



ONS Census Transformation Programme

The 2021 Census

Assessment of initial user
requirements on content for
England and Wales

Output and enumerations
bases 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, 310 responded to at least one consultation question, or discussed collection of data, on the 'Sexual identity' topic.

The topic consultation requested different information from census users on output and enumeration bases. The consultation sought information only on the suitability of the current output and enumeration bases and the need for any new output bases or changes/improvements to the current bases. A wider set of evidence on the use and implications of not having these was not asked as this was already gathered/provided within the relevant topics (eg. the workplace populations are primarily derived from the labour market sub-topic place of work and the year and month of arrival question allows usual residents to be identified in the enumeration base). Therefore output bases were not evaluated in the same way as other topics and this response seeks to summarise the main points made on output bases and any future work to develop, improve guidance, definitions or output bases.

¹ https://www.ons.gov.uk/file?uri=/census/censustransformationprogramme/consultations/the2021censusinitialviewoncontentenglishfinal_tcm77-405920.pdf

2. Background

The population enumeration base for the 2021 Census will have implications for many areas of census planning. The enumeration base describes who is included in the count of the population, and the way in which the population is counted. The decision on which enumeration base to use is informed by the need to collect information on such elements as: families, housing, specific population groups such as students and armed forces personnel.

ONS conducted a thorough review of alternative enumeration bases ahead of finalising the 2011 design. It concluded that the 2011 Census required a ‘composite’ enumeration base that would collect information on all usual residents and all people present at an address on census night. People present include short-term residents and visitors, and the inclusion of these helps to maximise coverage.

ONS proposed in the consultation document ‘[The 2021 Census: Initial view on content for England and Wales](#)’² to adopt the same enumeration base definition used in the 2021 Census as was used in 2011. The advantages of this enumeration base would be to ensure continuity with the 2011 Census enumeration base and is broadly consistent with the international standards

Table 1 shows ONS’s initial view on the core definitions used to construct the enumeration base and two key output bases, such as the usual residence population and household populations.

Table 1 Initial view of ONS

Topic detail	Initial view	Collected in 2011?
Usual residence definition	Unchanged	This information is not collected but it defines who completes the questionnaire
Household definition	Unchanged	
Visitor definition	Unchanged	
Short-term resident definition	Unchanged	

The primary output base in the 2011 Census was all usual residents, and this will remain the same for 2021. However, a limited number of other outputs will be produced on other output bases as in 2011. These allocate those enumerated in the census to different geographical locations where individuals could be counted. Some of these output bases total the usual resident population, some will count a subset of the usual resident population more than once and some will only include a subset of individuals. These are:

- Out-of-term populations – an alternative output base whereby the usually resident population are redistributed to their place of residence in out of term periods
- Workplace populations – a count of all people working in a geographical area

² https://www.ons.gov.uk/file?uri=/census/censustransformationprogramme/consultations/the2021censusinitialviewoncontentenglishfinal_tcm77-405920.pdf

- Workday populations – workplace population plus the non-working resident population in the area
- Usually resident dependent children with a parental second address
- Short-term residents – those that are resident in the UK for less than twelve months, so are not counted as usual residents
- Households – a subset of the usual resident population as defined in Box 1 below
- Second residence population – derived from the second residence question this outlines those people who have a second residence and the reason for that second residence (eg. holiday)

3. Summary of consultation responses

Table 2 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 2 Output and enumeration bases - number of responses by type of respondent

Type of respondent	Total responses	
	N	% total responses
Individual	383	58
Organisation (all sectors)	155	42
Sector		% organisation responses
- Government department/public body	16	10
- Local authority	87	56
- Health organisation	3	2
- Housing	4	3
- Academic / research	7	5
- Charity and voluntary	21	14
- Commercial	4	3
- Genealogist/family historian	4	3
- Other	9	6
Total responses	538	100

Note: Percentages might not add to 100% due to rounding.

Note: An organisation may have submitted more than one response

3.1 Summary of consultation responses - Enumeration Base

In general, respondents stated a need for the enumeration base to remain the same for the 2021 Census as for 2011 in order to maintain continuity. For example:

Dudley Metropolitan Borough Council: *“We welcome the adoption of the 2011 enumeration bases for the 2021 census as they are fit for purpose and would provide a continuity that facilitates comparisons over time.”*

Welsh Government: *“We would support using the same enumeration base in 2021 as in 2011 to maintain consistency over time.”*

Although the consultation did not make specific reference to enumeration bases, some specific points were raised regarding where definitions might be improved or expanded. For example, the enumeration of those of no fixed abode and the definition of people present (visitors and short term migrants) used.

