ONS Census Transformation Programme

The 2021 Census

Assessment of initial user requirements on content for England and Wales

Labour market and socio-economic classifications topic report

May 2016

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1. Introduction

In June 2015 the Office for National Statistics (ONS) published the public consultation document 'The 2021 Census initial view on content for England and Wales'[1]. This discussed the initial views of ONS regarding the potential inclusion of current (2011) and additional topics in the 2021 Census. The public consultation was open from 4 June 2015 to 27 August 2015 and aimed to promote discussion and encourage the development of strong cases for topics users wanted to be included in the 2021 Census. The focus was on information required from the 2021 Census, not the detailed questions that could be asked on the questionnaire.

ONS received 1,095 responses to the consultation; 279 of these were from organisations and 816 were from individuals. Of all consultation respondents, 339 answered at least one question on the 'Labour market and socio-economic classifications' topic.

The sub-topics included in this topic are:

- Economic activity

- Occupation

- National Statistics Socio-economic Classification (NS-SEC)

- Industry

- Supervisory status

- Year last worked

- Volunteering and unpaid work (a new sub-topic, not previously collected by the census)

Based on the evidence given by users, sub-topics were evaluated using the criteria detailed in the consultation document using a standardised method. The criteria are listed in table 1 below. The criteria largely reflect those used in the 2011 Census topic consultation and have undergone expert review within ONS and via the Census Advisory Groups for use in the 2021 Census topic consultation. More detail on the scoring methodology is available in section 2 of the document 'The 2021 Census - Assessment of initial user requirements on content for England & Wales: Response to consultation'[2].

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[1] https://www.ons.gov.uk/census/censustransformationprogramme/consultations/the2021censusinitialviewoncontentforenglandandwales

[2] https://www.ons.gov.uk/file?uri=/census/censustransformationprogramme/consultations/2021censustopicconsultation/assessmentofinitialuserrequirementsoncontentforenglandandwalesresponsetoconsultation.pdf

Table 1 Evaluation criteria

1. User requirement

- Purpose
- Small geographies or populations
- Alternative sources
- Multivariate analysis
- Comparability beyond England and Wales
- Continuity with previous censuses

2. Other consideration

- Data quality
- Public acceptability
- Respondent burden
- Financial concerns
- Questionnaire mode

3. Operational requirement

- Maximising coverage or population bases
- Coding of derived variables and adjustment for non-response
- Routing and validation

This report provides ONS's updated view based on our evaluation of user responses against these evaluation criteria.

2. Background

In order to produce accurate and comparable statistics on economic activity, six questions were included in the 2001 and 2011 Censuses. These allowed people to be classified as employed, unemployed or economically inactive, according to definitions, developed by the International Labour Organization (ILO). The census and the Labour Force Survey (LFS) are the most commonly used sources of economic activity data, and aligning definitions is important.

The 2013 International Conference of Labour Statisticians adopted a resolution ('Resolution concerning statistics of work, employment and labour underutilization'[3]) that seeks to standardise international approaches to measuring employment and work. This resolution introduced the concept of 'forms of work' and places more emphasis on measurement of participation in all forms of work, including unpaid work. The Government Statistical Service (GSS) is considering the programme of work necessary to meet these recommendations. The census topic consultation therefore included a 'volunteering and unpaid work' sub-topic, which was not collected in the 2011 Census. Respondents referred to this sub-topic simply as 'volunteering', and the sub-topic is referred to in this way in the body of this report.

Occupation and industry data from previous censuses both formed the basis of statistical outputs around the labour market, while occupation informed a National Statistics classification - the Standard Occupational Classification (SOC).

NS-SEC is the only sub-topic in this consultation that is entirely derived from other census sub-topics. In the 2011 Census it was derived using the 'reduced' method, which uses questions about occupation, employment status (which shows whether respondents are employed or self-employed, and if self-employed if they have employees or not), and supervisory status[4].

Occupation data are coded using industry data, which therefore have an indirect impact on NS-SEC.

Supervisory status was only used in the 2011 Census for the derivation of NS-SEC. Year last worked data are also used in NS-SEC, to code the long-term unemployed. However, statistical outputs from year last worked were produced. Therefore, the consultation also asked respondents about the direct impact of these sub-topics separately from their indirect impact through NS-SEC.

These considerations led to ONS's initial view on this topic, as published in the consultation document 'The 2021 Census: Initial view on content for England and Wales' reproduced in table 2.

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[3] http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm

[4] For more information on the different methods for deriving NS-SEC see www.ons.gov.uk/methodology/ classificationsandstandards/standardoccupationalclassificationsoc/soc2010/soc2010volume3thenationalstatisticssocioeconomiccl assificationnssecrebasedonsoc2010#category-descriptions-and-operational-issues

Table 2 Initial view of ONS

Topic detail	Initial view	Collected in 2011?
Economic activity	Collect	Yes
Occupation	Collect	Yes
National Statistics Socio-economic Classification (NS-SEC)	Collect	Yes
Industry	Further information required	Yes
Supervisory status	Do not collect	Yes
Year last worked	Do not collect	Yes
Volunteering and unpaid work	Further information required	No

3.   Summary of consultation responses

Table 3 presents the number of responses by type of respondent and organisational sector. The organisations that responded to this topic are listed by sector in Annex A.

Table 3 Labour market and socio-economic classifications topic - number of responses by type of respondent

Type of respondent	Total responses	
	N	**% total responses**
Individual	184	54
Organisation (all sectors)	155	46
Sector		% organisation responses
- Government department/public body	19	12
- Local authority	92	59
- Health organisation	2	1
- Housing	1	1
- Academic / research	6	4
- Charity and voluntary	18	12
- Commercial	6	4
- Genealogist/family historian	2	1
- Other	9	6
Total responses	**339**	**100**

Note: Percentages might not add to 100% due to rounding.
Note: An organisation may have submitted more than one response.

Figure 1 gives an indication of the level of demand for each of the labour market sub-topics that were proposed in the consultation itself.

Figure 1 Proportion of respondents who use 2011 Census labour market data reporting a high impact on their work if ONS did not collect information for these sub-topics
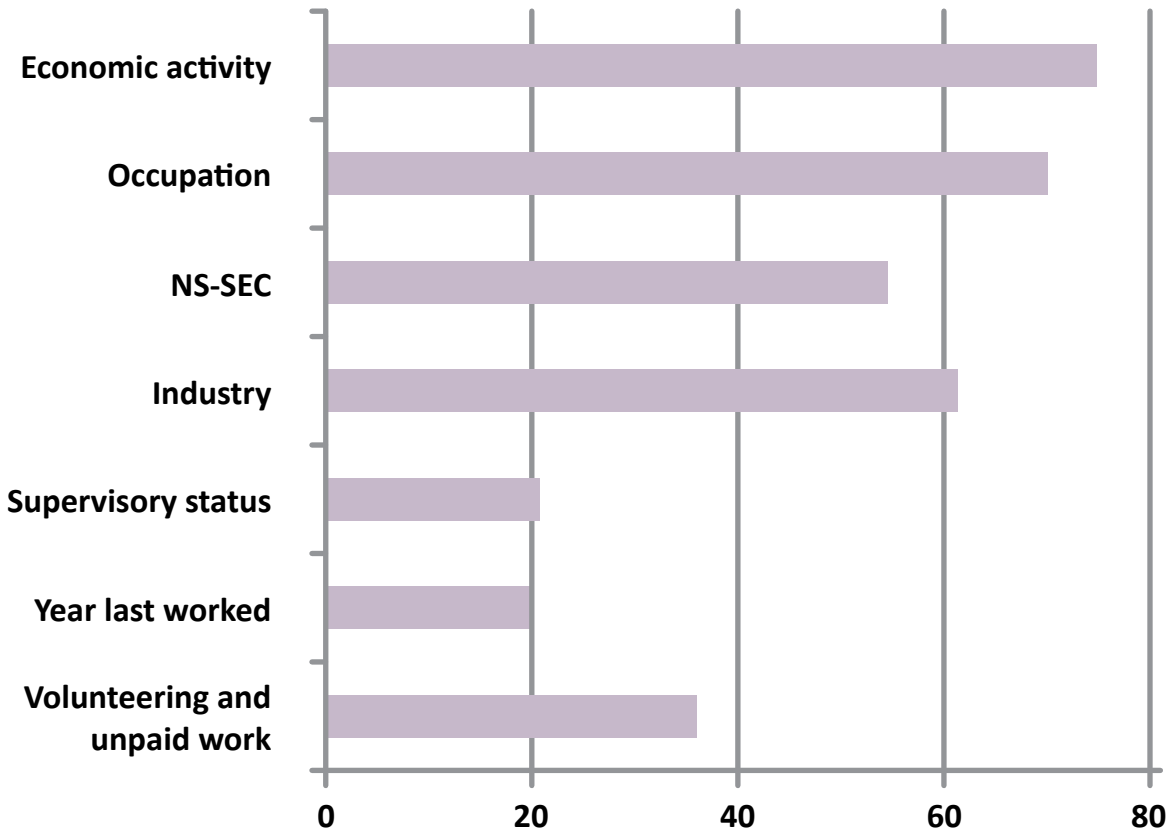
Note: responses on impact for all sub-topics are available from the report '_The 2021 Census initial view on content for England and Wales - You said: A summary of the results_'[5], table A2.

Many respondents across government discussed the importance of having sound evidence to underpin local strategies and promote economic growth.

