Office for National Statistics

Consultation

The Census and Future Provision of Population Statistics in England and Wales

Introduction

Every ten years, for over 200 years, every household in England and Wales has been required to respond to the Census. The 2011 Census successfully provided population statistics that will be used for the next decade by planners, policy makers and researchers across the public and private sectors.

Our population is changing rapidly, and the need to understand these changes will continue. The Beyond 2011 Programme in the Office for National Statistics (ONS) is currently reviewing these needs, and how they might best be met in future. Improvements in technology and in government data sources offer opportunities to either modernise the existing census process, or to develop an alternative census method that re-uses existing administrative data already held within Government.

Our research has resulted in two approaches for census-taking in future:

- once a decade, like that conducted in 2011, but primarily online,
- using existing government data and compulsory annual surveys.

Both approaches would provide statistics about the size of the population, nationally and for local authorities. A census using existing data and surveys would provide more statistics about the characteristics of the population every year, while an online census would provide more detailed statistics once a decade.

The consultation document describes these approaches, their strengths and weaknesses and the different types of information they could provide. No decision has yet been made, and we welcome your views.

You are strongly encouraged to read the consultation document before providing your response.

We will publish our findings in 2014.

Scope

The consultation questions ask for your views about the uses and benefits of census information, and the advantages and disadvantages of the two census approaches described in the consultation document – both for statistical and historical purposes.

Who are we seeking views from?

We welcome views from all users of census and population statistics, or anyone who has an interest.

Duration

The consultation opened on 23 September 2013 and will close on 13 December 2013.

Completing the consultation questionnaire

The questionnaire is available to complete online at http://www.ons.gov.uk/ons/about-ons/get-involved/consultations/consultations/beyond-2011-consultation/index.html - this is a quick and easy way for you to respond. Alternatively, you can:

email a completed copy of this template by 13 December 2013 to: Beyond2011@ons.gov.uk

- send a paper copy to:
  Beyond 2011 Consultation – Room 2000
  Office for National Statistics
  Segensworth Road
  Titchfield
  Fareham
  PO15 5RR

Enquiries

If you have any queries concerning this consultation please contact us by email at the following address: Beyond2011@ons.gov.uk

Publication of responses

All responses to the consultation will be published, and responses relating to uses of census information in Wales will be passed to the Welsh Government. We will assume that by responding you are indicating that you are happy to be contacted to discuss any issues. If you wish to be excluded from publication or sharing of your response please make this clear in your comments under Question Nine.

Peter Benton
Programme Director
Beyond 2011 Programme
Office for National Statistics

For further information, please visit the consultation page on our website.

Information about you and your organisation

Knowing who has responded to the consultation helps us to analyse the results and to respond to any specific points where necessary. In this section you are asked to provide information about yourself and your organisation (if applicable).

Your email address or telephone number are only required in case we need to contact you. We will not share or publish these without your permission.

i. Are you responding on behalf of an organisation or as an individual? *(Tick one)*

Organisation	✓
Individual	

ii. If you are responding on behalf of an organisation, please provide details below.

Organisation name	**Greater London Authority**
Contact name	**Rachel Leeser**
Email address	**Rachel.Leeser@london.gov.uk**
Telephone number	**020 7983 4696**

iii. If you are responding as an individual, please provide details below.

Name	
Email address	
Telephone number	

iv. If you are responding on behalf of an organisation, which sector do you primarily work or study in? *(Tick one)*

Public sector

Central government department or agency	
Health	
Local or sub-national government	✓
School or college	
University	
Other public sector (please specify)	

Private sector

Health	☐
Manufacturing	☐
Retail	☐
School or college	☐
Service industry	☐
University	☐
Other private sector (please specify)	

Other sectors

Media	☐
Voluntary / Community / Non-profit	☐
Other (please specify)	

v. What are your main uses of population and housing statistics? *(Tick all that apply)*

Policy development	✓	Research - social history	☐
Policy monitoring and evaluation	✓	Resource allocation	✓
Research - academic	☐	Service planning and delivery	✓
Research - family history	☐	Bidding for funds	✓
Research - marketing	☐	Other planning purposes	✓
Research - policy	✓	Other research and analysis	✓
Research - social	✓		

Other (please specify)

Views on the two possible approaches

A number of approaches have been considered by the Beyond 2011 Programme, and each has been assessed against a published set of evaluation criteria including statistical quality, cost, technical and legal feasibility, public acceptability and public burden.

This has resulted in two potential approaches to taking the census forward in future:

- a census once a decade, like that conducted in 2011, but primarily online or
- a census based on administrative data and large annual compulsory surveys.

