



National Statistics Small Area Geography Consultation – 2007

**Results, Analysis and Implications
for NS Geography Policy**

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September 2007**

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NOTES :

This consultation relates to the geography to be used for National Statistics in England and Wales only. Scotland and Northern Ireland have their own policies - and these are referred to where appropriate.

In the interest of brevity this report assumes a basic knowledge of the geographies and issues discussed. Readers of this document who are new to the subject may wish to consult the background information available on the NS website and in particular consult the explanatory notes provided in the consultation document. References are provided in Section 2.

1. Executive Summary

Introduction

- 1.1 The National Statistics Consultation on Small Area Geographies (for England and Wales) ran from 15th November 2006 to 21st February 2007. A total of 243 complete questionnaires were received, as were around 40 separate direct comments and submissions on particular aspects of the proposed policy.
- 1.2 A total of 65 comments were posted on the online 'blog' which, in the final month of the consultation received in excess of 1,000 unique visitors. The consultation is considered a success by ONS both in terms of the level of response and of the high quality of responses made.
- 1.3 The consultation was carried out in order to inform thinking on the future policy on the use of small areas geographies for National Statistics – and specifically the way forward on the use of Output Areas (OAs) and Super Output Areas (SOAs). All views received have been considered and the views analysed. The attached report summarises the findings of the analysis and the conclusions that have been drawn.

Stability – but at what level ?

- 1.4 The consultation has revealed a strong demand for stability and continuity in the small area geographies – but significant discussion on the level at which that stability should be maintained. The case would seem to be clearly made for stability at the SOA level – but things are far less clear at the OA level.
- 1.5 Many respondents suggest that the geography for Census 2011 should be changed to reflect 'reality' at the time. Just as many demand no change at all to any of the existing geographies.
- 1.6 There is a clear choice between leaving the OAs essentially as they are (bringing real stability but the known weaknesses of OAs) and attempting to produce an updated OA geography which better reflects reality in 2011 (losing some stability in the hope of getting something better).
- 1.7 The crux of the decision here is whether a new version of the OAs would be enough of an improvement on the existing set to make the change worthwhile. It is obvious that the OAs are an imperfect geography but less obvious how much better a replacement geography might really be.
- 1.8 Critically there are several conflicting demands placed upon the OAs and the consultation makes clear that any new or altered geography would need to be a compromise between strong user demands.
- 1.9 On balance a view is taken that the case is not made for change - and that a position of stability will offer more benefits, for more users.
- 1.10 **The National Statistics small area geography policy will be to retain a high degree of stability – both at the OA and SOA level.**
 - No change will be made to the existing OAs and SOAs before Census 2011.
 - A set of OAs and SOAs very similar to those used for Census 2001 will be the prime output geographies for Census 2011.
- 1.11 Changes will be limited to less than 5% of the OAs nationally. It is hoped that the level of change can be managed well below the 5% level.
- 1.12 The thinking behind this key decision is described in Section 5.

- 1.13 **Minimal changes will be made after Census 2011 to take account of the most significant changes in population and to fix the very worst performing OAs and SOAs.**
- 1.14 ONS will now work to develop criteria for essential changes to the existing OAs and SOAs.
- 1.15 Such criteria will determine which OAs will be split automatically as the result of population changes at Census 2011. Separate strict criteria will also be set against which requests for change in local areas will be judged. Local agencies will be provided with a further opportunity shortly before Census to request changes to OAs and Lower Layer SOAs which they feel cause real problems locally.
- 1.16 Continuity and stability are critical however. Changes will be limited to less than 5% of the OAs nationally (E&W) - and perhaps significantly less than this figure – dependent upon future research.
- 1.17 **Changes at the Lower Layer SOA level will be similarly minimised. Changes at the Middle Layer SOA level will only be made in exceptional circumstances.**
- 1.18 **As far as possible changes to OAs and SOAs will be made by simple mergers and splits of the existing scheme.**
- 1.19 The level of acceptable change at each level is still to be determined. This decision, together with decisions on the criteria to be used and which OAs are changed, will rest with ONS.

Other issues

- 1.20 There is some support for, and obvious advantages to, separating large communal establishments from other local households. The decision on whether this should be carried out, however, is too closely linked to output and disclosure policies for Census 2011.
- 1.21 **No decision has yet been made on the place of communal establishments in NS and Census outputs.** The evidence and views expressed as part of the consultation document will be fed into further thinking on output and disclosure policy and will play an important part in informing the decisions on this topic.
- 1.22 **There are currently no plans to establish business or workplace OAs.** Again the results of the consultation will be fed in as Census and Neighbourhood Statistics policies are further developed.
- 1.23 **The consultation has not identified sufficient support to make construction of a set of Upper Layer Super Output areas a priority at this stage.** The existing 'Lower' and 'Middle' Layer SOAs will retain these names
- 1.24 **It is not currently proposed that areas of 'empty' land will be defined as part of the NS Small Area Geography.** There will be further thinking on how Census and other NS outputs should support identification of these areas.
- 1.25 **ONS will investigate options for the extension of the central registry of local names for SOAs (at both levels).** These names will need to be agreed locally at the district / UA level using a mechanism similar to that used for the earlier Middle Layer SOA consultation. These local names will receive no validation, accreditation or recommendation from ONS but a single set of agreed local names will be available for central download from the NS website for those authorities who wish to supply one.

Boundary sets

- 1.26 **ONS will take every step possible to ensure that digital boundaries for OAs and SOAs are made freely available to end users and that licensing is kept as simple as possible for all types of sharing and distribution.**
- 1.27 **Further consideration will be given to options for improving the alignment of existing boundaries to real world features. Such re-alignment would not allow the movement of any population and will not proceed if there are any detrimental effects on licensing terms or rights for distribution of the data.**
- 1.28 **All possible steps will be taken to ensure that a common boundary exists between Scottish and English datasets.**
- 1.29 **A separate set of boundaries reflecting mean-high-water will be released as well as those extending to the extent of the realm.**
- 1.30 The conclusions drawn here and summarised below form a strong interim position for National Statistics policy and so for release of data from Census 2011. The approach to geography for Census will be reviewed and refined as the policies on disclosure control and outputs are finalised. ONS reserves the right to adjust any aspect of this policy to take account of future needs or developments.
- 1.31 Comments on any aspect of this policy are welcomed at any time and will be fed into such reviews when appropriate but this part of the consultation is now fully closed. The consultation has provided a strong body of evidence upon which we can base decisions and will prove invaluable over coming months. All of those who responded and provided such useful and well considered views to the consultation are thanked for their input and continuing interest.

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September 2007**

Summary of Conclusions

- C1** The National Statistics small area geography policy will be to retain a high degree of stability – both at the OA and SOA level.
- C2** Minimal changes will be made after Census 2011 to take account of the most significant changes in population and to fix the very worst performing OAs and SOAs.
- C3** Changes will be limited to less than 5% of the OAs nationally - and may be significantly below this level.
- C4** Changes at the Lower Layer SOA level will be similarly minimised. Changes at the Middle Layer SOA level will only be made in exceptional circumstances.
- C5** As far as possible changes to OAs and SOAs will be made by simple mergers and splits of the existing scheme.
- C6** No decision has yet been made on the place of communal establishments in NS and Census outputs.
- C7** There are currently no plans to establish business or workplace OAs.
- C8** The consultation has not identified sufficient support to make construction of a set of Upper Layer Super Output areas a priority at this stage.
- C9** It is not currently proposed that areas of 'empty' land will be defined as part of the NS Small Area Geography.
- C10** ONS will investigate options for the extension of the central registry of local names for SOAs (at both levels).
- C11** Further consideration will be given to options for improving the alignment of existing boundaries to real world features. Such re-alignment would not allow the movement of any population and will not proceed if there are any detrimental effects on licensing terms or rights for distribution of the data.
- C12** ONS will take every step possible to ensure that digital boundaries for OAs and SOAs are made freely available to end users and that licensing is kept as simple as possible for all types of sharing and distribution.
- C13** All possible steps will be taken to ensure that a common boundary exists between Scottish and English datasets.
- C14** A separate set of boundaries reflecting mean-high-water will be released as well as those extending to the extent of the realm.

2. Background

- 2.1 Output Areas (OAs) - formerly referred to as 'Census Output Areas' - were small, automatically generated areas developed by ONS as the geography for reporting small area statistics from the 2001 Census.
- 2.2 Super Output Areas (SOAs) were developed a few years later as a layered geography for the collection and publication of Neighbourhood Statistics. The Lower and Middle Layers (LSOAs and MSOAs) of an intended three layered hierarchy were released in 2004. An Upper Layer was envisaged at the same time but has yet to be constructed.
- 2.3 SOAs were built by aggregating groups of OAs and so inherited many of the characteristics, good and bad, of the OAs. Stability was not envisaged when OAs were developed, but was a key principle of the creation of SOAs. The Small Area Geography Consultation aimed to take stock of the success or otherwise of the OAs and SOAs and to inform future policy on their use.
- 2.4 Full details on the background to the consultation are included in the consultation document available from http://www.statistics.gov.uk/about/consultations/Small_Area_Geography_Policy.asp

Details on the nature and construction of the OAs and SOAs are also available from http://www.statistics.gov.uk/geography/Nat_Stat_geographies.asp

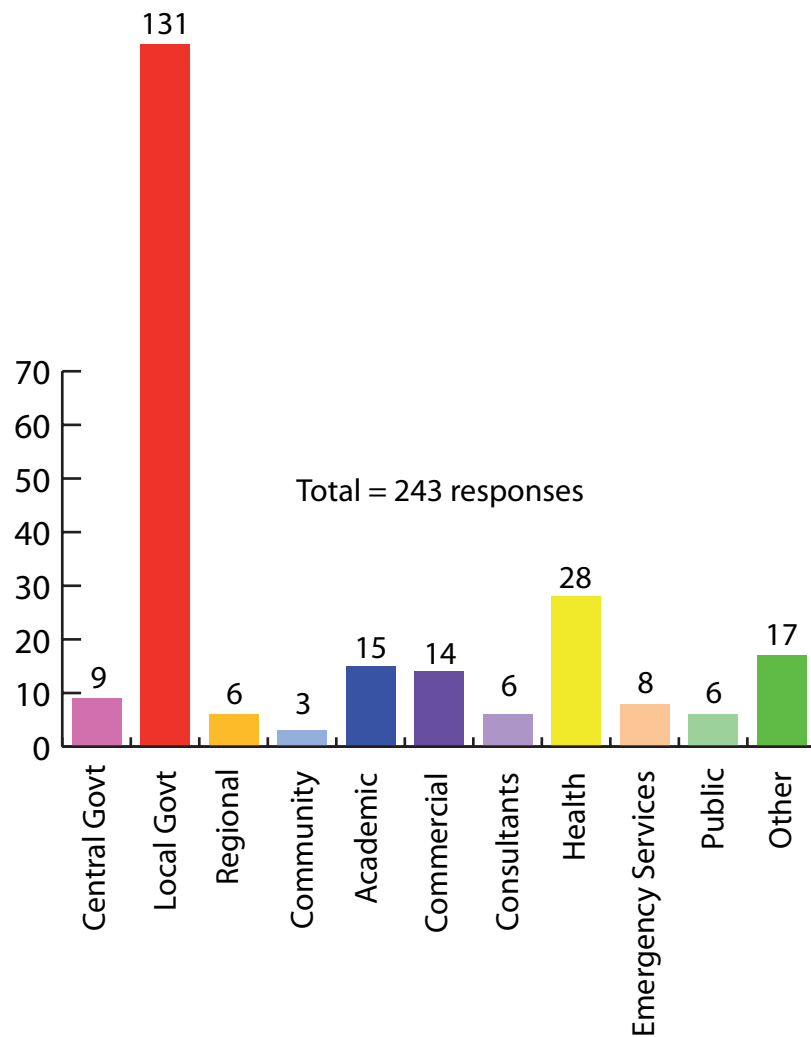
3. Response to the consultation

- 3.1 The National Statistics (NS) Small Area Consultation ran from mid November 2006 to mid February 2007. The consultation was widely and actively publicised through the NS website, across central and local government, and through Census and Neighbourhood Statistics stakeholder networks. The strength and quality of the response would suggest this publicity was effective and many respondents commented that they felt the consultation had been well run.
- 3.2 Responses were requested to a questionnaire available online or as part of the consultation document (address above). A copy of the questionnaire is attached for reference at Annex C.
- 3.3 In addition, a range of comments and submissions independent of the questionnaire were also received. Around 60 comments were posted on an online 'blog' run in conjunction with the Hansard Society – the first time ONS has used such a blog as part of a consultation. Again this is considered a success.
- 3.4 Figure 1 provides a breakdown of response by sector.

NOTE 1: Sectors

The division of responses into categories according to user sector is necessarily rather arbitrary. Respondents were asked to categorise themselves and these allocations were accepted with the exception of a few obvious errors which were reallocated as part of the analysis process.

In addition, 3 new categories – for regional government, consultants and police fire and rescue – were added to the classification to reflect a significant number of responses from these users. Responses were allocated to these categories by inspection. Any errors or anomalies in allocation here should be unimportant – the differences in views expressed by different sectors is often fascinating but all sectors are given the same weight in the analysis.



3.5 A total of 243 complete* questionnaires were received and the breakdown is outlined above. Responses were dominated by 131 (54% of the total) from local government – perhaps inevitably given the importance of small area data to these users.

3.6 There are also strong responses from the health sector (12%), academics (6%) and the commercial sector (6%). In the case of the commercial sector some responses were on behalf of groups of commercial organisations and comments from these groups have been given particular consideration. The quantitative analysis included here however is entirely un-weighted and democratic – one questionnaire accounts for one mark in the scoring (see NOTE 3 on weighting).

(* More than 50% of answers complete – see NOTE 2).

4 Analysis

Introduction

- 4.1 The majority of the analysis included here is focussed upon responses to Questions 11 to 27 from the consultation questionnaire. These questions cover issues of policy and design for the small area geography.
- 4.2 See Annex C for details of the questionnaire and discussion of how other parts of the questionnaire are being dealt with.
- 4.3 Each topic is discussed in turn below and presented in the form of a graph or graphs of the results, a selection of comments made by respondents and a brief commentary.
- 4.4 Where appropriate, options are discussed and conclusions drawn following relevant topics.

NOTE 2: Inclusion of responses

All comments and submissions made, whatever their source, have been considered in the conclusions drawn here but the quantitative analysis presented focuses only on responses to the questionnaire. Questionnaires which were less than 50% complete have been read but are not included in any part of the analysis and are not published with the other results.

NOTE 3 : Weighting of responses

The decision on how to weight responses is an extremely difficult one. In the vast majority of cases respondents represent their own view or that of a single authority or agency. A few responses, however, are provided on behalf of groups of users. A decision has been made to not apply weighting to try and take account of those responses which claim a larger constituency.

It would be exceptionally difficult to get this weighting right and impossible to properly value the strength of feeling of individual members. For the quantitative analysis here each questionnaire is given equal weight – one response, one vote in the scoring. Comments from such groups have, however, been given particular attention in the more subjective assessment of the views. In particular the views of Demographic User Group, the Market Research Society and the Association of Census Distributors, each of which represents a group of commercial organisations have been considered as important voices.

Equally comments from groups of local agencies or health organisations have been considered particularly carefully. In most cases inspection of the comments made suggests that the views expressed do not significantly differ from others in their sector so a lack of weighting is not thought to represent a significant problem.

The importance of comments

- 4.5 In addition to the new body of evidence provided by the scored responses the additional comments provided are enormously useful and are at least as important as the final scores. In many cases comments provide caveats or point out subtleties in the response. In others extra ideas or views are expressed. All comments have been read and considered – they will form an enormously useful source of ideas as NS geographic and other policies are developed. Many comments include comments on National Statistics,

Neighbourhood Statistics or Census policies – and these have all been passed forward as appropriate.

- 4.6 As a result of the quality and usefulness of comments made each topic below is accompanied by a range of quotes from the responses.

NOTE 4: Use of quotes

In light of the importance of the comments a selection of these are provided against each topic below. These are not an attempt to represent the most profound, most extreme or even the most representative comments. Most quotes are selected because they crystallise a view expressed by several users or because they help provide a flavour of one side of the argument. Some are selected because they include a particularly interesting idea or simply because they demonstrate the wide range of views expressed on every topic. It is all but impossible to provide a selection of quotes which fairly reflect the range of views expressed by around 250 respondents. The comments provided here are an attempt, in good faith, to pull out some key messages or ideas.

All respondents agreed in submitting a response that their comments would be published. It should not be assumed, however, that the responses published represent the views of the organisations for which individuals work - these are included purely to provide context.

Publication of responses

- 4.7 For those interested in a particular topic the full range of comments made is published separately as an Excel spreadsheet (available on request). The very scale of this file gives some impression of the scale of the task in drawing single conclusions from the comments received.

NOTE 5: Graphs

The graphs provided on the following pages provide the easiest way into the analysis of the data.

Most of the graphs show the relative response on the topic by each user sector. A separate line for each sector indicates the percentage of respondents in each sector who responded in each of 5 different categories – normally ranging from disagree strongly to agree strongly. All graphs also include an indication of the ‘mean’ response – the results for all respondents. In all cases the Y axis is the proportion (as a percentage) of the total number of users in each sector – not just those who responded on this specific question. It is felt that this provides a better reflection of the strength of feeling on each topic in each sector.

In the interests of clarity of the graphs the sectors are simplified into the following groups:

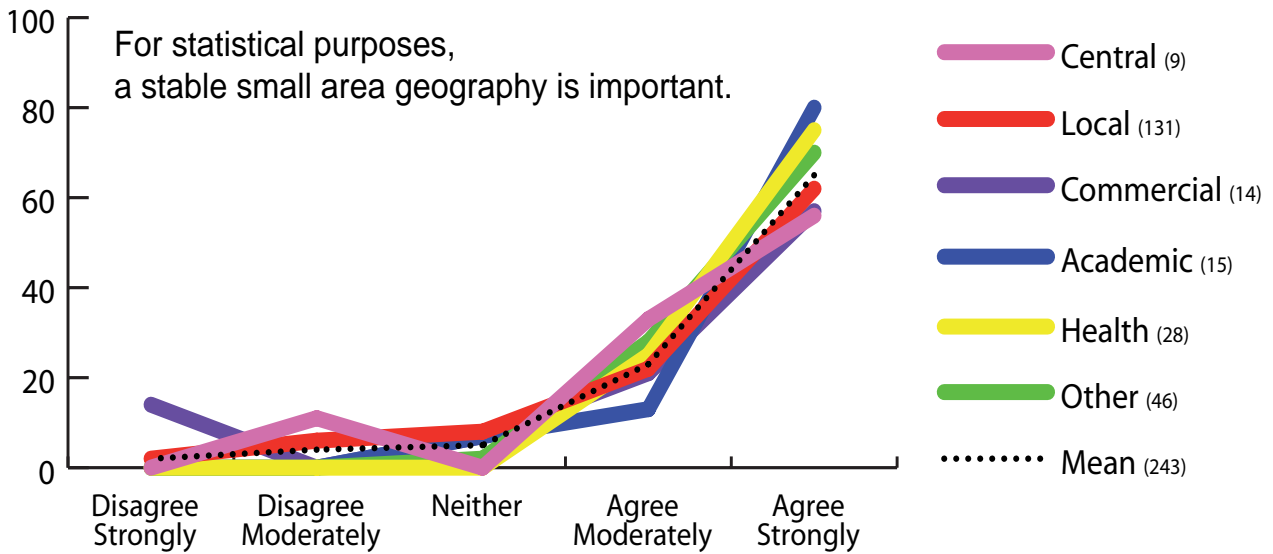
- Central government
- Local government
- Academic
- Commercial
- Health
- Other (Including Regional, Community, Consultants, Emergency Services and No Organisation)

Graphs which demonstrate the response by every individual sector are provided separately in Annex B and referred to where appropriate.

