

Census 2001 Review and Evaluation

May 2004

Output Policy and Dissemination: Evaluation Report

ONS is carrying out a review and evaluation of the 2001 Census in England and Wales which will culminate in a Data Quality report and a General Report being published.

Plans for individual reports on specific aspects of the Census operation and a timetable for release have been published.

Each report is written in isolation and is subject to amendments as processing progresses and further information comes to light.

Reports will be released on the ONS website in the form of a high level Executive Summary and a more detailed Evaluation Report.

Content	Page
Project Objectives.....	2
Background.....	2
Methodology.....	2
Key Achievements.....	6
Assessment and Lessons Learned.....	7
Conclusions.....	8

Census 2001 Review and Evaluation

Project Objective

To put in place the policies, products and services to implement the Census output strategy. That strategy was based on key criteria about user needs and Office for National Statistics (ONS) provision of outputs.

Following completion of the policies and the specification of product and services and services, many aspects of the production of the output were dealt with by a partner project, Output Production. This is the subject of a separate evaluation report, which includes evaluation of the timetable for release.

Background

The 2001 Census was the first which based the planning of output on a strategy which was agreed at the outset and included in the White Paper (as government policy). It was based on the simple premise that 'the investment in the Census was only justified if the results are made available speedily and in a clear and useable form'. The strategy provided a framework for all planning and production of output, although it gave flexibility for advances in technology and has accommodated a very significant shift in Government policy on information which has made the main output in effect, free to users.

The Census output strategy comprised four major groups of outputs:

- a set of statistical tables ("Standard Area Statistics") which would fulfil user requirements;
- products, including Reports to Parliament, which would meet statutory requirements for output and allow easy access to standard census results;
- arrangements for licensed and value-added use of 2001 Census output; and
- a specialist service to deal with user enquiries and requests for commissioned output.

The key criteria to meet users' needs were that outputs should:

- be comprehensive and standard output should be comparable between areas;
- have flexibility to meet ad hoc requirements;
- be fit for purpose and delivered to a pre-announced timetable; and furthermore
- their use should not be constrained by bureaucratic or financial barriers, particularly charges.

The key criteria for ONS were that outputs should:

- be drawn from a database which was based on 100 per cent counts, and as unbiased as possible, with an integral framework of geography and accompanied by all relevant supporting information;
- be produced speedily and efficiently and be user-friendly, accessible and intuitive;
- minimise the risk of disclosing information about identifiable individuals; and
- use definitions and classifications that are harmonised, as far as possible, with other sources.

It was closely linked to the Census Access project (the evaluation report will be available when the project is completed) which was set up to deliver Census results free-in-effect to the end user.

Methodology

Key features of the outputs and methods adopted to fulfil the strategy

This section describes the key features of the outputs and methods adopted to fulfil the strategy. The methodology adopted throughout the project recognised; the need to accord with statutory requirements and Government and ONS specific policies; the importance of finding out user requirements and reflecting these in the product specifications; and the value of working closely with the Output Production team.

The work followed the four major groups of outputs within the Census output strategy, as follows:

Census 2001 Review and Evaluation

Specifying a standard set of statistical tables (“Standard Area Statistics”) to fulfil user requirements.

It was clear that there was a requirement for census results to cover a range of geographies. Output Areas (OAs) were the building block of all geographies (for more information see the Census Geography Evaluation report at www.statistics.gov.uk/census2001/census_geography_evr.asp, and there was demand for results for those areas in themselves. The most obvious requirement was for results at ward and higher administrative area level. In addition, there was a requirement for results at parliamentary constituency, health administration geography, postal geography and urban area levels.

To meet these requirements, the Standard Area Statistics were specified as three sets of tables: Key Statistics (summary results for all areas above); Standard Tables (detailed results for wards and higher administrative geographies); and Census Area Statistics (detailed results for all areas). The distinction between Standard Tables and Census Area Statistics allowed very detailed results to be produced for administrative areas (as required for local and national government purposes) whilst protecting confidentiality of the Census returns.