These approaches are further described in Section Two of the consultation document and their advantages and disadvantages are summarised in Section Three.

1. What are your views of the different census approaches described in the consultation document?

While each of the two approaches outlined has some strengths and advantages, the primary concern of this response is whether the statistics that would be produced would be fit for purpose.

There are particular advantages of using administrative data for producing regular and frequent basic population estimates that the Greater London Authority, including both the Mayor of London and the Greater London Assembly would encourage ONS to pursue whatever method was adopted for producing statistics on the attributes of that population. We are nevertheless mindful of issues of accuracy of various administrative records that particularly affect large parts of London and are concerned about how these can be addressed adequately. In the long term, we would also encourage investigation of the potential for using other administrative data to produce statistics on the attributes of the population. This could potentially include data from the public and private sectors, though we recognise that this would introduce further difficulties, particularly around consistency, matching and public acceptability. However it seems unlikely that using administrative data alone would be able to replicate the richness of data collected via a single, direct questionnaire that would enable linking of characteristics in a consistent, yet flexible manner that allows evidence to be collated across a range of policy, planning and service requirements which may not always be predictable.

We see one of the key advantages of a census approach as the ability to produce not only small area data per se, but that the data are comparable across all areas, allowing statistics for areas to be compared either with neighbouring areas or with larger areas to which they belong, but crucially, they can also be compared consistently with all other areas in England. This allows for funding or other resources for particular issues, whether from the public, private or voluntary sector to be allocated appropriately to match need or to where it would have the greatest impact. This consistency would be lost for all but the very basic statistics if a survey option were adopted, since statistics would have to be aggregated over a number of years, and often different numbers of years' worth of data would be needed to produce

"robust" statistics for different areas, and even then confidence intervals could make such comparisons unreliable. Furthermore, if statistics from an annual survey show change for an area, such as a local authority, then the use of information collated over several years for constituent areas, such as a wards or LSOAs, becomes less valid as a basis for policy or funding decisions, since it would not be clear whether that smaller area had changed over the time period.

While we have no wish to place an unnecessary burden on households to complete a survey, we reject the argument that a survey would reduce the burden, since the survey model would only reduce the burden for some households, while potentially increasing it for others – it would be possible for the same households, or individuals to be required to complete the survey several times in a decade. While the average burden would be reduced, the inequity of the burden would be much increased. We also have concerns that a survey approach may be easier to avoid, legitimately or otherwise, and so particular population groups may be under represented.

Another aspect of a survey approach is that there is potential for questions to be changed over time, either in content or wording. While this has the advantages of being able to offer some information on new topics or adapt categories to reflect societal changes, it does mean that the potential for collating information over a number of years, allowing statistics for smaller geographies to be utilised, could be jeopardised.

In our view, the clear-cut "everyone takes part in a Census and answers the same questions" approach has much greater potential to produce the kind of statistics that are required to undertake effective and efficient service delivery and to make appropriate planning and policy decisions, in addition to providing the richness of multivariate statistics.

The single advantage of an annual survey, from a user perspective, is the increased frequency, but the reliability issues over much of the data and lack of detail of both characteristics and geography make this a much less attractive option, and we believe that to a large extent the statistics resulting from the proposal outlined would not be fit for purpose. The ability to measure change in a fully coherent manner for a city such as London outweighs the ability to gain a very limited, variable and potentially unreliable, picture of change on a more frequent basis.

Uses and benefits of population and housing statistics

This section asks for your views about the uses and benefits of census information, both for statistical and historical purposes. It builds on our research over the past two years to understand how people use census information, and the benefits those uses bring to society and the economy. The findings of this research are summarised in the following two papers:

- Summary of the Uses of Census Information
- Summary of the Benefits of Census Information

A good understanding of uses and benefits is critical to understanding the relative merits of each method. The questions below ask you to tell us about any uses or benefits of census statistics that we have not yet fully understood. In your answers, please provide as much evidence as possible. Uses that fulfil a regulatory or legal requirement are also of particular interest.

2. Please specify any significant uses of population and housing statistics that we have not already identified.

See separate list for an extensive, but not exhaustive, set of examples of the use of Census and related data made within London.

3. Please specify any significant additional benefits of population and housing statistics that we have not already identified.

Again see attached list for the uses and consequences of Census data made in London.

Impact of different census approaches on statistical uses

The questions in this section ask for your views on the real impact the different census approaches would have on operational or business decisions. Section Three of the consultation document outlines the advantages and disadvantages of the two approaches, and the appendix provides a summary of the statistics that would be available.