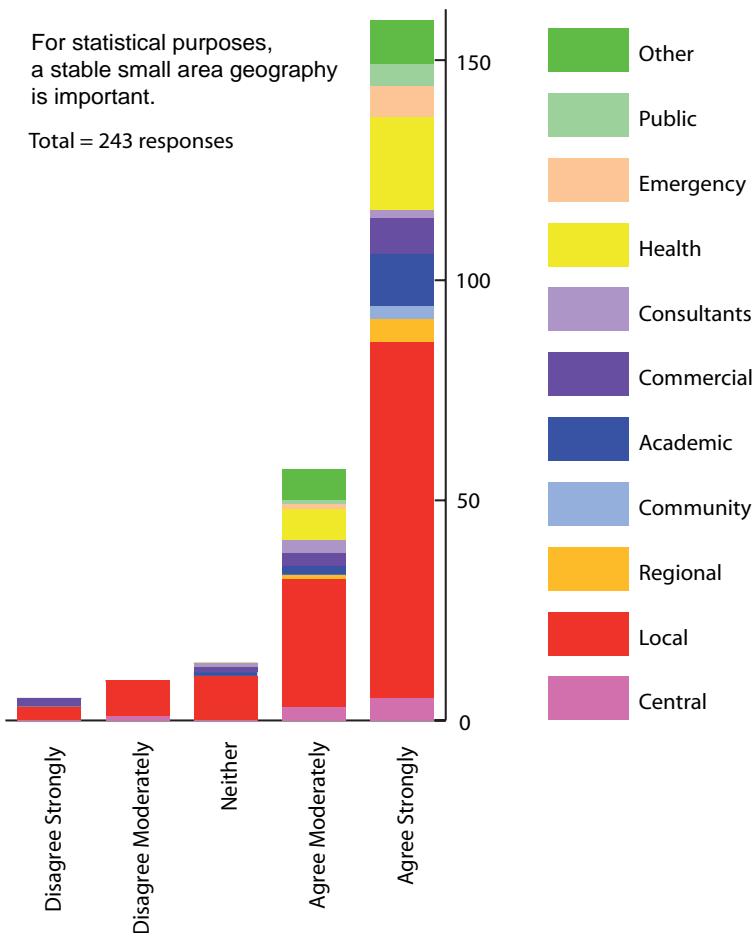
5. ANALYSIS BY TOPIC

Design Principles

Question 11: For statistical purposes, a stable small area geography is important.



Q11.1 All sectors agree strongly that stability is an important principle. A few commercial responses note that reflecting 'reality' at the date at which statistics are released is



more important to their applications but the overall message is clear.

Q11.2 In total 89% of respondents agreed either moderately or strongly that stability was important.

Q11.3 This, however, cannot be considered a vote for stability at all costs and at all levels. Some responses suggest that stability at the SOA level but change at the OA level might offer a reasonable compromise.

COMMENTS

It is essential that the outputs from the 2011 Census MUST be comparable with 2001 Census..... Redrawing either OA or SOA boundaries for 2011 would not only require 2001 Census output to be re-created but also all the datasets held on NeSS, which would involve a vast amount of work for many Government departments. The SOA boundaries should be preserved at all cost. Carol Hryniewicz - CLG

Please do not alter SOA boundaries - if the ONS changes them in Wigan, we would probably disregard the alterations as we have now got 4 years worth of time-related data. The alteration of boundaries across local authorities would wreck the stability that has so far been offered by the SOA model. Daniel Winter - Wigan MBC

Boundary continuity is particularly important for my purposes and for the work of others involved in time series analysis. Neil McSweeney - Cheshire CC

For LA purposes the ability to monitor change and trends is the overriding priority. A changing geography makes this very difficult. However monitoring is more meaningful if OA's can be built up into recognizable communities. Jerry Dixon - Merthyr Tydfil CBC

Whilst comparability over time is important for statistical purposes to enable monitoring, etc., this is secondary to the argument for stability because of the need for simplicity and 'user-friendliness'.... If (the geographies) were to be completely re-drawn LA research teams ... would have to re-educate colleagues, Members and the public and deal with yet another new geography..... Charlotte Devereux - Herefordshire Council

Stability over ten years is good. But would be prepared to sacrifice it in the next census for a chance to improve the actual SOAs for the next ten years Diana Greaves - Powys CC

A stable small area geography is of value, but we consider the most important consideration to be a small area geography that meets the needs of users at the time it becomes available. Ian Coldicott - Norfolk CC

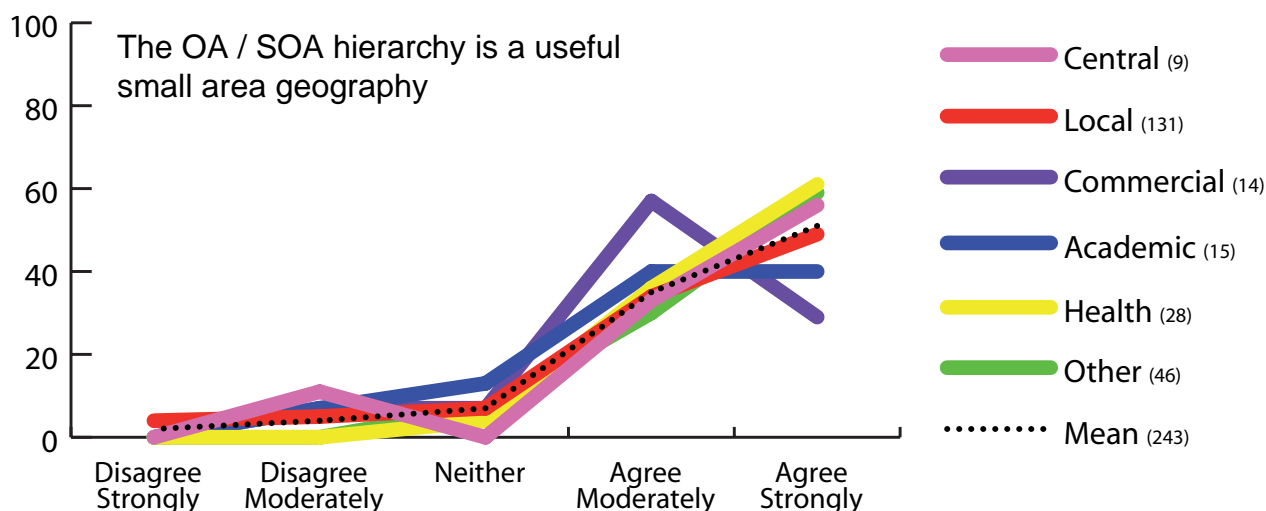
Each census is a snapshot in time, usually ten years after the last one. The priority must be to reflect the geography at the time the census is taken and not as it was ten years before. For statistical purposes, there are far more reasons to update boundaries than to maintain them. Eileen Howes - GLA

This was the reason for these geographies in the first place and stable geographies are important for comparison and monitoring over time. It's fundamental to the point of OAs and SOAs that they remain the same. Kate Canning - West Sussex PCT

It is essential for us, having invested so heavily that we have some stability so we can make useful comparisons. Don't mind having other geographies but we absolutely need stable OAs. Nick Ralph - Anglican Diocese of Portsmouth

Q11.4 Whatever the level(s) at which it is applied the principle of stability clearly needs to play a strong role in our policy.

Question 12: The OA / SOA hierarchy is a useful small area geography.



Q12.1 Again there is strong support (with some caveats) here.

Q12.2 Most people find some value in the SOAs and almost nobody disagrees that they have brought some value in terms of stability and comparability.

In terms of what was previously available, the OA/SOA hierarchy is a vast improvement and a very useful small area geography. Justin Martin - The Commission for Rural Communities

SOA geography provides useful sized areas for detailed analysis and comparison, but only to the extent that data are presented at this level. The overall usefulness is compromised by some OA and SOA boundaries which do not fit natural boundary lines and/or communities. Rosemary Aldridge - Department of Health

Whilst the boundaries don't have any basis in what is happening actually on the ground, it is as they say 'the best we have' and to keep extensively changing it every 10 years seems a little pointless and unnecessary. At least a more or less stable small geography allows us to look at issues more clearly for neighbourhoods, even if the edges are a bit blurry. No name supplied - Local Government

Only because it is better than nothing and marginally better than what we had previously. It could have been so much better if you had worked with local knowledge. Steve Jones - Kirklees Metropolitan Council

OAs are rubbish in villages and hamlets. SOAs should have represented neighbourhoods, parishes and communities, not wards. Diana Greaves - Powys CC

We have found the hierarchy useful. Having data available at levels smaller than wards for issues like deprivation and benefits has enabled us to uncover pockets of deprivation which may otherwise not have been identified by ward level analysis. Elise Caroll - Blackburn with Darwen BC

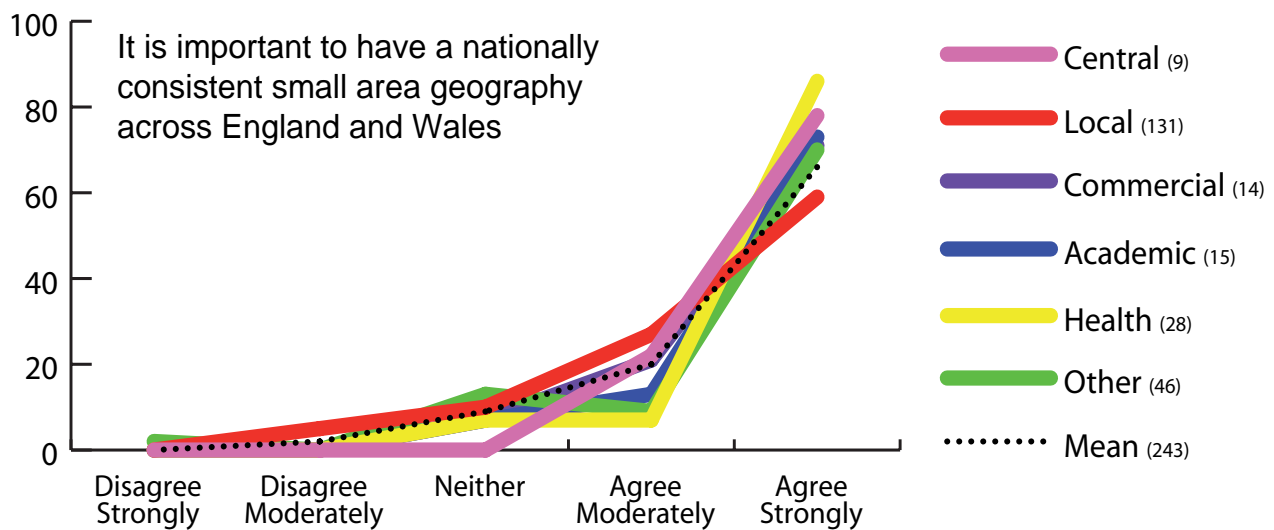
There is now such a lot of information available to these small geographies that it would be a disaster to change them. Barbara Carter - West Lindsey DC

Output areas are essential to our work, as the most detailed level at which census data is released. We believe that the importance of SOAs will increase over time, as more data is released for them and as they are more generally adopted as a standard reporting and analysis geography, particularly in the public sector. David Harris - CACI Ltd

Q12.3 **The OA/SOA hierarchy is broadly supported and must form the basis of the NS geographies.**

NOTE: In addition to the topics discussed in the analysis here the consultation has produced a huge wealth of information on how the SOAs are being used as well as recommendations on how the use and promotion of the SOAs can be improved. These results have been analysed and will be used in the development of future policy, particularly for Neighbourhood Statistics.

Question 13: It is important to have a nationally consistent small area geography across England and Wales.



Q13.1 Consistency across England and Wales is strongly supported.

Q13.2 Virtually nobody disagrees with the principle although it is noted by some that consistency is often more important for national organisations than for local ones.

We agree strongly that it is important to have a nationally consistent small area geography across England and Wales. The design of this geography has to meet a range of user needs. The aim of consistency in population size which applied to OAs and SOAs is very useful, and should be maintained. [Myer Glickman/Emma Gordon - ONS](#)

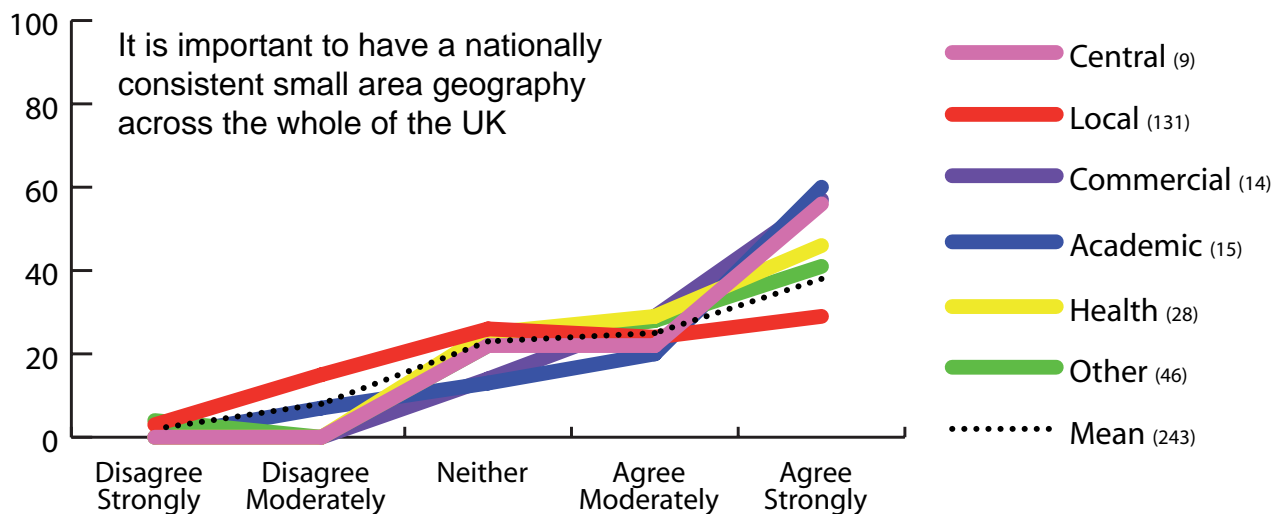
A lot of my work now involves analysis of English and Welsh data, so geographical consistency between England and Wales is very important. More generally, there is significant economic interaction between, for example, West Cheshire and NE Wales - and we need to gather more (and better) intelligence on this, so that cross-border policy initiatives are better informed. [Neil McSweeney - Cheshire CC](#)

It is most important to have a usable practical small area geography for all areas. Since most analysis of small areas will be done locally rather than nationally, the number of tasks (and users) that would benefit from a nationally consistent geography are quite limited. Therefore national consistency is only a secondary consideration. [Tim Bounds - Tees Valley \(representing a number of local agencies\)](#)

Why not? [Robert Barr, Ed Scarse & Dave Butler - Manchester Geomatics Ltd](#)

Q13.3 **The output geographies need to continue to be consistent across England and Wales.**

Question 14: It is important to have a nationally consistent small area geography across the whole of the UK (England, Wales, Scotland and Northern Ireland).



- Q14.1 The case for consistency with Scotland and Northern Ireland is rather weaker. Nonetheless there are still 37% of users who feel strongly that this is important.
- Q14.2 Around 23% of users say they are not bothered but again very few (11%) actively disagree with the principle.
- Q14.3 In this and in several of the later graphs it is interesting to note the difference between the response of local government and the mean response. Because of the large number of local government responses the two lines obviously tend to be close on most topics. Where the local government view differs from others the lines diverge – as here.
- Q14.4 Local government are less convinced than most by the value of UK consistency – as noted before because consistency is less relevant for many local uses.
- Q14.5 The commercial, academic sectors and emergency services sectors (see Annex B) are particularly keen on UK consistency.

We agree strongly that it is important to have a nationally consistent small area geography across the whole of the UK. There is an aspiration across government for more coherent UK-wide statistics, and ONS should support developments which facilitate this. However, differences between the countries in population distribution need to be taken into account; this is of particular importance in Scotland where there are large areas of very dispersed settlement. Myer Glickman/Emma Gordon - ONS

We do not view this as being as important as having a nationally consistent geography across England and Wales due to fundamental differences in governance and legislation across the rest of the UK. Gareth Wrench - Warwickshire CC

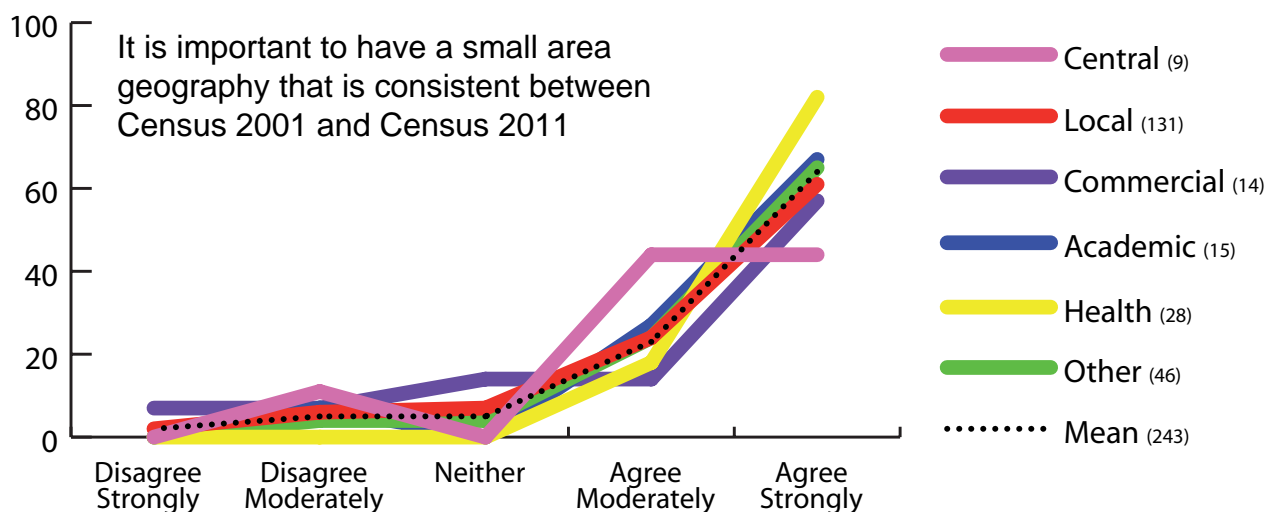
Comparison with OAs and SOAs in Scotland and Northern Ireland is not likely to be useful. Also, there may be differences in the questions asked in the 2011 Census e.g. Scotland will probably use a different ethnic group classification. Paul Ekers - London Borough of Havering

The main requirement is for analyses conducted across all of the UK to be valid, and to be able to equitably compare areas in different parts of the UK. We consider UK consistency to be important to a great deal of our work. David Harris - CACI Ltd

Why not? Robert Barr, Ed Scarse & Dave Butler - Manchester Geomatics Ltd

- Q14.6 While there are certain to continue to be differences due to different national structures and requirements **there is clearly value in continuing to work for common definitions and approaches across the UK wherever possible.**

Question 15: It is important to have a small area geography that is consistent between Census 2001 and Census 2011.



Q15.1 The second strongest positive response - consistency with Census is considered worthwhile by the vast majority. 85 % of respondents agree either strongly or moderately.

Q15.3 The health sector, feels most strongly of all – with 82% agreeing strongly on the importance of stability.

Urban flight, the death of rural services, and regional variation are all major social and political issues. The ability to analyse change over time is essential. Colin Wall

The prevailing view in the North-East is that the Census geography should reflect population patterns in 2011 and that this should be the overriding factor. John Mooney – NERIP

Much of the analysis that we will undertake using 2011 Census data will require comparisons with 2001 Census data. A consistent geography will make this process easier. Richard Campbell - Department for Transport

So much of our research began using 2001 data. And our work is all about tracking change over time. It is essential that base geographies remain stable. Chris Villar - Liverpool City Council

Shame that you didn't get it right by using local knowledge to make the 2001 OAs 'sensible' to local geography. Steve Jones – Kirklees MCI

In principle, this is a valid aim. However, even if geographies remain consistent, many things can change, e.g. topics and questions, response categories, conditions on the ground, and so on. Perhaps consistent small area geography is more meaningful for annual or shorter-term datasets. A valid current geography is probably more important, and artificially 'freezing' geographies beyond their 'natural life' isn't always helpful. Steve King - City and County of Swansea

Our view is that stability of boundaries is only secondary consideration. We view Stability as being impractical and unachievable and only of benefit to a limited number of users. We feel that it is vital that the 2011 geography matches the realities of communities on the ground at that time. Therefore the aim of having a consistent geography between Censuses is irrelevant. Eileen Howes - GLA

Whilst its accepted that growth may dictate changes to a small percentage of OAs / SOAs, it is essential to ensure that this small area geography remains stable over time. Stability over time breeds familiarity and trust. Mrs Helen Harvey – Shropshire CC.

