

Independent Review of Coverage Assessment, Adjustment and Quality Assurance

Terms of Reference

Introduction

One of the recommendations from the recent London Regional Select Committee was the need for further independent assessment of the methodology to assess, adjust for coverage error in the 2011 Census and quality assure the 2011 results. In addition, discussions with LAs have indicated a very similar need for a review of the methodology which will deliver a set of census estimates that will be the benchmark for future population estimates and hence resource allocation.

The use of the population estimates in resource allocation is a key driver for the development of the methodology for census coverage assessment, adjustment and quality assurance. Its strategic aim is to produce a set of robust census population estimates for local authorities and for key population groups (five year age-sex groups, BME populations) in which users have confidence.

The terms of reference set out here for a methodology review will action these concerns and provide ONS with a valuable opportunity to take stock and identify any remaining areas of risk whilst there is still time to mitigate and develop contingencies for these risks.

Objectives

The objectives of the review are to:

- To provide independent assurance and thus confidence to users that the methodology to produce the census population estimates is based upon sound research and a strong evidence base.
 - Identify areas of the process or methodology that can be significantly improved;
 - Identify the main risks with the methodology, noting any particular problems/challenges the methods will need to be able to deal with, and any further work required to mitigate these risks and challenges;
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Scope

The table below outlines key processes and methodological areas that are used in the production of the census population estimates and detailed population characteristics and identifies those areas which are in scope for the review. Necessarily some items are out of scope due to limitations in the timetable for making changes. However documentation on these aspects will be available to ensure that the reviewers have a complete understanding of the methods.

Methodological area	In or out of scope
Census and CCS fieldwork methods	Out
CCS Questionnaire	Out
Sample Design of Census Coverage Survey	Out
Definition of the Hard to Count Index used in coverage adjustment (excludes non-response model used in field allocation)	Out
Census and CCS Matching	In
Estimation methodology	In
Dual system estimate bias adjustments	In
Estimation and adjustment of overcount	In
Imputation of persons and households	In
Imputation for question non-response	Out
Quality assurance of the Census population estimates	In
Contingency plans for census population estimate modification	In

The review will focus on the methodology being developed and implemented by ONS for England & Wales.

Reviewers

It is expected that no single person will have the expertise or experience required to conduct the review alone. Therefore it is expected that a small team consisting of two or three experts will conduct the review.

The review team will need the following experience and expertise:

- Sample survey statistician
- Demography and, specifically, population estimation, migration estimation, and estimation of specific population sub-groups
- experience in the application of census population estimates, particularly in local or central government

Understanding user concerns

One of the main drivers for the review has been the concern expressed by some users, particularly LAs that the methodology is not robust enough to deal with the enumeration challenges that are specific to a small number of Local authorities. This includes, particularly high concentrations of migrants, short-term and long-term, an ethnically diverse population, and particular types of housing. Therefore the review team will need to understand these concerns.

A mechanism for gathering these views will be initiated by ONS, which will then feed directly into the review team. ONS will work with key organisations that represent LAs to gather and channel user concerns into the review team. The bodies likely to be involved are the Local Government Association, the London Councils, and the core cities group; the latter a group of LAs that represent the main urban areas of England & Wales.

Timing

The entire review should be completed by the end of January 2011, with a report delivered to ONS. Publication of the report will follow in early February. An indicative timetable for the review is detailed below which reflects the different development timetables for the methodology and the relative complexity of the different aspects.

October to November

- Understand key lessons learned from the 2001 Census, and how these have influenced the 2011 Census design.
- Gain an understanding of the high-level design of coverage adjustment and quality assurance and how all the components fit together.
- Review detailed methodology for coverage assessment and adjustment.
- Receive and review user concerns about the methodology.
- Produce report on emerging findings

December to January 2011

- Consider the more detailed quality assurance methods.
- Review the proposed methodologies for adjusting the census estimates as a result of expected breaches in the assumptions underpinning the methodology.
- Produce a report summarising the findings of the review.

Liaison with ONS

The review team will need to have frequent access to ONS to help understand particular aspects of the work, request further information and report on progress. The key contacts at ONS will be:

- Peter Benton – Deputy Director, 2011 Census – overall responsibility for the review.
 - Garnett Compton – Head of the 2011 Census Design Authority – manage contract, liaison with the review team and the supply/exchange of information.
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