Census geography: output areas and super outputs areas

Census Output Areas (OAs) and Super Output Areas (SOAs) are geographical areas developed from Census 2001 information. OAs are the smallest unit, covering around 125 households. SOAs are built from groups of OAs and replace the previously used electoral ward/divisions as the standard geographic hierarchy for reporting small area statistics in England and Wales.

The advantage of OAs and SOAs is that they do not have some of the key drawbacks associated with Electoral wards/divisions, which vary greatly in population size. This results in disclosure issues where the confidentiality of individuals needs to be protected. They are also subject to regular boundary changes, creating problems when comparing datasets from different time periods.

Census Output Areas (COAs)

- COAs consist of ~125 households and have a population of ~300.
- COAs therefore vary greatly in size and shape between urban and rural regions, for example a single tower block may consist of more than one COA, whereas a large area of remote moorland may be covered by a single COA.

SOAs come in 3 layers (Lower, Middle and Upper), each of which are consistent in size and whose boundaries will not change:

- Lower Layer SOAs are built of OAs, typically 5, and so contain ~625 households or a mean population of ~1500, with a minimum population of 1000. There are 34,378 Lower Layer SOAs in England and Wales (32,482 in England, 1896 in Wales).
- Middle Layer SOAs are built from groups of Lower Layer SOAs and have a mean population of 7200, and a minimum population of 5000. They are constrained by the 2003 local authority boundaries used for 2001 Census outputs. There are 7193 Middle Layer SOAs in England and Wales (6780 in England, 413 in Wales).
- Upper Layer SOAs have yet been created for England, as there is currently no demand for them.

Scotland and Northern Ireland have established their own similar areas. In Scotland there are two layers equivalent to SOAs: 'data zones', and the 'intermediate geography', There are 6505 data zones with 500 -1000 residents and 1235 intermediate zones with 2,500 – 6,000 residents. The Northern Irish equivalent is also called 'Super Output Areas'. There are 890 Northern Irish SOAs of size 1,300-2.800 residents.