



Advisory Group Paper AG (04) 06

**CONSULTATIONS WITH USERS ON POPULATION DEFINITIONS FOR
THE 2011 CENSUS: SUMMARY AND ANALYSES OF WRITTEN
RESPONSES**

Fourth Draft

Introduction

1. The issue of population bases is fundamental to population statistics and has important implications for the design and delivery of data collection exercises as it determines the nature and type of data obtained. In particular the choice of base for the 2011 Census enumeration must be informed by the needs of data users to ensure that relevant outputs can be produced. To stimulate a critical response from population statistics users, a consultation paper was placed on the ONS web-site in early June 2004, inviting written responses by late July 2004. This paper summarises the key responses of users in some detail, and distils the essential themes by analysing the submitted arguments.
2. In addition to placing the paper on the web-site, links were sent to a variety of key users within local authorities (LAs), central government departments and academia, inviting a written response to the paper. Colleagues in the General Record Office for Scotland (GROS) and Northern Ireland Statistics and Research Agency (NISRA) were also contacted. By 10 August 2004 a total of 33 written replies had been received: 17 from LAs and similar bodies; 10 from central government departments; five from academia; and one from the private sector. Whilst the detail in the responses varied from very brief to exceedingly lengthy and complex, all were informed by experience based upon use of data not only from the 2001 Census and, often earlier censuses too, but also from the annual mid-year population estimates. Accordingly, the breadth of experience inherent in these responses is high.
3. This paper summarises, separately, the responses among the four main user communities noted above, but also attempts a summary and analysis of the key common themes expressed by significant numbers of respondents. It is important to distinguish between comments relating to the population base to be used for census enumeration from those focused on the base to be used in output tables; respondents have commented on both, with their comments on the former intended to ensure the highest quality in the latter. Accordingly, this consultation response helps to inform the debate about the base or bases to be selected for output from the 2011 Census.
4. This consultation is part of a broader consultation process, starting with those that had already taken place by 2003. ONS has recently convened a working group of

key representatives from the population statistics/census user community, including some from within ONS, to address issues of population definitions. This group is being run jointly by Sources/Analysis and will also consider the implications for the 2011 Census. It is envisaged that the first meeting of this group will discuss the issue of population base(s) for 2011 in some detail, but that subsequent meetings will contribute to the consultation on the wider issues of question content.

5. ONS would like to take this opportunity to thank all the respondents to the consultation paper for the time taken to prepare their submissions and for the many helpful comments.

Local and Health Authority responses

6. A total of 17 written responses were obtained in this category; this included one comment each from an NHS trust, a National Park, a Regional Observatory and the Local Government Data Unit (LGDU) in Wales. Of the total, 16 were from England and Wales, and one from Scotland. The Scottish response was compiled on behalf of all of the Scottish local authorities, following general circulation of the consultation paper in Scotland. The sources are summarised at the end of the paper.
7. Whilst there was variation in the type and nature of detail in these responses, the broad thrust of comments was as follows:
 - (a) The census should be based upon a usually resident population, since this would best measure numbers locally requiring provision of education, housing and social services.
 - (b) The use of a population present (*de facto*) base alone would produce only a population that had occurred by chance on a particular day, rendering data on household composition (and thus relationships and living arrangements), migration and journey to work difficult to produce accurately, and also rendering intercensal estimates very difficult to achieve. It would also be incompatible with data obtained in 2001. However arguments in favour of population present but only as a secondary source are given below.
 - (c) The deficiencies in capturing certain hard-to-count groups in the 2001 Census need to be addressed by identifying each possible multi-address situation and producing a set of rules to cover these eventualities *within* the usually resident base. This would help to prevent individuals slipping through the census enumeration net, even if it means counting them more than once, although it would raise issues that require further thought within ONS. These rules include:
 - Students: primary need is at term-time addresses, though several respondents suggested that data might additionally be available for home addresses 'if possible', since many students spent a

significant time at their home addresses, and so were users of resources there;

- second homes (both weekend ‘retreats’ and accommodation near place of work ‘during the week’), including also holiday homes;
- overseas students, migrants and asylum seekers who do not think the Census applies to them;
- children of dissolved marriages ‘shared’ between parents;
- armed forces serving abroad, whilst their families remain at home; this also applies to offshore workers, and those working in industries such as overseas oil-production;
- retired people dividing their year between two or more locations, including outside the UK;
- those away from their usual residence for work purposes for part of the week, or for longer periods; and
- collection of usual address information for individuals away from their usual residence.