> **Department for Communities and Local Government (DCLG):** _"Lack of comprehensive, detailed, and sufficiently granular information on each of these sub-topics would hinder the Department's ability to assess the impact of labour market conditions on local economic growth."_

Respondents from different sectors referred to the importance of the detailed nature of census labour market data, and the importance of understanding how occupations, industries and socio-economic profiles vary between small areas. For example, users from the commercial sector noted the importance of using approximated social grade [6], a variable derived from the 2011 Census using a range of labour market sub-topics (economic activity, occupation and supervisory status) and variables from other sub-topics (including age, tenure, and qualifications).

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[5] https://www.ons.gov.uk/file?uri=/census/censustransformationprogramme/consultations/the2021censusinitialviewoncontentforenglandandwales/yousaidasummary.pdf

[6] For more information see "2011 Census Variable and Classification Information: Part 4" here: web.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-user-guide/information-by-variable/index.html

Market Research Society (MRS) and MRS Census & Geodemographics Group: *"Questions included in this topic were used in the 2011 Census to derive Approximate Social Grade, and we will continue to need this classification on the 2021 Census. Social Grade is the primary social classification used in Advertising, Market Research and Media Research; literally millions of pounds of advertising expenditures are allocated based on it. Approximate Social Grade from the census is the only source of social grade profiles for small areas"*

These sub-topics also have an important role in revealing deprivation, labour market exclusion, and inequalities, often at very small geographical levels. Local authorities use data on these sub-topics to carry out a wide range of economic development functions. For example:

Birmingham City Council: *"Occupation data allows us to understand how the occupational profile differs by ethnic group, age and gender. Upskilling the existing workforce, and making our residents more competitive in the changing jobs market is important to our economic prosperity, so we need to understand which groups and communities are particularly in need of support in retraining for future job opportunities. Budgetary constraints mean that effective targeting is crucial."*

Bristol City Council: *"Census data helps us target economic development and skills initiatives at a more local level. For example, we recently used the data to inform a bid to Government for Coastal Communities funding – this has brought funding of £1.2m for the Avonmouth/ Severnside area. We will shortly be using it to inform an Economic Development Strategy for South Bristol, which will include resource allocation and funding bids."*

A range of respondents highlighted requirements to use labour market data from the census in very specific ways to underpin policy.

Department for Work and Pensions (DWP): *"DWP seek to use ONS estimates of life expectancy by personal socio-economic position using the national statistics socioeconomic classification based on occupation. These are derived from linked census and mortality data available in the ONS Longitudinal Study... For DWP we are interested in these measures in relation to future decisions on the state pension age."*

Respondents expressed a range of needs for data on volunteering, with some proposing it as an additional topic in its own right. Local authorities explained how they would use data on volunteering to shape strategies and provide better support and services to volunteers in their local areas, encouraging greater levels of volunteering. For example:

Walsall Council: *"Volunteering and unpaid work have been recognised locally as an important way to boost employability for those who are out of work and anecdotally there has been an increase recently but we have no local evidence for this. Engaging in this sort of positive activity is believed to be beneficial to health and wellbeing, and inclusion in the census would allow this to be tested through multivariate analysis with health information. Profiling of volunteers could be produced and further programmes targeted more effectively as a result."*

Third-sector bodies highlighted the potential of the census to underpin volunteering policy with high-quality data. One put forward a case for using the census to understand the contribution of volunteers to the economy:

Wales Council for Voluntary Action: *"There are no ONS quality statistics gathered on volunteering in Wales. This means that economic activity of as much as £2 billion (estimated time given per year multiplied by the average hourly wage in Wales) is being missed from official statistics. There are moves to increase the involvement of volunteers in the provision of public services."*

Some respondents highlighted a range of new information needs about the labour market including additional jobs, business ownership, whether job roles match qualifications, running a business from home, skills, work done during annual leave, working from home and national insurance number. However none of these needs had sufficient evidence against the full range of evaluation criteria to allow an assessment to be undertaken.

4. Evaluation

The following sections show the scores allocated to each sub-topic by individual criterion based on the evidence given by users. The criteria largely reflect those used in 2011, but have undergone expert review within ONS and via the Census Advisory Groups. The document 'The 2021 Census - Assessment of initial user requirements on content for England & Wales: Response to consultation'[7] gives details on the scoring methodology including:

- 'user requirements criteria', including a description of relative weights, are described in section 2.1 of the document. Note that, in the following tables, the overall score is weighted and is not the sum of the scores for individual criteria
- 'other considerations' are described in section 2.2 of the document. These will predominately be used in conjunction with the user requirement score to steer the development of the census questionnaire and the production of administrative data research outputs
- 'operational requirements' are described in section 2.3, of the document. ONS has operational uses for some of the data collected in the census, of which the most important is maximising coverage of the 2021 Census. Each sub-topic is categorised as being of maximum, moderate or minimum importance in relation to operational requirements.

4.1 User requirements - economic activity

Table 4 User requirement score by criterion

Criterion	Score	Evidence
Weighted Overall Score	84.5	**High user need**
Purpose	9	Economic activity is used to develop policies targeted at reducing social exclusion, by both central and local government. Department for Communities and Local Government (DCLG) stated that: *"Non-inclusion of the full range of labour market sub-topics would also impact on the Department's ability to analyse each of the factors that contribute to the phenomenon of 'Troubled families' ".* Economic activity is the main census labour-market sub-topic used in the monitoring of the Troubled Families'[8] programme. Greater London Authority said: *"Economic inactivity is used directly by the GLA to measure economic exclusion of groups both at pan-London borough and local levels. Economic exclusion is also monitored for Ethnic, religious and other groups covered by the Equality Act. The economically excluded are targeted for interventions to improve their chances of gaining employment."*

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[7] https://www.ons.gov.uk/file?uri=/census/censustransformationprogramme/consultations/2021censustopicconsultation/assessmentofinitialuserrequirementsoncontentforenglandandwalesresponsetoconsultation.pdf

[8] For more information see www.gov.uk/government/publications/understanding-troubled-families

Criterion	Score	Evidence
		Other local authorities gave examples of the impact economic activity data have for economic plans and strategies. For example, Oldham Council stated: *"This information is at the heart - in some depth - of our Local Economic Assessment, which in turn makes recommendations upon which our economic and regen strategies are constructed. It will therefore impact on tens of millions of capital funding, and millions of revenue funding."* Local authority respondents also gave evidence of specific interventions backed up by these data, in areas such as skills improvement, health and well-being services, and programmes to improve employment rates, such as this example from the London Borough of Hounslow: *"Data on economic activity is used to identify target areas within the borough which have particularly high levels of economic inactivity and allocate more resources to those areas. The data on the reason for economic inactivity is also used, to help understand the types of support which economically inactive residents are likely to need. … Data on economic activity was also used at ward level in the Joint Strategic Needs Assessment (JSNA). The JSNA is used to determine the level of health and social care need across the borough and plan services accordingly."*
Small geographies or populations	8	Local authorities demonstrated a need for small-area data to target particular areas for employment interventions. Birmingham City Council stated: *"A ward average can mask enormous disparities within it, so detailed LSOA data is essential for analysing local differences. ...LSOA is used to 'create' target areas for funding bids to ensure those areas most in need are targeted and those not in need are excluded."* Economic activity is a key measure of social exclusion, and so local authorities require data for both small areas and for small populations such as ethnic minorities to plan interventions and tackle disadvantage. Blackburn with Darwen Borough Council gave this example: *"Information on groups such as ethnic groups and limiting long term illness helps inform the development of policies and interventions e.g. polices aimed at increasing economic activity within women of certain ethnic groups."*
Alternative sources	6	While alternative sources are in use (in particular the Annual Population Survey (APS)), the lack of estimates below local authority level prevent survey data from being a full alternative to the census. Available benefit data sources do not cover the full population of interest. A number of local government respondents noted alternative sources. Gateshead Council discussed the uncertainty of using a sample survey: *"Economic activity/SEC - data available from APS, but confidence intervals make monitoring trends difficult. Cannot get to sub-district level information."*

Criterion	Score	Evidence
		Gloucestershire County Council highlighted the inability of the APS to show small age group activity rates for local areas: *"Economic activity: the only alternative source is the APS which is not detailed enough for us to identify pockets of inactivity especially tied into age."* A small number of sources explained that Department for Work and Pensions (DWP) benefit data can be used as an alternative that partially meets needs. Oldham Council gave an example of using the data for their Local Economic Assessment (LEA): *"We get some limited data from DWP, but this tends to only measure those on specific benefits. It does not measure inactivity, and does not measure self-employment. We would not be able to compile our LEA using just that data."*
Multivariate analysis	9	Users from different sectors gave examples of comparing economic activity data with data on equality characteristics, such as ethnicity, and other key outcome measures such as health and disability. Walsall Council stated: *"Labour market information has been used extensively with demographic (age, sex, marital status) and other equality characteristics (ethnicity, disability, religion) to understand inequalities in employment, occupation or socio-economic classification. Economic activity, occupation and socio-economic classification have also been analysed to see how they are related to health, qualification levels, travel to work"* Birmingham City Council said: *"We use this data frequently with a wide range of topics. ...We make extensive use of these to understand how labour market status differs for different communities, but also to evidence the relationship between labour market status, and skills & knowledge of the English language."* The Centre for Longitudinal Study Information and User Support (CeLSIUS) gave this example of an academic study: *"These variables may be used as outcomes in their own right, in which case other census topics may be explanatory variables. For example, current research is examining the partnership, childbearing, housing tenure, employment, social status and health outcomes later in the life course for those who are NEETs (not in employment, education or training) during the age range 16-25."*
Comparability beyond England and Wales	9	Economic activity is widely used as an indicator of social exclusion as well as simply labour market exclusion. Respondents therefore use UK comparisons to place results in context and understand the severity of exclusion. For example Cumbria County Council stated: *"We make comparisons with the UK on a regular basis in order to establish where labour market characteristics differ from average. ...As a county that borders Scotland, Scottish data are becoming increasingly relevant to our own planning."*