YES, YES, YES, Absolutely imperative!!!! Steve Gibbons - LSE

Complete consistency unachievable Complete change utterly frustrating and undermines the value of the entire census dataset Only option is therefore controlled change, with clear tabular relationship between the geographies David Martin - University of Southampton

The point of OAs and SOAs was that they would be a consistent geography to allow comparison over time - if they are changed they almost become meaningless Kate Canning - West Sussex PCT

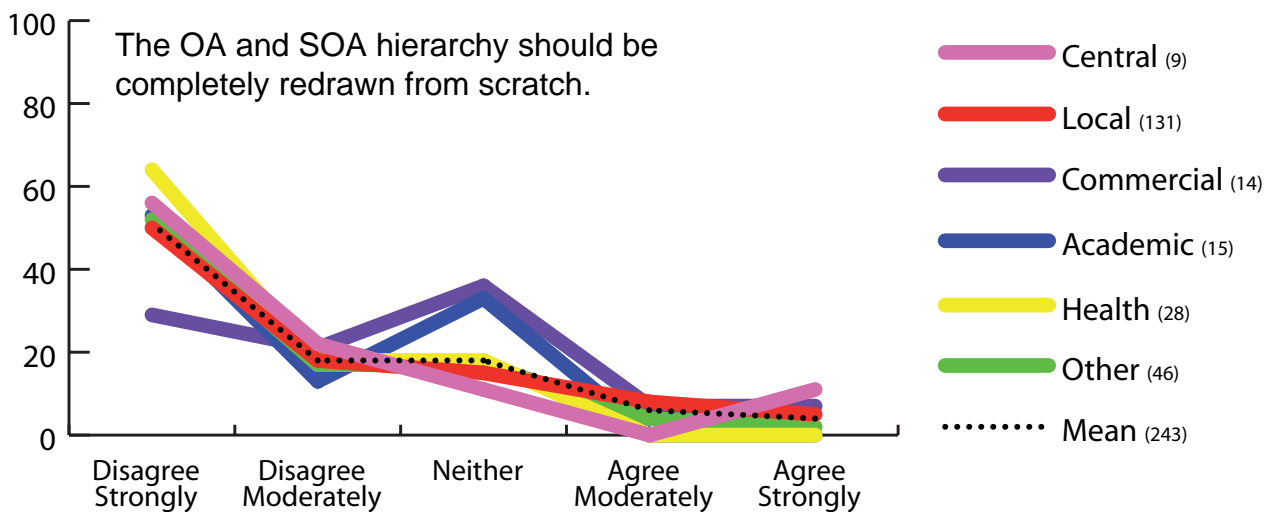
Consistency in SOA between 2001 and 2011 is very important to us, for performing time series analysis, for example. Any changes between 2001 and 2011 should preferably involve splitting or aggregating existing boundaries rather than redistribution. Lookups should be provided as a cross-reference between 2001 and 2011 boundaries should any changes be made. Stephen Rogers - North West Public Health Observatory

We have only just started to invest in this and explain it to others. It would be help to us to be able to make the case based on a clear comparison between the two dates and hugely aid the observation of changes. Nick Ralph - Anglican Diocese of Portsmouth

Q15.4 **It is obvious that we should press for consistency between censuses where possible** but two key points are clearly made:

- that comparability will never be perfect due to changes in method and questions; and
- that, again, consistency must not be an end in itself and needs to be balanced against the utility of the final geography.

Question 16: The OA and SOA hierarchy should be completely redrawn from scratch.



Q16.1 The first 'negative' response!

Q16.2 Only 23 respondents (9%) agree with a redraw from scratch (and even then, most only moderately.)

Q16.3 Regional agencies are the most strongly against change (with all disagreeing strongly). Consultants are most in favour (see Annex B Q16).

The areas currently identified are a great starting point, and in the most fit the bill. I would not foresee the need to start again from scratch. James Naunton - South Norfolk Council

I get very frustrated in change for changes sake - if they were redrawn they wouldn't be perfect - so it seems a waste of time and money to go through the process again. Sarah Thorneycroft - North Cornwall District Council

Create a geographical hierarchy and stick to it! David Evans – Mansfield District Council

You could get away with tidying up and eliminating the worst anomalies of the existing boundaries. Roger J Morgan - Royal Borough of Kensington & Chelsea

Based on our experiences there is no need for this to happen. Although we have encountered flaws, they are only flaws to us and we have accepted them. Daniel Winter - Wigan MBC

It would be impossible to satisfy everyone, and attempting to redraw boundaries would run the risk of creating a whole new set of problems whilst burdening heavy users (i.e. LAs) with yet another set of geographies to deal with. Charlotte Devereux - Herefordshire Council

.... the current OA/SOA geography (and the methodology used) is not fit for purpose. A complete replacement, with a better methodology, is needed. Tim Bounds - Tees Valley (on behalf of a number of local agencies)

NO, NO, NO please, please don't do this. Steve Gibbons - LSE

OAs should remain, SOAs could be redrawn if necessary. Steven Ward - Sefton PCT

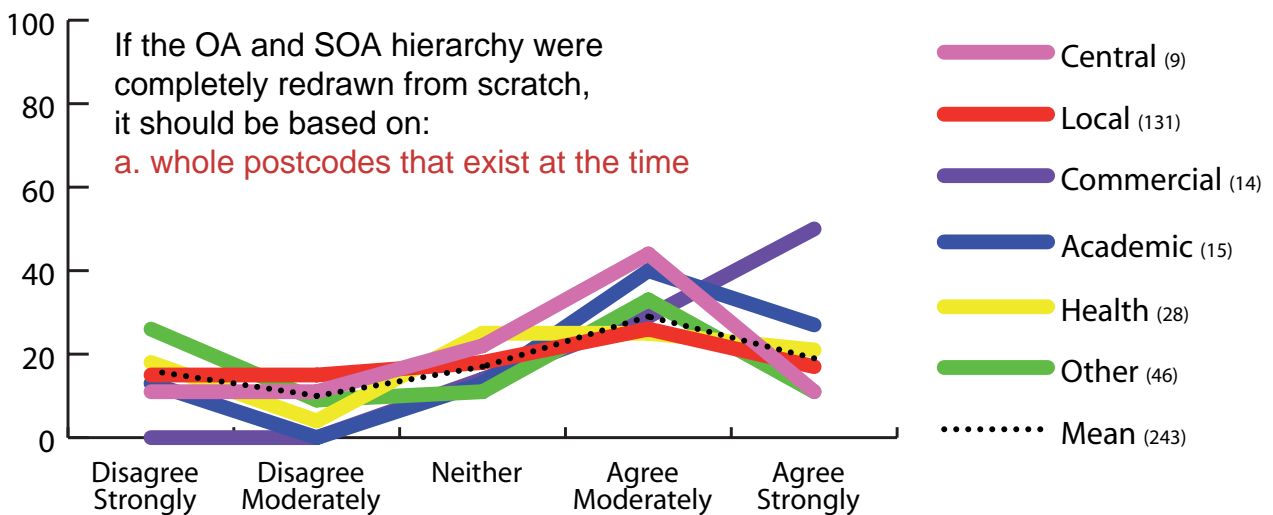
NO! Now we have it, let's stay with it. Otherwise we are adding layers of confusion. Greg Wells - Warwickshire PCT

Q16.4 **Redrawing the OA and SOA hierarchy from scratch is a non-starter.** We need to retain, at least, some elements of the OA / SOA hierarchy.

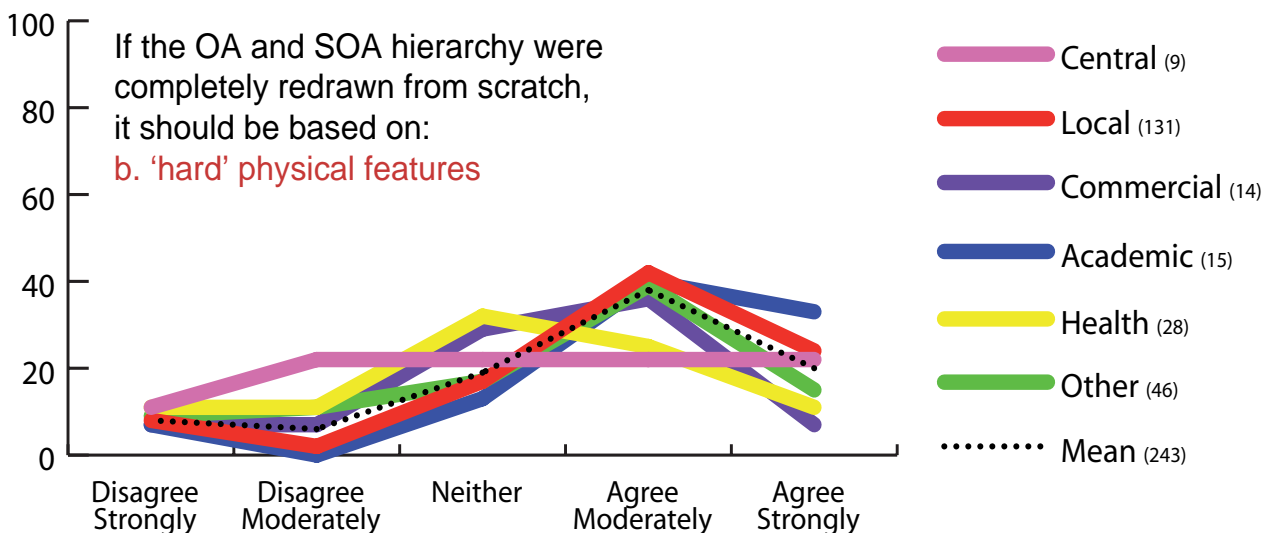
Q17.1 The following set of questions were intended to get a sense of what features matter to different users in the construction of a new geography. The responses are independent of each other but should be considered together.

Question 17: If the OA and SOA hierarchy were completely redrawn from scratch, it should be based on:

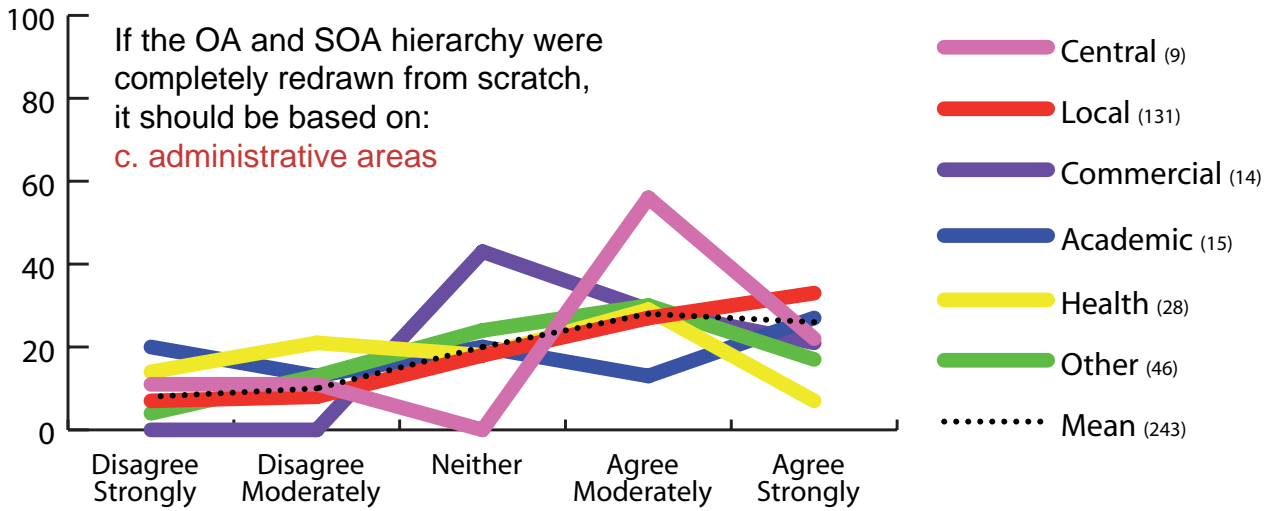
a. whole postcodes that exist at the time



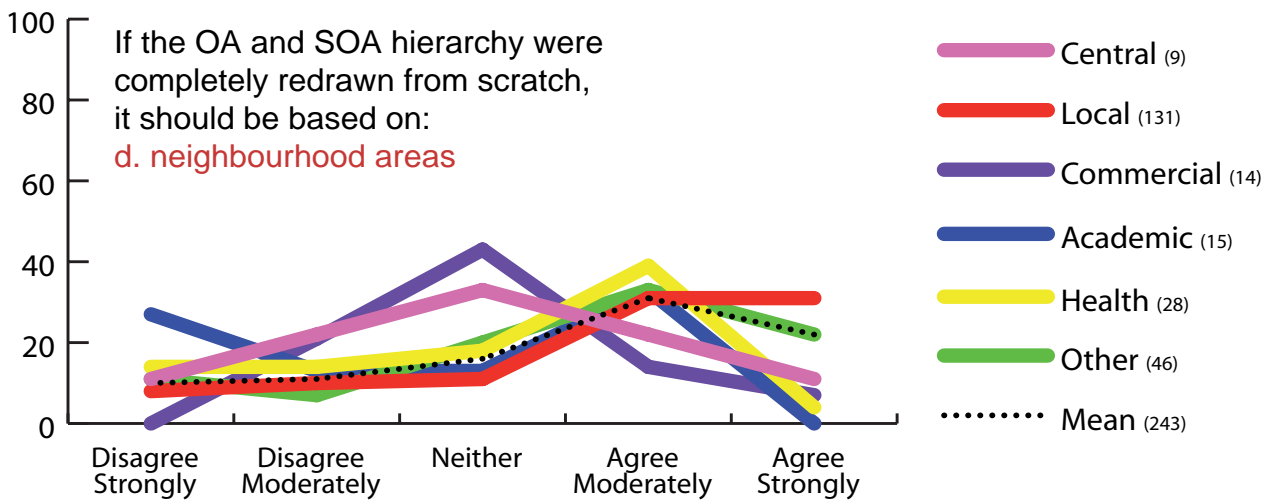
b. 'hard' physical features (e.g. roads, rivers, railways)



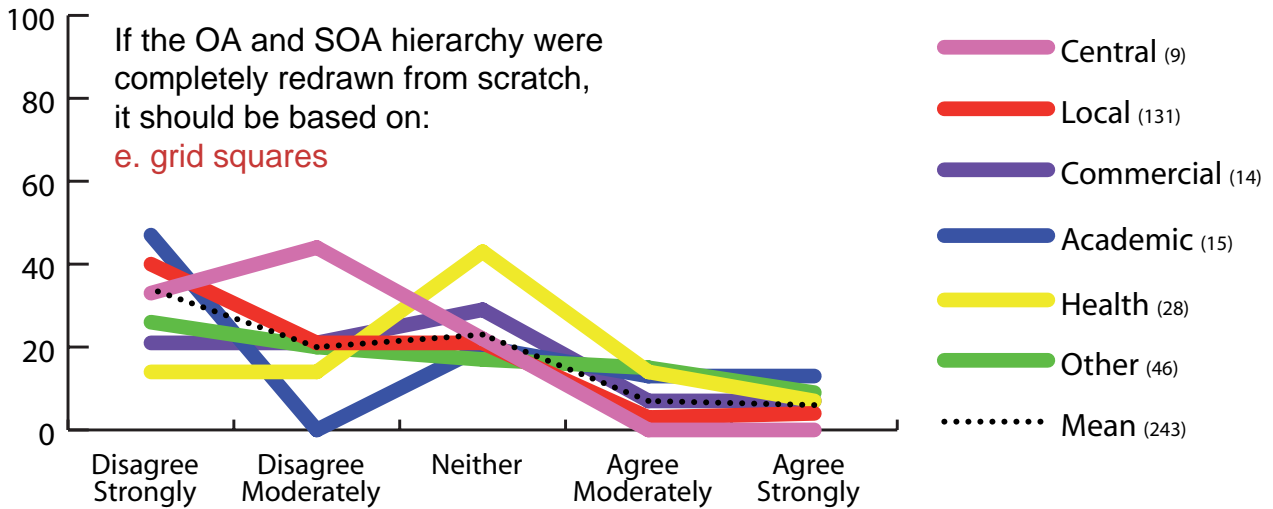
c. administrative boundaries that exist at the time



d. neighbourhood definitions, where they exist



e. grid squares



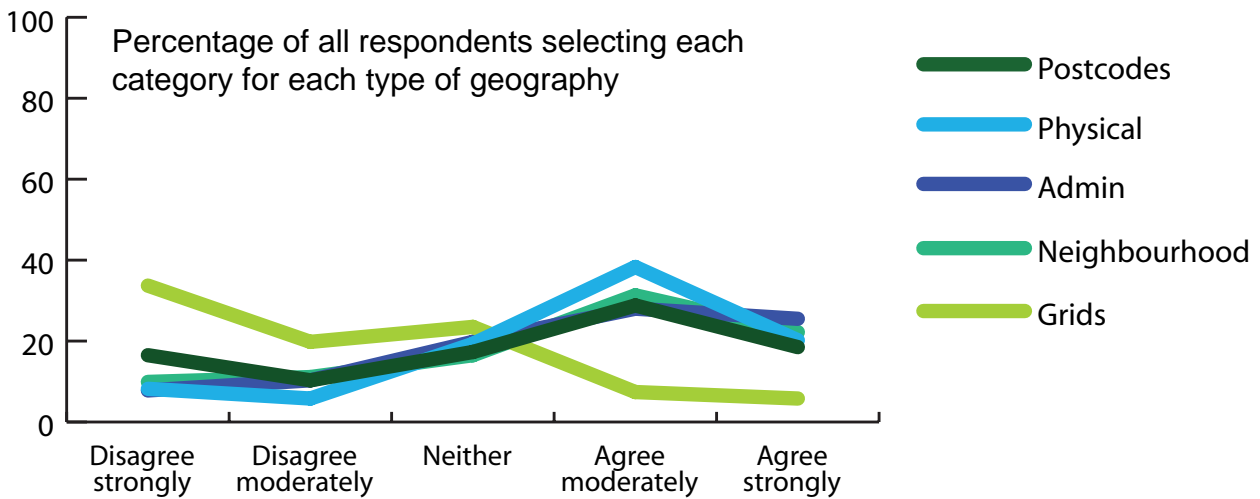
Q17.2 The pattern is fairly clear – the majority of users would ideally like any new geography to reflect postcodes, physical features, administrative boundaries and neighbourhoods. Most people agree moderately and want the geography to provide a balance between several or all of these requirements.

Q17.3 There is, however, only limited support for grid squares – and even disagreement with their inclusion.

Q17.4 Different sectors have different interests.

- Local government feels most strongly about administrative boundaries (33% strongly) and neighbourhoods (31% strongly).
- The commercial sector feels particularly strongly about postcodes (50%) and are non-committal on neighbourhoods.
- The academic sector feels strongly about everything – in favour of postcodes, physical features and both for and against neighbourhoods. They are the least committed to administrative boundaries.
- The health sector are keen on postcodes and neighbourhoods but are otherwise mixed or non-committal in their views.
- Central government cares most about administrative boundaries but are also keen on postcodes.
- Emergency services are generally against the use of postcodes.

Q17.5 The following graph and table shows the relative weights with which all users responded.



ALL USERS	DISAGREE Strongly or moderately	AGREE Strongly or moderately
Postcodes	65 (27%)	115 (47%)
Physical Features	34 (14%)	142 (58%)
Admin Boundaries	44 (18%)	130 (53%)
Neighbourhoods	51 (21%)	130 (53%)
Grid Squares	130 (53%)	32 (13%)

Q17.6 Physical features just win out as the favourite geography to influence a new set of OAs – but administrative boundaries, neighbourhoods and postcodes are all close behind.

NOTE : In retrospect this set of questions might have been better had it asked users to allocate a limited number of marks to each option – it is easy to ask for more than you need when there is no constraint. Nonetheless it is clear from studying individual scores that users have weighted the relative importance of different features and the supporting comments make it clear that there are strongly conflicting calls upon the policy. Different user groups need different things and most users would like the geography to reflect several different sets of features.

