a.
3. Develop a process map to illustrate the supply of data used to produce the various population statistics that are included in this Assessment (para 3.14).	Not produced as yet due to other work taking priority.
4. Produce the quality assurance tool for comparing different data sources of population estimates on a more regular basis (para 3.18).	To be considered when it is possible to publish more comparator data. At the moment limited data is available to publish.
5. Add a link to the Scottish Government Revisions Policy from all the population estimates and projections statistical reports (para 3.24).	Done. A link has now been added to the back page of all NRS Demographic Statistics publications.

<p>6. Reference, or link to, the UK Population Revisions Policy from each 'About this publication' document and the population estimates and projections statistical reports(para 3.24).</p>	<p>Done. This is now linked to from all About this publication documents referring to population estimates and projections .</p>
<p>7. Consider the points detailed in annex 1 and annex 2 in order to enhance the statistical reports (para 3.25).</p>	<p>Done. These points have been considered as each publication has been updated.</p>
<p>8. Publish maps for settlements and localities in more-accessible ways (para 3.27).</p>	<p>Currently Shape files are provided on the NRS website along with a link to download free GIS software to allow users to look at the boundaries for these areas. It would not be practical to publish pdf documents with the boundaries for all these areas, given priorities for other outputs.</p>
<p>9. Review the <i>Statement of Compliance with the National Statistics Code of Practice and Protocols</i> and update where necessary (para3.29).</p>	<p>Done. We have published an updated version on the data access and confidentiality page of our website.</p>

Comments on the progress we have made to meet the requirements and suggestions are welcome.

NRS Population and Migration Statistics
4 May 2016