Criterion	Score	Evidence
		Respondents also stated a need for comparability in economic activity data, alongside other labour market sub-topics, to produce evidence bases for economic development policy. The City of London Corporation stated:
		"As a local authority we require this information to be comparable to other local authorities and boroughs in London, as well as at a UK-wide level, for comparisons with national averages. Having an objective evidence base, supported by robust local and regional statistics, supports our policymaking and promotion of the City, London and the UK's economic development."
Continuity with previous censuses	10	A number of local authority respondents indicated that data showing sustained low employment rates are more useful for understanding the labour market and evaluating interventions than data showing a single point in time. Tower Hamlets Council stated that:
		"The Census data has allowed us to map changes in employment and economic activity patterns over time, and to monitor labour market inequalities. This type of research helps inform how effective past policies have been, and informs future policy development and priorities."
		The London Borough of Hackney described how economic activity rates over time have a role to play in allocating funding:
		"Comparisons between Census data have been used to make decisions and allocate funding - for example with regard to planning policy (land use), and investment in employment programmes."
		The National Association of British Arabs made a related point, highlighting that the 2021 Census could allow the first monitoring of *"the success, or otherwise, of the Arab population in the employment market"* by showing comparisons over 10 years."
Weighted Overall Score	84.5	**High user need**

4.2 Other considerations - economic activity

Table 5 ONS assessment of impact by criterion

Criterion	Operational impact	Justification
Impact on data quality	Medium	This sub-topic includes information collected from a number of census questions. The data are used to derive variables measuring economic activity. The agreement rate between the 2011 Census and the Census Quality Survey (CQS) for the 'working status in previous week'

Criterion	Operational impact	Justification
		question was 91.2%; the agreement rate for 'hours worked' was 83.9%. The census response rate for the derived variable 'activity last week' was 95.0%.
Impact on public acceptability	Low	There were no public acceptability concerns associated with collecting information on this sub-topic.
Impact on respondent burden	High	A large amount of information was required from the respondent to provide this sub-topic output. Most of the individual questions that make up this sub-topic are not burdensome but, as demonstrated by the CQS, respondents found the questions about their employment situation last week, whether they were available to work the week before the census, and the number of hours they usually work somewhat difficult to answer.
Impact on financial concerns	Medium	The data collected from some of the questions for this sub-topic required moderately complex coding to create the variables needed for derivations or outputs, the edit and imputation rates are high, and the number of questions take up a large amount of available space on the questionnaire - just over half a page, out of four pages of individual questions.
Impact on questionnaire mode	Medium	There were some differences between the online and paper questions on the 2011 Census. Most of the individual questions that make up the economic activity sub-topic are short, but there are several questions to answer to collect the data required. The questions were presented in batches online so online respondents had to scroll down the pages to view them. Scrolling is not best practice when designing a questionnaire. These questions also take up a large proportion of space on the paper questionnaire, where they appear on two separate pages.

4.3 Operational requirements - economic activity

Moderate operational requirement

This sub-topic includes information collected from a number of census questions. Some of these questions provide data that are used in:

- editing and imputing of other sub-topics, especially an individual's age and household relationships
- adjusting estimates for undercount through the Census Coverage Survey
- the derivation of the NS-SEC, activity last week, and approximated social grade
- routing respondents through the questionnaire, ensuring respondents are only asked travel to work questions if these are relevant

4.4   User requirements - occupation

Table 6 User requirement score by criterion

Criterion	Score	Evidence
Weighted Overall Score	77	**Medium user need**
Purpose	8	At the local level, occupation data are required to reveal precise differences between different populations and specific areas of economic exclusion. It is rarely used by itself, but in conjunction with other labour market or travel outputs. Department for Transport (DfT) described how this helps design infrastructure projects: *"DfT typically spends over £10bn a year, the great majority of this being for investment in or maintenance of national and local transport infrastructure and services. …Labour market and socio-economic status are fundamental to transport analyses because they are key to assessing transport demand and the benefits of future policies and schemes."* Local authorities also use these data to understand local labour markets and to support Local Economic Assessments (LEAs). Oldham Council stated that: *"Occupation and industry we would view as essential, as they are both used extensively within the LEA in our assessments of the changing nature of the Oldham economy, both looking back and looking forward, and enabling us to prioritise spend to the right sectors."* Cornwall Council stated that they use occupation as a proxy to model income and deprivation, and use this sub-topic alongside industry for strategic planning: *"Information on Occupation and Industry should be maintained as this can help identify local and national trends in employment and be used for planning education, training strategies and programmes. This is important for monitoring the impact of economic regeneration in Cornwall and for understanding the impact of policies to increase productivity."*
Small geographies or populations	9	Occupation data are important for understanding local economies to the lowest level of geographical detail. While users require occupation data to explore characteristics of workforces there was little need given for understanding the occupations of specific small population groups. Department for Transport (DfT) have used these data at the LSOA level to design infrastructure projects: *"Current work on the Northern Transport Strategy has looked at detailed occupation groups, their methods of travel to work, and for small (LSOA and workplace zone) geography."* Local organisations demonstrated a need for using this sub-topic at the smallest level - output area. Tees Valley Unlimited stated the following: *"Useful for identifying detailed geographical employment centres (comprised of combination of OAs) by industry and occupation if possible."*

Criterion	Score	Evidence
Alternative sources	6	Users told us about different survey sources which partially meet their needs. A number of local government respondents noted alternative sources, in particular the Annual Population Survey (APS) and the Business Register and Employment Survey (BRES). For example, Gloucestershire County Council stated: *"Occupation: APS not detailed enough, need smaller geographies and tied in with industry data to understand the local labour force."* Bournemouth Borough Council stated: *"Occupation and Industry - Restrictions on using datasets such as the BRES mean they are of limited use at small geographic areas."* Overall these alternative sources only partially meet users' needs; in particular because respondents need low-level geographical occupation data.
Multivariate analysis	8	Local authorities gave evidence of using occupation data alongside other labour market sub-topics in multivariate analysis to profile local workforces and underpin economic development work. The Greater London Authority said: *"Occupation and commuting are used at as fine a level as possible (OA if available) to measure the Economy of the London Central Activity Zone, and also other local areas of policy interest to the GLA (such as North Greenwich, Nine Elms, Heathrow)…for the CAZ we need to describe the characteristics of the workforce by qualifications, migration status and residence."* Occupation can be used to show economic disadvantage, but is less widely used for this purpose than economic activity. The London Borough of Hounslow stated that they require occupation data with other topics for equalities monitoring: *"Labour market data is used in conjunction with both demographic data such as age and sex and data on self-assessed health and long-term illness/disability, to identify whether there are specific groups in the borough who are under or over-represented in the economically active/inactive populations in the borough, or in different occupations/industries."*
Comparability beyond England and Wales	8	Occupation data users included central government departments such as BIS and Department for Transport (DfT) who can perform their functions better if able to make comparisons with other parts of the UK. For example, BIS stated: *"BIS has UK-wide policy responsibility for the labour market, and carries out UK-wide research and analysis."* Furthermore, the importance of occupation and other labour market sub-topics to Longitudinal Study researchers with a UK interest creates a need to have comparability between countries of the UK. CeLSIUS stated: *"For example, a recently-begun project is examining mortality rates across the UK (using the three Longitudinal Studies) by specific*

Criterion	Score	Evidence
		occupations and employment conditions. The aims of this project are epidemiological, to study geographical health inequalities and inform public health interventions."
Continuity with previous censuses	6	While few respondents require continuity over time for a complete set of all occupations, a small number of users across different sectors require data on how specific occupations have changed over time. City of York Council stated: *"This has helped confirm changes which we have considered to be happening on the ground and monitor how the work force and market are responding to change. E.g moving from a manufacturing to science/ knowledge based industries and manual to professional occupations."* Continuity with previous censuses is important for maintaining and updating the Standard Occupational Classification (SOC). ONS has used this information since the 1981 Census to research new and declining occupations, adding new job titles and removing obsolete job titles from the SOC. The updated SOC index is made available to the following census, to allow occupations to be more accurately coded with the latest information available.
Weighted Overall Score	77	**Medium user need**

4.5   Other considerations - occupation

Table 7 ONS assessment of impact by criterion

Criterion	Operational impact	Justification
Impact on data quality	High	The census response rate was 97.7% for respondents currently working and 93.5% for respondents not currently working who have worked in the past. The agreement rate between the 2011 Census and the Census Quality Survey (CQS) for occupation codes at the major group level was 67.5%, which indicates that this question was not answered well and that respondents were unclear about how to answer the question. The 2011 CQS stated that the reason for this level of disagreement may have been due to: • different coding approaches, with the CQS being all coded manually by interviewers experienced in coding • some people having more than one job and being unsure which one to give • some retired people giving the title of the job they had for the majority of their career, rather than their latest job

Criterion	Operational impact	Justification
Impact on public acceptability	Low	There were no public acceptability concerns associated with collecting information on this sub-topic.
Impact on respondent burden	High	Respondents have to answer two questions related to this sub-topic and respondents do not always know their job title or how to describe their job briefly. There were instructions and guidance to read and there was not much room to describe respondents' job, all of which place a burden on them. There was a high demand for online help from people who responded online.
Impact on financial concerns	High	This sub-topic requires a high level of manual coding which increases the processing cost.
Impact on questionnaire mode	Low	These questions displayed well both online and on the paper questionnaire, alongside the appropriate instructions and guidance. There were therefore no concerns about the differences between the two questionnaire modes.