Substantial consultation was undertaken from 1999 - 2003 to ensure that the Standard Area Statistics met user requirements as far as possible. Discussions were held with key users to ensure their needs were fully understood. Four rounds of general consultation were undertaken, during which draft tables were made available to all users for comment. More than 500 responses, incorporating several thousand comments, were received and considered, and the draft tables were amended substantially as a result of this consultation. Additional consultation was conducted with users in Wales to ensure that results on the Welsh language were presented in the most useful form. The improvement in the table specifications through this process was noted by the Treasury Sub-Committee Report into the Census. The tables were agreed, and thus notionally finalised, by the Census Data Custodian in July 2002. Following this agreement, the table layouts were passed to the Output Production Project for development.

Specifying output products which meet statutory requirements and allow easy access to standard Census results.

These products included printed reports; CDs and DVDs; and delivery through the website. As with the specification of the content of the results, the specification of the products involved consultation with users on the most useful media and formats of delivery. Thus, the variety of ways to obtain the Census results reflects the variety of user requirements and therefore the different means needed to fulfil the strategy requirements of accessibility and user friendliness. Users vary from the non-expert users accessing results through the web via the Neighbourhood Statistics Service (NeSS), to developers of commercial packages, such as SASPAC, loading results in bulk into their databases.

Printed reports

The terms of the Census Act 1920 places a statutory obligation on the Registrar General to produce Reports on the results of the Census and lay these before Parliament. The first Report to Parliament containing results of the 2001 Census was published on 30 September 2002 and this was followed by more detailed Reports in February 2003 (*Key Statistics for Local Authorities*) and May 2003 (*National Report for England and Wales*). Further reports to Parliament covered health geographies; parliamentary constituencies; civil parishes in England and communities in Wales; and urban areas. These printed reports were published and are available through The Stationery Office (TSO) and other bookshops.

CDs and DVDs

The sheer volume of available census results means it would be both impractical, and unhelpful to users, to release it solely in printed form. The bulk of results were therefore released on CD or DVD allowing users to obtain, and manipulate, results not necessarily shown in the printed reports. Reports to Parliament were generally accompanied by a CD providing similar results for smaller areas (for example, the *National Report*, which contained detailed results for England and Wales as a whole, was accompanied by a CD providing corresponding results for local authorities throughout England and Wales). The Census Area Statistics, which were not part of any Report to Parliament, were provided only on DVD (with partial provision on the website).

Census 2001 Review and Evaluation

Web delivery

Many results were also made available on the web. Electronic versions of all Reports to Parliament were made available for viewing or downloading, along with manipulable versions of the tables included in the printed reports. Key Statistics, and part of the Census Area Statistics, are also available through the Neighbourhood Statistics Service (NeSS) website.

The range of methods of delivering the Census results is illustrated by the *Key Statistics for Local Authorities in England and Wales*. This was the second Report from the 2001 Census, and attracted interest from a wide range of users. The results were made available in the following ways:

- Through the NeSS website.
- As a printed report.
- As a pdf of the printed report, available on the NS website.
- Profiles and commentaries available on the NS website.
- In CSV format on CD.
- Through ad hoc requests to Census Customer Services.
- As summaries for single areas as email attachments from Census Customer Services.

In addition to the statistical tables, the Project took responsibility for specifying the supporting information required to understand and use the Census products - for example indexes of tables and a glossary of census terms - and sought to integrate this information with the results where possible.

Specifications of the Census output products were agreed jointly by Output Policy and Dissemination (ensuring that plans reflected user requirements for particular content, media and formats) and Output Production, (ensuring that plans were technically feasible). Plans were coordinated, where possible, with other UK Census organisations through Joint Output Project Board meetings, though the autonomy of census organisations meant that it was not always possible, even with best efforts from each organisation, to agree a full set of consistent outputs. The need for bilingual pres-

entation of census results was reflected throughout the output planning process and comment invited from the National Assembly for Wales; Welsh Language Board; and other Welsh users on these plans.

