

**Royal Statistical Society
Statistics User Forum**

**Response to the consultation
on the census and the future provision of population statistics
in England and Wales**

Introduction

1. The Royal Statistical Society (RSS) and the Statistics User Forum (SUF) welcome the public consultation by the Office for National Statistics (ONS) on the future options for the Census in England and Wales published on 23 September 2013.
2. Businesses, local authorities, voluntary organisations and many others are arguing the case for why good quality, up to date census data matters to them. Data on the population is used to ensure that we build our schools where they are required by our children, that hospitals are equipped to deliver the services that we need, that transport links reflect the journeys we undertake. With good data we can get these things right (and can hold people to account should things go wrong). Without it children are left without school places, patients do not get the care they need and we sit frustrated on trains and motorways. It matters to all of us.
3. It is clear the data the traditional Census has been generating throughout its history are of immense value to a wide range of users and form a key part of our national data infrastructure. At the time of the publication of the ONS consultation, the RSS released a statement setting out the three key areas on which we would want to see firm evidence to support a decision on which approach to take to the future development of key data on the population and its characteristics.
4. First, it is essential that ONS gather good evidence about the decisions that draw on census-type information. In deciding on the expansion of a school, for example, what information is needed, when and at what level of geography? How accurate does it have to be? What is the economic, social or environmental impact if the information is not available, out of date or not precise enough? This evidence should be gathered first before ONS makes judgments about which approach will best meet national data needs.



5. Second, once this is done, an analysis of the attributes of the statistics that could be generated to meet each of the user requirements should be made available so that users can see the basis of the case for each of the options. This analysis should include not just those statistics that would be generated directly by the approach under consideration but also any modelling or use of alternative data that would be involved. This should be done in a clear way so that users can fully understand the implications for them of different approaches – users should not be required to try and work this out for themselves. Such analysis of each “use case” can then be put alongside the broader value to social science and evidence based policy and practice of the database that will be created under the various options.
6. Third, to assess the different approaches it is also important to understand the assumptions that are being made about future changes in the context for gathering data. Public attitudes, the legal environment (e.g. for data linking) and changes to technology could result in a very different landscape for the production of census-type data in 2021 and beyond. These assumptions provide the means to judge the sensitivity and robustness of alternatives and the level of risk each would entail given the uncertainty involved in predicting the future.
7. In summary, this response will explore three essential criteria. First, the robustness of the evidence base gathered by ONS – what information does the nation need? Second, the statistical basis for analysing the alternatives – what quality of information can be collected to meet user needs? Third, the validity of the assumptions being made about the legal, attitudinal and technological context – what are the risks involved in taking each course of action?
8. In the following sections we will provide our detailed view on the progress made in each of these three areas.

Assessing user need

9. The production or collection of data funded by public money can only be justified if there is a genuine need for the data – be it from central government, local government, business, academia, the general public, or a whole range of other actors who have a legitimate need for data to underpin their decision making. Therefore to make sure any future approach is the right one, a thorough and comprehensive analysis of the user need for data needs to be available.
10. ONS has been engaging with a wide range of users throughout the Beyond 2011 programme. The current consultation is reaching out to a wide range of users, through established channels, for example through bodies such as the Statistics User Forum (SUF) and various local government bodies.