4.6   Operational requirements - occupation

Moderate operational requirement

The information for this sub-topic was used to derive NS-SEC and 'approximated social grade'.

4.7   User requirements - National Statistics Socio-economic Classification (NS-SEC)

NS-SEC is an occupation-based classification, derived from a range of other census sub-topics. In the 2011 Census derivation was based on the 'reduced' method, using occupation, employment status, self-employment status and supervisory status. Year last worked data were also used, to code the long-term unemployed.

NS-SEC is a sub-topic that is widely used in conjunction with a range of other datasets from the census, and is available through the Longitudinal Study. However, it cannot be made available without the other census sub-topics required to derive it.

Table 8 User requirement score by criterion

Criterion	Score	Evidence
Weighted Overall Score	81.5	**High user need**
Purpose	9	While socio-economic status is not a characteristic protected in the 2010 Equalities Act, NS-SEC is widely used as a measure of advantage and inequality. The Equality and Human Rights Commission (EHRC) stated that NS-SEC:
		"is included alongside data on characteristics protected under the Equality Act 2010 as a standard breakdown for the comparison of different groups within the population."
		Central government respondents said that NS-SEC is used in different ways to understand labour market and health inequalities, and to counteract them. Department for Work and Pensions (DWP) have used the classification, through outputs based on the Longitudinal Study, to calculate state pension ages and are required to do so again in future:
		"DWP seek to use ONS estimates of life expectancy by personal socio-economic position using the national statistics socioeconomic classification based on occupation. ...For DWP we are interested in these measures in relation to future decisions on the state pension age. ...During the last parliament we legislated twice (Pensions Act 2011 and Pensions Act 2014) for changes in the State Pension age. ONS information has been crucial in setting the policy and ensuring legislation was passed. We have also legislated for State Pension Age to be reviewed at least every six years, with the first review to be carried out by 2017."
		At the local authority level a number of respondents gave examples of monitoring health inequalities and delivering services to those who are affected using NS-SEC. The Royal Borough of Kingston upon Thames stated that:
		"Kingston's 2013 Annual Public Health Report on the wellbeing of older people living in the borough used Census NS-SEC data to provide a baseline".
		Colchester Borough Council stated that:
		"It is an important tool for exploring inequalities. It is also used to assess local labour markets and the mix of skills, particularly rural skills for our Environmental Sustainability Strategy."
		Several users, mostly academics, emphasised that over time socio-economic classifications give deep insight in social inequality, revealing patterns in social mobility.
Small geographies or populations	8	NS-SEC users who plan specific interventions sometimes need to understand variations between specific small areas to understand differences and tailor what is delivered, as shown by the following two examples.
		Public Health Wales National Health Service Trust use NS-SEC to understand the link between social class and health. They stated:
		"Understanding of small area variation is important in tackling health inequalities. We use information on economic activity and social class

Criterion	Score	Evidence
		to describe within-LA variation…the ultimate aim of which is to inform service provision and policy development to improve health and reduce inequalities."
		Warrington Borough Council stated: *"Identify specific areas to target for intervention. Intervention could possibly tailored to fit NS-SEC categories. NB We look at many health issues at a ward level. …we will need to aggregate output area data."*
		City of York Council said:
		"We use this data to understand change at regional, local and neighbourhood level. For example, we can see whether new development has influenced gentrification. It allows us to build a picture of who is doing what and where they live to ensure we can plan more accurately for sectors of society."
		First UK Bus described a specific use of the data to model bus travel patterns and plan their bus services:
		"Economic Activity and NS-SEC social class is a key driver for the propensity for bus travel … Therefore these are key statistics that we need in order to forecast demand for potential new bus services. We need it at OA level in order to assess demand in 400m catchments around bus stops."
		Both local authorities and academic users require NS-SEC data for comparatively small populations, specifically ethnic minority groups. CeLSIUS stated that researchers often use it this way:
		"Only census data offer a large enough sample to study ethnic sub-groups by neighbourhood, and almost all studies of ethnic sub-groups examine employment, occupation and NS-SEC."
		Shropshire Council Intelligence and Research Team stated that they use NS-SEC data in a similar way, as did Public Health Wales NHS Trust, drawing on its ability to show differences in conditions of occupations.
Alternative sources	6	Respondents from a variety of sectors gave examples of a range of alternative sources that partially meet needs for this sub-topic. An academic, Dr Richard Lampard, stated:
		"Clearly, government surveys and other survey/longitudinal sources such as Understanding Society provide some scope for looking at socio-economic differentials/differences in demographic behaviour, etc. However, reliability of findings can be limited even for large sample surveys where phenomena are complex and heterogeneous (e.g. stepfamilies) and where it is important to compare subgroups of the population"
		The "Understanding Society" survey (also known as the UK Household Longitudinal Study) was mentioned by a number of respondents, but the limited possibilities for multivariate analysis prevents it from fully meeting users' needs.
		Local authority users commented on commercial geodemographic sources such as MOSAIC; however these are created in part using census data. Oxfordshire County Council stated:
		"Paid-for datasets such as Mosaic/Acorn provide a detailed alternative to the Socio Economic Classification provided by the Census."

Criterion	Score	Evidence
		Lancashire County Council went further and said: *"We use commercially available geo-demographics which are a rich and varied resource and go down to small geographies. These however in turn are supported by census data and would be weakened without it. They are also costly to purchase and if we did not have it access to data on this topic would be severely restricted."*
Multivariate analysis	9	NS-SEC can highlight inequality and disadvantage across a broad range of sub-topics and population groups. The Equality and Human Rights Commission (EHRC) stated: *"Labour market information, including hours of work, is needed for comparison between different groups of people who share protected characteristics as identified within the Equality Act 2010 and by NS-SEC classes. ...NS-SEC is needed for the identification of socio-economic groups for cross-tabulation with other topics including labour market information."* NS-SEC is commonly used within health analysis. Public Health Wales National Health Service Trust stated: *"We have used the Census to show NS-SEC by ethnic group in our profile of ethncity and health in Wales".* These profiles were in turn used by Hywel Dda University Health Board who said: *"We use the profiling and support products produced by Public Health Wales to inform our needs assessments, as social class is a key determinant of heath and relates strongly to health inequalities. This in turn informs our service provision and support for health and wellbeing of our population."* A number of academics reported using NS-SEC to profile groups and explore their experiences in the labour market - for example, Peter Elias stated: *"To enable us to understand better the distribution of skills and socio-economic disadvantage across the UK economy, and to clarify these distributions by age, gender, ethnicity, location, sector of activity, educational background, etc."* Other academics highlighted the role of NS-SEC in exploring social change, and, through the Carstairs index, in exploring health inequalities. This deprivation index has a specific role in deprivation studies – for example Imperial College London – Small Area Health Statistics Unit said: *"We use information about economic active males and social position of head of household which are two of the input variables used to construct the Carstairs Index. ...This is a vital part of any health analysis because without adjusting at level of analysis, results are often meaningless as most health outcomes are strongly influenced by deprivation."*
Comparability beyond England and Wales	8	As might be expected from a sub-topic that can be used as a broad measure of social inequality, a range of different types of respondents told us they can better understand and counteract disadvantage by comparing an area with the UK, or comparing different parts of the UK. Respondents from different sectors set out a need for comparing NS-SEC across the UK. Public Health Wales National Health Service Trust stated:

Criterion	Score	Evidence
		"It is important to be able to analyse the socio-economic make-up of Wales in relation to other nations and regions of the UK, particularly since the evidence of the impact of socio-economic factors on health and health needs is very strong." Academics also carry out UK-wide health analysis using the Carstairs Index, derived in part from NS-SeC. Imperial College London - Small Area Health Statistics Unit said: *"Many of our studies are UK-wide studies. The socio-economic characteristics that form part of the carstairs index allow us the flexibility to construct deprivation indices across the UK."* Department for Work and Pensions (DWP) stated briefly that *"NS-SEC and related - we need to compare different areas of the UK."* In some cases these functions are being carried out at a UK level. The Higher Education Funding Council for England (HEFCE) stated their need for a UK-level picture: *"We make use of census NS-SEC information in research, where we are trying to establish higher education participation of particular groups, at an aggregate level. ...Its useful to be able to understand the UK picture. The NS-SEC is a measure that's currently used in the UK Higher Education Institution Performance Indicators"*
Continuity with previous censuses	8	Users explained how using NS-SEC to look at change over time is important. The Department for Work and Pensions (DWP) gave an example of determining state pension ages based on life expectancy by NS-SEC outputs which require continuity between censuses to maintain a consistent methodology. They stated: *"We have also legislated for State Pension Age to be reviewed at least every six years, with the first review to be carried out by 2017. ONS information that we have used in the past and will continue to use, includes: population projections and information on cohort life expectancy split by gender, socio-economic group".*
Weighted Overall Score	81.5	**High user need**

4.8   Other considerations and operational requirements - NS-SEC

ONS considerations are not relevant for collecting NS-SEC, as the information is derived from other census questions. For the same reason, there are no operational requirements that can be attributed to NS-SEC rather than the sub-topics from which it is derived. The impact and requirements for each relevant sub-topic has been assessed individually.

