

Census 2001

One Number Census Quality Assurance information: Quality Assurance themes

Post-stratification

Problem

Part of the One Number Census (ONC) estimation strategy involved ensuring that the strata within which estimates were produced were as similar (internally homogenous) as possible in terms of their underenumeration characteristics. Within the ONC framework, the Hard to Count index (HtC) was used to partition the sample into groups that represent areas that were expected to have a similar level of underenumeration in the 2001 Census. More information on the derivation of this index can be found at www.statistics.gov.uk/census2001/pdfs/sc0015.pdf. This stratification was established prior to the 2001 Census and CCS using small area level 1991 Census data and made broad assumptions about the likely characteristics of underenumeration in 2001. For most of the Local Authorities in England and Wales, the pattern of underenumeration across the HtC index was as expected, with the highest levels of underenumeration in the hardest to count strata.

However, there were some areas where the QA panel noted that the derived HtC index may not have been a good predictor of underenumeration, particularly if the area had undergone significant urban regeneration. The concern was that this could potentially introduce bias into the ONC estimates for such areas. Under these circumstances the QA panel agreed that further investigative work should be done.

Actions

A contingency program had been developed as part of the ONC processing systems to address the possibility that the Hard to Count strata for estimation looked implausible. This post-

stratification program recalculated the HtC index using an identical methodology, but using 2001 Census data, and then re-estimated for an area using the new strata. Areas that were of particular concern to the QA panel were:

LAD code	LAD	EA code	EA
00BX	Knowsley	NV	Wirral & Knowsley
00BY	Liverpool	NU	Liverpool
00CB	Wirral	NV	Wirral & Knowsley
30UJ	Pendle	NJ	East Lancashire

Results

The post-stratification program was run for the areas noted as being of particular concern. Results showed that post-stratification had little effect on the ONC estimates for these areas. As a result the estimates produced from the post-stratification strategy did not replace the original ONC estimates.