Irish in Britain: *“We note the issues which arose regarding enumeration of those of less ‘fixed’ abode - eg. ‘churn’ areas, alleged undercounts of Irish Travellers.”*

Office for National Statistics (ONS): *“The 2011 Census only routed those who were non-UK born to answer the year of arrival and intended length of stay questions. The 2011 Census questions therefore did not precisely reflect the UN definition of a short-term migrant used in other ONS outputs.”*

Furthermore, there were some concerns regarding the household definition. This definition was previously reviewed for the 2011 census to reflect social change and to reduce ambiguity, removing the “common-housekeeping” aspect of the 2001 definition. As a result, the 2011 definition was based wholly on the physical features of the house. This is broadly consistent with the UN definition of a household.

The 2011 Census questionnaire defined a household as:

A household is:

- one person living alone; or
- a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area

ONS proposes that this household definition is retained for 2021 for the purposes of data collection.

3.2 Summary of Consultation Responses - Output Bases

Respondents expressed a need for the output bases to remain the same in 2021 as for the 2011 Census to allow comparisons to be made over time.

Sheffield City Council: *“We support the view that that output [and enumeration] bases should not change as consistency with previous censuses is vital. Changes to output bases would make it difficult to track changes over time, which is an important part of the work that we do.”*

Rwth Hunt: *“I think these should be maintained to give consistency to these censuses.”*

In addition, the consultation also identified the potential for using visitors as an output base. Respondents also spoke more generally about issues around reporting on flexible living. Flexible living can be defined as: where a usual resident spends the majority of their time, or where dwellings are unoccupied for part or all of the time

Respondents were asked: *“Was there enough flexibility in the output bases available from the 2011 Census?”* Overall, 535 users responded to this question.

Table 3 Output and enumeration bases - number of responses by type of respondent

Type of respondent	Total responses		
	Total 'Yes' responses	Total number of responses	'Yes' responses as a % of total responses
Individual	336	382	88.0
Organisation (all sectors)	136	153	88.9
Sector			% organisation responses
- Government department/public body	18	18	100.0
- Local authority	78	85	91.8
- Health organisation	3	3	100.0
- Housing	4	4	100.0
- Academic / research	6	7	85.7
- Charity and voluntary	17	20	85.0
- Commercial	2	4	50.0
- Genealogist/family historian	2	3	66.7
- Other	6	9	66.7
Total responses	472	535	88.2

As part of the consultation, users provided examples of how they use the current census output bases. Some respondents also identified output bases they thought were missing from the 2011 census. Some examples for each of these are given in the table below.

Table 4 Uses of output bases provided by users

Output base	Evidence of use
Usual residents	<p>Respondents identified this base as being essential for many of their subsequent uses of census data, and stated that loss of this information would have a significant impact. For example, Oldham Council stated:</p> <p><i>“Usual residence is our key output base. The lack of this base would render all census information useless for us. It is difficult to see how funding, spatial research, population projection and many other programmes would function without this.”</i></p> <p>A selection of local authorities provided specific examples of tasks they were able to complete with access to this output base. For example, London Borough of Harrow said:</p> <p><i>“Without this information the council would not have the required information to develop policy, plan services and allocate resources needed for our residents.”</i></p>

