

EXPLAINING THE NEW ESTIMATES FOR MANCHESTER

Introduction

New provisional population estimates for Manchester were published on 4 November 2003 that take account of findings to date from the Census Matching Project for Manchester. These amend the revised estimate for 2001 and the 2002 estimate that were published on 26 September. The provisional 2001 population estimate for Manchester is 418,600 and that for 2002 is 422,300.

The estimates for Greater Manchester, the North West Region, England, England and Wales and the UK have been amended as a consequence. All estimates are provisional in that they could be revised when the next population estimates are published in August 2004. These amended estimates are available from www.statistics.gov.uk/popest

Following release of the first results from the 2001 Census, in September 2002, ONS began a study to compare the addresses enumerated by the 2001 Census with those used for administrative purposes by Manchester City Council. Manchester had been identified in the Census Quality Assurance process as the local authority in England and Wales with the greatest difference between its Census-based population estimates and the administrative sources used in the QA process. See the description of QA Process from www.statistics.gov.uk/census2001/onc_qa/pdfs/Manchester.pdf At the time of release of the population estimates in 2002, the estimates for Manchester drew on all the information then available to ONS.

Manchester Matching Exercise

Both the Statistics Commission and the Local Government Association have recently published reviews which conclude that the methodology used in 2001 was the best available and no alternative approach would have produced more reliable results overall. However, there is greater uncertainty about the estimates in the most extreme of circumstances as identified by, for example, response rates or local authority sources. Where estimates have been at the boundary of the test criteria, particularly for the City of Manchester, we have lacked alternative sources, to corroborate or to substitute for the census processes. The difficulty of refining or increasing measures of reliability has made it hard to provide local authorities in these circumstances with the confidence that is increasingly a very necessary part of population measures. This has been recognised in the recent ONS report on 'A demographic service for the 21st century'. This reinforces the decision to carry out matching studies in Manchester and Westminster, and to assess the lessons for any other area, for alternative and less costly or demanding ways of doing this.

The Census Matching Project for Manchester has compared the address list collected by the 2001 Census with the administrative address lists held by Manchester City Council. The outcome of the exercise is that an estimated 14,000 addresses were missed in the Census enumeration. Details of how the matching exercise was conducted, the results and the range of uncertainties associated with those results are explained in www.statistics.gov.uk/downloads/theme_population/InterimReport_CensusMatching.pdf

Using information about the characteristics of households clustered near to the missed address it has been possible to make an estimate of the number, age and sex of people missed by the Census. The number of people missed from the Census is estimated at 24,500. There are uncertainties associated with this estimate because for example it has been necessary to make assumptions that addresses are a good proxy for households and that the characteristics of a household neighbouring a missed address are a good proxy for those of the missed address. Special action was taken on communal establishments. Where a communal establishment was in the cluster near to a missed address, an assessment was made on whether it was suitable to use as the "best fit" to for a missed address. Where this was not appropriate a next best nearby address was selected. The matching study has so far made assumptions about the relationship of person to households that we would like to corroborate

with field work, before accepting the wider applicability of the findings, or accepting them as the final, most precise population estimate that we can ultimately provide.

The age and sex profile of the missed people is shown in the table below



ONS will be following up the matching study in Manchester with further work to complete a fuller understanding of what has happened in Manchester and to conclude all that can practically be done to reduce the uncertainties associated with the estimates of missed people.

Amending the population estimates for Manchester

Although there are some uncertainties associated with the estimate of people missed, the evidence is that the Census estimate and hence the mid-year population estimates for 2001 and 2002 are too low. Therefore the population estimates for Manchester have been amended and labelled as provisional to reflect the uncertainties. Further work will seek to improve the precision of the estimated revision, but the estimate published now, as was the case in September 2002, is the best achievable estimate for Manchester with the information currently available to ONS. When all the matching studies and follow up work has been concluded, this may lead to further revisions in 2004; any further changes will be next released in a coherent package.

The provisional 2001 population estimate for Manchester is 418,600 and that for 2002 is 422,300. These estimates take into account the revisions to population estimates published on 26 September 2003. About 20,000 people have been added in 2001 and 22,000 in 2002 compared to the population estimates published on 26 September.

Future work plans

ONS will be carrying out more work before the Census Matching Project is regarded as complete. Following on from the two matching studies in Manchester and Westminster, we plan a later programme of work, as detailed in the table below.

