

## POPULATION AND MIGRATION STATISTICS (PAMS) COMMITTEE (SCOTLAND)

### Census Geography

1. This paper provides an update on work being done in relation to output geographies for the 2011 Census.

PAMS members are invited to note its contents.

Written comments will also be welcome to [sandy.taylor@gros-scotland.gsi.gov.uk](mailto:sandy.taylor@gros-scotland.gsi.gov.uk)

2. Paper PAMS (09) 11, tabled at the May 2009 meeting, set out a range of issues relating to geographies for the statistical outputs from the 2011 Census. Since then the Census Outputs Geography Working Group has met twice (in August 2009 and May 2010) to review these and to discuss other relevant issues.
3. In the spring of this year, General Register Office for Scotland (GROS) ran a formal 12-week consultation with census users about its initial plans for the statistical outputs from the 2011 Census. This included four specific consultation points in relation to geography issues. Details of these points, together with a summary of user responses and a GROS commentary, are included as an annex to this paper.
4. A separate consultation is currently being run by the Scottish Government in relation to the data zone geography used for Scottish Neighbourhood Statistics. As part of this consultation, which is due to conclude in November, users have been asked if there are specific 2001 Census output areas (OAs) which should be considered as potential candidates for redesign when the OAs for the 2011 Census are created. As a minimum, users were asked to provide for each relevant OA, the 2001 OA code together with an explanation of its design limitations and the statistical benefits that would result from realigning its boundary.
5. Work to develop the IT system that will be used to create the census output areas for the 2011 Census continues. On current plans it is hoped to complete work on the system by the end of this year ready for it to be put into testing early in 2011. The actual creation of the output areas will take place as part of census downstream processing once postcode level counts of people and households are available (provisionally in August 2012).
6. Discussions have been taking place with GROS Demography colleagues about statistics in relation to settlements and localities, and on the need for any consultation about the boundaries of these. Further details on this is provided in a separate paper.

**GROS Census Outputs  
October 2010**

**Annex – extract from draft analysis of responses to the GROS spring 2010 consultation about statistical outputs from the 2011 Census**

**Consultation Point 5: do you foresee any disadvantages with the proposed general approach to geography described for 2011 Census outputs?**

**User Response**

Twenty-three responses were received on this consultation point, with the great majority (over 85 per cent) supporting the proposition that the approach taken to census output geography for the 2001 Census had worked well and so should be retained for the 2011 Census.

Similarly, there were many comments emphasising the importance of maintaining comparability with the range of higher geographies produced for the 2001 Census.

Strong requirement noted for a postcode to output area index so that the core headcounts for both postcode and administrative geographies can be created.

**GROS commentary**

GROS will repeat the general approach taken in the 2001 Census for output geographies. Output areas will continue to form the building bricks for census outputs for all higher geographies - they will be created to be of similar size and threshold to 2001 with as high a degree of comparability as possible to the set of 2001 Output Areas. Some output areas may have to be merged (where they have dipped below confidentiality thresholds), while others may have to be split (e.g. when new housing has taken them above maximum thresholds). Changes since 2001 in local authority and locality boundaries will also need to be taken into account.

**Consultation Point 6: are there any additional intermediate geographies for which you would like to have pre-defined census outputs available, and why? Are any of the existing intermediate geographies no longer useful to you?**

## User Response

Thirty-three responses were provided on this consultation point.

A strong requirement was noted for:

- Scottish Neighbourhood Statistics datazones – to allow census data and non-census data to be more easily used in combination on a common geography.
- Community Health Care Partnership level – mentioned as a key geography for health improvement and for local health care.
- Multi-member wards - and the higher geographies derived from these, including neighbourhood partnerships, neighbourhood management areas, community planning areas, Westminster & Scottish Parliamentary constituencies.

Some requirement was noted for:

- User-defined intermediate geographies, e.g. school catchment areas and LAs \*excluding\* areas within a National Park (because some LA functions are carried out by the relevant National Park Authority).
- Geographies available on the Scottish Neighbourhood Statistics (SNS) website e.g: Nomenclature of Units for Territorial Statistics (NUTS), Local Enterprise Company (LEC's).

A limited requirement was noted for:

- Civil parishes
- settlements and localities
- postcode sectors
- 2001 wards
- inhabited islands.

## GROS commentary

GROS aims to accommodate user needs for census output intermediate geographies as far as is possible. It is therefore proposed to provide standard census outputs for all the intermediate geographies produced for the 2001 Census, apart from 2001 wards (to avoid the potential confusion with multi-member wards). The issue of disclosure through differencing will also be monitored and taken into account. It is hoped that the new census outputs dissemination system will also have the functionality to allow users to create and save their own output geographies (from aggregations of census output areas).

**Consultation Point 7: subject to its feasibility, would you find value in having available a small area geography for reporting workplace data, and why?****User Response**

There were 26 responses on this consultation point. (It has been assumed that the remaining 17 respondents who did not provide a response found no value or were neutral about having this type of additional output geography available.)

The strongest interest for having this type of output geography available came from business and commercial respondents, together with a few from local and central government. Other respondents either saw some advantages in having a separate workplace geography but did not view it as essential, or felt it was not particularly relevant to their needs.

The potential uses cited by respondents in favour of an outputs geography based on workplace included generating workplace profiles, drive time and travel pattern analysis, understanding where employment opportunities are taken up and by whom, planning workplace-based health improvement and spatial planning in general.

**GROS commentary**

The demand for an output geography based on workplace appears to be strongest from the business and commercial sector, who are mainly also likely to be users of UK-wide census data. As Office for National Statistics (ONS) is looking into the feasibility of developing a workplace geography for England and Wales, this is therefore something that GROS intends to pursue in the context of UK census outputs. The costs and feasibility of creating such a geography for Scotland will have to be considered against other priorities.

**Consultation Point 8: please note any other specific requirements you have in relation to geographical issues for census outputs?****User Response**

Fourteen responses were received on this consultation point.

There was a very high demand, particularly from local and central government respondents, for any census outputs dissemination system to allow users to customise and save for re-use new geographies. In addition, it was suggested that an interactive mapping tool be provided which could be used by users to specify boundaries of interest to them and which would have built-in disclosure checking to reflect the detail of data that could be made available for different levels of geography.

There was a suggestion that a means be provided to allow users to sub-divide output area level data on a ratio or percentage basis where the output area boundaries did not match exactly with users' own small area geographies.

Some respondents asked that local authorities and other expert users be given the opportunity to comment on any design limitations of individual output areas which were included in the set created for the 2001 Census.

There was a request that shape files be provided in advance of, or in conjunction with, census data releases to allow immediate mapping of the data using GIS software.

**GROS commentary**

There is clearly high demand from users for functionality within any census outputs dissemination system to allow them to create and save their own geographies. This is therefore something we would aim to provide if at all possible. An improved mapping tool was included as a requirement for the software tools currently being procured to build the 2011 Census outputs dissemination system.

The request for a means of sub-dividing output area level data on a ratio or percentage basis has been noted but is still to be considered in detail. At this stage this is unlikely to be a priority area for development.

The consultation currently being run by Scottish Government in relation to Scottish Neighbourhood Statistics datazones includes a consultation point asking users to identify any of the 2001 Census output areas which they feel have design limitations (and which could therefore be taken into account in the creation of output areas for the 2011 Census).

The feasibility of providing shape files along with census data releases will be discussed with GROS Geography colleagues.