Output base	Evidence of use
	<p>Additionally, North Yorkshire County Council stated:</p> <p><i>“Usual residents in particular are frequently used in calculating rates for indicators from non-census sources such as crime, health measures, recycling rates etc which we could not calculate without these output bases.”</i></p>
Households	<p>Information regarding households is particularly helpful to local government for housing projections and planning. Ludi Simpson stated:</p> <p><i>“For household planning, the distinction between vacant dwellings and dwellings that are second homes or holiday homes is important, because the latter are not available to satisfy housing need. Statutory requirements of Local Plans to consider housing need include the consideration of levels of vacancy for local authorities and for areas within local authorities.”</i></p> <p>Another specific example of how this output base can be used came from Operational Research in Health Ltd (ORH Ltd):</p> <p><i>“The Household base is important to our work since we use car ownership data to estimate the proportion of people with no access to a car. This forms a critical component of our sports facility modelling. The model calculates the number of users accessing different facilities by different modes of transport.”</i></p>
Second residence populations	<p>Areas with a higher level of second residences, for example holiday homes, can use that information to help assess housing need. An individual stated that:</p> <p><i>“Housing is an important issue in Cornwall and being able to identify numbers of people who occupy households on a temporary and permanent basis helps build cases for targeted housing need.”</i></p> <p>Local authorities stated that information is necessary about where people temporarily live in order to gauge demand on services in the area. For example, Westminster City Council stated:</p> <p><i>“In Central London we have a lot of people living in properties who may not count as full time residents but who have family homes elsewhere - however they still use services and modelling needs for the borough as a whole requires taking them into consideration.”</i></p>
Out-of-term populations	<p>Local authorities with a high proportion of students have particular need for the out-of-term population base. This information can be used for profiling and service planning, for example North Yorkshire County Council said:</p> <p><i>“The... out-of-term output bases are required for our analysis of the local economy and to provide the most suitable information area profiles such as those which we produce for local businesses who require catchment information based on the characteristics of their customer base.”</i></p> <p>Some respondents made specific reference to the requirement for information on students for the provision of public health services, such as Cardiff and Vale University Health Board who describe the impact of loss of information on this output base:</p> <p><i>“The UHB would be unable to ascertain potential population health service use due to visitors other than residents, including students”.</i></p>

Output base	Evidence of use
<p>Workplace populations</p>	<p>Local authorities stated that workplace information is necessary in order to gauge demand on services in the area.</p> <p>City of London Corporation also provided a detailed use of this base, relating to mapping employment patterns across London:</p> <p><i>“Relating to the workforce the spatial context of distribution of the workplaces associated workforce is different to that of the resident population. Thus the introduction of Workplace Zones in the 2011 Census of Population provided an invaluable tool for being able to spatially analyse the workforce. An example is set in City of London Workforce CENSUS 2011 – Analysis by Industrial Sector, where the spatial context enables an analysis of the locational patterns of employment in different industries within the City of London. This provides framework for being able to spatially analyse the evolving employment market and then compare spatially with other data themes such as the office market and size of office buildings.”</i></p>
<p>Workday populations</p>	<p>This base is also particularly useful to local authorities in London as they have a high proportion of commuters. This is true for Tower Hamlets Council, who stated:</p> <p><i>“The borough of Tower Hamlets includes Canary Wharf, one of London’s major employment centres, which a large commuter workforce, alongside some of the England’s most deprived neighbourhoods. In this context, data on different population bases to complement residence based data are essential. Without these data, our evidence base would be significantly weaker. For example, without data on workday populations, we would be unable to accurately profile the dynamics of the local labour market and population.”</i></p> <p>Respondents stated that the workday population it is helpful for service planning, particularly in relation to travel, but less important than some other bases, For example, Oldham Council stated:</p> <p><i>“We also use workday population on an occasional basis. Not having this information would not at present be critical for our purposes, but would degrade our intelligence about the likely demand and transport patterns within Oldham. It is likely that it would impact on a small number of one-off projects with an economic or tourism basis.”</i></p>
<p>Short-term residents</p>	<p>The short-term resident output base was of use to local government, as the impact of this group on services must also be taken into account alongside the usual residents. For example Birmingham City Council said:</p> <p><i>“It is important to have this data to understand the additional needs and pressures of people who come to work, or stay in the city for short stays. They are reliant on services. Policies and services need to be designed to include people who come and work and come for short stays.”</i></p> <p>Furthermore, this information can be of use for the development and monitoring of policies. Local Government Data Unit Wales said:</p> <p><i>“The short-term residents base is very useful for the work we undertake to support the Wales Migration Partnership to give data to support programmes and policies relating to migration in Wales.”</i></p>

Output base	Evidence of use
Potential new output bases - Visitors	A small number of respondents identified ‘visitors’ as a missing output base in the census, although they did not express a requirement for this information. This information was not published for quality reasons and was primarily collected to improve enumeration coverage.
Potential new output bases - Flexible living where a usual resident spends the majority of their time or where dwellings are unoccupied for part or all of the time	<p>In addition to the second residence population base for which data are already published, some local authorities highlighted a requirement for a better understanding of the length of time residents spend at different addresses when they live in more than one place. For example, Greater London Authority said:</p> <p><i>“We need to recognize that people increasingly live at multiple addresses. Recording second addresses in 2011 started to address this, but there was no measure of time spent at each address. This affects second homes and other parent addresses, but it particularly affects working addresses.”</i></p>

4. Updated view

The following table gives the updated view of bases.