Of this work that we have yet to carry out or conclude, in Stage 1, further work will be carried out in Manchester to reduce the uncertainty associated with the provisional results. The interim report describes some of the uncertainty. In addition, an assessment will be made of the impact of the change of definition between the 1991 and 2001 Census : in 2001 the Census counted the usually resident population whereas in 1991 all residents in the UK were counted. Work on the Westminster exercise is well underway. We chose matching as the initial method of evaluation because it was the most demanding means of comparing alternative estimates and, when fully completed, the studies will give a large amount of information which we hope will allow simpler methods of validation to be adopted. The concluding stages of the two matching studies will involve some fieldwork enabling on the ground comparisons of dwellings and households that has not yet been possible. This work will be completed before the studies are finalised. Publication of the overall report of the matching project is planned for Spring 2004.

Our analysis has identified two further authorities , Wandsworth and Middlesbrough, for which further work will begin while the current matching studies are being completed (Stage 2). Wandsworth, like Westminster, has a relatively high level of multi-occupied dwellings, a large number of vacant properties, and relatively high levels of difference compared with some (although not all) administrative sources. Middlesbrough had a relatively large population change, a large number of vacant properties, and low agreement with child benefit records (although not with other administrative sources)

The analysis which identified these two additional authorities was based on five criteria. We have compared the ranking of all 376 LA Districts in England and Wales using the following criteria, based on our published data:

- Size of reduction in population between 2000 and 2001
- Census response rates
- Comparisons with other sources (Council tax; electoral roll; patient registers; pensioners; child benefit; School Census)
- Estimated vacant households
- Number of multi-occupied addresses

This, and other assessments, including the results of the matching study and correspondence with local authorities, will inform our future work programme.

Medium-term plans

In the medium term, ONS will be taking forward actions identified through the study 'A demographic service for the 21st century' and improving estimates of international migration through implementing recommendations in the National Statistics Quality Review on International Migration.

From the beginning of 2004, ONS will initiate an annual series of local authority specific studies to identify where there are higher than usual risks that the ONS' population estimates might miss material

changes at a local level. This will cover a range of activities, some of which are described in Stage 3 in the table below. We will be selecting a small sample of areas each year from 2004 to 2006 in which to carry out further work using appropriately-designed methods. Rather, the proposed approach will enable us to extend not only our understanding of the conduct of the Census but also the quality of administrative data sources, in a range of types of area. Our aim is to improve the methods and data sources used in producing the population estimates in order to deliver more accurate estimates at the local authority level, and also increase knowledge of their reliability. The 'Stage 3' work will consist of two parts:

A) The analysis described above identified a small number of other local authorities which were among the 'outliers' on one or two of the criteria only and these are likely to be priority areas for study in 2004 (Stage 3A). ONS will be contacting those local authorities in the next two weeks.

B) Areas for further investigation in 2005-6 (Stage 3B) will be selected according to the analysis described above together with a random selection of other areas

In the longer term ONS are investigating ways of providing an intercensal population assessment that can independently corroborate the population estimates (Stage 4). The most practical time for this sort of survey is likely to be 2007. Looking even further ahead ONS has issued a consultation document setting out proposals for an integrated population statistics system that might be implemented from 2013 (Stage 5) . Details of this are linked here

<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=10784&Pos=&ColRank=1&Rank=422>

ONS future work plans for population estimates

Stage	Project	Milestones	Timing
Stage 1	Census matching project in Manchester and Westminster	Provision of revised estimate for Manchester Completion of Westminster matching work Fieldwork to compare dwellings, people and households within dwellings Study completed for publication	4 November 2003 Spring 2004
Stage 2	Census matching / fieldwork studies in Wandsworth and Middlesbrough	Preliminary design of population studies Carry out appropriately designed studies	Spring 2004 2004
Rolling programme	programme to improve future population estimates		
Stage 3A	2004 – Local Authorities selected according to current five criteria, plus any additional criteria arising from Stages 1 and 2 above.	Contact selected Local Authorities to discuss possible work with them Preliminary design of population studies Carry out appropriately designed studies	November 2003 Mid-2004 Late 2004
Stage 3B	2005 and 2006 – Small number of areas selected each year	Including both: - Some areas selected according to the criteria - Random selection of areas	2005-2006
Stage 4	Investigate ways of providing intercensal population assessment		2007
Stage 5	Work towards integrated population statistics system	Vision and first thoughts set out in consultation document Possible implementation	October 2003 2011 – 2013

In all of the above future work plans ONS will continue to work with local authorities and representative bodies such as the Local Government Association, with whom we will be discussing the Stage 2 and Stage 3 plans.

Looking further ahead, local authority involvement in the work leading up to the next Census is essential.