

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

### Population and Migration Statistics Update

#### Introduction

This paper summarises the recent work on population statistics. PAMS is asked to note the paper and other comments. Written comments will also be welcome to [esta.clark@gro-scotland.gsi.gov.uk](mailto:esta.clark@gro-scotland.gsi.gov.uk).

#### Staffing

A number of staffing changes have taken place since the last meeting. Kylie Hill, Martin Devine and Paul Gona all joined in October, moving from elsewhere in the Scottish Government, along with external recruits Michael Hunter and Luke Main. Our newest member, Ronan O'Kelly, joined in February to work on sub-national population projection methodology for 11 months.

#### Publications

Publications since the last PAMS meeting are:-

- Centenarians, 2002-2011, based on the 2001 Census (11 October 2012);
- Quarterly migration release (29 November 2012).

Future publications, draft timetable:-

- Mid-2011 and Mid-2012 Population Estimates, based on the 2011 Census and reconciliation report (June/July 2013);
- Migration tables for mid 2011-2012 (July/August 2013);
- Re-basing of population and migration estimates at Scotland, Council and NHS board area (October/November 2013);
- 2012-based National Population Projections for Scotland (October/November 2013);
- Small Area Population Estimates for 2011 and 2012, old data zones (November/December 2013)
- 2012-based Sub-National Population Projections for Council and NHS Board areas (Spring 2014).
- 2012-based SDP and NP Population Projections (Summer 2014);
- Life Expectancy, Council and NHS Board areas 2010-2012 (Spring 2014)
- 2011 and 2012 Small Area Population Estimates – new data zones (Spring 2014);
- Re-based Small Area Population Estimates (late 2014) – new data zones, old data zones if possible depending on resource.

#### Format of 2011 and 2012 mid-year estimates publication

We plan to publish a joint bulletin combining the commentary on mid-year estimates rolled forward from the 2011 Census for 2011 and 2012. In this publication we intend to place emphasis on the changes which have occurred since Census day and between mid-2011 and

mid-2012 rather than the longer time series, since we are yet to re-base the previous series. We

propose that where graphs included show a long term trend the 2002-2010 section is represented by a dotted line. We propose to release a full set of web tables for each year, and include tables for both years in the back of the commentary publication, however, due to the increased number of pages this will represent, the single year of age tables would only be made available in Excel. At this stage we would flag up on the previously published web pages for 2002 to 2011 that they have been superseded and that revisions will follow in due course.

We would be grateful for your comments and suggestions on the format of this publication.

### **Reconciliation between the Census and Mid-year estimates**

Alongside the publication of the 2011 and 2012 mid-year estimates we plan to publish a report looking at the differences between the Census results and our rolled-forward estimates. This will attempt to break down the amount of difference that can be attributed to different components of the rolling-forward process and so feed into the work to rebase our 2001 to 2011 time series and improvements in our methodology.

### **Proposed changes to mid-year estimate methodology**

As part of the work assessing the success in capturing population change since the last census we will be looking at ways to improve our methods of rolling-forward and applying these to the 2011-based estimates. A separate paper has been submitted on the distribution of international migrants; this will not affect the total migration to Scotland but will affect sub-national estimates and age and sex distributions. We are also looking at whether small adjustments are needed in respect of changes in 'special populations', the armed forces and prisons and ensuring that these are treated consistently in the base population at census day and future points. We would welcome the views of the group.

### **Rebasing the mid-year estimates**

Following on from the new mid-year estimates and reconciliation work we will be preparing a rebased population estimate series back to 2002, initially at Council area and NHS board level. This will take into account the findings of the reconciliation work.

### **Population Projections (2012-based)**

The National Population Projections (NPPs) are due to be published by ONS in October/November 2013. Work has started to look at the assumption setting process and the UK Expert meeting is taking place on 19<sup>th</sup> April. We will be organising a Scottish expert meeting for June/July.

Progress on implementing changes to the national migration assumption setting process by ONS has been good. They are modelling international migration in and out flows separately as well as each cross border flow. They are also implementing the use of a variant of the Rogers Curve to smooth the age distributions. The modelling of the migration rates for cross-border flows and international emigration at an overall level has been successful, however breaking

them down to age/sex specific rates has been more problematic. They have tried several approaches and have been in discussion with Jakub Bijak from the ESRC Centre for Population Change (CPC) and with methodology colleagues at ONS but do not yet have a satisfactory solution that is compatible with their projections system. The NPP Committee has therefore agreed that ONS do not move to rates for the 2012-based NPPs, but that they will continue to work towards introducing rates in the future through further research and redevelopment of the projections processing system. ONS will therefore be modelling international emigration and cross-border flows as volumes in a similar way to the way they are modelling immigration.

In NRS, we will be reviewing the methods and software used in producing the Sub-National Populations for Scotland (SNPPs). We are investigating whether our existing methodology/system for the SNPPs can be adjusted to cope with the changes being introduced at the national level, or if a new method/system is needed. We will update you regularly on progress, consult you on options and your views and hopefully by the end of 2013 a new/updated sub-national projection system will be in place.

We plan to consult on the 2012-based sub-national migration assumptions in November/December 2013 with the SNPPs being published in Spring 2014.

### **Census Quality Assurance**

We are continuing to help our colleagues in Census division with the quality assurance of the 2011 Census.

***Views from PAMS on any of the above points are welcome.***

NRS: Population & Migration Statistics Branch  
27 March 2013