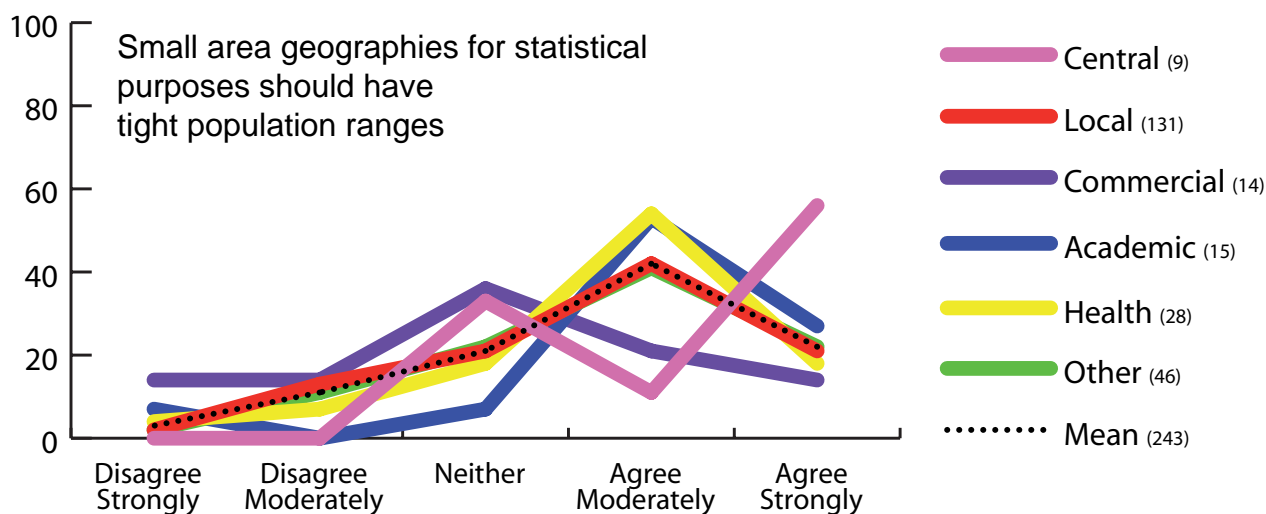
The incorporation of postcodes in the 2001 OA methodology was one of the major causes of the subsequent irrationality of the boundaries, so it is vital that postcodes are not used again.The failings of the 2001 Geography amply demonstrate the problems that arise when an artificial methodology is rigidly adhered to and technology alone is relied on. What is needed is a more straightforward geography of areas that can be successfully used as building blocks for neighbourhoods or other communities. Tim Bounds - Tees Valley (on behalf of a number of local agencies).

Following hard physical features may be important for those undertaking neighbourhood level analyses, but to a large extent the usefulness of this would depend on the criteria and methodology used to define these neighbourhood/user-specific geographies. For the type of analysis our organisation performs the current boundaries are fine – with the possible exception that knowing where zero population areas are would be useful. Brian McAuley – West Midlands Regional Observatory

Best not to redraw them at all. Kevin Loughlin - ESRI (UK)

Q17.7 **It is obvious that our geography needs to be a compromise and has to, at least partially, satisfy several needs.**

Question 18. Small area geographies for statistical purposes should have tight population ranges.



Q18.1 Most users agree moderately that a tight population range is an important target – though note that the commercial sector are less committed to this. The comments capture some of the issues here.

This requirement has obvious conflicts with the need for stability over time. The process for creating new ward boundaries took into account population, number of households but also community cohesion and physical features. Clearly, there is a need to safeguard confidentiality but, as a data user, consistency with the ward boundaries and stability over time would be more important than tight population ranges. Kate North - Liverpool City Council

In principle this is a good idea, but if it is at the expense of defining areas that are homogenous in character it becomes undesirable. Also given the capabilities of modern desktop database/spreadsheet/GIS software, the calculations to allow comparisons of OAs are easy to perform, even for large numbers of OAs. David Morgan - Pembrokeshire Coast National Park Authority

Agree moderately. However, if having tight ranges means that the boundaries need to be changed on a frequent basis, this would undermine the idea of having a stable geography against which comparisons over time can be made. Gareth Bevan - Mott MacDonald MIS

I think population/ household ranges should be reasonably tight, as that makes it easier to compare absolute measures (i.e. counts rather than %) for different geographical areas. Neil McSweeney - Cheshire CC

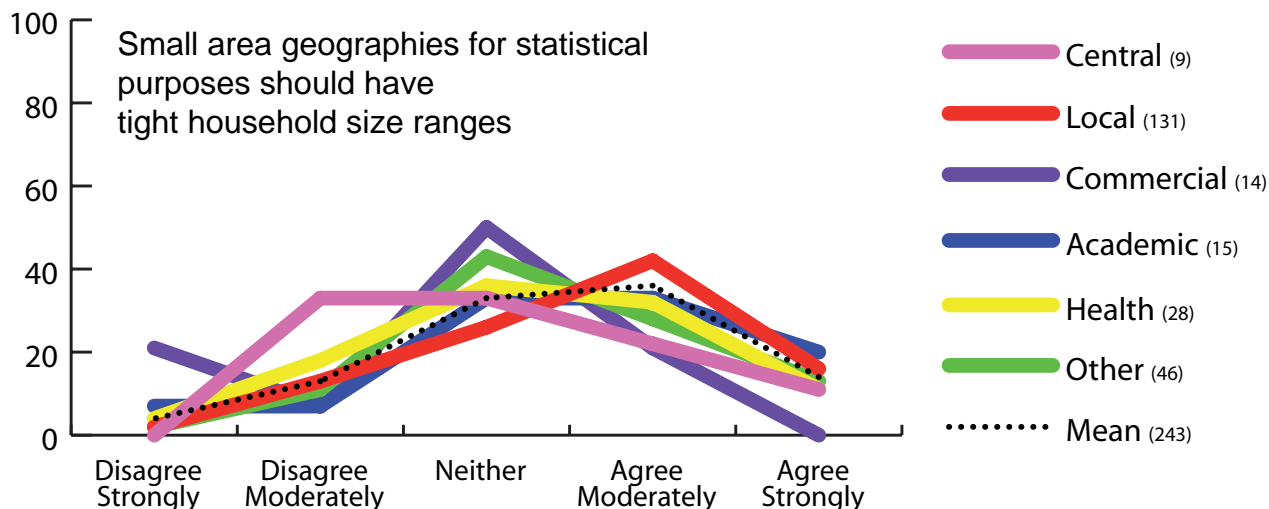
Population change at small area level is important and could be lost. The case for tight ranges is fairly arcane, and some users (myself included) do not find it convincing against other more significant data losses (i.e. change) Richard Cooper - Nottinghamshire CC

This is the whole purpose of a statistical geography, to ensure that there is a comparative dataset that transcends the variability of ward geography. Michelle von Ahn - London Borough of Newham

Fairly tight, but flexible. Hugh Neffendorf - Katalysis

Q18.2 Views and comments here will be fed into future work on disclosure and outputs policy.

Question 19. Small area geographies for statistical purposes should have tight household size ranges.



Q19.1 If anything users are slightly less committed to household targets than population ones – though this is still a positive response. The commercial sector are even less convinced by household targets than population ones.

Q19.2 Again the comments capture some of the subtleties.

Agree, though complications may arise with this ideal because of communal establishments which could mean producing tight population ranges then becomes problematic. Andy Bates -ONS

Household sizes vary so much especially more so today than previously; however for spatial planning and land-use analysis having a robust measure for household sizes would enable more detailed analysis Brian McAuley - West Midlands Regional Observatory

Difficult one this. People or households? I think households win on this as they are nearer our conception of the real world. We can understand that some areas have more people in the houses than others Martin Callingham - Birkbeck College

I keep an open mind as I can envisage some areas of the country where tight ranges might not result in the most sensible areas being chosen Sidney Tyrell - Coventry University

Sensible geographical size is more important than tight household size ranges: in some sparsely populated areas small area geographies would actually be quite large in physical extent if constrained too tightly to household size. Keith Augiers - Public Health North East

Q19.3 Views and comments here will be fed into future work on disclosure and outputs policy.

Conclusions on design principles - The case for, and against change

- 5.1 There are obviously difficult decisions to be made here. The results above show clearly that some degree of stability and continuity is strongly supported by virtually all users. Nonetheless there are several options here and several ways in which that stability might be enabled.

OPTION 1) Redraw the OAs and the SOAs from scratch?

- 5.2 **A complete redraw of the OA/SOA hierarchy is rejected by virtually all users and so is easy to discount here.**
- 5.3 It would, however, be possible to redraw just the OA or SOA level and retain a degree of stability and comparability at the other level(s)....

OPTION 2) Keep the OAs but redraw the SOAs?

- 5.4 Any close consideration of the options here however soon rejects retention of the OAs (only) and a redraw of the SOA level.
- 5.5 This would not solve the problems with the OAs noted by critics of the hierarchy and would cause huge disruption for those who are either finally getting to grips with SOAs or have them fully embedded in local systems. Critically it would run counter to the stated principles of the SOAs and would cause huge confusion. The need to keep things simple and avoid the introduction of extra geographies is a common thread in many comments.
- 5.6 **A redraw of the SOAs from a retained set of OAs is rejected.**
- 5.7 Having rejected the first two options we are left with a clear but much more difficult choice.
- 3) We could freeze either the Lower or Middle layer of SOAs and attempt to produce an improved set of OAs constrained within these boundaries;
- or
- 4) We could keep both the OA and SOA layers fundamentally stable.

OPTION 3) Redraw the OAs within frozen SOAs

- 5.8 On first impressions this option looks very attractive. It provides a level of stability at which data can be compared over time – but would provide an opportunity to fix at least some of the weaknesses of the OAs.
- 5.9 A small but significant minority of respondents feel very strongly that such a complete redraw of the OA level is the only way forward – and, indeed, the case for change is a real and initially convincing one.
- 5.10 There are clear and recognised local weaknesses in the OA (and so in the SOA) geography. When constructed, the OA boundaries upon which the whole scheme is built were never intended as a persistent geography – or even as a building block for anything other than Census 2001. By the time of Census 2011 the OAs will be 10 years old - and the world has moved on.
- 5.11 Census provides our best opportunity to identify local conditions and provide information to support the provision of local services.
- 5.12 A number of users argue strongly that the output geography should be rebuilt to reflect the situation on the ground at the time of Census.
- 5.13 Again this idea is attractive and seems sensible – but it does assume that we can build a radically better geography at the OA level than the existing one – and it is here that the crux of the problem lies.

Issues around redrawing the OAs

- 5.14 The process of producing output areas for the Census is a complex one. The areas need to be:
- based on the location of population as identified on Census day;
 - small – so numerous; (around 175,000 last time – an average of 465 per LA)
 - generated as quickly as possible; and
 - (critically) consistent across the whole of the country.
- 5.15 As a result of this the production of the OAs needs to be (at least very largely) automated.
- 5.16 At the same time the consultation has shown more clearly than ever before that there are many (normally conflicting) calls upon the OA areas.
- 5.17 Different users want the geography to align (to varying degrees) to:
- physical features;
 - locally recognised neighbourhoods;
 - postcodes; and
 - administrative boundaries.
- 5.18 Most users would like the geography to conform with several of these features.
- 5.19 At the same time virtually all users want to
- retain a high degree of stability at the SOA level and
 - retain the same freedom of licensing as the existing digital boundaries (or improve it!).
- 5.20 These multiple calls on the policy leave us in a similar place to where we were in designing the geography for 2001. The OAs are the subject of a wide range of, often conflicting, demands from a wide range of users. Everyone can think of ways in which the OAs might be improved for their own applications but it is much less easy to identify how a new set can satisfy all, or even the majority of, users.
- 5.21 It is true that there have been some improvements since 2001 in the datasets available to us but there are still significant technical challenges. Although Ordnance Survey MasterMap now exists it is not structured or attributed in a way that makes the construction of a new OA geography much easier. There is still no easy way of linking gardens, sheds and garages to the house they are associated with. The address datasets available for 2011 will certainly be significantly better than they were in 2001 but even these are not without their problems.
- 5.22 One criteria that would clearly be useful to build into a new set of areas would be neighbourhoods. Homogeneity (of tenure) was one of the criteria fed into the algorithms that defined the OAs in 2001 but it played a very minor role in the definition of areas and in no way could it be considered to equate to local 'neighbourhoods'. Neighbourhoods are, however, exceptionally difficult to define – particularly on a nationally consistent basis. Different uses require different types of neighbourhood, different local users have different understandings of where they want them to lie and neighbourhood areas and names are famously contentious.
- 5.23 Some responses suggest a solution where individual local agencies identify their own OAs within set criteria. Our experience on defining the Middle Layer (only) of SOAs showed that some authorities were able to commit the time and resources required – but many were not. The OAs are at least an order of magnitude more complex than this both in terms of the scale and the criteria that need to be included. Although a local redrawing of areas is initially attractive we feel that it is practically impossible and would result in a

significant lack of consistency across the country.

OPTION 4) Keep both the OAs and the SOAs stable

- 5.24 The consultation has confirmed that the user demand is little different to that which existed in 2001. Any new set of OAs would have to be the result of a compromise between the different calls upon the policy outlined above. The OAs produced for 2001 were just such a compromise.
- 5.25 There will be improvements in the datasets available to us by 2011 – but these are not fundamental ones. We are starting from a similar place and the scale of the operation means we are likely to use similar automatic methods. In addition we now have the additional constraint of wanting to conform to the existing SOA geographies.
- 5.26 Were it possible to produce a perfect (or even significantly better) new geography a change would be worthwhile. There is a real danger, however, that all that will result from a redraw is a new set of OAs demonstrating the same compromises as the old ones.
- 5.27 Admittedly a new set would be updated and would be more useful for some purposes – but they would lose all of the potential advantages of stability and would add confusion for some. Many users note that stability is likely to help in user understanding of the SOAs. Continuity of the OAs and SOAs will help promote their wider adoption.
- 5.28 After close consideration we believe that the case for retaining the old geography is stronger than the advantages that a redrawn version would bring.
- 5.29 Maintaining stability at both levels of the hierarchy will help promote their adoption and follows through on the promise of stability made when SOAs were established.
- 5.30 It is recognised that the existing OAs do have weaknesses but they do provide a compromise solution as a building block for many purposes. They have a reasonable alignment with postcodes and with administrative areas. They have a tightly grouped distribution of population and strict population and household minimum values (100 people, 40 households). The tight focus of values here is likely to be allowed to slip a little in order to retain stability of boundaries but they will still be small, similar building blocks with a degree of local acceptance and understanding.

NOTE 6: OPTION 4b - A split of OAs to Scottish OA size?

One option suggested by some respondents and which appears, at least initially, attractive is to split the existing E&W OAs in half (in terms of population). It would be possible to constrain such splits to the existing OAs and so end up with a set of OAs which bring a high degree of comparability with the existing set while aligning much better to the smaller OAs used in 2001 in Scotland. Unfortunately what seems like an ideal solution does have a couple of disadvantages.

There is a clear relationship between the (population) size of OAs and the amount of data that can be released. In simple terms the smaller the areas involved the more difficult it is to release a full and rich range of data for those areas. In addition, although comparability would be retained, a change to smaller OAs would result in an apparent change to OAs which would need to be managed. Several respondents insist that change of any sort is disruptive.

On balance a view is taken that, at least until outputs and disclosure policy are further developed, the case is not made for a split in OA size.

C1 The National Statistics small area policy will be to retain a high degree of stability – both at the OA and SOA level.

- No change will be made to the existing OAs and SOAs before Census 2011.
- A set of OAs and SOAs, very similar to those used for 2001, will be the prime output geographies for Census 2011.

C2 Minimal changes will be made after the Census to take account of the most significant changes in population and to fix the very worst performing OAs and SOAs.

5.31 It has always been recognised that some degree of change is essential in order to respond to population change between censuses. The need for this is most obvious in areas where the population of areas have dropped below the stated minimum population or household levels – but it will actually be more common to split areas than to merge them. ONS will now work to develop criteria for essential changes to the existing OAs and SOAs.

5.32 Such criteria will determine which OAs will be automatically split and merged as the result of population changes at Census 2011.

5.33 Strict criteria will also be set against which requests for change in local areas will be judged. Local agencies will be provided with a further opportunity shortly before Census to request changes to OAs and LSOAs which they feel cause real problems locally.

5.34 Continuity and stability are critical however.

C3 Changes will be limited to less than 5% of the OAs nationally.

5.35 It is hoped that the level of change can be managed well below the 5% level. Findings from this consultation – and particularly the areas which users have identified as troublesome – will be used in this aspect of research.

C4 Changes at the LSOA level will be similarly minimised. Changes at the MSOA level will only be made in exceptional circumstances.

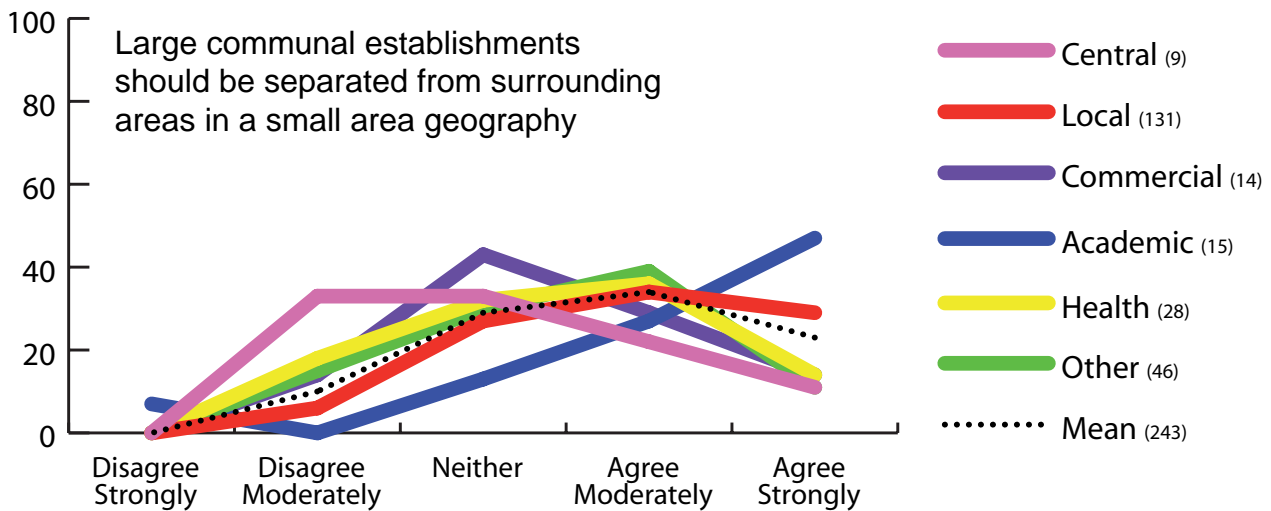
C5 As far as possible changes to OAs and SOAs will be made by simple mergers and splits of the existing scheme.

5.36 Except where essential, changes will be simple ‘many to one’ or ‘one to many’ relationships. ‘Many to many’ reorganisations, as is so often the case with administrative geographies will be avoided. Simple lookups between geographies will be provided to help manage (minimal) changes.

5.37 The level of acceptable change at each level is still to be determined. This decision, together with decisions on the criteria to be used and which OAs are changed, will rest with ONS.

Other Issues

Question 20. Large communal establishments should be separated from surrounding areas in a small area geography.