4. What would the impact be if the most detailed statistics for very small geographic areas and small population groups were no longer available? High, medium, low or no impact? *(Tick one)*

High [✓] **Medium** [ ] **Low** [ ] **No Impact** [ ]

4. 1. If medium or high, please give further information.

Inability to target programmes and initiatives to where help is most needed.

For example, identifying where vulnerable older people live who may face barriers to accessing goods and services they may need to improve their quality of life. The barriers might include limited access to transport, language or health issues.

For example, identifying areas where fuel poverty is a particular issue and target programmes to ameliorate the problem, particularly where the residents are in vulnerable groups and where the tenure and other housing characteristics allow effective intervention.

For example, provision of appropriate language services tailored to the needs of local communities.

Inability to benchmark other surveys

For example, the London Travel Demand Survey, which uses small area data to both verify and gross the survey, which in turn is the basis for much infrastructure spending.

Inability to understand the different characteristics of the population living within parts of the city.

For example, the Metropolitan Police make extensive use of Census data to profile local areas and to understand the characteristics of the people they serve.

Inability to adequately monitor inequality

For example, life expectancy and health outcomes measured against deprivation scores show the gradient across the social scale.

For example, tracking differentials in employment and unemployment levels among young people from different ethnic groups in order to provide support and training opportunities to address imbalances.

5. What would the additional benefit be if more frequent (i.e. annual) statistics about population characteristics were available for areas like local authorities and electoral wards? High, medium, low or no additional benefit? *(Tick one)*

High [✓] **Medium** [ ] **Low** [ ] **No Additional Benefit** [ ]

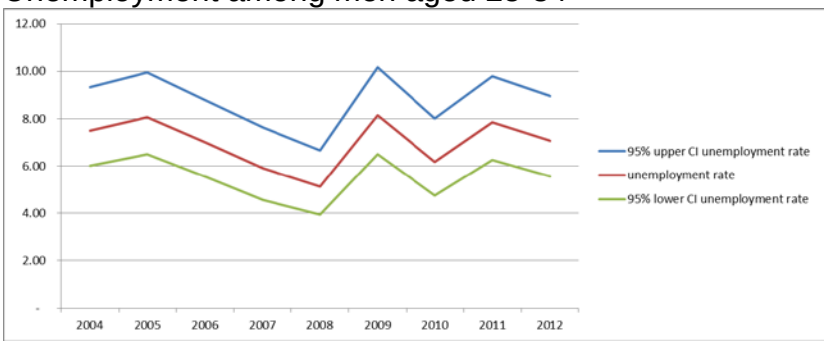
5. 1. If medium or high please give further information.

London is a city that is in constant flux, with high population churn, and therefore it would be highly beneficial to have the ability to track those changes in order to provide the appropriate policies and services. However, we have undertaken some preliminary research using APS data to look at the level of information that might be available through the suggested four per cent annual sample and we believe that the ability of the proposed survey to capture that change is very limited.

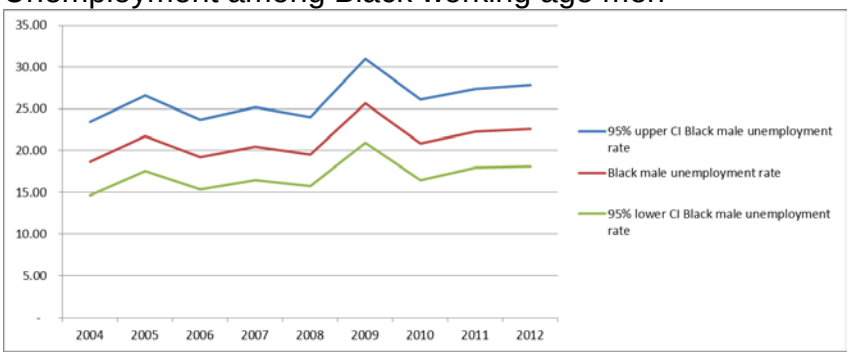
The size of the annual sample from the entire APS is approaching that of a four per cent sample for London as a whole and there is no doubt that a sample of that size could produce fairly reliable statistics to provide estimates, including some estimates of change, in the characteristics of the population of London generally, but it is equally clear that once this is broken down geographically or by population sub groups, any measurement of change would be somewhat less reliable. For example, for a sample close to the size that would be expected based on a 4% sample of the population for a London borough such as Southwark, it would not be possible to say that any significant change could be seen in the rate of unemployment among 25-34 year old men between 2004 and 2012. Similarly, there appears to be no significant change in the unemployment rate for Black men of working age (16-64), and only for 2009 can we say with 95 per cent confidence that the economic inactivity rate among 25-34 year old women was lower than in 2006. It would never be possible to say whether this was an aberrant finding for 2009 or whether the inactivity rate was indeed lower in that year. This level of uncertainty does not accord with the aim of producing statistics more frequently, and is not sufficient for planning and resource allocation purposes. In our view, in many cases it is unlikely that change would be seen with any degree of confidence over a ten year period even at local authority level, and certainly not at lower geographies based on this sample size.

