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## **ONE NUMBER CENSUS STEERING COMMITTEE**

### **Maximising coverage in the 2001 Census**

1. This paper seeks to place the research towards a One Number Census in the context of the broader work of the 2001 Census Programme. The Census Offices are building on the experience gained from the 1991 and earlier Censuses to develop an effective methodology for the 2001 Census. Obtaining the best possible Census coverage in 2001 is seen as the first step towards achieving a successful One Number Census.
2. **Members of the Steering Committee are asked to:**
  - a) **note this paper; and**
  - b) **to provide any comments at the forthcoming meeting, or in writing by 10 December 1997.**

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## **Maximising coverage in the 2001 Census**

**David Thorogood and Wayne Codd**

### **Introduction**

The One Number Census (ONC) project aims to measure the level of Census underenumeration in the most acceptable way, to provide a much clearer link between the Census counts and the population estimates and, if possible, to adjust all the Census counts (which means the database itself) for underenumeration. All counts will then add to 'One Number'. However, this does not detract from the need to achieve the best possible coverage in the Census. Maximising coverage in the Census is seen as the first step towards producing a successful ONC. High coverage in the Census is important in itself and to the accuracy of estimation of the undercount as illustrated in the papers on the design of the Census Coverage Survey and Capture-Recapture Estimation for the ONC (Steering Committee papers 97/10 and 97/12 respectively).

### **Experience in 1991**

Although a high level of coverage of nearly 98% was achieved in the 1991 Census, there was a problem with differential undercount whereby the underenumeration was not evenly distributed throughout the population (OPCS, 1994). The population sub-groups that suffered most from underenumeration were:

- Young adults aged 20-29 (6% nationally, 11% in inner cities and as high as 23% for young males in some inner cities);
- Those in converted or shared accommodation (11% net undercoverage);
- Infants under one year old (estimated at 3% nationally);
- Armed forces personnel and their dependants;
- Elderly women (around 6% for 85s and over); and
- Ethnic minorities in inner city areas.

The following factors may well have contributed to this undercount:

#### ***Students***

The Census was conducted during holiday time for some but not all students. This, together with the fact that they were treated as resident at their parents address, led to uncertainty over completion of the Census form and resulted in some students being missed completely.

### ***Resident six-month rule***

The rules adopted in 1991 implied that a person could only be treated as a resident at an address if they had been living there for at least six months. It is thought that this rather strict definition caused confusion, particularly amongst the elderly population who had recently moved into nursing and residential homes.

### ***Contacting households***

Buildings designed for single-occupancy but converted to contain a number of individual flats led to undercounting as enumerators did not realise that additional households occupied the dwelling. Purpose-built flats with entry phones also caused problems as contact could be difficult to establish.

Due to changes in society, it was more difficult in the 1991 Census than in the past for enumerators to make contact with someone in the household. For example, there was an increase in the number of one person households and households where both people were working.

## **Developments for 2001**

The priority for the development of the 2001 Census is to ensure that the maximum possible coverage is achieved, and in particular that the differential nature of any underenumeration is minimised. To this end, the methodology for carrying out the Census is being re-assessed; to reduce the burden on the public and to use resources to their best effect.

A major Census Test earlier in 1997 provided an opportunity to try out new ideas such as:

- the use of postal methods of delivering and collecting Census forms to allow enumerator resources to be redirected to follow-up non-returned forms in areas of poorest response; and
- new designs of the Census form with the aim of making it easier to complete for those households most susceptible to underenumeration.

In addition, the **population bases** for the Census - defined as the population which it is intended to count - have been reviewed. In particular, information will only be collected about residents from forms completed at their home address. In previous Censuses, information has also been collected from visitors to an address on Census night, to permit a count of the population 'present' on Census night. Census customers have indicated that this information is only used for long-term comparisons. Collecting information from some people twice - once where the person lives and once where they are on Census night - places an unnecessary burden on the public and may confuse them. It is also possible that this could lead to an undercount of residents if a visitor only completes a Census form at their Census night address, believing they have fulfilled their obligation. There was some evidence of this in the 1991 Census - the Census Validation Survey (CVS) (as the 1991 Post-Enumeration Survey (PES) was called) estimated a figure of 100,000 people living in Britain but only enumerated as visitors

(Heady *et al.*, 1994). Bearing in mind the propensity of the CVS to underestimate, the true figure may well have been higher.

The definitions of residence for subgroups of the population with more than one address - such as students, armed forces and long-distance commuters - have been reviewed. A principle has been adopted that the residence should in general be the address at which the person spends (or intends to spend) the majority of the time.

It is planned that the Publicity programme for 2001 should include liaison with community groups. Local contacts will be made to identify areas where difficulties might be expected. Local Authorities, the police, and community organisations will know about their local areas, patterns of ethnicity, and pockets of multi-occupancy, and therefore provide guidance as to where resources should be focused.

Despite these efforts, it is only realistic to expect there to be some degree of underenumeration. This has entailed a re-think of the design of the post enumeration survey and how this should be integrated with other measures of the undercount, provided by administrative records and demographic analysis. Other papers presented to the Steering Committee provide an overview of the methodology as currently envisaged.

## References

**Heady, P., Smith, S. and Avery, V.** (1994) *National and local demographic estimates*. Census Validation Survey: coverage report, pp 39-44, by OPCS (Social Surveys Division).

**OPCS** (1993) *Rebasing the annual population estimates*. Population Trends 73.

**OPCS** (1994) *Undercoverage in Great Britain*. 1991 Census User Guide 58.