The return of the special ED/OA as in previous censuses would be a very welcome move. This would enable researchers to remove a major component of the institutionalised population at a stroke and would provide a better distinction between students living in communal establishments and those living in the community on a usual residence basis. Chris Connolly/Neil Martin - Durham CC

Separation of large communal establishments is not supported on the grounds that these would be difficult to define; might fall outside the parameters for defining OAs; and would not be future proofed (eg complete or partial closure of a large communal establishment could lead to an area with a zero or below threshold population). One response queried whether it would be possible to place some kind of 'flag' on OAs where a large proportion of the population was in a communal establishment? Rosemary Aldridge - Department of Health

I don't think that this is necessary, especially as it will cause boundary changes preventing trend analysis. It would however be useful if a dataset could be produced which simply highlighted the presence of one or more communal establishments in any OA which would supplement local knowledge. Katy Thomas - Lincolnshire CC

It would be infinitely preferable for large communal establishments to have their own OA. Sheila Ritchie - Joint response Manchester CC and PCT

Having communal establishment in ordinary OAs is useful. Previously, in 1991 and earlier censuses, 'Special Enumeration Districts' were likely to get overlooked. It would be useful, though, to have communal establishments flagged up in some way. Dr Paul Tansey - on behalf of a range of local agencies

It is better to define geographical areas by geography than it is to define them by services Michael Convey - Stoke Speaks Out

There is a disclosure risk for vulnerable groups, depending on agreed definitions (hospital, prison, detention centre), but what if university or hostel dealing with a particular client group. Must be certain that it is over the household and population thresholds, and that it can't be identified by differencing between geographies. Ann Roberts - National Housing Federation

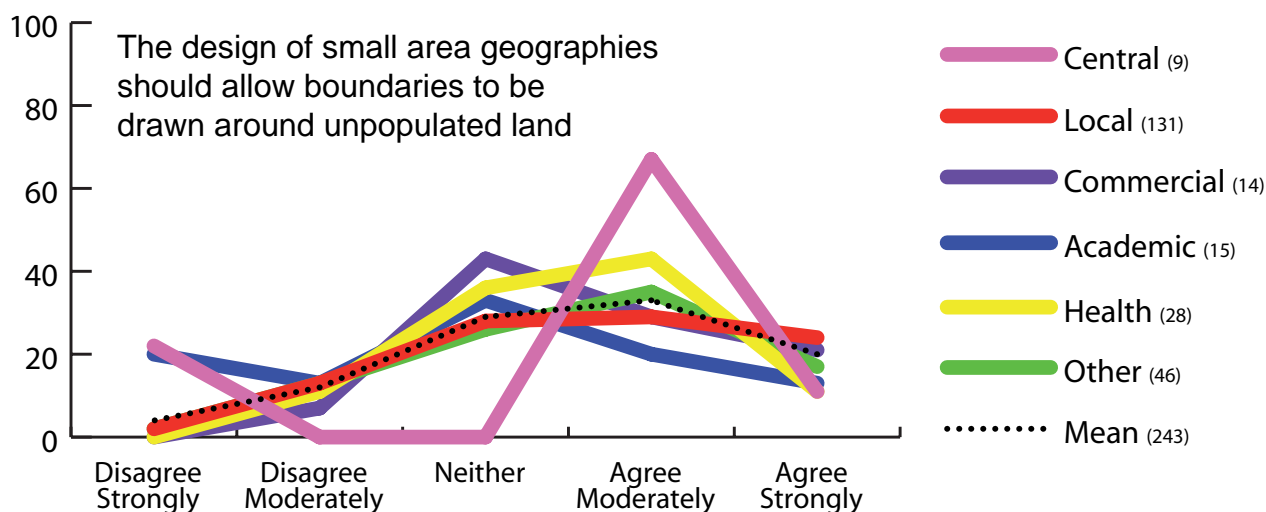
Q20.1 This is a tricky issue. It is recognised that large communal establishments can have a significant impact on local statistics and the idea of separating them is initially attractive. There are, however, complications arising from disclosure policy as well as the potential for establishments to change.

Q20.2 In light of the complications here it is not possible to make any decisions on the policy at this stage. The decision is too closely linked to output and disclosure policies for Census 2011.

C6 **No decision has yet been made on the place of communal establishments in NS and Census outputs.**

Q20.3 The views resulting from the consultation (a fairly strong support – particularly from academics and local government) will be fed into further thinking on disclosure and outputs policy (and so back into the final geography policy).

Question 21. The design of small area geographies should allow boundaries to be drawn around unpopulated land.



This would be very useful. Non-residential areas such as parks, woodlands and industrial estates need to be identified. This would avoid misinterpretation of output such as low population density, which only results from a park or an airport being included. It would help with the presentation of statistics in GIS where some OAs and LSOAs are disproportionately large as a result of covering unpopulated land. Sheila Ritchie - Joint response Manchester CC and PCT

Interesting idea, but would need more details as to how these areas would be determined: how small would they be - could one school or factory be given its own zero population OA for instance? Don't like the suggestion of basing them on 'population sparseness': it's one thing to have large areas where no-one lives that should rightly be excluded when considering population based statistics, but quite another when there is a small population scattered over a very large area - these people still have to be served by public organisations, and it is a major consideration in the provision of services in such areas. Charlotte Devereux - Herefordshire Council

It would not be sensible to have empty or unpopulated output areas however a new geography of unpopulated land would be a very useful addition to use in mapping to 'white out' unpopulated areas on thematic maps. Martin Robinson - The London Borough of Hammersmith and Fulham

The SOAs and OAS should be contiguous and cover the entire area of a local authority. The local authority can, itself (as we do) create an 'unpopulated land' layer to use in mapping, and this would be more timely and accurate than anything that ONS would be able to create. Michelle vonAhn - London Borough of Newham

This is OK in theory, but difficult in practice.....An ancillary but matching set of unpopulated land polygons could be a useful additional product. David Martin - University of Southampton

The availability of population weighted centroids has meant that this has not been a problem. Alison Peacock - Manchester Diocesan Board for Ministry & Society

Q21.1 Again this is a complex area. A clear identification of those areas in which there is very sparse population – particularly in complex rural OAs and LSOAs where much of the area is 'unpopulated' seems like a useful idea.

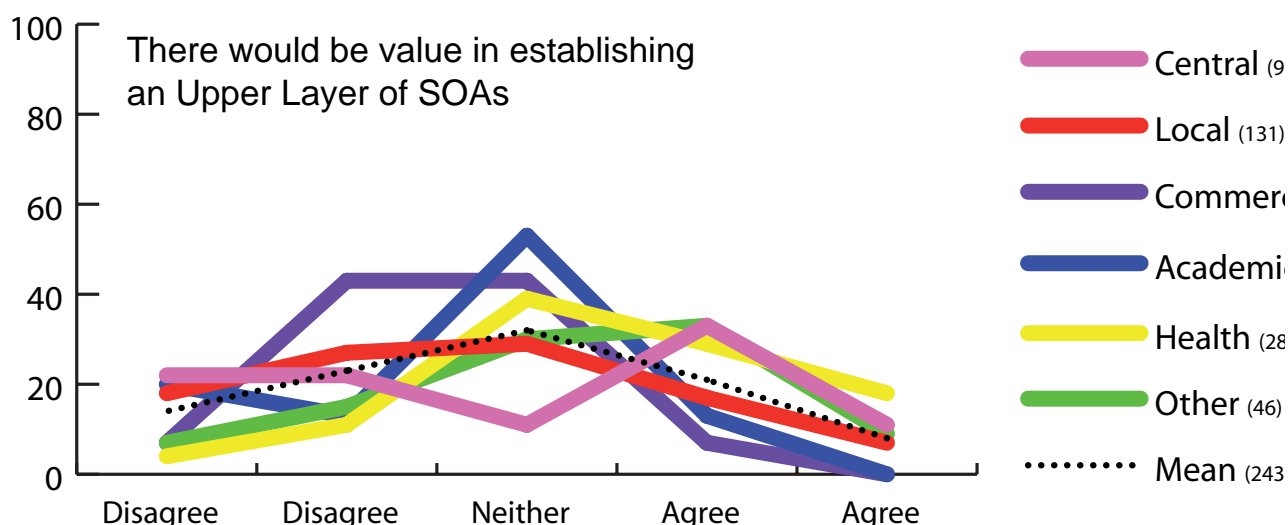
Q21.2 The issues are fairly obvious, however, and some are reflected in the comments above.

- A closer definition of the location of the population has potential to bring disclosure problems.
- Isolated households would make this concept particularly difficult to implement.
- Defining an areas as 'empty' assumes that our only interest is in the distribution of population – and this is not the case.
- As with communal establishments there is a constant risk that change will make the areas out of date.

C9 It is not currently proposed that areas of 'empty' land will be defined as part of the NS Small Area Geography.

- Q21.3 It is noted by several respondents that there are other ways of identifying the distribution of the population of interest using GIS.
- Q21.4 These and other comments from this question will be fed into thinking on Census Outputs and options for identifying these areas.

Question 22. There would be value in establishing an Upper Layer of SOAs.



Q22.1 There is much less commitment to an Upper Layer here than had been expected. The health, central government and emergency services sectors (see Annex B Figure Q21) generally support the Upper Layer. Very few others are in favour, however, and a significant number of users are against a third layer.

There is no need for another geography below district level. John Mooney – NERIP

Most responses supported an upper layer of SOAs. It would be more sensitive than Local Authority level but less prone to disclosure issues that arise with the existing SOAs and OAs. Currently many health data sets are not routinely available below LA/PCT level. The availability of an intermediate level of geography (upper layer SOA) might encourage data providers to make more data available at this level and would allow record level data to be aggregated to a geography that avoided problems of potential person identification. Rosemary Aldridge - Department of Health

More confusion Bryan Lyttle - Berkshire Unitary Authorities

Although it seemed useful when the original consultation and intentions for SOA's were formulated, this is no longer really necessary due to the use of MSOA's and the continuing use of other higher level comparator boundaries such as local authority administrative boundaries. Other areas tend to change (such as funding and action zones) and can be collated anyway. Katy Thomas - Lincolnshire CC

Upper Level SOA's would be too big to be meaningful to LA's and particularly for small La's Jerry Dixon - Merthyr Tydfil CBC

I really can't see much point in this. I don't even use the Middle Layers. Charles Arthurs - Borough of Poole

These could be used for presenting relatively rare events below LA geography. We have found our health sector colleagues would be more comfortable with 25,000 populations than 7,500 from which to draw occurrences of relatively rare. Nick Holmes - Local Government Data Unit - Wales

An upper level would be invaluable for releasing datasets currently restricted to Local Authority level due to disclosure issues. Examples of where this level could potentially be very useful for enhancing the regional evidence base and strategy formulation include ethnicity data, skills data, health data and economic data. Brian McAuley - West Midlands Regional Observatory

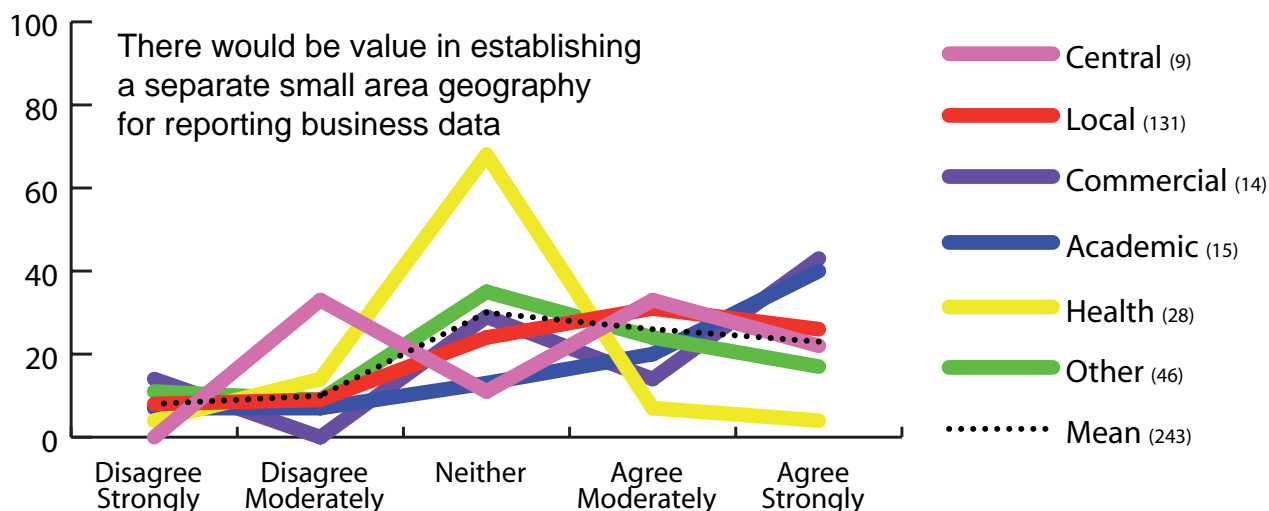
Would this complicate things even more? Julie Longden - Tribal

Q22.2 It seemed obvious at the time the Lower and Middle Layer SOAs were established that an Upper Layer would also be developed (hence their names!). Nonetheless there is only limited support here and several respondents suggest that an additional level would add confusion.

C8 The consultation has not identified sufficient support to make construction of a set of Upper Super Output areas a priority at this stage.

Q22.3 It is felt that a change of name to the existing 'Lower' and 'Middle' layer SOAs is more likely to lead to confusion than to help so, at least for the present, they will retain these names.

Question 23. There would be value in establishing a separate small area geography for reporting business data.



Could bring confusion to some users as small area geography would need to be introduced. Not convinced that there is a strong business case for reporting of business data through a separate small area geography. Andy Bates - ONS

I think this would add to confusion and would probably overlook small businesses or those who work from home, a significant number in our part of the world. Trying to relate this to resident SOAs would not prove any meaningful data. Matt Callaghan - New Forest DC

This is a very interesting idea, and having a different geography to deal with business data would probably be welcomed, as it could be better related to the physical structure of employment/business. Michelle vonAhn - London Borough of Newham

Do not favour a separate geography, as this would be difficult to handle. We need more Business data by SOA (ideally LSOA but MSOA if it allowed release by Industry and Occupation). Greg Ball - Birmingham City Council

This would simply add confusion. Derek West - Sheffield City Council

... The current publication of business/employment/workplace data on the ordinary resident population OA geography is thus unsatisfactory. In particular the City of London has very few resident and more than a quarter of a million workers. Other examples are Heathrow, Isle of Dogs, and Croydon. Basing the geography for the City and these other areas on residents makes no sense at all. We would like to have an alternative workplace geography. A separate workplace geography would improve the quality of the data, make it easier to use, and alleviate the disclosure control problems that damaged the quality of much 2001 Census workplace based data. Eileen Howes - GLA

This need not be a complete coverage - just supplying exact subdivision of high-business-density OAs would be very useful for workplace data and trip destinations, without upsetting the rest of the geography. This one seems a real potential gain. David Martin - University of Southampton

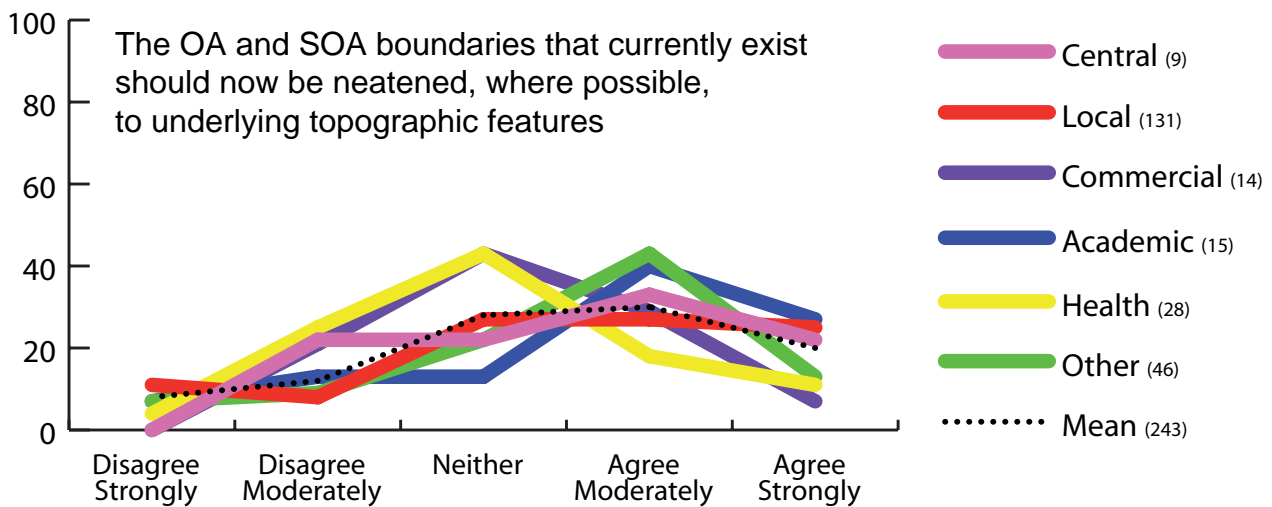
I would favour splitting OAs into smaller business OAs as opposed to introducing an upper layer SOA. It would serve as a useful benchmark for surveys such as the Annual Business Inquiry and would be useful for general land use planning. Les Johnson - Integrated Transport Birmingham - Mott MacDonald Ltd.

Q23.1 There is obviously mixed support here. For some users a business geography seems attractive and offers the possibility of better information in non-residential areas. For those with limited interest in business and workplace statistics it is a distraction and is likely to cause confusion.

C7 There are currently no plans to establish business or workplace OAs.

Q23.2 Again the results of the consultation will be fed in as Census and Neighbourhood Statistics policies are further developed.

Question 24. The OA and SOA boundaries that currently exist should now be neatened, where possible, to underlying topographic features (e.g. by snapping them to building and open land boundaries, roads, rivers etc).



The possibility of taking into account natural boundaries and other topographic features should be investigated but should proceed only if there is no detriment to the geographical hierarchy or licensing arrangements. Rosemary Aldridge - Department of Health

Has to be MasterMap full stop no debate. Bryan Lyttle - Berkshire Unitary Authorities

Any changes would only confuse. Sarah Thorneycroft - North Cornwall DC

Get rid of all those wavy lines and boundaries through buildings. Roger J Morgan - Royal Borough of Kensington & Chelsea

More sensible, neatened boundaries will help people to better identify with their areas compared with crude, purely statistical boundaries. Using the features in OS Mastermap would seem to be the best way to do this.... Gareth Wrench - Warwickshire County Council

Although this would improve matters now they will soon become out of date again as areas are developed. Slight neatening around features that don't change (rivers etc.) may be useful. Mark Painter – Devon CC

This may be feasible but I think a better approach would be to scrap current OAs and SOAs and start from scratch, using a big dollop of local knowledge. Steve Jones - Kirklees Metropolitan Council

This would make boundaries conceptually more meaningful without changing the essence of the areas, but should only be considered if a suitable long-standing agreement can be reached with OS that would ensure no restriction on their use. Charlotte Devereux - Herefordshire Council

Whilst we agree that boundaries should follow identifiable features, we feel strongly that the proposal to superficially modify existing boundaries is without merit and only seeks to disguise the fundamental failings of the underlying geography. Tim Bounds - Tees Valley (on behalf of a number of local agencies)

Neatening OAs / SOAs boundaries would make them visually more acceptable to users. This move is supported, but ONS will have to weigh up the costs of doing this. This should not jeopardise arrangements with OS to make the vector boundaries freely available. Mrs Helen Harvey - Shropshire CC

This would be a real improvement generally, and is vital for:

* the coast – OA boundaries should be snapped to MHWM (as was done for EDLINE in 1991)

* the need for a common England / Scotland boundary Keith Dugmore - Demographics User Group (Representing 14 commercial users)

Q24.1 The realignment of OA boundaries to 'get rid of those wavy lines' seems very attractive. The abstract form of the OAs and lack of relationship to real world features has certainly held back the wider use of OA boundaries.

Q24.2 The starting point for any such realignment would have to be that no address should be allowed to move (or at least be identified) by the change. There would be no change in

statistical terms to the areas – only how they appear on the map. Even with this constraint it seems like a good deal could probably be done to ‘neaten’ the boundaries and, on the face of it, this seems like an obvious step.

Q24.3 There are, however, two key issues that need to be addressed here.

Q24.4 Firstly the process of realignment is far from trivial. As noted in the comments above, the obvious source of data against which the boundaries should be tied is OS MasterMap. As discussed earlier MasterMap is not ideally structured for our needs and for a variety of reasons alignment of boundaries with MasterMap is not straightforward.

Q24.5 Further to this, a simple realignment may not be what we need anyway. A move from wavy lines to jaggy ones isn’t going to help anyone much. What may be required is a more relaxed adjustment to the boundaries allowing the incorporation of more permanent features – road centre-lines and physical features for example - rather than a simple redrawing of the existing shapes using MasterMap. There remains more work to be done here.

Q24.6 Secondly, again as mentioned by many respondents, any consideration of realignment needs to take into account the impact such a change might have on licensing terms. In simple terms we will not proceed with any solution which has a negative impact upon licensing or distribution terms for the OA boundaries.

C 11 Further consideration will be given to options for improving the alignment of existing boundaries to real world features. Such re-alignment would not allow the movement of any population and will not proceed if there are any detrimental effects on licensing terms or rights for distribution of the data.

Q24.7 Although there are advantages to having more recognisable areas, there are also some attractions in terms of awareness and understanding to not changing anything.