These assertions are based on an analysis of unweighted Annual Population Survey data for Inner London (this sample size is close to that for a 4% sample of Southwark's population in 2012, the most recent year available, though there is some variation for other years) and calculating confidence intervals around the data, as if it were a simple random sample. See the charts below.

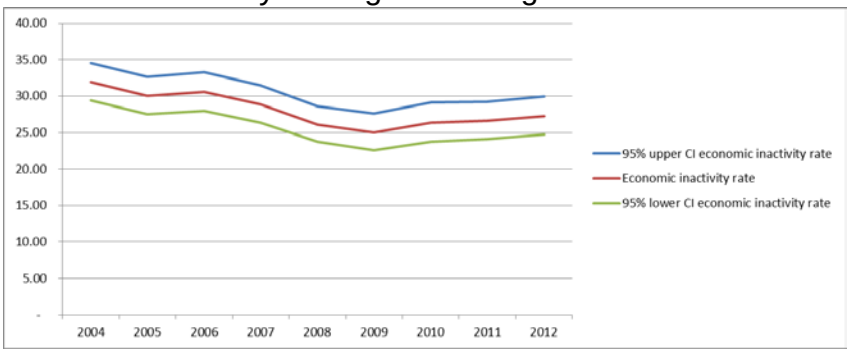
Unemployment among men aged 25-34



Unemployment among Black working age men



Economic inactivity among women aged 25-34



Source for all charts: APS unweighted sample for Inner London 2004-2012

Note that the level of geography and the level of detail on the variables are far below those that local authorities would wish to use to understand population differences and changes adequately. We would not only need to disaggregate this further geographically, it is also important to look at age differentials (partly as ignoring the age profiles of different ethnic groups can mask greater similarities or differences in rates by age) and to look in more detail at specific ethnic groups, rather than just the overall “Black” sector.

Similarly, this translates to other areas outside London. The APS sample size for the South West region is roughly equivalent to a 4% sample of Bristol and Bath and North East Somerset combined (population total in excess of 600,000). In some years it would not be possible to produce estimates of the number of unemployed men aged 25-34 with any

degree of reliability (ie the number based on the sample would be less than the 800 quoted as being a minimum for “reliability” and that is with a Confidence Interval of 40 per cent, which in our view is far too large for making reliable policy or spending decisions).

It would not be possible to produce reliable estimates of the number of unemployed male working age residents for most ethnic groups, even in areas as ethnically diverse as most London boroughs. Furthermore it is unclear how these data would be reported in terms of suppression of statistics for small numbers to protect disclosure, but if guidelines similar to those adopted for the APS were used, it would be likely that the ethnic breakdown available for something as basic as economic activity status would be likely to change from year to year, even in Inner London, with groups having to be combined in different ways to preserve confidentiality, or the level of detail available would be such that nearly all detail would be lost. For example, based on APS sample data for Inner London for 2004 – 2012, which as noted earlier is roughly equivalent to the sample size for a London borough, it is only acceptable to produce statistics for all the Black groups combined, rather than separately for Caribbean, African and any other groups, let alone for individual groups such as Somalis.

Furthermore, there would also be an issue around household level figures, about the reliability of what could be produced. For an average local authority with average household size of 2.5, there would be approximately 60,000 households. Trying to get a picture of overcrowding issues among private or social renters would be almost impossible with any degree of certainty, and measuring change would be unreliable. Estimates of the numbers of unemployed lone parents would be unreliable for many, even large, local authorities for a single year.

We also note that issues around the methods, data and frequency of collection for people outside the household population have yet to be fully addressed under the survey option.

The examples of confidence intervals are based on the “average” local authority size, but we are concerned that many local authorities’ populations outside London fall far short of this average, so producing statistics for those areas with any degree of reliability would not be feasible, which would make bidding for funding based on evidence of need, as is the case with various Government, Lottery and other funding schemes, impossible to carry out on a consistent basis. Combining years risks missing a decrease or increase in need. Even combining data for a small area over a ten year period would be considerably less reliable than a similar statistic produced from a census-type collection.