Despite these arrangements, problems were occasionally caused by late changes in specifications - where this happened it was frequently due to a perceived or stated change in user requirements. The extent of the changes meant that more resource was required than had been planned, and at short notice, sometimes requiring revision of the timetable for the output, with consequent difficulties for users. This is discussed further in the 'Assessment and lessons learnt' section.

Making arrangements for licensed and value-added use of 2001 Census output.

In addition to the statutory requirements for Census Reports to Parliament, there is a huge demand for census results from a variety of organisations and researchers. Easy access to census results relies on the removal, as far as possible, of both bureaucratic and financial barriers to its use.

Terms and conditions of use of census output

The terms and conditions under which census output can be used were made significantly less onerous for the 2001 Census.

In 1991, users who wanted to publish Census results would obtain a licence and would be charged for the number of counts (above a certain threshold) they wished to publish. Alternative arrangements were in place for 'Census Agencies' who, after passing an initial assessment, paid a small up-front fee and then a royalty on data sold on to a third party.

Arrangements were simplified in 2001 in line with the Treasury's *Cross-Cutting Review of the Knowledge Economy* and with the help of the Census Access project. Whilst Her Majesty's Stationery Office (HMSO) hold copyright of the census results, the Output Policy team worked to ensure that it was as straightforward as possible to obtain and use the census results from 2001 and earlier years:

Census 2001 Review and Evaluation

- by agreeing to basic terms and conditions of use, if using the results for private research;
- by obtaining a 'Click-Use Licence' from HMSO if needing to publish results; or
- by obtaining a distribution licence if wishing to pass the results on to a third party for publication.

A booklet was produced by the team and made available through Census Customer Services to explain to users the Conditions of Supply of the Census data; and when a Click-Use Licence or Distribution Licence is required.

Costs of obtaining and using census output

The development of the charging policy for results from the 2001 Census took into consideration the terms of the Census Act; government policy (as expressed through the *Cross-Cutting Review of the Knowledge Economy* mentioned above); and ONS policies on release of results and cost-recovery. The Census Access project played a key role in allowing free-in-effect supply of local statistics to end-users. The provision of results free of charge through the NeSS website was complemented by the decision that ONS would not seek to recover material costs for the supply of small numbers of CDs or DVDs, where arranging for recovery would be costly relative to the cost of supply. Charges made for commissioned output would be purely on the basis of the time required to program and produce the requested table with, again, no charges made for the data itself.

The removal of the requirement for commercial licences also removed the need for value-added resellers to become Census Agencies. An Approved Suppliers scheme was created to help promote high standards in the re-supply of census results. The scheme allows organisations to apply for Approved Supplier status - that is, confirmation that the Census organisations have examined the supplier's arrangements for dealing with census data and are satisfied that they are of adequate quality and that the supplier demonstrates that it has the required technical and statistical competence.

Providing a specialist service to deal with user enquiries and requests for commissioned output.

The existing Census Customer Services team, with additional new staff, received full training on the 2001 output, to cope with the expected rise in enquiries following the release of the 2001 results. Their manager worked with the ONS Central Enquiry Unit (CEU) to ensure that enquiries were dealt with as efficiently as possible, with the census team dealing with detailed inquiries and CEU ensuring that simple questions were answered in full as quickly as possible (answers to these simple questions were also made available on the web via www.statistics.gov.uk/census2001/nr_cd_faq.asp).

Provision of information to users

Great efforts were made to provide users with as much information as possible on the plans for census output.

National Statistics (NS) website

Information on the issues surrounding the Census output was available through the NS website from the beginning of the project. In January 2002, the Census Output Prospectus was launched. This included all aspects of the plans for the Census results - including accessing the results; content of the Reports and the availability of local statistics; output geography; schedule for release; commissioning output; and copyright and licences. The Prospectus was updated frequently as plans were developed and announcements made.

Census News

The Census News newsletter, which provided updates of issues of interest to census users, was produced three or four times a year throughout the intercensal period. In 2002, with plans developing rapidly as publication of the 2001 results approached, it was decided to switch Census News to be a web-based publication. Users were then alerted to significant announcements by a short e-mail with a link to the extended article on the website. Paper copies of Census News were also made available to those few users who requested one. At June 2003, there were 3,201 subscribers to Census News. Making information available through the web and email is a very quick and efficient way of disseminating announcements and developments in plans.