Q24.8 Two additional issues relating to boundaries remain:

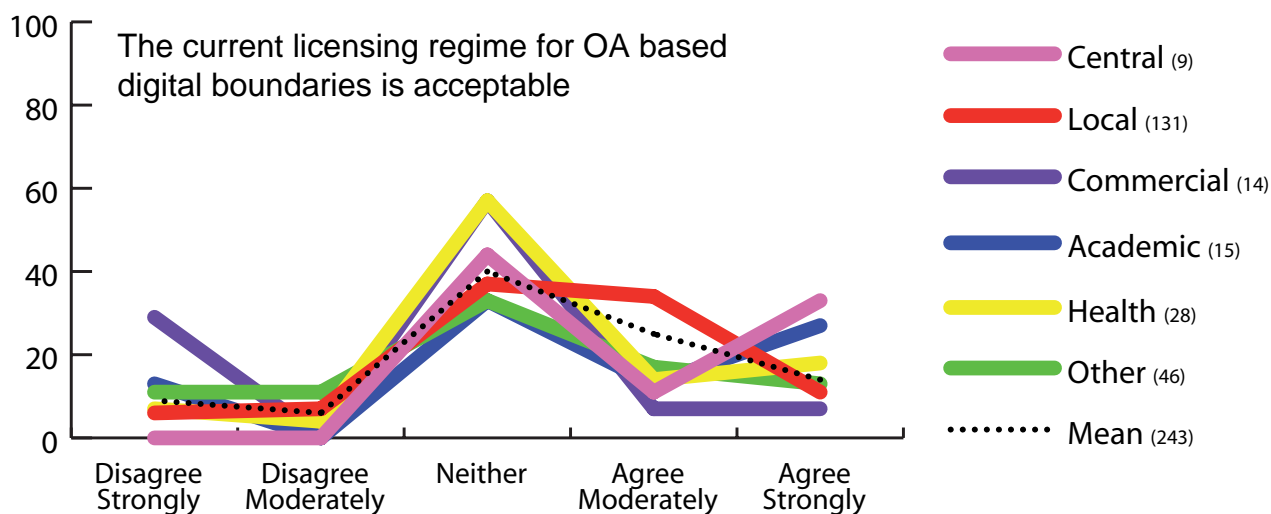
Q24.9 Firstly - In 2001 as a result of technical differences the Scottish and English Output Areas datasets did not align at the border. This situation is clearly not acceptable and a solution will be found for 2011.

C13 All steps possible will be taken to ensure that a common boundary exists between Scottish and English datasets.

Q24.10 Secondly - The Output Area boundaries released for 2001 extended (only) to the legal extent of the realm (ie out into the sea and across rivers in many places). This is appropriate for some purposes (eg allocation of data using GIS) but is a disaster for mapping of the data and some types of analysis. Again this is not acceptable and needs to be fixed for 2011.

C14 A separate set of boundaries reflecting mean-high-water will be released as well as those extending to the extent of the realm.

Question 25. The current licensing regime for OA based digital boundaries is acceptable.



The free availability of boundary data for the 2001 census was a major advance over the 1991 situation. If census data is to be made available for the public good it must be accompanied by free boundary data. John Mooney – NERIP

Geographical data is an essential part of making the most of Census and other social data. It is unacceptable to continue to be caught in rules about how such boundary data can be share and published, particularly when the focus of work is not commercial in nature. Geographical data - and in particular these OA-based digital boundaries - must be seen as a national resource, paid for by the public and should be freely available for their use. What commercial benefit is there in the boundary that is snapped to a road centreline? Why should OS continue to have any great financial interest in the use of this data? Michelle vonAhn - London Borough of Newham

Obviously it's OK for LAs, but it's not an ideal situation that free, public data cannot be fully utilised because of restrictive mapping licensing. Charlotte Devereux - Herefordshire Council

As a local government user, the current arrangements has worked well enough for us. However, it is astonishing that agreement for their use by the commercial sector has not been agreed. Tim Bounds - Tees Valley (on behalf of a number of local agencies)

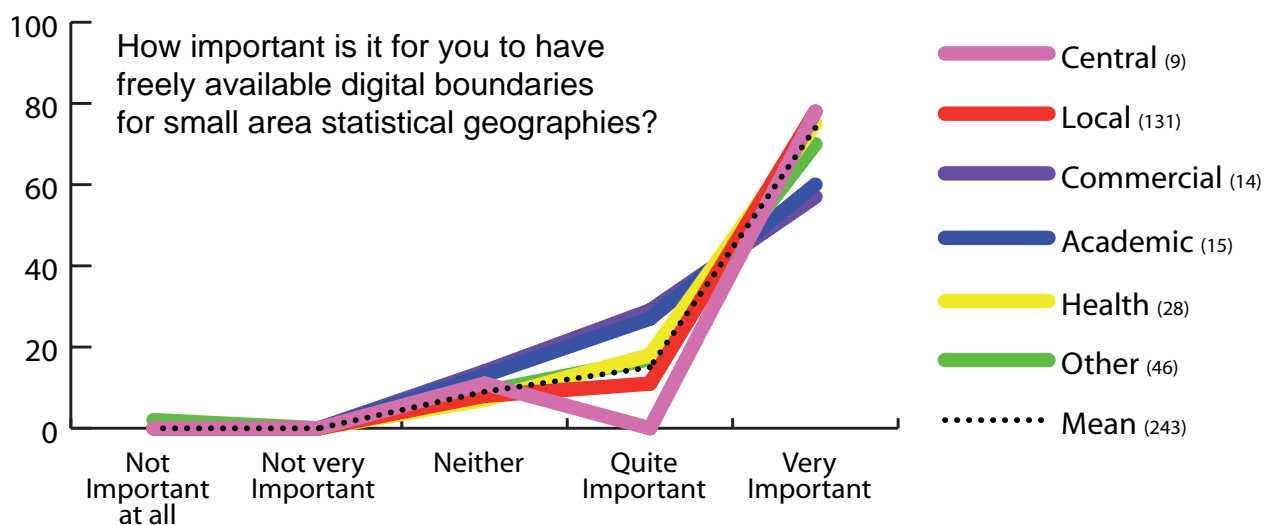
We have had no problems so far! Dr Paul Tansey - (on behalf of a number of local agencies)

The 2001 solution (basically, free boundaries for census users) was actually a major success on which ONS isn't congratulated often enough (well done) David Martin - University of Southampton

It is ludicrous to limit use of digital boundaries in this way. Rob Walker - Rob Walker Consultancy Ltd

- Q25.1 For the most part there is only very limited commitment either way here.
- Q25.2 It seems likely that the lack of commitment might be taken to mean that users have not been bothered by the licensing arrangements – which might be taken as a positive result.
- Q25.3 It should be noted, however, that the commercial sector are not at all happy with existing terms for distribution of boundaries – 29% strongly disagree on this question.
- Q25.4 See also the response to Question 26.

Question 26. How important is it for you to have freely available digital boundaries for small area statistical geographies?



The OA/SOA digital boundaries have proved invaluable for use within GIS for attaching statistical data to geographic areas. Gareth Wrench - Warwickshire CC

The use of these building blocks will increase and become increasingly recognised if the boundary data is freely available David George - Housing Intelligence for the East Midlands

There seems to be little point in making the data freely available, if the information describing the geography is not. David Morgan - Pembrokeshire Coast National Park Authority

The arrangements ONS have made with OS regarding the availability of OA / SOA boundary data to anyone who needs (via a click user licence) them has been one of ONS's greatest successes. The implementation of this new geography would not have been possible without the facility to map them. We would estimate that nearly 100% of our use of OAs / SOAs is through the use of ArcGIS. The ability to map data (i.e. thematically mapping census and IMD data) makes the data much easier to interpret for people who are intimidated by graphs and tables. Mrs Helen Harvey - Shropshire CC

Essential. It's not just the cost, it's being able to share them and work with others without the constant fear that the data might have been passed to someone who hasn't paid for it or whose licence isn't up to date. David Martin - University of Southampton

Fortunately I don't have to deal with our licensing which sounds a nightmare! Kit Watson - Wiltshire Fire & Rescue Service

Q26.1 The most definitive response of all.

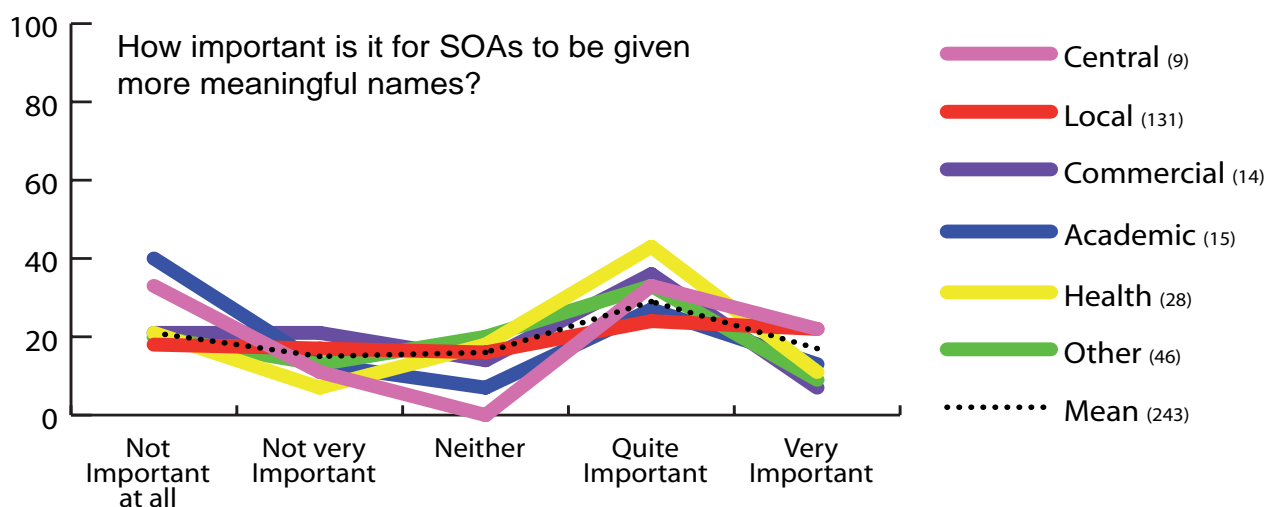
Q26.2 74% of respondents felt that it was very important that digital boundaries should be made freely available (and a remaining 15% felt it was quite important).

Q26.3 1 respondent felt this was not at all important (the only negative response on this question).

Q26.4 The strength of user feeling here is understood and supports ONS's own line on digital boundaries to support National Statistics.

C12 ONS will take every step possible to ensure that digital boundaries for OAs and SOAs are made freely available to end users and that licensing is kept as simple as possible for all types of sharing and distribution.

Question 27. How important is it for SOAs to be given more meaningful names?



Q27.1 Very mixed views from all sectors – but a significant number (including, notably, some academics) feel strongly against.

SOA are massively underused and the most common reason for Wards being used in preference is that Wards have recognised names. If local areas (Local Authorities) were encourage to name their own SOAs they might be used much more. Carol Hryniewicz - CLG

We have already assigned names to all the LSOAs in Warwickshire. This has certainly helped data users become more familiar with the new geography and we would be keen for these to be included in any future lookup tables. Gareth Wrench - Warwickshire CC

We have been asked to give the SOA's names the past, so that people and councillors have an idea of the area that the reference code refers to as number have no geographical meaning to them. With this in mind naming areas should be done at a local level ie local authority and passed back to ONS for inclusion to the main data set. Ian Williams - Liverpool City Council

I wouldn't attempt to do that with the 160 SOA's we have in our city - The SOA boundaries do not relate to any readily identifiable geography. Steven Johnston - Stoke-on-Trent City Council

Better that these are NOT given meaningful names as these could cause confusion. In Suffolk there are several parish names that are replicated as ward names causing a lot of confusion; a further layer with similar names for areas that are of a similar size will cause even more confusion. If necessary, suggest each SOA is listed within the ward where it is located so as the reader can put it in context. Mary Moores - Suffolk CC

SOAs are statistical areas, they do not represent communities or neighbourhoods. Naming them may confuse people by giving this impression. SOAs often do not contain specific areas and naming may become problematic with some councillors or residents wanting specific names, whilst others will not. Wards are already named. Giving SOAs names which easily identify these areas as being different from wards is difficult. Giving SOAs abstract names will not be of benefit. A well composed map, highlighting local land marks and the SOA boundaries enables identification of areas better than naming them ever will. Elise Caroll - Blackburn with Darwen BC

We have found the creation of meaningful area names for MSOAs has lead to a greater acceptance and use of MSOA datasets. Without names, maps are more often required to see which geographic areas the codes refer. Paul Ayre - Lancashire CC

Do NOT give them names - they are statistical building blocks; NOT attempts to represent specific geographical neighbourhoods. Naming them will raise this (false) expectation. Dr Paul Williamson - University of Liverpool

There is little or no value, (provided boundaries are freely available), and this would be an expensive and time consuming job. David Harris - CACI Ltd

Not important at all though a convention to allow naming authorities to add such names would be useful. ONS could provide a facility where organisations could publish their naming convention for SOAs or OAs so that others could also use it. We believe that the codes are far more useful as they allow easy cross-referencing of information between organisations. Robert Barr, Ed Scarse & Dave Butler - Manchester Geomatics Ltd

Q27.2 Naming of the SOAs is one of the most thorny outstanding issues.

- Q27.3 As previously discussed, SOAs are abstract and relate poorly to real world features. ONS's view is that the SOAs should be coded rather than named – as several of the comments note, these are abstract statistical areas rather than an attempt to identify specific areas. The addition of names does have the potential to confuse. The naming of areas is always highly contentious and, as noted in several of the comments above, ONS are not in a position to judge the suitability of names for local areas.
- Q27.4 Nonetheless, it is recognised that in some areas standard local names have been developed for SOAs and it is clearly in nobody's interest for multiple sets of names to develop.
- Q27.5 Where local agencies feel that meaningful real-world names can be applied to their SOAs it might make their use more straightforward and their location more obvious to new and in-expert users.
- C10 ONS will investigate options for the extension of the central registry of local names for SOAs (at both levels).**
- Q27.6 These names will need to be agreed locally at the district / UA level using a mechanism similar to that used for the earlier Middle Layer SOA consultation. These local names will receive no validation, accreditation or recommendation from ONS but a single set of agreed local names will be available for central download for those authorities who wish to supply one. These names will not be included on National Statistics, Neighbourhood Statistics or Census Outputs but lookups may be made available where appropriate.

Annex A User requirement for geographies other than OAs and SOAs

NOTE: Question 10 does not relate to design of the small area geography - but to outputs policy which is being considered separately. Results for this question are reported here for information but are not discussed in any detail.

Question 10. Would it be useful to you if small area data was also released for geographies other than OAs and SOAs?

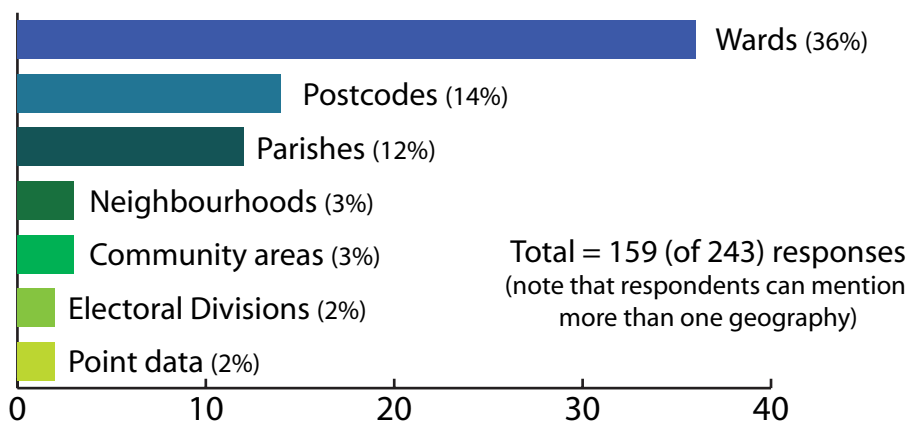
Q10.1 159 out of 243 respondents (65%) said that they want data released on geographies other than OAs and SOAs.

Q10.2 131 out of 243 respondents (53%) named specific geographies. Of these, 64 out 243 (26%) mentioned more than one additional geography.

Q10.3 The most often specified geographies were as follows

Geography	Percentage (of all respondents) mentioning
Wards	36%
Postcodes	14%
Parishes	12%
Neighbourhoods	3%
Community areas	3%
Electoral divisions	2%
Point data	2%

Would it be useful if small area data was also released for areas other than OAs and SOAs ?



Q10.4 Other geographies mentioned included:

- Parliamentary constituencies
- Health boundaries (eg PCTs)
- Urban areas
- Grid squares
- Street blocks
- National Parks /AONB
- Neighbourhood policing areas
- Historic wards for Census

(all mentioned by less than 2% of respondents)

Q10.5 58 out of the 131 Local Authorities (44%) mentioned wards.

23 (18%) mentioned parishes.

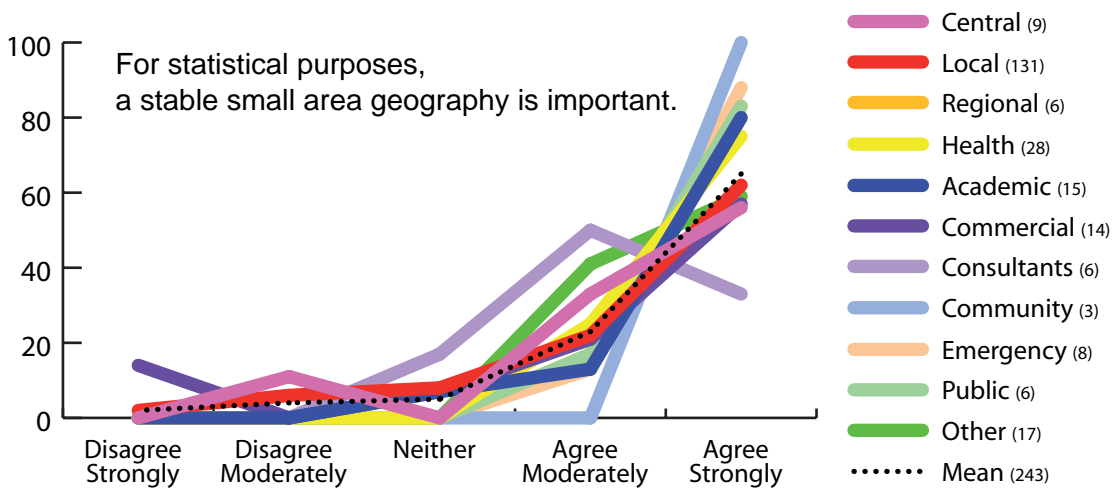
20 (15%) mentioned postcodes.

Q10.6 The demand for the release of data on geographies other than OAs and SOAs is recognised. These results will be passed forward to those developing the output policies for Census 2011 and Neighbourhood Statistics.

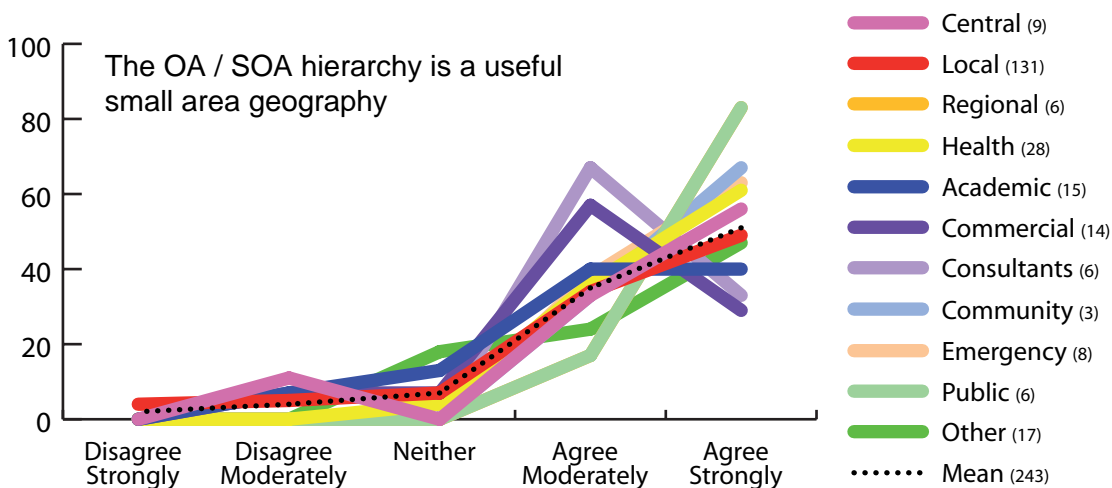
Annex B Additional Graphs for all sectors

- A1 The graphs below contain information for all sectors (See discussion on sectors in Note 1). These are provided for information and but need to be viewed with some care. Some sectors have very small numbers of respondents - and results for these sometimes visually dominate and confuse the overall pattern.
- A2 The graphs provide extra information on the consultants, community, emergency services and public sectors which are included in the 'other' category ion the preceeding graphs.
- A3 An Excel document including all responses is available on request to anyone interested in studying the results more closely.
- A4 All graphs show percentage of those who responded to the survey. (See Note 5 for further discussion).

