

# February 2011 Census Outputs Consultation

## 1. Introduction

The General Register Office for Scotland (GROS) carries out the census of population every 10 years in Scotland. The data collected about the characteristics of people and households in the country is widely used by central and local government, health boards and many other organisations to allocate resources and plan for future services.

As part of its preparations for the 2011 Census in Scotland, GROS conducted a formal consultation in spring 2010 about its initial plans for how the statistics from the census will be published. This was the third and final round of formal 12-week consultations on all aspects of the census; further details can be found in the [census consultations](#) section of the GROS website.

The spring 2010 consultation provided an opportunity for users to help shape the main statistical outputs from the census and to comment on a range of related issues. It also enabled GROS to update users on the progress with its plans for producing and disseminating the census results. The consultation provided the basis for final specifications of the main outputs from the 2011 Census that meet the needs of the majority of users and make the best use of the data collected. Respondents were asked to consider and comment on 11 specific consultation points, including:

- any current difficulties in accessing and working with 2001 Census data;
- a set of initial proposals for pre-defined census output tables;
- suggestions for new cross-tabulations of census information;
- any specific data delivery requirements;
- the need for any new intermediate output geographies;
- demand for an additional outputs geography based on workplace;
- potential new technical solutions for accessing census data; and
- priorities for the order of release of census output products.

In addition, during April and May 2010, we held four roadshow events with census data users in Aberdeen, Edinburgh, Glasgow and Inverness to outline our thoughts for the 2011 Census outputs and to explain the consultation process. Further information can still be found on the [Outputs Roadshows](#) page.

The consultation and roadshows provided us with many valuable comments and suggestions. A summary analysis of this feedback is contained in a paper [Spring 2010 Consultation on Statistical Outputs: Analysis of Responses](#) (PDF 277 Kb) which is available to download.

The supporting material included an Excel file which listed initial proposals for pre-defined census output tables. The list was based on the tables produced following the 2001 Census. The planning assumption for the 2011 Census is that all these tables will be provided again as part of the standard set of outputs provided to users, except for those where the underlying questions are no longer asked in the census.

## 2. Proposed new and revised table outlines

This next phase of consultation provides users with:

- a list of pre-defined tables where there have been significant revisions since 2001 in the underlying census questions, coding or definitions (and hence problems in comparing 2011 outputs with 2001); and
- draft outlines of some proposed new pre-defined tables based on suggestions made by users in the spring 2010 consultation for additional cross-tabulations (mainly those which relate to the questions being asked for the first time in 2011).

The list of tables affected by 2001 to 2011 comparability issues and the draft outlines of proposed new tables are in the associated [2011 consultation workbook](#) (excel 762kb) . They are still 'work in progress', for a number of reasons. First, there may be further tables that users now wish to request. Second, some of the designs for new tables may require amendment to avoid disclosing information about individual people. Lastly, some table designs may be modified to improve harmonisation with the census tables for the other United Kingdom (UK) countries. In addition, some of the detailed comments on specific tables received following the spring 2010 consultation have still to be incorporated into revised draft table outlines; please go to [Annex 1](#) for details of where this is the case.

Users are invited to review and comment on the list of proposed significant revisions to the pre-defined tables from 2001 and on draft outlines of new tables, **by Thursday, 31 March 2011**. [Section 11](#) below provides details on how to submit responses.

**Consultation Point 1:** do you have any comments on the list of proposed significant revisions to the pre-defined tables from 2001?

**Consultation Point 2:** do you have any comments on the proposed new pre-defined table outlines?

**Consultation Point 3:** are there additional tables you would now wish to propose?

## 3. 2001 to 2011 comparability issues

### Pensionable age

The age at which people receive their state pension is changing. Between April 2010 and November 2018, the retirement age for women is increasing from 60 to 65. Between December 2018 and April 2020, it is then proposed that the retirement age for both men and women start to increase to 66. The government is also considering the timetable for later increases to the state pension age from 66 to 68.

Following a public consultation in early 2009, published headline government statistics on working age employment and inactivity rates are now based on the population aged 16 to 64. It is therefore proposed to follow this definition for pensionable age in the standard set of 2011 Census outputs, i.e. aged 65 and over for both males and females.