11. The Statistics Users Forum, hosted by the Royal Statistical Society, is an independent forum where users and producers of statistics engage on how to best meet user needs. The overarching SUF has worked with the RSS in the formulation of this response. Some of the subject-specific user groups which are part of SUF will be submitting a separate response to this consultation, and we support their specific analysis of the needs of the different types of users.
12. However, even though these efforts are of value, we do believe there is considerable richness to the user base which doesn't necessarily get captured through existing consultation mechanisms. It is clear that a whole range of 'traditional' users of data are moving into a different political context which means the decision making is shifting. As well as local authorities a diverse range of other actors are increasingly instrumental in local decision making about how education is being delivered: academies, free schools and parents themselves. Likewise, in health, there is a move away from centralised decision making to local decision making. These new actors will equally need data and statistics to underpin their business decisions – for example in planning school places needed or hospital capacity. Not all of these new actors are necessarily engaged in the traditional user engagement channels on data needs.
13. In our view therefore, a complementary exercise should be undertaken to analyse the decisions themselves, rather than who makes the decisions. In a whole range of policy debates, future decisions on issues such as health, education, transport and public finances will need the evidence base to inform critical decisions which will impact on all citizens. By understanding the questions our society needs to answer we will make better judgements on the statistical evidence base we need.
14. So, although we welcome the work ONS has undertaken to engage with the broad user base, we believe further work needs to be done to detect and analyse needs for a range of subject areas. This will involve further and sustained effort to engage with a range of new actors out there, some of them largely unorganised, so we would recommend further investment is made to ensure the future data needs of the country are sufficiently analysed and taken into account.
15. This further work will result in a higher public value for the statistics than will be estimated from the existing approach. However, even on the basis of the information already captured by the user community, there is an overwhelming level of support both for better information at low levels of geography, and for more timely information. The consultation document sets out the tension between the user need for consistent, comparable information from the national level down to very small areas and for small population groups (as would be delivered in the traditional census approach) versus the demand for statistics on a more frequent basis (as would be delivered by the administrative data approach). It is increasingly clear this tension will be difficult to resolve and the improved delivery of both will be needed.



Meeting the user need: the statistical evidence

16. The second criterion which needs to be satisfied before any decision on an alternative approach for the census can be made is that the solution which is proposed needs to meet the user need at a sufficiently high level of quality. The quality of the information on which decisions are based is critical to those decisions – bad information leads to bad decisions.
17. ONS has been working on producing the statistical evidence base for the two approaches it proposes in the consultation document. For both approaches the ONS has produced statistical evidence as to what statistics they would be able to produce, and at what levels of quality.
18. To review the evidence which has been produced, the ONS commissioned an [independent review](#) of the methodology which underpins its proposals. The review was undertaken by a team headed by Professor Chris Skinner (London School of Economics). Professor Skinner was appointed for the role on the recommendation of the President of the Royal Statistical Society.
19. The review led by Professor Skinner concludes that the evidence base to confidently support an approach based on administrative data would need further work. The report states:

“A principal question addressed by our review is whether each of the two front running options provides a methodologically sound basis for replacing Census 2011 methodology, given the quality standards specified by ONS. Our answer to this question is positive for the online census option, subject to it including full follow-up for nonresponse and to appropriate work being undertaken to address possible mode effects. We do not believe that there is yet sufficient evidence to support a positive reply to this question for the administrative data option.”
20. The RSS takes therefore the view there is not yet sufficient evidence to inform a decision about the feasibility of an approach to use administrative data for the production of data on the population.
21. In a [previous statement](#) we have therefore set out the further work which needs to take place to produce sufficient evidence:
 - ONS should act on all of Professor Skinner’s recommendations and report publicly on those actions
 - Building on the work undertaken thus far, ONS should start using administrative data to produce experimental numbers now so we can see how well they measure up in practice.



22. The work carried out on the production of population counts by sex and age has thus far shown potential. However, we are of the view that the current proposed approach, focused only on using administrative data for age by sex counts, is too limited. It needs to be embedded within a strategy for making much wider/more ambitious use of administrative data, and we would welcome the articulation of a more strategic approach to the use of administrative data for the production of both social and economic statistics.
23. In terms of measuring the quality of the two approaches, the ONS quality criteria are based upon the overall performance of population statistics over the ten year inter-censal period. However, for the production of annual population statistics we do question a performance target that reflects the fact that the traditional census occurred once every ten years, this approach in itself inevitably having quality issues. If one were to move to an entirely new system the ambition at least ought to be to do better than that. This implies that ONS do everything possible to improve the coverage properties of the Statistical Population Dataset (SPD) rather than just accepting the existing quality of the administrative sources.
24. There will also need to be further work undertaken on a number of enablers, which we discuss below.

