

Population And Migration Statistics Committee (Scotland)

Quality Assurance of Census Data

The main stages of quality assurance of Census data will be:

- (1) Quality assurance of captured and coded data (May 2011 – October 2011).
- (2) Quality assurance of downstream (DSP) processes currently being developed (August 2009 – April 2011).
- (3) Quality assurance of population counts at Local Authority level during live running of DSP (October 2011 – August 2012).
- (4) Detailed demographic quality assurance at other levels of geography, quality assurance of variable distributions and other checks (August 2012 – December 2012).

Item (1) will involve sampling of capture and coding and the first step of DSP, load and validation.

Item (2) is already underway and DSP processes are being quality assured using rehearsal data as they are completed.

The Data Quality Management System will be used for items (3) and (4) to allow effort to be focussed on the largest discrepancies from comparators. For item (3), analysis will take place at Local Authority level with the ability to drill down to lower levels where necessary. The analyses currently planned in item (3) are:

- Mapping of population densities in ArcGIS and investigation at postcode level of unusual results (e.g. high densities in rural areas).
- Comparisons of population figures at LA level with 2001 Census, population estimates, National Health Service Central Register (NHSCR) and appropriate additional data supplied by Local Authorities.
- Comparison of age/sex ratios with 2001 Census, population estimates, NHSCR, Local Authority data and the Scottish Longitudinal Study.
- Use of registration data, pensions data, child benefits data, Schools Census data, Higher Education Students data and migrant data to investigate population counts and age/sex ratios.
- Use of household level data (e.g. Assessors' Portal and Council Tax data) to investigate household counts and household sizes for imputed and non imputed households and people.
- Other comparator sources are also currently being investigated.

This analysis will be challenging as it may be difficult to determine in many cases whether discrepancies are due to Census data quality issues or the accuracy of

comparator sources. However, it should be possible to discover and investigate major discrepancies. Item (3) will be carried out before the population counts are released. As coverage adjustment is applied at the Local Authority level, these counts will not be affected by any lower level adjustments required in item (4).

Item (4) will be carried out after output areas have been assigned and will involve checks on the coverage imputation at lower levels of geography and detailed variable checks.

Local Authority Involvement

It is being proposed that a working group could be set up involving the General Register Office for Scotland (GROS) and Local Authority representatives to address the following aims:

- To inform Local Authorities about data processing and quality assurance.
- To consider other comparator data sets, particularly those held by Local Authorities.
- To gain knowledge of local issues in preparation for data quality assurance and for investigation of anomalies.

There has already been some interest expressed in this from Local Authorities. This working group could investigate comparator sources and local issues and consider how discrepancies may be investigated. This working group would also provide an opportunity for GROS to inform Local Authorities on downstream processing and progress with quality assurance.

Your comments are invited on whether this would be a useful working group and how the members could best be identified.

For those Local Authorities not represented on the working group, a contact could be identified to provide comparator sources that have been suggested by the working group and to advise on local issues during live quality assurance.

Your comments are invited on this approach and how these contacts may be identified.

Please select "Customer Services – Statistics" from the drop-down menu on the General Register Office for Scotland (GROS) website [Contact Form](#).