To still allow comparability with the 2001 Census outputs, it is also proposed to add (subject to avoiding disclosing confidential information on individuals) a 60-64 age band to all the 2001 tables

which involve pensionable age and have sex as a cross-classifying variable. Outputs based on two alternative definitions of pensionable age will also be made available to users through the commissioned tables service and the publicly accessed microdata files:

- the state pensionable age as at Census Day, 27 March 2011 (aged 60.5 years and over for females and aged 65 and over for males); and
- the 2001 Census definition of state pensionable age (aged 60 and over for females and aged 65 and over for males).

**Consultation Point 4:** do you have any comments on the proposed treatment of pensionable age in the 2011 Census outputs?

### **Table populations**

The questionnaire routing in the 2001 Census meant that qualification and labour market questions were asked only for people aged 16-74 years. In the 2011 Census this information will be collected for all people aged 16 and over:

- qualifications
- industry
- occupation
- social grade
- NS-SEC (National Statistics Socio-Economic Classification)

The table populations for the relevant 2011 tables will therefore be those aged 16 and over.

For tables relating to qualifications, an attempt will be made to maintain comparability between 2001 and 2011 by adding or introducing an age break to provide data on those aged 75 and over, subject to avoiding disclosing information on individual people.

For industry, occupation, social grade and NS-SEC, it is proposed to produce the relevant tables on the entire population aged 16 and over in the standard tables but with no additional age range incorporated for the 75 and over age group. This is because additional coding and definitional changes between 2001 and 2011 mean that direct comparability is not possible.

In 2011, information on industry and occupation will be coded for all people aged 16 and over who were working in the week before census, or were not working in the week before census but had ever worked. In 2001, industry and occupation – and hence social grade and NS-SEC – was not collected or coded for:

- all people aged between 64 and 74 who were not working in the week before census
- all people aged between 16 and 64 who were not working in the week before census and last worked prior to 1996
- all people aged 75 and over

The scope for meeting user requirements for 2001 and 2011 Census data on industry, occupation, social grade and NS-SEC on directly comparable populations will be investigated through the commissioned tables service and the publically accessed microdata files.

**Consultation Point 5:** do you have any comments on the proposed approach to table populations for tables relating to qualifications, industry, occupation, social grade and NS-SEC?

### **Other comparability issues**

Amendments to some of the underlying questions raise some other issues of comparability between 2001 and 2011. These include the questions on:

- marital status
- ethnic group
- general health
- limiting long-term health problem or disability
- qualifications

The relevant table designs will be drawn up to provide as much comparability as possible between 2001 and 2011. Any issues will be flagged up to users in the accompanying metadata.

## **4. Output geographies**

For the 2011 Census, GROS plans to take the same general approach to output geographies as was adopted for the 2001 Census. Output Areas (OAs) (groupings of postcodes that average around 50 households, with minimum thresholds for confidentiality set at 20 households and 50 individuals) will continue to form the building bricks for census outputs for all higher geographies.

2011 OAs will be of similar size and threshold to those used in 2001, to allow as much comparability as possible with 2001 Census data. Some 2001 OAs may have to be merged with a neighbouring OA (where they have dipped below confidentiality thresholds), while others may have to be split (e.g. when new housing has taken them above maximum thresholds). The postcode boundaries which will be used to create the 2011 OAs have been maintained over time to take into account the relatively small number of local authority boundary changes there have been since 2001. The design of the 2011 OAs will therefore align with the local authority boundaries which will be in force at 1 April 2011.

It is proposed to use the underlying postcode geography at the point it was frozen for the census enumeration (January 2011) as the basis for producing all census output geographies. This will ensure that all geographies (enumeration, usual residence, travel destination and migration origin) will be on the same postcode basis; and users will be aware of that postcode basis well in advance of receiving any output.

OAs will continue to be the smallest geography for which census results will be produced. As in 2001, an 'Output Area to Higher Area Index' will be produced to enable users to aggregate OA level census results to 'higher' areas such as council, health board and locality. For Scottish Parliament constituencies, it is proposed to map OAs to the set of constituencies that will come into force for the May 2011 elections.