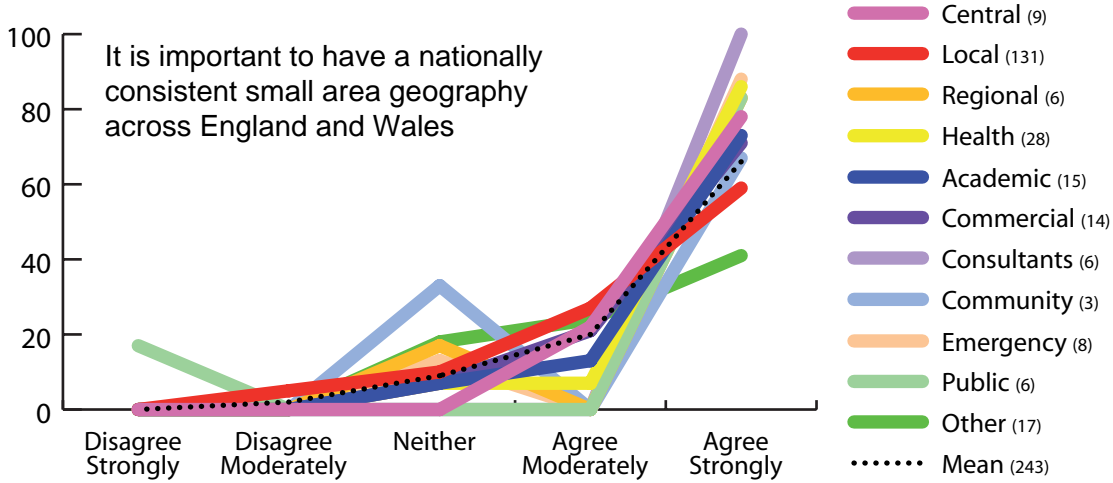
Q11. STABILITY



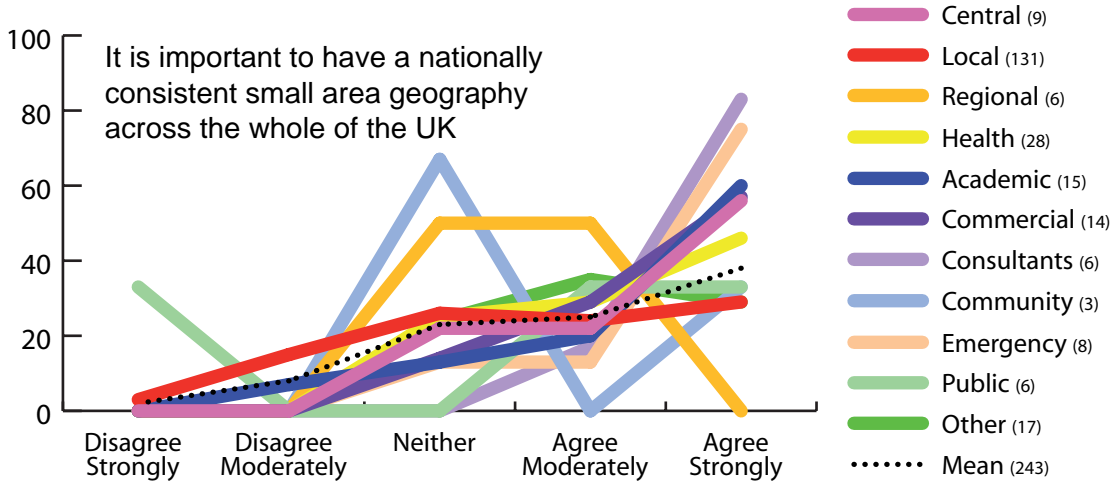
Q12. USEFULNESS



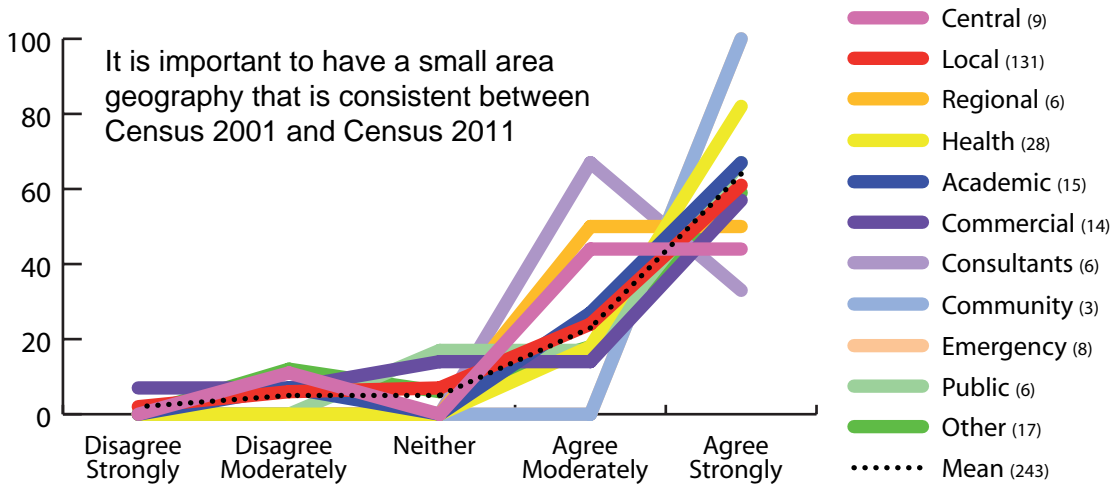
Q13. CONSISTENCY - E&W



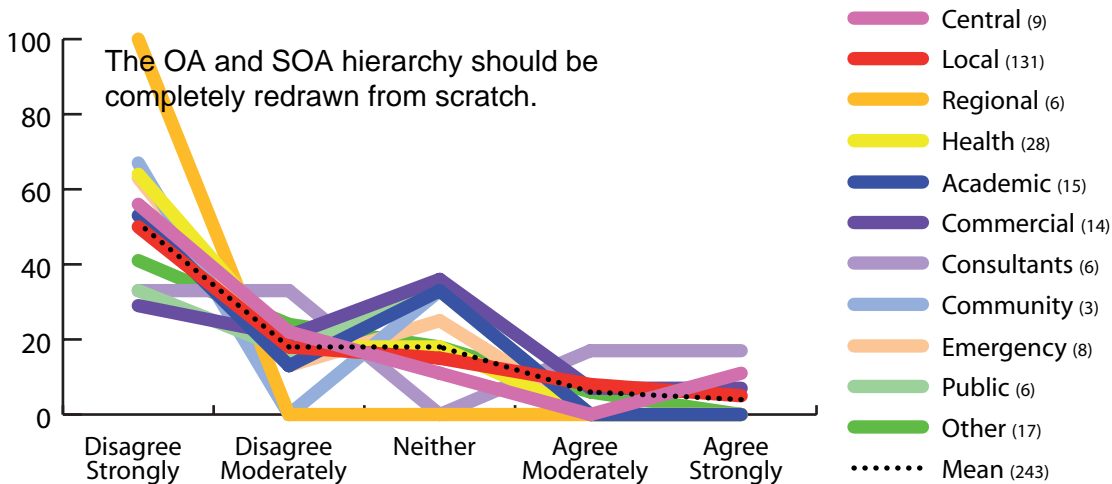
Q14. CONSISTENCY - UK



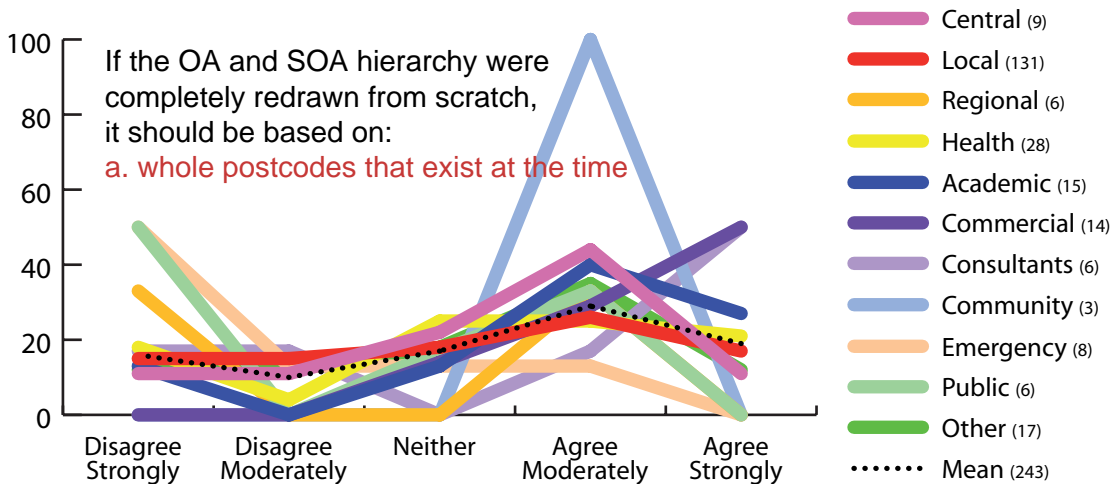
Q15. CONSISTENCY - BETWEEN CENSUSES



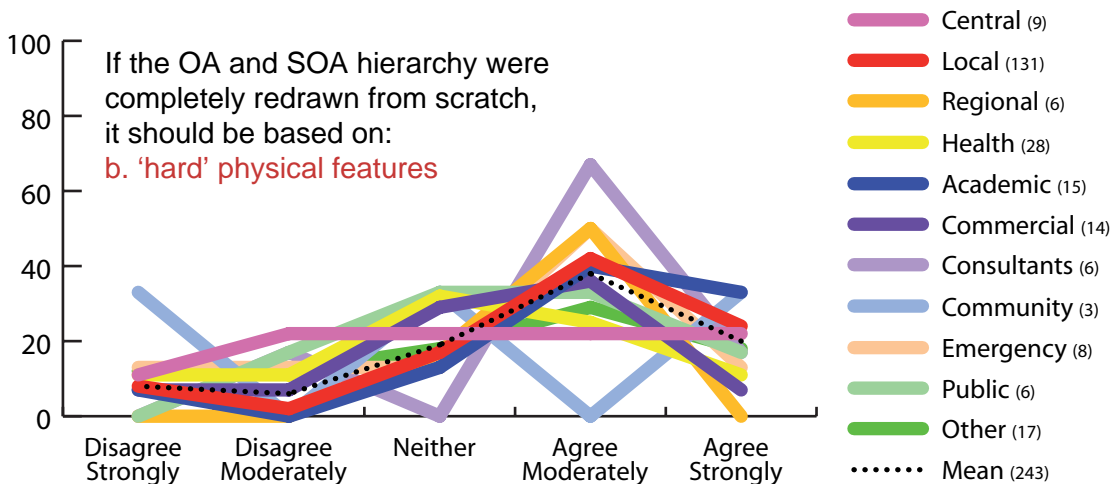
Q16. CHANGE FROM SCRATCH



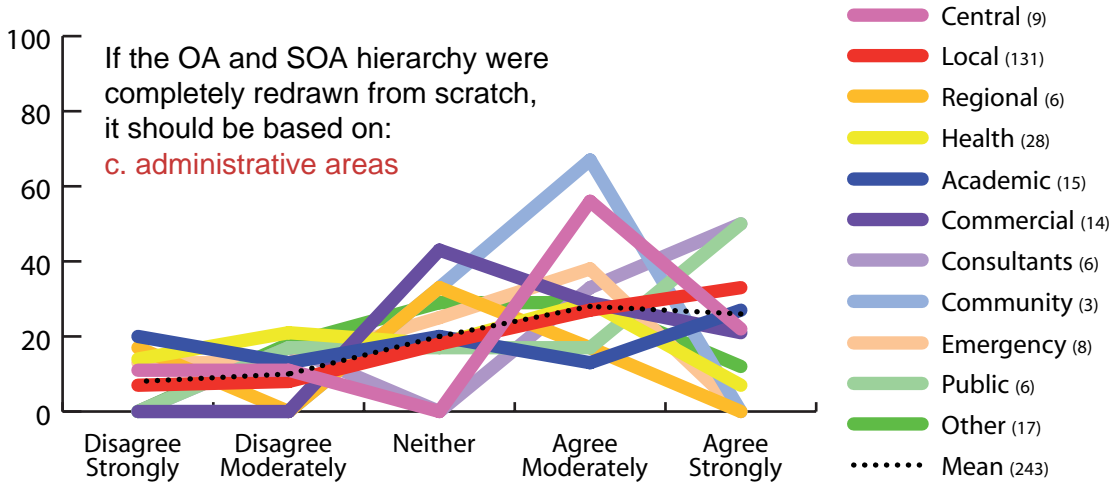
Q17a. CHANGE - POSTCODES



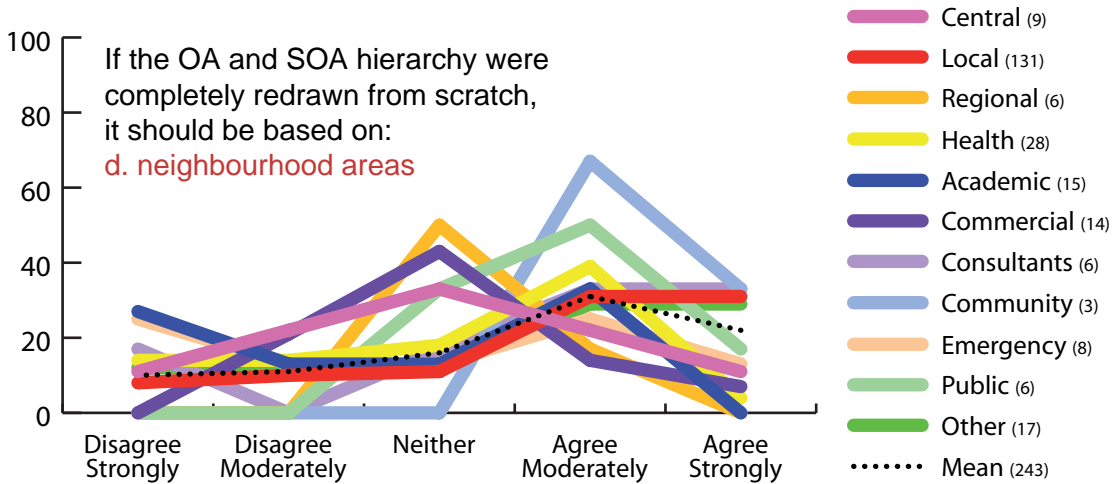
Q17b. CHANGE - PHYSICAL FEATURES



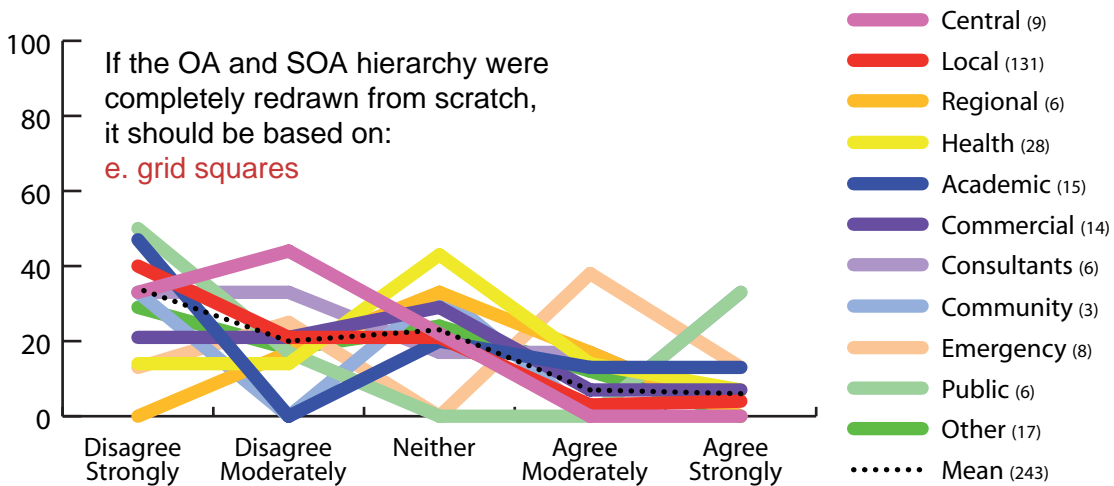
Q17c. CHANGE - ADMIN BOUNDARIES



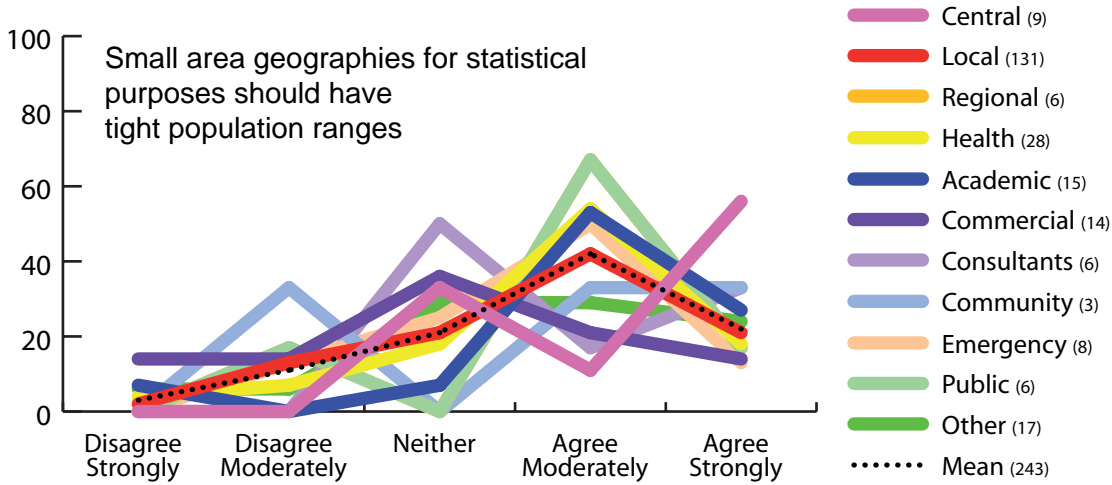
Q17d. CHANGE - NEIGHBOURHOODS



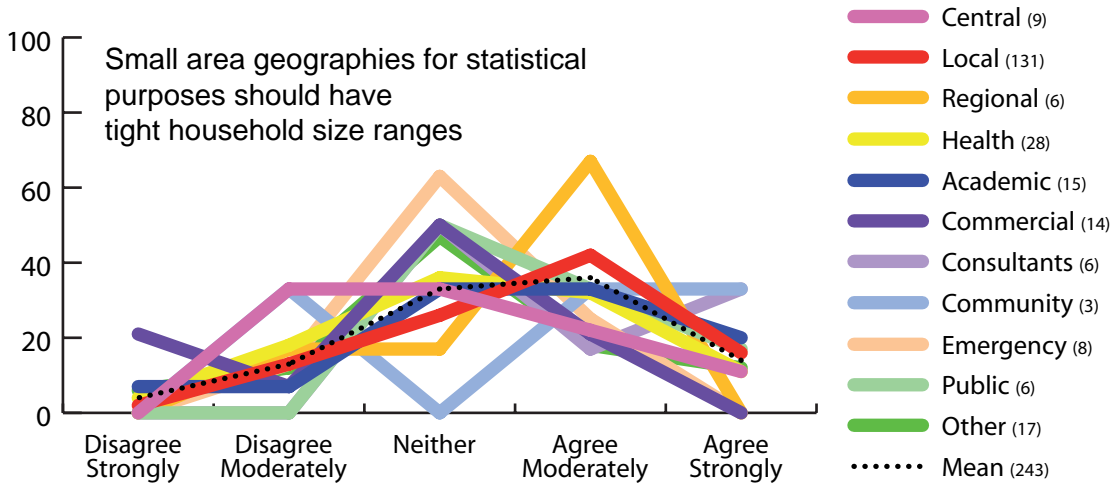
Q17e. CHANGE - GRID SQUARES



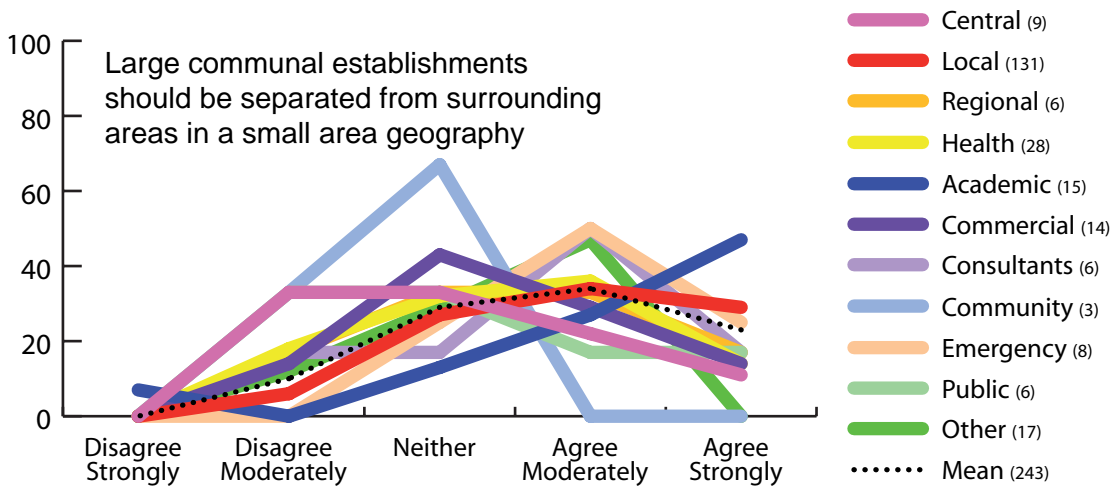
Q18. TIGHT POPULATION RANGE



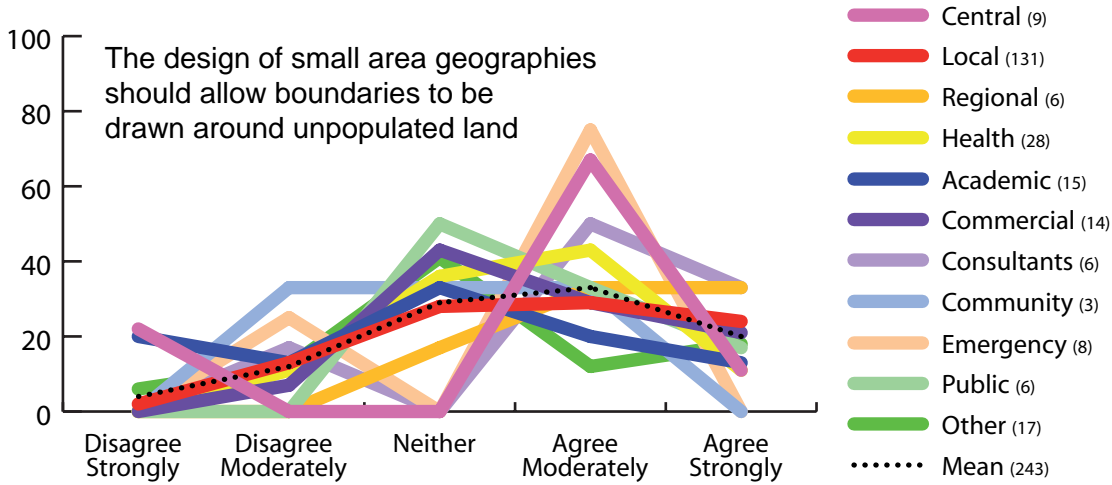
Q19. TIGHT HOUSEHOLD RANGE



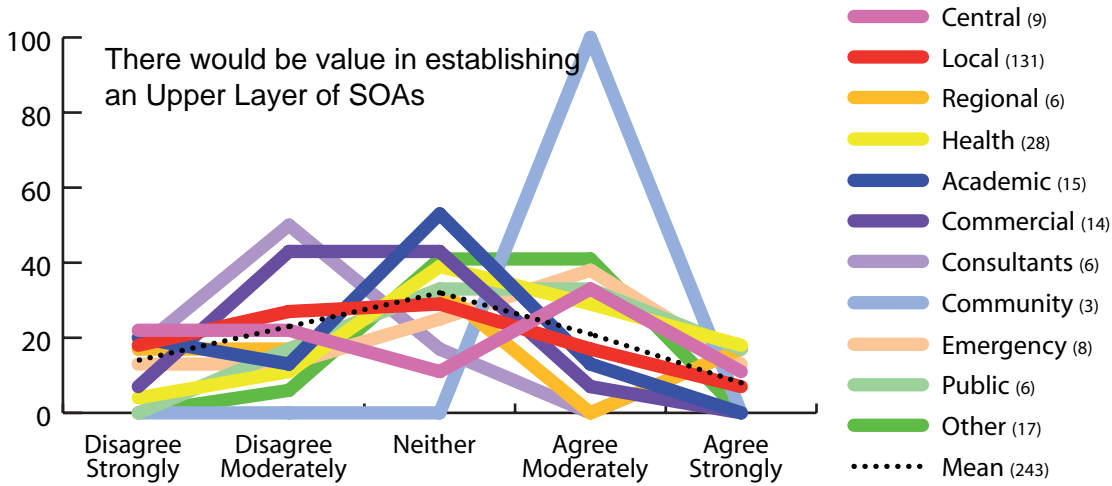
Q20. COMMUNAL ESTABLISHMENTS



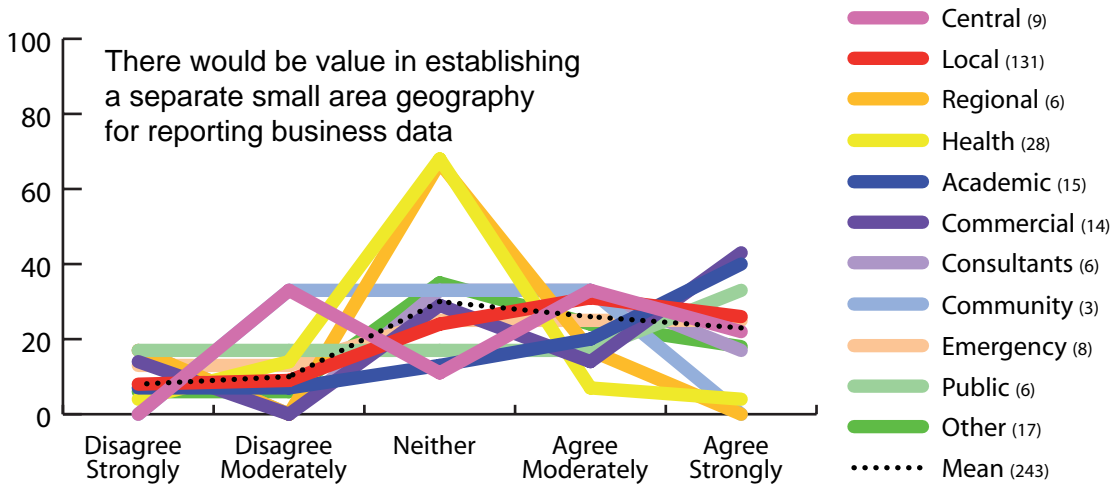
Q21. EMPTY SPACE



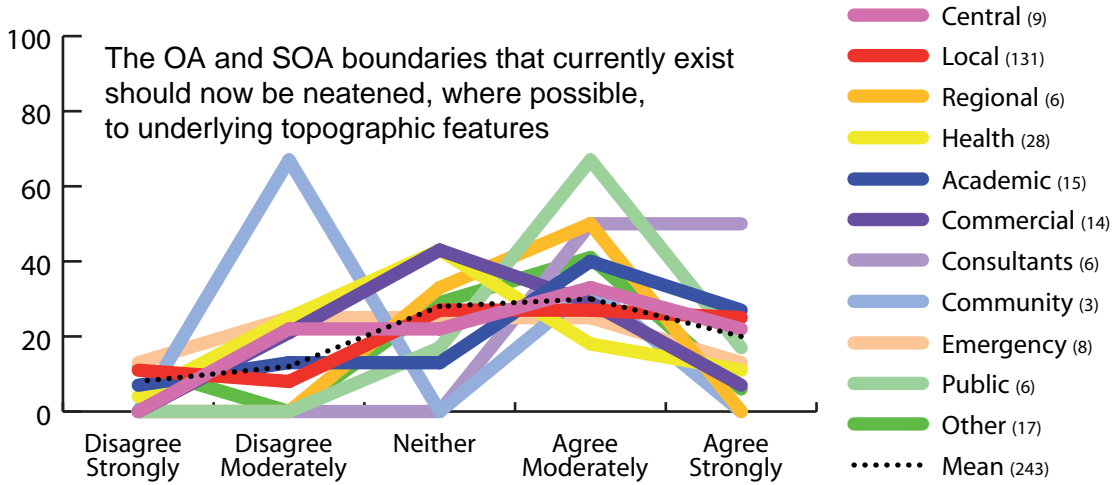
Q22. UPPER LAYER SOAS



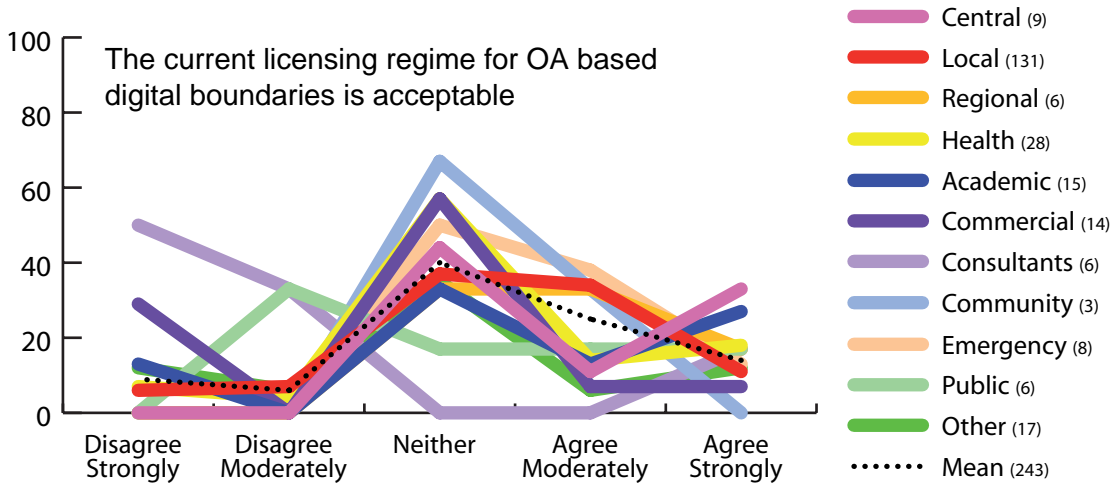
Q23. BUSINESS SOAS



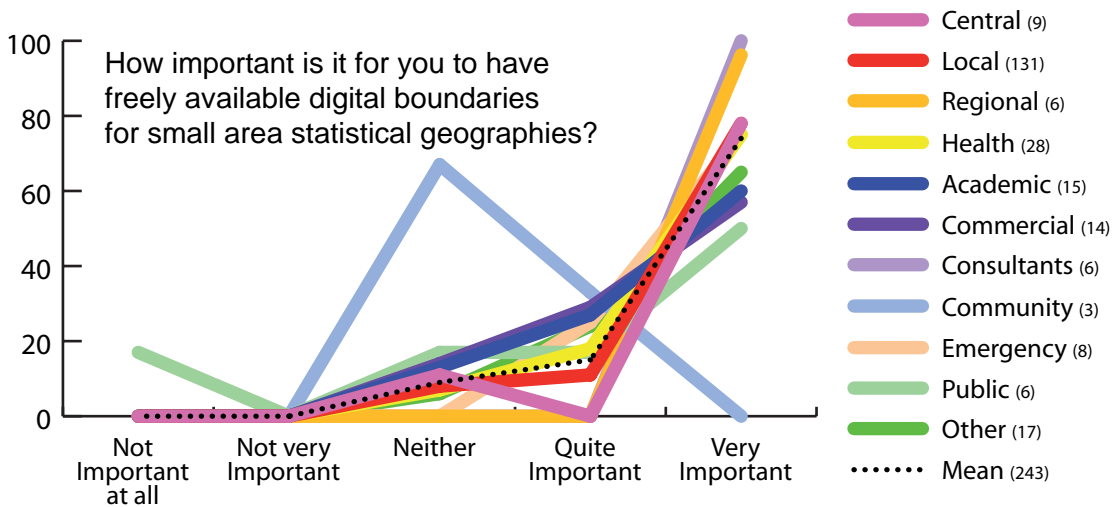
Q24. NEATEN TO TOPOGRAPHIC FEATURES



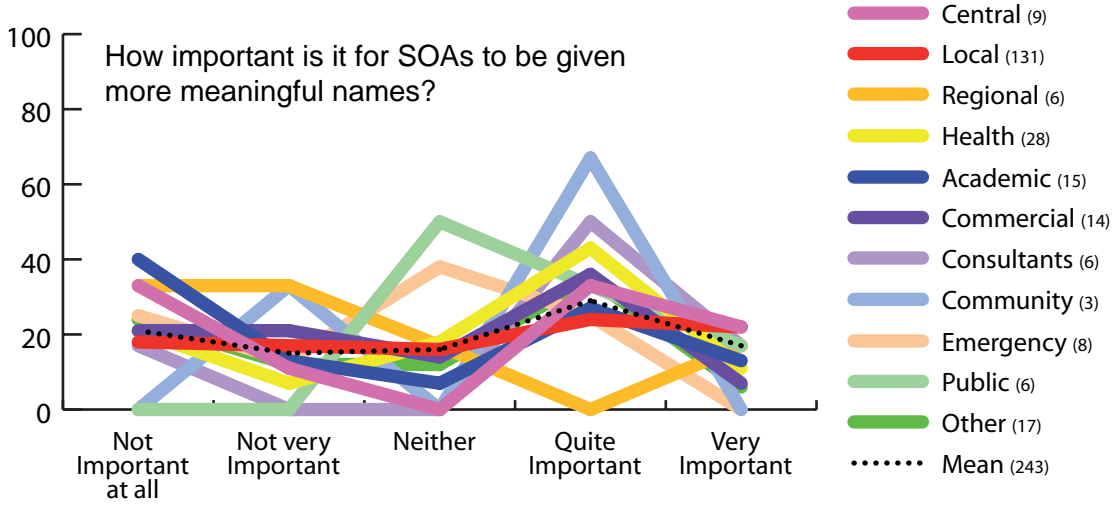
Q25. LICENSING



Q26. FREE BOUNDARIES



Q27. NAMES



Annex C CONSULTATION QUESTIONNAIRE

and notes on questions

- B1.1 The consultation questionnaire is attached below for reference.
- B1.2 It is formed of 3 distinct parts:
- Section A (Questions 1-4) – Personal and Organisational Details
 - Section B (Questions 5-10) – Reviewing the OAs and SOAs
 - Section C (Questions 11-25) – Policy and Design
- B1.3 This report focuses primarily on analysis of part C of the questionnaire although the response to Question 9 (on particular issues identified with OAs or SOAs) is considered in the discussion here.
- B1.4 Questions 5 to 8 (on past and possible future use of the OAs and SOAs and on requirements for other outputs) were all asked to help inform policy for Neighbourhood Statistics and Census 2011. All responses and comments have been passed forward to those involved in developing the respective outputs policies and are not discussed further in the analysis or conclusions here.
- B1.5 Question 9 asked for details of specific OAs or SOAs which have proven problematic. These details will be used in studies relating to the maintenance of the geographies and in consideration of options for local improvements to OAs & SOAs. A further process of consultation with individual authorities is likely to be held in advance of Census once decisions have been made on the level of local change that will be allowed.

Small Area Geography Policy Consultation Questionnaire

(Note that format has been simplified to save space)

A. About You

1. What is your name?
2. Which of the following best describes the organisation that you represent?
[please tick one box only]
 - No organisation (member of the public)
 - Central Government
 - Local Government & Partner Organisations
 - Government Statistical Agency
 - Neighbourhood Renewal
 - Academia
 - Commercial Sector

Community Group
Health Sector
Other

3. What is the name of your organisation?
4. Are you willing for ONS to contact you, to explore your answers further? If yes: (contact details)

Please note, all responses to the consultation will be made public.

When answering questions, please continue writing on a separate sheet where necessary

B. Reviewing Output Areas and Super Output Areas

5. For what purposes have you used OAs and SOAs?
6. How have you used OAs and SOAs?
7. How useful have you found OAs and SOAs in terms of:
 - a. analysing census data?
 - b. analysing other datasets?
 - c. using the Neighbourhood Statistics service?
 - d. building other geographies of interest?
 - e. matching different datasets?
 - f. taking action as a result of data analysis?
8. Can you see any further potential uses for a stable small area geography? Yes / No

If yes,
 - a. what potential uses can you see?
 - a. are there any technical issues preventing this potential use?
 - b. are there any other issues preventing this potential use?
9. Are there any OAs or SOAs that you have found to be particularly problematic during data analysis?
Yes / No

If yes,
 - a. which areas are particularly problematic?
 - b. why are they problematic?
10. Would it be useful to you if small area data was also released for geographies other than OAs and SOAs? Yes / No