Table 5 Updated view on definitions and output bases

Base	Initial view	Updated view	Justification
<i>Enumeration bases</i>			
Usual residence definition	Unchanged	Unchanged	ONS proposes retaining the questions used in 2011 to produce the output bases from the enumeration base in order to ensure that there is: <ul style="list-style-type: none"> • high quality well defined coverage • flexibility in producing outputs, and • continuity with 2011
Household definition	Unchanged	Unchanged	
Short-term resident definition	Unchanged	Unchanged	
Visitor definition	Unchanged	Unchanged and collect	No change to the definition and questions on visitors will be retained, both to ensure coverage and for operational reasons.
<i>Output bases</i>			
Usual residents	N/A	Derive for outputs	The primary output base for the 2021 Census.
Households	N/A	Derive for outputs	The population living in households. A subset of the usual resident base. Informs housing projections and housing planning.
Second residence populations	N/A	Derive for outputs	Derived from the second address question this outlines those people who have a second residence and the reason for that second residence. Informs local authority modelling of service needs. This would also allow the continued production of tables on usually resident dependent children with a parental second address. Financial concerns associated with the second address question require review through exploration of postcode lookup online to ease manual coding.
Out-of-term populations	N/A	Derive for outputs	An alternative output base whereby the usually resident population are redistributed to their place of residence in out of term periods. This is of particular interest to local authorities with a high proportion of students.

Base	Initial view	Updated view	Justification
Workplace populations	N/A	Derive for outputs	A count of all people working in a geographical area. This complements the usual resident population.
Workday populations	N/A	Derive for outputs	Workplace population plus the non-working resident population in the area. This base is particularly useful to local authorities where there are high levels of commuting, and therefore large differences between the usual resident and workday populations.
Short-term residents	N/A	Derive for outputs	People resident in the UK for less than twelve months, are not included in the usual resident population base. Local authorities use this information to inform service planning and delivery, and policy monitoring.
Potential new output bases - Visitors	N/A	Do not derive for outputs	The 2011 Census asked a small number of questions about people who do not usually live at an address (visitors). While this was identified as potentially a missing output base, the information was not published for quality reasons and was primarily collected to improve enumeration coverage.
Potential new output bases – Flexible Living	N/A	Do not collect	While the addition of further questions around living arrangements and occupation of properties would be of interest to local authorities to model service and housing needs, the extra complexity of such questions and the evidence given for inclusion in the 2021 Census means the case for inclusion of further questions is insufficiently compelling.

5. Equality implications of ONS's updated view

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 Wales³ 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

None of the proposals with regard to the enumeration and output bases directly supply information on protected characteristics, but the ability to produce detailed census outputs on different output bases enables users to look at the protected characteristics of, for example, those that work in a particular area. With little change proposed to the questions the proposals here are neutral with no notable consequences for any diversity groups

As research and stakeholder engagement continues, if any further equality implications emerge these will also be considered and mitigated against where necessary.

³ *The Equality Act 2010 (Specific Duties) Regulations 2011 and The Equality Act 2010 (Statutory Duties) (Wales) Regulations 2011.*

6. Next steps

As outlined in '[The 2021 Census - Assessment of initial user requirements on content for England & Wales: Response to consultation](#)'⁴ ONS proposes to retain the same enumeration base as in 2011. In addition ONS intends to include the questions in the 2021 Census needed to derive the output bases set out in Section 4 .

As part of developing a questionnaire for the 2021 Census, including definitions, question instructions and respondent guidance, ONS will review and update definitions , instructions and or guidance as necessary. This will include reviewing specific points highlighted in the topic consultation, for example definitions around student households.

⁴ <https://www.ons.gov.uk/file?uri=/census/censustransformationprogramme/consultations/2021censustopicconsultation/assessmentofinitialuserrequirementscontentforenglandandwalesresponsetoconsultation.pdf>

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 ‘Output and enumeration bases’ topic. If multiple responses were received from an organisation the name only appears once.