With the exception of local authority areas, which will be produced on an 'exact fit' basis, all higher geographies will be generated as aggregations of output areas on a 'best fit' basis. This approach has been confirmed in previous consultations as acceptable to users. In most cases the best fit achieved is a very good one, reflecting the small size of the output area building blocks – this linked [report](#) provides some further background.

The matrix in [Annex 2](#) sets out proposals for which geographies will be produced for which sets of pre-defined standard tables.

It is intended that the 2011 Census outputs dissemination system will provide mapping functionality to accompany the data. We also aim to provide users with the ability to define (and save for later re-use) their own output geographies built from OAs. In previous consultations, this was a feature that users expressed a strong demand for.

## 5. UK outputs

Work is underway with the other UK census offices to achieve our intention of harmonised and comparable UK-wide outputs. Further information on this will be provided to users in due course, but final decisions on what will comprise UK level data cannot be taken until the table specifications in each country have been agreed with users.

The other UK census offices are currently running consultations on their plans for disseminating 2011 Census data outputs. We will work closely with them to ensure all user requirements for harmonised UK level data are taken into account.

## 6. Flexible table generation service

We aim to provide users with the ability to build their own output data (subject to preserving the anonymity of the statistics) via a flexible tabulation tool as part of the 2011 Census outputs dissemination system. We will therefore design data cubes to underpin a flexible table generation service. The full extent of what can be offered via data cubes will be limited by confidentiality constraints and the functionality available from the statistical software recently procured to build the 2011 Census outputs dissemination system. Users will be consulted again once our proposals for flexible table generation have been developed.

<p>A <b>data cube</b> can be thought of as an extended, multi-dimensional table or data set. Whereas a conventional table is generally limited to presenting a pre-defined cross-tabulation of two or three variables, many more variables can be made available through a data cube. This then gives users much more flexibility in building their own tables by picking and choosing which combinations of variables to cross-tabulate.</p>
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## 7. Dissemination of census results

For the 2011 Census, the emphasis will be on disseminating census information via electronic methods, with a web-based dissemination system as the primary channel.

However, users will also be able to obtain a 'bulk supply' of all Standard census output. This will be provided on request in DVD format. There may be a charge for this service.

Unless there is a clear user requirement, we do not intend to produce printed versions of census output data. All statistical reports produced will be published online in downloadable format (most likely PDF format).

## 8. Metadata

A criticism of the 2001 Census outputs was that the relevant metadata (i.e. supporting background information to aid understanding and interpretation of the census results) was not always as well integrated with the actual data as it could have been. For 2011, it is therefore planned that comprehensive and integrated metadata are released along with the outputs, and that consistent UK-wide metadata are made available.

## 9. Plans for further user engagement

Our aim is to issue, around May/June 2011, a baselined prospectus of Standard and UK output products for the 2011 Census, with an associated dissemination timetable for each product type. That dissemination timetable will be built around the priority order for product release, indicated by users in response to the spring 2010 consultation.

We also intend to involve users in the development and testing of the outputs dissemination system. We want to ensure that, as the primary platform for accessing census output data, the system meets your requirements.

We will therefore build a prototype, loaded with 2001 Census data, which users will be invited to try out and provide feedback on. All feedback will be considered and we will aim to maximise the user experience and key functionality of the system prior to release of 2011 data. We do not yet have a firm timetable for user testing, but anticipate this would be in the latter part of 2011. If you would like to be involved in user testing, please let us know.

In addition to publishing the 2011 Census Output prospectus in May/June and running user testing, we will at appropriate intervals publish further information to clarify the position on various topics so that users can keep up to date with progress ahead of the first release of data, including for example:

- flexible table generation service;
- mapping functionality;
- strategy for integrated metadata;
- statistical disclosure control policy;
- corrections or 'known-errors' policy;
- commissioned outputs policy;
- charging policy (for bulk supply and commissioned output);
- alternative population bases; and
- origin-destination statistics.

**Consultation Point 6:** are there any other topics you think it would be important to cover in further user engagement by GROS on its plans for the 2011 Census outputs?

**Consultation Point 7:** are there any other points you want to make in relation to the developing GROS plans for the 2011 Census outputs?