4.9   User requirements - industry

Table 9 User requirement score by criterion

Criterion	Score	Evidence
Weighted Overall Score	79	**Medium user need**
Purpose	8	Local authorities told us that industry data have a variety of uses, from supporting economic strategies and plans, to understanding skills requirements and local job markets. Bristol City Council stated that census industry data: *"Supports the work of statutory Local Plans, Economic Development Needs Assessments (required to be produced by the National Planning Policy Guidance), Local Economic Assessments and Strategic Economic Plans."* Central government respondents told us they use industry data, alongside other labour market sub-topics, to find industry clusters of local businesses or workforces, understand why differences exist, and work to support specific industries or groups. For example, Department for Environment Food and Rural Affairs (DEFRA) gave this example: *"Industry: This information is used alongside IDBR and LFS for multi-variate analysis to understand the make-up and differences of rural businesses to urban ones and to link this to productivity per worker. Lack of information would mean that some attributes of rural people and communities would be missing from the evidence base. This would then potentially leave gaps when looking at impacts of Government policy on rural areas and for rural proofing to ensure that rural communities receive a fair deal."* The Equality and Human Rights Commission (EHRC) stated: *"Labour market data from the census are also being used in research into discriminatory recruitment of migrant and non-migrant labour, which is using information on economic activity and industry to identify workforces of interest."*
Small geographies or populations	9	Organisations working with local economies told us they use industry data at small geographies to understand the needs of specific areas. Greater London Authority stated that: *"Data on workforce by industry, occupation and commuting are used at as fine a level as possible (OA if available) to measure the Economy of the London Central Activity Zone, and also other local areas of policy interest to the GLA (such as North Greenwich, Nine Elms, Heathrow) for the CAZ we need to describe the characteristics of the workforce by qualifications, migration status and residence."* Local authorities also use industry data to examine the employment profiles of small populations. Birmingham City Council, stated: *"The census is the only source of detailed local resident employment. The main way we use this data is to examine whether local people are taking advantage of local job opportunities, by comparing resident employment by industry to workplace employment. Crucially, the data also allows us to*

Criterion	Score	Evidence
		ascertain whether different ethnic groups, age bands or gender are not able to take advantage of local job opportunities. This knowledge helps us target recruitment and employment activities appropriately and allows us to make more effective use of limited resources."
Alternative sources	6	A number of local government respondents noted alternative sources, in particular the Annual Population Survey (APS) and the Business Register and Employment Survey (BRES). Department for Culture, Media and Sport (DCMS) stated: *"The APS/LFS is the best alternative source of information and can provide good information regarding who works in each industry (including by age, gender, SEG, BAME)."* However, a variety of local authority respondents told us that these sources do not meet their needs at the local level. Bristol City Council reported: *"BRES for number of workers and industry but subject to sampling variability, is constrained by statistical disclosure control and is not cross-tabulated with other variables. Also known to contain errors. It is however updated on a regular basis."* East Sussex County Council stated that: *"Business Register and Employment Survey (BRES) can be used for looking at employment in some industries (not agriculture), but as mentioned, in East Sussex showed only 177,000 people in employment in 2011, compared to 242,000 people aged over 16 in employment in the Census. It is annual though so can be used for more up to date analysis."*
Multivariate analysis	8	Central government organisations gave evidence of using industry data alongside occupation data in multivariate analysis to profile local workforces and understand who is working in certain industries. Department for Business, Innovation and Skills (BIS) stated that they use the data for *"comparing demographic and socio-economic information across different occupations and industries"*. Department for Environment Food and Rural Affairs, as stated in 'purpose', use census industry data alongside other ONS sources to provide an evidence base on rural businesses and support policy making. They stated: *"Multivariate analysis is conducted using Census data and other survey data to gain an understanding of issues affecting rural areas."* The Equality and Human Rights Commission, having given a specific example shown in 'purpose' of using industry with economic activity and migration for research, stated: *"Industry information is required in order to identify workforces in specific industries and to compare the characteristics of people employed in different sectors."* Local authorities also identified multivariate uses of industry data, including the London Borough of Hounslow, who use industry data alongside other labour market sub-topics to look at differences according to "demographic data such as age and sex and data on self-assessed health and long-term illness/disability".

Criterion	Score	Evidence
		The Greater London Authority said:
		"Industry of employment is a key component in describing the London economy. ...Without census we would not be able to identify the demographic characteristics of workers. ...we need to describe the characteristics of the workforce by qualifications, migration status and residence"
Comparability beyond England and Wales	7	Central government department users of industry can perform their functions better if able to make comparisons with other parts of the UK. For example, DCMS, stated:
		"Although DCMS policy delivery varies between England and UK it is important to understand the whole UK as much of the related economic data (e.g. GVA and exports) is only available by sector at the UK level and therefore a consistent comparison is important."
		Oxfordshire County Council described the benefits of being able to compare their local area to the wider UK:
		"Comparability with the rest of the UK is key to many of the uses of this data - it provides the basis of the Strategic Economic Plan and other plans for local growth, which in turn are used to attract funding from central Government."
Continuity with previous censuses	9	The following examples demonstrated the ways in which local authorities have used industry data across censuses:
		Greater London Authority:
		"The economic evidence base for the London Plan includes long time series (and forecasts) of the London labour market by industry which is calibrated (though not totally dependent on) census workplace employment by industry. Characteristics of the London labour market over time are derived from census estimates, and form a basis for workforce planning in London."
		Powys County Council:
		"We look at past Census results to help produce projections of the labour market and the economy for planning future needs, such as office and manufacturing space."
Weighted Overall Score	79	**Medium user need**

4.10 Other considerations - industry

Table 10 ONS assessment of impact by criterion

Criterion	Operational impact	Justification
Impact on data quality	High	The agreement rate between the 2011 Census and CQS for industry codes at the section level was 74.2%. The response rate was 92.8% for respondents currently working and 82.8% for respondents not currently working who have worked in the past. The 2011 CQS stated that the reason for this level of disagreement may be due to may be due to: • different coding approaches, with the CQS being all coded manually by interviewers experienced in coding • respondents having more than one job being unsure which employer to put down • people changing jobs between the census and CQS, or undertaking short-term work
Impact on public acceptability	Low	There were no public acceptability concerns associated with collecting information on this sub-topic.
Impact on respondent burden	High	Respondents have to answer two questions related to this sub-topic and respondents do not always know the title of their industry. There were instructions and guidance to read and there was not much room to describe respondents' industries, all of which place a burden on them. There was a high demand for online help from people who responded online.
Impact on financial concerns	High	This sub-topic requires a high level of manual coding which increases the processing cost.
Impact on questionnaire mode	Low	These questions displayed well both online and on the paper questionnaire, alongside the appropriate instructions and guidance. There were therefore no concerns about the differences between the two questionnaire modes.

4.11 Operational requirements - industry

Moderate operational requirement

In the 2011 Census the data collected for this sub-topic were used to improve the quality of the occupation coding, which in turn is used to derive NS-SEC.

Industry data were also used for the first time in the 2011 Census to derive [Workplace Zones](#) [9] for England and Wales. The Workplace Zone statistical geography is a product tailored to businesses rather than households, a need for which was established by ONS through consultations in 2007, 2009 and 2011. Workplace Zones were created from output areas, using 2011 Census industry and address of place of work data. These were used to estimate the number of workplaces in each industry classification and the number of workers at each workplace. Output areas were then merged or split to create areas that contain a consistent numbers of workers.

4.12 User requirements - supervisory status

Table 11 User requirement score by criterion

Criterion	Score	Evidence
Weighted Overall Score	24	**Low user need**
Purpose	3	Academic respondents told us that supervisory status can be used to better distinguish economic position. The Health Statistics User Group (HSUG) stated that: *"For supervisory status, given that income is not collected and it seems that it is not feasible to do so, this is an important measure to gauge status when used in combination with other (derived) occupation data when researching within a derived occupational category. For example, if researching a particular occupation, this extra refinement can provide a valuable insight within that category that would otherwise classify everyone at the same level or status."*
Small geographies or populations	0	Respondents did not demonstrate a need for supervisory status data at small geography levels or for small population groups.
Alternative sources	6	The Joint Industry Committee for Population Standards (JICPOPS) stated: *"Supervisory status: No alternative source."* The Labour Force Survey, however, does collect supervisory status, to allow coding of NS-SEC, mirroring the main purpose for collecting supervisory status through the census.
Multivariate analysis	2	Two respondents highlighted the ability of supervisory status to add depth to other labour market information. Fair Play South West suggested using supervisory status as an outcome variable, alongside other labour market sub-topics, to measures inequality: *"This data, disaggregated by gender, is essential for analysing the causes of the gender pay gap and campaigning for its reduction. This includes supervisory status and volunteering and unpaid work."*

[9] *See: http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/census/workplace-zones--wzs-/index.html*

Criterion	Score	Evidence
		The Health Statistics User Group (HSUG) stated that supervisory status provides a helpful measure of economic status when analysed against other labour market sub-topics such as occupation.
Comparability beyond England and Wales	3	Respondents who had previously stated a need for supervisory status data indicated a need for comparability in labour market sub-topics in general. For example, the Economic History Society stated: *"UK-wide comparisons are often made by economic and social historians concerned with Labour Market and Socio-economic Classification information."* Comparability can therefore support the research conducted by academic or third-sector organisations; but no evidence was presented by organisations with an obligation to deliver national-level services.
Continuity with previous censuses	0	No respondents included any requirement in this sub-topic to compare with previous censuses. Chwarae Teg expressed an interest in understanding changes over time, but had not used supervisory status data from previous censuses.
Weighted Overall Score	24	**Low user need**

4.13 Other considerations - supervisory status

Table 12 ONS assessment of impact by criterion

Criterion	Operational impact	Justification
Impact on data quality	Medium	The census response rate was 95.7%. This question had an 86.2% agreement rate between the 2011 Census and the 2011 CQS. The CQS report stated that this is likely to be due to some respondents finding it difficult to interpret the meaning of a "supervisor", uncertainty over the number of people that someone was required to manage to be considered as a "supervisor", or whether it needed to be in their job specification or simply perceived by themselves and others.
Impact on public acceptability	Low	There were no public acceptability concerns associated with collecting information on this sub-topic.
Impact on respondent burden	Medium	This question is short - although there is some explanatory text to read and some respondents have found it difficult to interpret the meaning of 'supervisor'.