Context and enablers

25. A third area for further consideration is the broader context in which any new approach would be implemented. In the Society's view, three areas will need further work before a new approach to the production of population data based on administrative data can be successful.
26. The first area is that of legislation to facilitate the sharing and linking of administrative data held within government. Although the current legislation (Statistics and Registration Services Act 2007) provides for some data sharing facilities, the process is relatively cumbersome and does not provide the flexibility required to easily link administrative data for statistical purposes.
27. We therefore urge the ONS to make the case for the legislation and assurance necessary to enable full and comprehensive sharing and linking of administrative data for the purpose of creating statistics for the public good in accordance with data protection principles.
28. This should include a role for the National Statistician in decisions about administrative data that are to be used for statistical purposes. One specific example of this is in the registration of deaths which is a fundamental element of the system of population statistics. We have [previously commented](#) on this issue and we will continue to pursue a resolution.



29. The second area for further consideration is related to the data sharing legislation. It is clear that better data sharing legislation for statistical purposes would be a necessary, but not sufficient condition to implement an approach which is based on administrative data. The public acceptability of such a solution is a critical element which needs to be understood.
30. The Beyond 2011 programme appears to have given some, but too limited, attention to the issue of public acceptability of the proposed approaches. The Society believes the ONS has a pivotal role, together with government and parliament, to explain to the wider public what the benefits are of using existing data sources for the production of statistics on the population.
31. A useful analogy here is the public acceptability of the use of individual medical records to conduct research in e.g. cancer. There is a clear and publicly accepted benefit for linking medical data to improve public health. The challenge will be to explain to the wider public the importance of data on the population in a whole range of areas, from schools to hospitals, and the public benefit of data sharing for statistical purposes so long as safeguards are in place to protect the confidentiality of personal data.
32. We therefore believe it is important to create legislation for data sharing for *statistical purposes* separate from any other proposals by the government for data sharing for the purposes of national security or benefit fraud for example, or for personal service delivery. In all these cases the reason for sharing relates to the information that can be generated about named individuals. Different considerations apply in these cases than those relating to sharing for statistical purposes where the data will be anonymised before release in the form of statistics where the identity of the individual is always protected.
33. Thirdly, it is clear the current arrangements for the availability of a consistent national address register are unsatisfactory. For both approaches proposed by the ONS a high quality address register is an essential enabler to produce high quality population statistics. The Society has [previously commented](#) on this issue, and remains of the view government should take steps to make these data freely available.



Conclusion

34. In summary, although we commend the work ONS has undertaken thus far, we believe more work will be needed before any decision on an alternative approach to the production of population data can be taken. Most of this task will fall to ONS, but we note the important role of government in ensuring a number of enablers are in place for an alternative approach to the traditional Census to succeed.
35. We recognise the current debate on the future of the Census provides a unique opportunity to provide the country with the data it needs, and recommend the further work should continue to make this happen. It should be noted the countries which currently have an administrative data based system in place for the production of statistics on their population all have in place a well-established register either of the population or of addresses or both which has taken a number of decennial cycles to establish. The issues involved in such a change are complex, both from a technical and statistical perspective, and from a public acceptability and legislative angle.
36. We therefore have expressed the view ONS should make a clear statement that it will not replace the 10-yearly census at least until real numbers using an alternative approach have been produced and accepted by those who rely on them. To continue with just the 10-yearly census (with a strong online focus) might be unambitious but to abolish it without a well-tested alternative would be reckless.
37. However, it should be clear the preparations for a Census in 2021 should not detract from the essential task to further develop an alternative approach based on administrative data combined with surveys. In the longer term, dedicated data collection for a Census will become increasingly difficult and expensive. It is therefore vital to continue to develop an alternative approach which maximises the potential of data already available within government.
38. This also means there should be sufficient funding available to develop both approaches in parallel in the short to medium term. In financial terms the expenditure on the production of statistical information by ONS and the Government Statistical Service is small compared to expenditure elsewhere in government. The quality of our decision-making in a wide range of areas, both within and outside government, is directly related to the quality of the statistical evidence. It is therefore essential we continue to invest in the critical statistical infrastructure which informs and underpins our economy, society and the daily lives of our citizens.

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