(d) The use of population present *in addition* to usually resident would permit utility companies, emergency services and some service providers to have a measure of maximum demand, and would additionally help to maximise response rates. In areas where tourism was important, it would also afford a one-off estimate of visitors, though this would only be for date of the census.

(e) The Census should be taken in term-time to ensure continuity with the mid-year estimates of students, which are based upon term-time address.

(f) Daytime population can be calculated partly via usual workplace from within the usually resident base. Additionally the use of travel to place of study (as in 2001 in Scotland) would supplement this measure of daytime population base. Respondents did not allude directly to the economically inactive population in calculation of daytime population.

(g) It was suggested that those wishing to evade ‘capture’ by the Census (for example out of concern for being detected as unlawful immigrants or unlawfully in receipt of welfare payments) would seek to avoid compliance *irrespective* of the population base(s) employed. Accordingly, ‘picking up’ this non-compliance is a coverage and compliance issue rather than one of underlying base methodology.

(h) Moreover it was noted that a population present base would record those genuinely without a ‘usual residence’, unless they wished to evade as in (g) above.

Responses from Central Government Departments and Agencies

8. There were a total of 10 responses in this broad category. Five were from central government departments; two were from the Scottish Executive and Welsh Assembly; two were from GROS and NISRA; one was from Education Learning Wales (ELWa). These are listed at the end of this paper.

9. Again, specific comments varied in terms of detail and perspective, but broadly the following issues were voiced:
- (a) Usual residence is the base of choice for outputted data.
 - (b) Outputted data on numbers of people working in an area was frequently required.
 - (c) Usually resident data should be collected for individuals/households and institutions. Whilst recognising the difficulties in 2001, the aim should be to improve on 2001, not to discard and start from a clean sheet.
 - (d) Further refinement to a working definition of usual residence is required and must include within the totals groups which are particularly hard-to-count:
 - students recorded at term-time address; also at home address too ‘if possible’
 - people with main home and a holiday residence;
 - people with a main home with a flat in town used in the working week;
 - children ‘shared’ between divorced/separated parents;
 - armed forces away from home;
 - retired people sharing two or more addresses over a year, including time abroad;
 - workers on contracts away from home; and
 - some young people with no permanent residence.
 - (e) Population present could be used too, and would provide indicators of likely maximum use of amenities in some local areas. However, sole use of population present would render data on household composition flawed and incomplete.
 - (f) A usual residence base would be most appropriate for projection work, and provide continuity with projections from the 2001 Census.
 - (g) If the 2011 Census is to be the last national census, then it might be replaced by a population register system, with a likely usual residence operational base. Accordingly, it would be sensible to continue the 2001 practice of using a usual residence base to achieve a longitudinal compatibility.

Responses from academia

10. The five written responses from academics were interesting in that all addressed the issues not primarily from the perspective of a narrower academic use of population data for research purposes, but rather chose to approach the issues from the perspective of wider public use. Accordingly, the body of evidence reinforces the views of the two other groups above. The list of academic contributors is given at the end of the paper. The key points were:

- (a) Output on the usually resident population was the most valuable and so sole use of population present as an enumeration base in data collection exercises would be unhelpful.
- (b) However, closer attention must be paid to developing questions that refine measurement of those living in more than one household during a week or a year. Groups identified as hard-to-count were very similar to those given above.
- (c) If population present is enumerated *in addition* to usual residence, then more permutations of useful data could be outputted. In effect this would be a return to the practice adopted in 1981 and 1991. For example, it would ‘pick up’ those away from their usual address and could ask them where that usual address is, whilst those with no usual address would be clearly identified. However the increased burden on respondents was not mentioned in this context.
- (d) There is a demand for outputted data measuring daytime population.
- (e) There was one dissenting voice who argued for a return to a population present base because of the growing difficulties of achieving “adequate explanation and population response to questions of usual residence”, which “the *de facto* base avoids”. This respondent argued that “the concept of ‘usual’ is often hard to interpret in relation to residence, travel to work etc”. Accordingly, unless these complexities could be overcome, “the *de facto* basis seems the most robust”. However, the commentator does not dwell on difficulties inherent with using population present solely at enumeration, nor does he attempt to provide a listing of possible definitional amendments to ‘sharpen’ the definition of ‘usual’ within a modern complex society. It should be stressed that this one response was the only one of the 33 received that overtly favoured sole use of the population present base.