Criterion	Operational impact	Justification
Impact on financial concerns	Low	The response to this sub-topic did not require manual coding or complex processing.
Impact on questionnaire mode	Low	The question on this sub-topic is short, and in 2011 displayed well online and on the paper questionnaire.

4.14 Operational requirements - supervisory status

Moderate operational requirement

The data collected for this sub-topic was used in the derivation of the National Statistics Socio-economic Classification (NS-SEC); in the coding of occupation; and in the derivation of approximated social grade.

In the 2011 Census, where the 'reduced' method was used, around a third of responses were dependent on supervisory status to be assigned an accurate NS-SEC category. Without supervisory status the reduced method cannot be used, leaving the simplified derivation method which relies solely on occupation. Using the simplified derivation method lowers the quality of NS-SEC and this quality change affects some NS-SEC categories more than others.

4.15 User requirements - year last worked

Table 13 User requirement score by criterion

Criterion	Score	Evidence
Weighted Overall Score	55.5	**Low user need**
Purpose	5	A number of local authority respondents covering major urban areas stated that year last worked data are important for profiling and understanding the needs of the long-term unemployed. For example, Manchester City Council stated: *"Year last worked/Volunteering: used for targeting employment interventions to get those furthest from the labour market back into employment."* Academic respondents gave evidence of a need to use year last worked data to distinguish between the short-term and long-term unemployed. Peter Goldblatt described using it for: *"...distinguishing the long term unemployed from short term unemployed. This distinction is of major social policy interest and also has significant health implications - the long term unemployed have significantly higher death rates."*

Criterion	Score	Evidence
Small geographies or populations	7	Response to this criterion exclusively focussed on the need for year last worked data for small geographies as long-term unemployment varies substantially between local areas. Cheshire West and Chester Council mentioned specifically a need to understand the distribution of the long-term unemployed: *"Year last worked - …so it is even more important we can understand where long term unemployed residents live at a small geographical level."* London Borough of Hounslow indicated using the data at super-output area and ward level, and discussed its use by their job brokerage service, the Employment and Skills Team, stating that: *"The team also uses data on occupation, industry and year last worked to build up a picture of the local labour market."*
Alternative sources	5	Users told us about different alternative sources which partially meet their needs. ONS discussed administrative benefits data: *"Year Last Worked is potentially available or derivable from DWP, but possibly only for those who are or have claimed unemployment related benefits."* Some surveys were also mentioned as alternative sources, but did not provide the low-levels of geography users require. London Borough of Hounslow stated: *"Economic activity, industry and year last worked: The best alternative published source of data on this would be the Annual Population Survey, but this only goes down to local authority level, and is not very accurate even at that level."*
Multivariate analysis	6	Academic respondents stated a need to explore the characteristics of the long-term unemployed. For example, the HSUG stated: *"Year last worked …is vital for research on the short or long-term unemployed compared with never worked proportion of the population which can include for example women who left the labour market at young age to start family formation."* Local authority respondents also mentioned using year last worked data with other labour market or basic demographic sub-topics. For example, Gateshead Council stated that: *"Year last worked …However, the North East (like most of the UK) has an ageing population and one of the key issues is skilled people 50+ leaving the labour market to care for parents that are living longer into their 80's. Making this data available would help to give an accurate insight into this issue and help future planning."*
Comparability beyond England and Wales	6	Respondents who stated a need for year last worked data also indicated a broad need for comparability in all labour market sub-topics. These respondents were a mix of academic users and local authorities; for example Birmingham City Council stated:

Criterion	Score	Evidence
		"The main way we use UK data is to compare our city's performance with the national average, in order to understand where we under and over perform. This information is used to inform work around employment interventions and to understand which of our groups and communities under-perform the national average. "
Continuity with previous censuses	4	A single respondent, the academic Tony Champion, discussed continuity of year last worked, making a case for using it to better distinguish different types of unemployment over multiple censuses, using the census data on the Longitudinal Study. He stated: *"This is important in the context of Longitudinal Studies in being able to indicate how current the occupation and NS-SEC information is, as well as helping to identify cross-sectional variation and long-term trending in retirement behaviour and impact of unemployed spells."* Long-term unemployment is therefore better understood if data from previous censuses are available.
Weighted Overall Score	55.5	**Low user need**

4.16 Other considerations - year last worked

Table 14 ONS assessment of impact by criterion

Criterion	Operational impact	Justification
Impact on data quality	High	The census response rate was 89.1%. The agreement rate between the 2011 Census and CQS for year last worked was only 55%. The CQS report stated that some possible reasons included: • respondents misunderstanding the question, or having difficulty recollecting the correct year without further prompts from the CQS interviewers • respondents entering the digits incorrectly • incorrect scanning from handwritten responses
Impact on public acceptability	Low	There were no public acceptability concerns associated with collecting information on this sub-topic.

Criterion	Operational impact	Justification
Impact on respondent burden	Medium	Some respondents may have found it difficult to recall the year they last worked, particularly if it was some time ago. In addition, they may have been unsure what job to include in this answer, for example whether they should include paid work or unpaid work and if they had taken on a casual or part-time job before retiring whether to refer to a previous main career job or the casual job.
Impact on financial concerns	Low	The response to this sub-topic did not require manual coding or complex processing.
Impact on questionnaire mode	Low	The question on this sub-topic is short, and in 2011 displayed well online and on the paper questionnaire. Online respondents, however, had to scroll down the page to see the question, which was displayed after four other work based questions.

4.17 Operational requirements - year last worked

Moderate operational requirement

Data on this sub-topic are not essential for the derivation of the National Statistics Socio-economic Classification (NS-SEC); however year last worked data were used in the 2011 Census to distinguish between the short-term and long-term unemployed within NS-SEC. When used alongside data on those who have never worked, these data allow those who are involuntarily excluded from labour markets to be distinguished from the other NS-SEC operational categories[10]. Without year last worked, the long term unemployed would have to be coded with other groups excluded from the labour market, or coded as if they are in the labour market. Year last worked is also used to derive the unemployment history outputs variable.

4.18 User requirements - volunteering

Table 15 User requirement score by criterion

Criterion	Score	Evidence
Weighted Overall Score	63.5	**Medium user need**
Purpose	7	Central government users stated that they would use volunteering data if it were available from the census to better understand the contribution of volunteers, with Department for Environment Food and Rural Affairs (DEFRA) stating that volunteering data could help reveal the potential

[10] *See: www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-NS-SEC--rebased-on-soc2010--user-manual/index.html#5*

Criterion	Score	Evidence
		for economic growth, in this case in rural areas. Department for Culture, Media and Sport (DCMS) stated they would use census data on volunteering for: *"...better targeting of policy for volunteers, in terms of support for existing volunteers and encouraging new volunteering. DCMS sectors (particularly culture and sport) are very reliant on volunteers for delivery."* Organisations from a variety of sectors made cases for ONS collecting volunteering data. While supporting services delivered to volunteers and helping influence policy were key themes, respondents presented a variety of additional reasons. For example, Wales Council for Voluntary Action stated: *"Volunteering can also be looked at as a mode of community engagement and is related to ideas of community resilience, social capital and wellbeing. As these concepts become more important in the way statistics attempt to describe the way we live in the UK, a definitive data source, such as the Census would add to the understanding of these issues."* Local authorities told us they provide support and services to volunteers, and about the importance of the voluntary sector in service delivery. Data on volunteers are used by local authorities to inform policies and strategies. For example, Gateshead Council stated: *"Volunteering is one of the Councils long term priorities and is enshrined in our long term strategy; data regarding volunteering enables ...Areas with limited volunteering to be identified and to understand how volunteering support can be prioritised."*
Small geographies or populations	8	The National Council for Voluntary Organisations (NCVO) explained that levels of volunteering and the services provided to volunteers vary across small areas: *"The use is primarily by our member organisations rather than us ...to identify target areas for intervention, by evidencing need in local areas e.g. unemployment and economic inactivity, overall and by various sub-groups. Such evidence supports the case for funding and/or delivering particular voluntary sector services. Within a local authority, and even within a ward, different output and super-output areas can have quite different levels of need for services. "* Local authorities both provide services to support volunteering and use volunteers to deliver their own services. They are therefore interested in using small-area data to find pockets of volunteers that might suggest successful community activism. For example, Gateshead Council stated: *"Volunteering is one of the key drivers in developing community activism at both a Ward, LSOA and sub LSOA level. Better data and understanding of volunteering would help better to shape and form strategies and project delivery."* Suffolk County Council discussed the need for data about small population groups, using the data alongside deprivation, at the LSOA level, and for particular combinations of age and sex. For example, they stated:

Criterion	Score	Evidence
		"There is the problem of insurance cover for older volunteers so data structured by age group would reveal how many would no longer be able to volunteer in the future as they reach the maximum insurance age limit."
Alternative sources	7	DCMS pointed out that different national surveys generate estimates of volunteering, but that these give different results: *"The main sources used by DCMS are Community Life Survey (CLS), Taking Part Survey (TP) with detail on sport volunteering on Active People Survey. Given the difference in levels of reported volunteering between CLS and TP it would be valuable to have a definitive estimate."* National Council for Voluntary Organisations (NCVO) stated: *"The best alternative source of information would be the Community Life Survey (CLS), where information about those doing formal and informal volunteering is currently collected."* Respondents pointed out a variety of limitations of sample surveys which prevent the Community Life Survey from fully meeting their needs. One respondent highlighted the limitations of the data, being based on a sample of around 2,000 people. There were no commonly used administrative sources reported.
Multivariate analysis	6	Volunteers are a diverse group of people, and a number of organisations would understand volunteers by profiling them with other census sub-topics to increase rates of volunteering. Wales Council for Voluntary Action stated that the data would: *"Allow in depth research into the demographic (age, gender, ethnicity, no of dependents, relationship status, economic activity status) and household attributes (type of tenure, locality, make up of household) associated with volunteering... Informing national and local policy makers on the role of volunteering in keeping older people active and socially included, enabling people to remain independent longer and delaying the use of statutory services... Look at the relationship of caring responsibilities and volunteering."* Walsall Council stated: *"Volunteering and unpaid work: ...Engaging in this sort of positive activity is believed to be beneficial to health and wellbeing, and inclusion in the census would allow this to be tested through multivariate analysis with health information. Profiling of volunteers could be produced and further programmes targeted more effectively as a result."* The Department for Culture, Media and Sport (DCMS), gave evidence of a similar need: *"The main requirement would be to understand more about people who do volunteer for small groups (geographic and by characteristics) which could then lead to better targeting of policy for volunteers"*

Criterion	Score	Evidence
Comparability beyond England and Wales	7	Volunteering data users included central government bodies with a UK remit national-level organisations such as DCMS who can perform their functions better if able to make comparisons with other parts of the UK. DCMS stated: *"Although DCMS policy delivery varies between England and UK it is important to understand the whole UK"* Furthermore, umbrella-organisations representing volunteers gave clear reasons for wanting UK comparability. Wales Council for Voluntary Action stated: *"Understanding what policy interventions work to improve volunteering and citizen engagement within the 'policy laboratory' of the UK devolved administrations is useful for better policy making in the future."* National Council for Voluntary Organisations (NCVO) stated: *"NCVO's work focuses on England but we also make comparisons with other parts of the UK and with other countries, to inform research, policy, and best practice. We use evidence to inform our own policy and to attempt to influence Government policy."*
Continuity with previous censuses	0	Since information on volunteering has not been collected on the census no comparisons with previous censuses would be possible if a question were included in the 2021 Census.
Weighted Overall Score	63.5	**Medium user need**

4.19 Other considerations - volunteering

Table 16 ONS assessment of impact by criterion

Criterion	Operational impact	Justification
Impact on data quality	High	No information was collected about this sub-topic in the 2011 Census for England and Wales. The 2011 Census for Northern Ireland did ask the single-concept question 'In the past year, have you helped with or carried out any voluntary work without pay?'. While this question had an agreement rate of 88.2%, it contained no instructions or definitions of volunteers. The Wales Council for Voluntary Action pointed out in the consultation that "The nature of the question(s) is very important in determining the usefulness of the data. A two fold difference in volunteering participation rate is common". Therefore, the level of concern about

Criterion	Operational impact	Justification
		a question on volunteering would remain high until question testing showed that the responses given correctly align with the required definition of who is and who is not a volunteer.
		Further work would therefore be required to understand the concept better and develop a suite of questions for the 2021 census, and to understand the full quality implications.
Impact on public acceptability	Low	There are no public acceptability concerns associated with collecting information on this sub-topic. The non-response rate for the volunteering question in the 2011 Northern Ireland Census, at 3.5%, suggests that few people felt the question to be inappropriate on a census.
Impact on respondent burden	High	Respondent burden on a volunteering question may be a concern for three reasons. It is likely that with the limited space on the census questionnaire, the given definition would not cover all types of volunteering activities. Therefore, a number of types of volunteers would therefore have to think carefully, or ask for support, to work out whether they would meet the definition given.
		Secondly, volunteering questions involve a recall period: the process of matching activities to time periods increases burden for those respondents.
		Finally, respondents may need clarification about whether an activity they carry out should count for the volunteering question.
Impact on financial concerns	Low	There is unlikely to be large amounts of manual coding associated with a volunteering question, and processing is not expected to be complex.
Impact on questionnaire mode	Medium	Even a relatively simple volunteering question is expected to require a moderately long question and multiple instructions. A question on the 2021 Census may therefore display differently online to a paper questionnaire. There is insufficient evidence at this stage to assume that it would appear identically in both modes, and so a medium level of concern is assumed.

4.20 Operational requirements - volunteering

Questions on this topic have not been asked in any previous England and Wales censuses and we do not anticipate any operational requirement to collect this information from the census.

5. Updated view

The following table gives the updated view of ONS at the sub-topic level and the justification for this.

Table 17 Updated view

Sub-topic detail	Initial view	Updated view	Justification
Economic activity	Collect	Collect	Economic activity data from the census are widely used by central and local government. As a key dimension of local economic performance, economic activity is used by local authorities to form economic plans and strategies, underpinning large amounts of public spending. Unemployment and economic inactivity are important measures that can show disadvantage for small areas and small groups. In addition, economic activity is used to target interventions, not just those that aim to increase employment rates, but also health interventions. Respondents to the consultation set out a strong need for data that can be used with data from other census topics, other UK census data, and with previous censuses in England and Wales. In order to continue to measure economic activity consistent with ILO guidelines and with LFS outputs, the questions will be reviewed as updated guidelines become available and changes are assessed.
Occupation	Collect	Collect	Occupation, like industry, provides specific detail about local labour markets, and can reveal exclusion from particular types of work. Respondents from central and local government described how occupation data, when available at the most granular local level, can underpin long-term economic development plans, and also large infrastructure projects. In predominantly paper-based censuses accurate capture and coding of occupation can be difficult and costly. ONS will therefore review the options for self-coding of occupation in the online census, in order to improve data quality and reduce processing costs.

Sub-topic detail	Initial view	Updated view	Justification
National Statistics Socio-economic Classification (NS-SEC)	Collect	Derive	NS-SEC is required by respondents across central government, local government and academia as a key indicator in measuring inequality across a range of policy areas, including the state pension age, access to higher education, and public health. Continuity with previous censuses was particularly important to users. NS-SEC is derived from a range of other sub-topics. ONS has recently undertaken a consultation on the use of NS-SEC and which derivation method is most appropriate. This information will be used to inform the detailed level of NS-SEC provided from the 2021 Census.
Industry	Further information required	Collect	Industry, like occupation, provides specific detail about local labour markets, employment, and business populations. Respondents from central and local government in particular demonstrated a need to use data on this sub-topic to understand specific industries, and the industries in which particular groups or small populations are employed in. This allows them to support local economies, in particular through creating local economic plans. In predominantly paper-based censuses accurate capture and coding of industry can be difficult and costly. ONS will therefore review the options for respondents self-coding their own industry in the online census, in order to improve data quality and reduce processing costs.
Supervisory status	Do not collect	Consider how/whether to meet NS-SEC need	Respondents put forward a limited need for supervisory status in its own right. Users from academic and charity sectors explained how it can be used as a measure of labour market disadvantage, or be used to better distinguish different types of workers using other labour market sub-topics. However, there was little evidence of the data being used to develop labour market policies. Supervisory status is one of the sub-topics that is used to derive NS-SEC and is required for both the full method (used in the 2001 Census) and the reduced method (used in 2011). ONS is undertaking a separate 'Consultation on revising the Standard Occupational Classification 2010 (SOC2010)' which may provide further evidence of the derivation method needed from the 2021 Census. Following the consultation ONS will review whether supervisory status needs to be collected for the derivation of NS-SEC.

Sub-topic detail	Initial view	Updated view	Justification
Year last worked	Do not collect	Do not collect	Respondents put forward a limited need for year last worked data. A small number of respondents from local authorities pointed to the need to profile and understand the needs of the long-term unemployed; academic respondents explained that this sub-topic can help better differentiate types of unemployment. There were few responses to this sub-topic, and the user need is not sufficient for it to be included on the 2021 census ahead of other sub-topics. Furthermore the data quality from the 2011 Census for this topic is poor mainly due to respondent recall. However, year last worked enables the long-term unemployed to be distinguished as a separate NS-SEC group. ONS will work to identify potential administrative sources that, if linked to the census, could provide the information required for NS-SEC.
Volunteering	Further information required	Consider how/ whether to meet need	While there was limited user need for data on unpaid work, respondents from, central government, local government and charity sectors gave examples of a wide range of volunteering policies and services that could all be improved by being underpinned by better data on volunteers. Local authority respondents outlined the increasing importance of volunteers to society, with many looking to identify areas where high levels of volunteering indicate strong community cohesion, and extend the benefits to other areas. Others explained the need to understand who volunteers are, hoping to use census data to promote volunteering to older or unemployed people to improve their wellbeing. Finally, charity and central government users pointed to the potential of detailed census data on volunteering to reveal its contribution to the economy, and the potential for increasing volunteering rates in areas where they are low. ONS will conduct a programme of work to: • understand the user need and the type of questions needed • develop and test questions to determine whether it is possible to meet the user need for this topic.