## 10. Summary

In summary, users are invited to:

- review and comment on the list of proposed significant revisions to the pre-defined tables from 2001 (consultation point 1);
- review and comment on the proposed new pre-defined table outlines (consultation points 2 and 3);
- comment on the proposed treatment of pensionable age in the 2011 Census outputs (consultation point 4);
- comment on the proposed approach to table populations for tables relating to qualifications, industry, occupation, social grade and NS-SEC (consultation point 5);
- register interest in participating in user testing of output dissemination system; and
- note (and comment on) plans and timetable for future user consultation (consultation points 6 and 7).

## 11. How to respond to this consultation

It would be helpful if you could provide your responses using the [Response Form](#) (PDF 225kb).

Completed responses should be emailed to: ([census.consultation@gro-scotland.gsi.gov.uk](mailto:census.consultation@gro-scotland.gsi.gov.uk));

or posted to: Census Consultation,  
General Register Office for Scotland,  
Area 2/3/1, Ladywell House,  
Ladywell Road,  
Edinburgh  
EH12 7TF.

The closing date for responding to this phase of consultation is **Thursday, 31 March 2011**.

Responses may be shared with the other UK Census Offices in order that they can also take your views into account.

Thank you for your time in taking part in this latest phase of consultation. Should you wish to discuss any queries in relation to this consultation documentation please do not hesitate to contact us, by email or in writing (as per contact details above), or by telephone (0131 314 4215).

## Annex 1 – list of detailed comments made on specific tables in the spring 2010 consultation

2001/2011 Table Number	Title	Comments
CAS007	Age of Family Reference Person (FRP) and number and age of dependent children by family type	Include more age detail
CAS008	Whether living in household or communal establishment and age by migration (people)	Include 0-4 and 5-15 as age groups
CAS012	Schoolchildren and students in full-time education living away from home in term-time and sex by age	Include more family structure detail
CAS014	Age and dependent children by household type (Adults)	Add age breakdowns for the households with children of 0-4 and 5-18; add a Male/Female split to All Adults, Living in and not in a couple
CAS015	Country of birth by sex	Add in the extra dimension of Migration into the table CAS015, i.e. have you moved into the UK in the past year
CAS016	Sex and age by general health and limiting long-term illness	Include detail for people who are deaf or hard of hearing
CAS021	Economic activity by sex and limiting long-term illness	Include age in cross-tabulation to identify differential withdrawal from economic activity For these tables the split of economic activity given in UV28 should be used Include detail for people who are deaf or hard of hearing
CAS026	Sex and economic activity by general health and provision of unpaid care	For these tables the split of economic activity given in UV28 should be used
CAS027	Households with a person with a Limiting Long-term Illness (LLTI) and their age by number of carers in household and economic activity	Remove: coincidence of LLTI and carer in household is not interpretable as carer of LLTI

CAS028	Sex and age by economic activity	Use the split of economic activity given in UV28
CAS030	Sex and economic activity by living arrangements	For these tables the split of economic activity given in UV28 should be used Adding in an extra category to describe whether the couples or non couples have children or not to CAS030. This would allow getting hold of DINKYs (Dual Income No Kids Yet). This is not possible at present and could not be done in 2001. These are an important social category and was possible in the 1991 Census.
CAS032	Sex and age and level of qualifications by economic activity	Use the split of economic activity given in UV28
CAS034	Former occupation by age	Adding a by Sex category to the table CAS034 so that unemployment by sex can be measured - there is currently no way of measuring unemployment by former occupation by sex.
CAS037	Former industry by age	Consider also a UV table for 'former industry'
CAS038	Sex and industry by employment status and hours worked	Use the split of economic activity given in UV28
CAS043	Sex and NS-SeC by economic activity	Use the split of economic activity given in UV28 Add in an extra category for economic activity of Self-Employed to the table CAS043. This extra refinement would allow trades people to be picked up. This was possible in the 1991 Census, but would be extremely useful for 2011 Census. In the 2001 Census and proposed for the 2011 Census in England & Wales there is a table called UV067 Households by Selected Characteristics which provides information on household deprivation. Households are recorded as being deprived in 1 of 4 dimensions; employment, education, health & disability, and housing. This was not present in Scotland in 2001 and has not been proposed for 2011. This table would be extremely useful as it would provide a uniform indicator of deprivation across Great Britain. It was released at Output Area level and at present there is no way of getting hold of this type of information at this fine scale of geography