Responses from the private sector

11. The sole response from the private sector was from an agency distributing census data to commercial users. This source is listed at the end of the paper. The view from this source was that the 2011 Census should be founded upon a usual residence base at enumeration, but that population present might be used also to compute ‘transient’ people who are not usually resident. Outputted data based upon usual residence were most important.

Are there any common themes evident from these responses?

12. The consensus reached is as follows:
 - (a) Usual residence is the key population base required for output; this is likely to have implications for the base at enumeration;

- (b) That by itself population present would fail to provide accurate data on household composition, migration, journey to work and resident population;
- (c) That similarly a return to population present as sole enumeration base in 2011 would render intercensal estimates more difficult and lead to incompatibilities with data obtained from 2001; moreover it would simply be unsatisfactory to a wide range of LA and central government users;
- (d) That deficiencies in recording certain hard-to-count groups in 2001 need to be addressed, e.g. by producing a set of rules to cover these eventualities *within* the usually resident enumeration base;
- (e) However, using population present *in addition* to usually resident at enumeration would allow imputations of those without usual residence, and additionally give indications of demand for services to those usually present in an area;
- (f) That student populations need to be recorded at term-time address, and that, if possible, also at home address;
- (g) That detection of those individuals wishing to evade the Census is an issue of coverage and compliance rather than one pertaining to choice of underlying enumeration base;
- (h) That data on working population is very important; and
- (i) That any future population register would probably operate under a usually resident system; accordingly, and particularly if it is to be the last, the Census in 2011 should do the same to ensure data compatibility during any transition period.

Analysis

13. The view predominates that there is almost universal support for outputted data to be based on usual residence for both individuals/households and for communal establishments. There is clear concern that data based upon population present would be inadequate, and incompatible with more recent censuses and mid-year estimates. However there are issues of defining usual residence more specifically to ensure better 'capture' of hard-to-count groups.
14. Respondents noted that visitors should be counted to provide data for areas where usually resident population is exceeded by total population present (i.e usually resident plus visitors), since there are clear resource implications locally. Students should be captured at their term-time addresses, though several respondents suggested that, if possible, they should also be recorded at their home addresses, since time was spent there and thus resources used.
15. Daytime population data was important to many respondents. Whilst many mentioned workplace data as a key to this, only one respondent cited journey to

study data (as used in Scotland in 2001) as relevant too, and no respondents mentioned directly the ‘economically inactive’ within the computation.

16. Those evading the Census do so for ulterior motives that are not affected by underlying population bases employed. This reinforces the strategy of the 2011 Census of ensuring that the best possible count is obtained.

Dr CW Smith
(25 August 2004)

References

1. ‘Consultations with users on population definitions for the 2011 Census’ (http://www.statistics.gov.uk/about/consultations/general_consultations/downloads/Population_definitions.pdf) (June 2004)

Sources

Responses to the above paper were obtained from the following sources:

(a) Local Authorities and Related

1. Cardiff Council
2. County Durham and Darlington Priority Services NHS Trust
3. Falkirk Council (also representing Scottish local authorities)
4. Greater London Authority (also representing local authorities on CLIP Census sub-group)
5. Hampshire County Council
6. Herefordshire County Council
7. Local Government Data Unit (Wales)
8. Manchester City Council
9. Merthyr Tydfil CBC
10. Milton Keynes Council
11. NERIP (Regional Observatory for the North-east of England)
12. Nottinghamshire County Council
13. Peak District National Park Authority
14. Suffolk County Council
15. Tees Valley JSU
16. Torfaen CBC
17. Worcestershire County Council

(b) Central Government and Related

18. Department for Education and Science
19. Education Learning Wales
20. General Register Office for Scotland

21. Department of Health
22. Home Office
23. Northern Ireland Statistics and Research Agency
24. Office of the Deputy Prime Minister
25. Scottish Executive
26. Department for Transport
27. Welsh Assembly Government

(c) Academic Responses

28. Professor Michael Anderson (Edinburgh University)
29. Professor Daniel Dorling (Sheffield University)
30. Professor Tony Champion (Newcastle University)
31. Professor David Martin (Co-ordinator ESRC/JISC Census Programme)
32. Dr Ludi Simpson (Manchester University)

(d) Private Sector

33. CACI