6.   Equality implications of the updated view of ONS

The Equality Act 2010 and associated public sector equality duty require public bodies to work towards eliminating discrimination and promoting equality of opportunity with regard to nine protected characteristics: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. These requirements are reinforced by secondary legislation in both England and Wales[11] as well as by the Equality Objectives published recently by the Welsh Government which seek to address the key equality challenges faced in Wales and to support progress towards the well-being goals in the Well-being of Future Generations (Wales) Act 2015.

The proposals made for the 2021 Census content will consider identified 'User requirements' for data alongside other factors such as 'Other considerations' and 'Operational requirements' specified in our evaluation criteria. In addition, it will be important to take account of the impact of any decisions that we may make on equality. Impacts can be:

- positive - actively promote equality of opportunity for one or more groups, or improve equal opportunities/relations between groups

- adverse or negative - cause disadvantage or exclusion (any such impact must be justified, eliminated, minimised or counter-balanced by other measures)

- neutral - have no notable consequences for any group

Labour market status and socio-economic class are not considered to be protected characteristics in the Equality Act 2010. However, a number of these characteristics, such as age, sex, and race/ethnicity, are thought to correlate with exclusion from labour markets and lower socio-economic status. The economic activity, occupation, industry and NS-SEC sub-topics are therefore widely used by local authorities and other organisations to fulfil their Public Sector Equality Duty.

Respondents to the consultation gave many examples of using these sub-topics for measuring disadvantage. Collecting these data through the census gives a different pattern of inequalities to those revealed by surveys – for example in showing a higher proportion of women in employment than the LFS shows.

The next steps for this topic, discussed below, take into account the identified equality implications. As research and stakeholder engagement continues, if further equality implications emerge, these will be considered and mitigated where necessary. Further information on the research linked to question development and testing, and stakeholder engagement will be published as required.

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[11] *The Equality Act 2010 (Specific Duties) Regulations 2011 and The Equality Act 2010 (Statutory Duties) (Wales) Regulations 2011.*

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7. Next steps

The consultation responses showed that there remains a clear need for labour market socio-economic classification sub-topics for census data users. The sub-topics ONS propose to collect underpin economic development work in central and local government and allow a variety of organisations across different sectors to measure and act on disadvantages between different groups of the population. Before finalising the labour market questions for the 2021 Census work will be undertaken in a number of different strands:

1. Ensure that the questions for the 'economic activity' sub-topic align with changing international definitions (ILO's 2013 'Resolution concerning statistics of work, employment and labour underutilization' [12]) and the labour market concepts remain consistent with those collected in the LFS

2. Explore how the online question(s) set can improve the collection of the data while still meeting user needs, especially for occupation and industry. In particular ONS will develop and test functionality within the online questionnaire for self-coding the occupation and industry questions. The development work will seek to explore the extent to which the outputs continue to meet user needs, whilst reducing respondent burden, minimising the significant costs involved in manual coding, and improving data quality.

3. ONS will use the responses to the separate ONS 'Consultation on revising the Standard Occupational Classification 2010 (SOC2010)' to inform the detailed quality requirements for NS-SEC and whether this identifies any further scope for reducing the sub-topics needed to derive the current version of NS-SEC used in census outputs.

4. Gather further evidence to determine whether to include question(s) to collect information on volunteering in the 2021 Census. In particular, ONS will engage with stakeholders to identify the detailed requirement for this sub-topic to inform the development and testing of question(s). The impact on other census sub-topics, particularly unpaid care and economic activity, will be assessed.

Following the development and testing stages there will be a period of evaluation and further stakeholder engagement to support the final decision regarding any changes to the labour market and socio-economic classification sub-topics. These activities will be sufficiently progressed to provide a clear proposal for the 2021 Census questionnaire which will be included in the Census White Paper in 2018 before the questions are submitted to Parliament for approval in 2019.

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[12] http://www.ilo.org/global/statistics-and-databases/standards-and-guidelines/resolutions-adopted-by-international-conferences-of-labour-statisticians/WCMS_230304/lang--en/index.htm

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Annex A: List of organisations that responded, by sector

This list includes organisations that responded to at least one consultation question, or discussed collection of data, on the 'Labour Market and National Socio-economic Classification' topic. If multiple responses were received from an organisation the name only appears once.

Government department/public body

College of Arms

Department for Business, Innovation and Skills (**BIS**)

Department for Communities and Local Government (**DCLG**)

Department for Culture, Media and Sport (**DCMS**)

Department for Environment, Food and Rural Affairs (**DEFRA**)

Department of Health (**DH**)

Department for Transport (**DfT**)

Department for Work and Pensions (**DWP**)

Equality and Human Rights Commission (**EHRC**)

Health & Social Care Information Centre (**HSCIC**)

High Speed Two Limited

Higher Education Funding Council for England (**HEFCE**)

National Assembly for Wales

National Parks England

Office for National Statistics (**ONS**)

Sport England

Welsh Government

Local authority

Arun District Council

Association of North East Councils

Aylesbury Vale District Council

Barnsley Metropolitan Borough Council

Bedford Borough Council

Birmingham City Council

Blaby District Council

Blackburn with Darwen Borough Council

Blackpool Council

Bolton Council

Bournemouth Borough Council

Bristol City Council

Broxbourne Borough Council

Caerphilly County Borough Council

Carmarthenshire County Council

Chelmsford City Council

Cheshire East Council

Cheshire West and Chester Council

Chesterfield Borough Council

City of Bradford Metropolitan District Council

City of London Corporation

City of York Council

Colchester Borough Council

Consolidated response: Shropshire Council; Citizens Advice Shropshire; Shropshire Providers Consortium; Energize Shropshire; Oswestry Community Action

Cornwall Council

Coventry City Council - Skills and Growth Team

Local authority (continued)

Cumbria County Council

Cyngor Sir Ceredigion/Ceredigion County Council

Derbyshire County Council

Devon County Council - Public Health

Dudley Metropolitan Borough Council

Durham County Council

East Northamptonshire Council

East Riding of Yorkshire Council

East Sussex County Council

Essex County Council

Gateshead Council

Gedling Borough Council

Gloucestershire County Council

Greater London Authority

Gwynedd Council

Haringey Council

Hertfordshire County Council

Horsham District Council

Kent County Council

Knowsley Metropolitan Borough Council

Lancashire County Council

Local Government Association

London Borough of Bexley

London Borough of Camden

London Borough of Hackney

London Borough of Harrow

London Borough of Havering

London Borough of Hounslow

Manchester City Council

Merton Council

Mole Valley District Council

Newcastle City Council

North York Moors National Park Authority

North Yorkshire County Council

Northampton Borough Council

Northumberland County Council

Oldham Council

Oxfordshire County Council

Powys County Council

Reigate & Banstead Borough Council

Royal Borough of Kensington and Chelsea

Royal Borough of Kingston upon Thames

Salford City Council

Sheffield City Council

Shropshire Council – Intelligence and Research Team

Snowdonia National Park

Somerset County Council

South Norfolk District Council

Southend-on-Sea Borough Council

St Helens Council

Suffolk County Council

Surrey County Council

Swansea Council

Tameside Council

Tower Hamlets Council

Uttlesford District Council

Walsall Council

Waltham Forest Council

Warrington Borough Council

Warwickshire Observatory

West Sussex County Council

Westminster City Council

Wookey Parish Council

Worcestershire County Council

Wychavon District Council

Wycombe District Council

Health organisation

Hywel Dda University Health Board

Public Health Wales National Health Service Trust

Housing

Yarlington Housing Group

Academic/research

British Sociological Association

Centre for Longitudinal Study Information and User Support (**CeLSIUS**)

Economic History Society

Imperial College London – Small Area Health Statistics Unit

UK Data Service and Administrative Data Service

University of York - Centre for Housing Policy

Charity and voluntary

Chwarae Teg

Community Action Suffolk

Discrimination Law Association

Fair Play South West

Family and Childcare Trust

Friends, Families and Travellers

Irish in Britain

Muslim Council of Britain

National Association of British Arabs

National Council for Voluntary Organisations (**NCVO**)

Older Lesbian, Gay, Bisexual and Trans Association (**OLGA**)

Portsmouth Diocesan Council for Social Responsibility

Presbyterian Church of Wales

Royal Town Planning Institute

Shelter

The Salvation Army

The Vegan Society

Wales Council for Voluntary Action

Commercial

CACI Ltd

Demographics User Group (**DUG**)

First UK Bus

Infusion Research

Operational Research in Health Ltd (**ORH** Ltd)

Sainsbury's

Genealogist/family historian

Society of Genealogists

Tasmanian Family History Society Inc.

Other

Academy of Social Sciences

Emergency Planning Society -
West Midlands Branch

Health Statistics User Group (**HSUG**)

Joint Industry Committee for Population
Standards (**JICPOPS**)

Market Research Society (**MRS**) and MRS
Census & Geodemographics Group

New Economy

Older People's Commissioner for Wales

Royal Geographical Society with the Institute
of British Geographers (**IBG**)

Tees Valley Unlimited