Census 2001 Review and Evaluation

Roadshows and presentations

Roadshows (day-long events organised by ONS) and one-off presentations (at the request of users) supplemented electronic communications, allowing the explanation of broader issues, and a better understanding of user concerns and priorities. Over the year to May 2003, the team was involved in 10 Roadshow events (in conjunction with the ONS Neighbourhood Statistics project) and more than 20 one-off presentations to a variety of public and private sector groups. The Roadshow events in March 2003 emphasised the links between the Census and the Neighbourhood Statistics Service in delivering local statistics.

One of the most important aspects of the output plans was the timetable for publication. In January 2002 indicative dates for the publication of the main results were announced, and final dates were confirmed as publication approached. However, changes in plans, due both to technical issues and changes in user requirements, meant that these dates had to be revised which made planning difficult for some users. More evaluation of the need for changes to the timetable is included in the Output Production evaluation report.

An electronic order form was made available on the website along with the timetable for publication, and this allowed users to ensure they received census data as soon as it was released.

Key Achievements

The achievements of the project must be measured by the extent to which the Census output fulfilled user requirements:

Specification of Standard Area Statistics

The Standard Area Statistics were specified following extended consultation with users. The tables fulfilled stated requirements for data for the Standard Spending Assessments for both England and Wales as well as reflecting, as far as possible, the stated requirements of those responding to the consultation.

Standard results provided 'free-in-effect'

The Census Access Project enabled the Standard Area Statistics to be made available to all users, free of charge, in electronic format.

Dissemination of results with easy access and minimal barriers to use

Results from the 2001 Census were disseminated in a variety of media and formats. Bureaucratic barriers to their use were also minimised with the advent of the 'Click-Use Licence' and the incorporation of the standard terms and conditions in electronic products.

Availability of commissioned output

As in previous censuses, it was recognised that standard output could not meet all requirements for analysis of census results. A system was set up to process requests for non-standard 'commissioned' output. The cost of such output from the 2001 Census will broadly be, in real terms, less than half the cost of output from the 1991 Census.

Provision of information to users

Users were kept updated with the constantly developing plans for releasing census results through the National Statistics website, the Census News publication (also available on the website) and a series of roadshows. New use of electronic updates meant users got information more quickly, it could be downloaded from the website at their convenience, and ONS could provide that information more easily and cheaply.

Common UK approach

Whilst each census organisation has its own specific requirements for output, a common approach to table design and numbering was achieved to make the use of UK-wide results as simple as possible. The Census organisations also worked together to produce and make available a set of tables giving results for the UK as a whole.

Dealing with user inquiries

The ONS Central Enquiry Unit deals with simple questions on the Census results. In addition, a specialised Census Customer Services team is available to deal with more detailed questions requiring greater

Census 2001 Review and Evaluation

expertise or experience of using census data. The complexity of census datasets means that it typically takes 18 months for a new member of the Census Customer Services team to become fully competent, and the team performed well in providing expert advice on products from the day of release.

Integration of Welsh language output

The importance of providing bilingual reports for the first releases of Census results, and for detailed results on the Welsh language, was recognised and integrated into the planning of the release of census results. The provision of Welsh language output went beyond the requirements of the ONS Welsh Language Scheme and was informed by substantial consultation with key Welsh users.

Assessment and Lessons Learnt

The project can be judged a success to the extent it met the requirements of the Output Strategy. In particular, the extended consultation on content of the output, and the immediacy and extent of information provided to users, undoubtedly improved the quality of the Census products, and the plans for use of those products. However, there were some aspects of the project that could have been improved.

- Consultation with users showed that there remained a preference for most census output to be provided in a standard set of tables, rather than relying on a method of obtaining customised output, though this question should be revisited for output from future censuses.
- Comprehensive information on plans for output was contained in the Census Output Prospectus on the National Statistics website and further developments in the plans were announced in Census News, also on the website. Emails were sent to users to alert them to any major developments being announced. In addition, two sets of events were held, in Autumn 2001 and Spring 2003, to discuss and explain the plans for releasing the Census results. These processes must be maintained for the future.