Government department/public body

College of Arms	Equality and Human Rights Commission (EHRC)
Department for Business, Innovation and Skills (BIS)	Health & Social Care Information Centre (HSCIC)
Department for Communities and Local Government (DCLG)	High Speed Two Limited
Department for Culture, Media and Sport (DCMS)	Local Government Data Unit Wales
Department for Environment, Food and Rural Affairs (DEFRA)	Ministry of Defence (MOD) - Defence Statistics
Department for Transport (DfT)	National Assembly for Wales
Department for Work and Pensions (DWP)	National Parks England
	Sport England
	Welsh Government

Local authority

Arun District Council	Cumbria County Council
Aylesbury Vale District Council	Cyngor Sir Ceredigion/Ceredigion County Council
Barnsley Metropolitan Borough Council	Derbyshire County Council
Basildon Council	Devon County Council - Public Health
Bedford Borough Council	Dorset County Council
Birmingham City Council	Dudley Metropolitan Borough Council
Blackburn with Darwen Borough Council	Durham County Council
Blackpool Council	East Northamptonshire Council
Bournemouth Borough Council	East Riding of Yorkshire Council
Bristol City Council	East Sussex County Council
Bury Metropolitan Borough Council	Essex County Council
Caerphilly County Borough Council	Flintshire County Council
Carmarthenshire County Council	Gateshead Council
Chelmsford City Council	Gedling Borough Council
Cheshire West and Chester Council	Gloucestershire County Council
Chesterfield Borough Council	Greater London Authority
City of Bradford Metropolitan District Council	Gwynedd Council
City of London Corporation	Hampshire County Council
City of York Council	Haringey Council
Colchester Borough Council	

Local authority (continued)

Hertfordshire County Council	Royal Borough of Kensington and Chelsea
Hinckley & Bosworth Borough Council	Royal Borough of Kingston upon Thames
Kent County Council	Sheffield City Council
Knowsley Metropolitan Borough Council	Shropshire Council – Intelligence and Research Team
Lancashire County Council	Snowdonia National Park
London Borough of Barking and Dagenham	Somerset County Council
London Borough of Bexley	South Norfolk District Council
London Borough of Camden	Southend-on-Sea Borough Council
London Borough of Hackney	St Helens Council
London Borough of Harrow	Staffordshire County Council - Connectivity Strategy
London Borough of Havering	Surrey County Council
London Borough of Hounslow	Tameside Council
London Borough of Richmond upon Thames	Tower Hamlets Council
Manchester City Council	Uttlesford District Council
Merton Council	Walsall Council
Mole Valley District Council	Warrington Borough Council
Newcastle City Council	Warwickshire Observatory
North York Moors National Park Authority	West Sussex County Council
North Yorkshire County Council	Westminster City Council
Northumberland County Council	Wookey Parish Council
Oldham Council	Worcestershire County Council
Oxfordshire County Council	Wycombe District Council
Powys County Council	
Reigate & Banstead Borough Council	

Health organisation

Cardiff and Vale University Health Board	Public Health Wales National Health Service Trust
Hywel Dda University Health Board	

Housing

Chartered Institute of Housing	Habinteg Housing Association
Cymorth Cymru	Yarlington Housing Group

Academic/research

British Sociological Association
Caribbean Atlantic Research in Britain (**CARIB**)
Economic History Society
Gloucestershire House Histories
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

Church of England - Archbishop's Council
Chwarae Teg
Coalition of Latin Americans in the UK
Cymdeithas yr Iaith Gymraeg/Welsh Language
Society
Fair Play South West
Family and Childcare Trust
Friends, Families and Travellers
Gay and Lesbian Association of Doctors and
Dentists (GLADD)
Hindu Forum of Britain
Irish in Britain
Khalsa Foundation

Leeds Gypsy and Traveller Exchange (Leeds
GATE)
Lichfield Civic Society
Muslim Council of Britain
National Association of British Arabs
Older Lesbian, Gay, Bisexual and Trans
Association (OLGA)
Royal Town Planning Institute
Shelter
The Vegan Society
Unity Group Wales
Wales Council for Voluntary Action

Commercial

CACI Ltd
First UK Bus

Operational Research in Health Ltd (ORH Ltd)
Sainsbury's

Genealogist/family historian

Burgum Family History Society
Powys Family History Society

Tasmanian Family History Society Inc.

Other

Academy of Social Sciences
Emergency Planning Society - West Midlands
Branch
Joint Industry Committee for Population
Standards (JICPOPS)
Market Research Society (MRS) and MRS

Census & Geodemographics Group
New Economy
Sikh Council
Summit Planning Ltd
Tees Valley Unlimited