Producing reliable estimates of household level data, even at local authority level is likely to be difficult, since the “average local authority” has around 60,000 households. Even in large local authorities it may not be possible to produce estimates of the numbers of lone parent households in say local authority housing with any degree of certainty – the APS figures need to combine all renters into one category to avoid disclosure risk under current guidelines.

Impact of different census approaches on historical research

Many users of census information make use of the individual records released after 100 years from historic censuses to support genealogical or social history research. Clearly the world will be a very different place by the time that records from a 2021 census are released, and the information environment unimaginably different. At this point in time it is impossible to know how census information would be used, but it is clear that a set of records about the population would be of value.

ONS's role is to produce statistics rather than register individuals or households, but we are keenly aware of these uses of census information and have been discussing options with The National Archives, the UK Government's official archive. It is not yet clear what would be possible if we were to move to a census approach using administrative data, but we are interested in views on what opportunities there might be, as well as the risks from a change of approach.

This section asks you to tell us about any uses of census information that we have not yet fully understood and to share your views on the potential impact of the different census approaches.

6. Please specify any significant uses of census information for historical research that we have not already identified.

7. What advantages or disadvantages for genealogical or historical research can you see from a move to a solution based on archiving administrative data sources?

Although not used by the GLA in this context, we do appreciate that many Londoners use historic Census records for this purpose. We believe that in most cases it would not be possible to find out about any of the characteristics of individuals traced through the admin sources – one of the key points of interest derived from historic Censuses. For example, Census records can not only identify individuals, but also any familial relationships and other characteristics, such as what sort of job the person was engaged in. Such characteristics may not be available through administrative records.

Managing risks

Section Three of the consultation document describes the opportunities and risks arising from both census approaches. The questions below provide an opportunity to comment on these and to raise any other issues.

8. What are your views of the risks of each census approach and how they might be managed?

Risks of Census approach

- Ensuring that everyone responds once and only once, particularly everyone within each household and each address – possibly lessons to be learnt from online electoral registration processes as to how they control this?
- As with previous Censuses, risk of a "catastrophic" event, which would include possibilities of online issues as well as external issues, such as the poll tax policy that affected the 1991 Census collection
- Risk of an online Census making those without their own facilities to do this feel even more marginalised – ONS would have to work very closely with LAs and others to ensure that facilities were available with support where and when needed.
- Handling the inevitable mixed mode response and whether this impacts in any way on data quality
- Address list not correct, if no ground enumeration is carried out.

Risks of administrative data

- Changes to the data collection method (including clean up rules) or categories on the information collected, or even the loss of a source of admin data could mean that there are discontinuities in the data, or that this method is no longer viable
- Changes to the NHS or NI/benefit system could result in a shift of people appearing on the registers, that is potentially outside the control of ONS.
- Other, contradictory, sources of data are developed, leading to greater uncertainty.
- Increasing marginalisation of people outside the mainstream systems

Risks of survey

- That it wouldn't be accepted by the public
- That the statistics produced would not be fit for purpose, users would not understand how to use them and what the confidence intervals mean
- It is a wholly untested concept of a mandatory survey and so it is unclear how the public would respond
- That legislation to make it mandatory does not go through
- That the address list is not correct – this method potentially relies even more heavily on an accurate address list than does a Census approach
- That changes to questions mean that data for small areas cannot be produced at all
- Not having comparability between areas due to timing and confidentiality issues
- Not having comparability over time as output categories vary due to confidentiality

issues, even where questions have stayed the same
- Missing the hard to reach populations.

9. Are there any other issues that you believe we should be taking into account?

The confidence interval quoted as representing a "reliable" statistic is ±40%, with 95 per cent certainty. This represents a very wide range for identifying the size of small and vulnerable groups, and is likely to far exceed any change that might be occurring, especially when taking into account that some of the groups that are hardest to reach and enumerate are those who have the greatest need for provision from the local authorities, and so it is important to be able to identify where such people can be found. In our view, a confidence interval of this size does not represent a "reliable" statistic.

With a Census, many members of the public have confidence in the data because everyone has been involved and they feel some kind of "ownership" of the data. Being involved also means they are more likely to know it exists and believe they know what it's all about and are happy to use it. This is not so with the survey approach, as most people would not be involved with it each year.

As ONS have acknowledged, moving to using data derived from a survey would require a huge amount of education of users on how to use these data appropriately. There are significant concerns that this would further marginalise people who do not have confidence in their numerical ability and lead to fewer people using statistics. Also the cost of this education would need to be factored into the overall costs of the programme. As for several other aspects, this might result in further responsibilities, burdens and costs being placed on local authorities.

Please ensure that you have completed all sections of the questionnaire that are relevant to you/your organisation.

Thank you very much for your help.