- Late changes to specifications were sufficiently substantial that they resulted in changes to the planned output timetable and the numbering and layout of tables, with consequent difficulties for users. A more efficient approach may have been to have a 'mop-up' product to include any additional requirements and to be produced towards the end of the Standard Area Statistics timetable, leaving pre-announced products to be released as planned, although this approach may give problems with disclosure.
- Calls made to Local Authorities following the release of the National Report revealed both positive and negative reactions to provision of the results in SuperTABLE format, with several users disappointed at the work involved in obtaining all results for a single area.
- Whilst changes made through the consultation process greatly improved the usefulness of the Standard Area Statistics, the management of these changes could have been streamlined. The tabulation system treated each table as a separate entity so changes affecting a standard classification or single footnote had to be replicated many times, with a consequent risk of error. An approach considering each table as a combination of standard building blocks would have greatly helped to ensure consistency and accuracy in development and reduce manual checking at the output production stage.
- The Standard Area Statistics had to be developed before important decisions were made on some aspects of ONS statistical policy, in particular regarding disclosure control and geographic boundaries. In future more should be done to integrate development of statistical policy and development of census products, and ensure that any subsequent changes in policy are considered with an appreciation of user requirements.
- There was the inevitable tension between concentrating on the specification and development of the standard census products and responding to requests for non-standard tables required for other projects. The work on standard products was frequently overridden by the ad hoc requests. One solution is to delay all such requests until after the great bulk of the standard output had been produced.

Census 2001 Review and Evaluation

- Whilst a large amount of the main results were available on the web-site, technical problems meant that it was not possible to make all results available through this route. The tables that were available on the website were found in two different parts of the site, and users understandably sometimes found it difficult to find the table they wanted.
- The need for a specialist customer service team with expertise in the Census output products was clear from discussions with users, and the number of queries received immediately following the release of the early reports provided further evidence of this need.
- Problems were experienced in filling vacancies for relatively short-term (less than a year) jobs to specify the 2001 products. Consideration should be given to how these problems could be avoided in future. The inclusion of more statistical expertise within the Output Policy team might help and might have the added benefit of avoiding some of the problems with integration of policy and development, as noted above.

Conclusion

The project can be considered a success by the criteria outlined above. The emphasis on consultation and communicating with users improved the quality of census products and services. On the basis of the outputs produced so far, the new methods of disseminating the Census results appear to have succeeded in fulfilling user requirements. The final months of dissemination and any analyses users subsequently undertake, will provide further feedback.

Further discussions will be held with users to make sure that their views of the 2001 output programme are considered when planning output from the 2011 Census.

Census 2001 Review and Evaluation

Census Topics	Target Dates for Release
Legislation	Published
Non-Compliance (Executive Summary Only)	Published
Data Needs	Published
Geography	Published (Executive Summary)
Publicity	Published
Data Collection Development	Published
Data Collection Support	Published
Census Coverage Survey	Published
Processing	Published
Annex: Quality of Data Capture and Coding	Published
Downstream Processing	Published (Executive Summary)
Data Quality	
- Question non-response rates	Published
- Disclosure Control (Executive Summary only)	Published
- Data Validation (Executive Summary only)	Published
Edit & Imputation	Published
One Number Census	
- Quality Assurance	Published
- Lessons learnt (Executive Summary only)	Published
Output Policy	Published (Executive Summary)
Output Production	
- Part 1:Review of Output Released to date	Published (Executive Summary)
- Part 2:including Sample of Anonymised Records (SARs)/Origin Destination Matrices	Published
Census Access	Published
Programme Management	Published (Executive Summary)
Quality Report	Published
General Report	Published

Please note that the dates for release of individual evaluation reports noted above are target dates, and therefore subject to change. For the latest information please visit www.statistics.gov.uk/census2001/reviewevaluation.asp