If yes;
 - a. which one other geography is of most interest to you?
 - b. which other geographies are also of interest?
 - c. which datasets are of most interest?
 - d. what key benefits would this bring?

C. Policy and Design

For questions 11 - 25, please indicate your level of agreement with the statement given by circling a number from 1 to 5. On this scale:

- 1 = Disagree strongly
- 2 = Disagree moderately
- 3 = Neither agree nor disagree
- 4 = Agree moderately
- 5 = Agree strongly

11. For statistical purposes, a stable small area geography is important.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments.

12. The OA / SOA hierarchy is a useful small area geography.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments.

13. It is important to have a nationally consistent small area geography across England and Wales.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments. If applicable, please explain which aspects of consistency are important.

14. It is important to have a nationally consistent small area geography across the whole of the UK (England, Wales, Scotland and Northern Ireland).

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments. If applicable, please explain which aspects of consistency are important.

15. It is important to have a small area geography that is consistent between Census 2001 and Census 2011.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments.

16. The OA and SOA hierarchy should be completely redrawn from scratch.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments.

17. If the OA and SOA hierarchy were completely redrawn from scratch, it should be based on:

a. whole postcodes that exist at the time

Disagree strongly – 1 2 3 4 5 – Agree strongly

b. 'hard' physical features (e.g. roads, rivers, railways)

Disagree strongly – 1 2 3 4 5 – Agree strongly

c. administrative boundaries that exist at the time

Disagree strongly – 1 2 3 4 5 – Agree strongly

d. neighbourhood definitions, where they exist

Disagree strongly – 1 2 3 4 5 – Agree strongly

e. grid squares

Disagree strongly – 1 2 3 4 5 – Agree strongly

f. Please note any further comments

18. Small area geographies for statistical purposes should have tight population ranges.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note reasons and any further comments.

19. Small area geographies for statistical purposes should have tight household size ranges.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note reasons and any further comments.

20. Large communal establishments should be separated from surrounding

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note reasons and any further comments including, if applicable, how a 'large communal establishment' should be defined.

21. The design of small area geographies should allow boundaries to be drawn around unpopulated land.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note reasons and any further comments.

22. There would be value in establishing an Upper Layer of SOAs.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments including, if applicable, details of the benefits that an Upper Layer would bring.

23. There would be value in establishing a separate small area geography for reporting business data.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments including, if applicable, details of the benefits that such a geography would bring.

24. The OA and SOA boundaries that currently exist should now be neatened, where possible, to underlying topographic features (e.g. by snapping them to building and open land boundaries, roads, rivers etc).

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments including, if applicable, which features or datasets (e.g. OS MasterMap) to use.

25. The current licensing regime for OA based digital boundaries is acceptable.

Disagree strongly – 1 2 3 4 5 – Agree strongly

Please note any further comments

For questions 26 and 27, please indicate your answer by circling a number from 1 to 5.

26. How important is it for you to have freely available digital boundaries for small area statistical geographies?

Not important at all – 1 2 3 4 5 – Very important

Please note any further comments

27. How important is it for SOAs to be given more meaningful names?

Not important at all – 1 2 3 4 5 – Very important

Please note any further comments

28. Please comment on any other topics that you feel are relevant