CAS052	Tenure and persons per room by accommodation type	<p>It is not particularly helpful to have two tables, one using the persons per room measure of overcrowding and one using the occupancy norm measure, but which cross classify these against different classifications. CAS052 should be repeated for occupancy norm and CAS053 for persons per room. In both cases we should also have the more detailed occupancy norm groupings from UV59. There is also an issue about the tenure categories which will need to be corrected. This relates to the inclusion of 'Living rent free' with 'Private rented'. 'Living rent free' includes a significant majority of people who rent from a Local authority or from another social landlord and therefore we need to ensure that the landlords of those living rent free are identified in 2011 so that the tenure classification in this table is correct (see figures in table UV92)</p> <p>It is not particularly helpful to have two tables, one using the persons per room measure of overcrowding and one using the occupancy norm measure, but which cross classify these against different classifications. CAS052 should be repeated for occupancy norm and CAS053 for persons per room. In both cases we should also have the more detailed occupancy norm groupings from UV59. There is also an issue about the tenure categories which will need to be corrected. This relates to the inclusion of 'Living rent free' with 'Private rented'. 'Living rent free' includes a significant majority of people who rent from a Local authority or from another social landlord and therefore we need to ensure that the landlords of those living rent free are identified in 2011 so that the tenure classification in this table is correct (see figures in table UV92)</p> <p>For these tables the split of economic activity given in UV28 should be used Tenure and car or van availability by social grade. This table would be based upon the table structure of CAS061, but replace Economic Activity with Social Grade. It is not possible to combine these variables at present and they would be extremely useful.</p> <p>Split the 35-59 age group into 35-44 and 45-59 Consider including single year of age and/or a 16-21 age group</p> <p>Suggest splitting the 35-59 age group into 35-44 and 45-59</p>
CAS053	Household composition by tenure and occupancy rating	
CAS061	Tenure and car or van availability by economic activity	
CAS204	Age by highest level of qualification	
CAS206	Sex and age by knowledge of Gaelic	

		This should provide actual totals of Speaking Gaelic, Reading Gaelic, Writing Gaelic, and Understanding Gaelic, in addition to the various combinations. Such combinations should include Reading with and without speaking ability, Writing and Understanding similarly. There should be a standardisation of age-categories.
CAS218	Whether working or studying and age by method of travel to work or place of study	Split the 35-59 age group into 35-44 and 45-59
CAS222	Whether working or studying and age by distance travelled to work or place of study	Split the 35-59 age group into 35-44 and 45-59
KS02	Age structure	If KS tables on economic activity can be split by gender, age should also be split by gender
KS06	Ethnic group and language	This should be a new table or tables with details on other languages spoken in Scotland, in line with the proposed new language questions in 16, 17 and 18, including data on Scots and language in the home. 'Language indicators' should be developed, based on country of birth of the head of household in non-English-speaking countries and total numbers of members of their households.
KS18	Tenure and landlord	This should be available in 2011 albeit with a different classification. Perhaps average household size from the discontinued KS19 could be added here.
S08	Whether living in household or communal establishment and sex and age by migration (people)	It would be more useful to have age groups 0-4 and 5-11 and 12-15 to enable us to look at school age migration
S21	Economic activity and hours worked by sex and limiting long-term illness	Include age in cross-tabulation to identify differential withdrawal from economic activity Include detail for people who are deaf or hard of hearing
S27	Households with a person with a Limiting Long-term Illness (LLTI) and their age by number of carers in household and economic activity	Remove, Coincidence of LLTI and carer in household not interpretable as carer of LLTI
T27	Theme table on Gaelic speakers	An improved age-categorisation is required. Also inclusion of other census questions, such as those on migration, religion and language spoken at home.

UV10	Ethnic group	Sub totals for white and non-white would be helpful.
UV12	Knowledge of Gaelic	This should be extended to cover Scots and English as univariates All of the 16 ability combinations of speaking, reading, writing and understanding Gaelic should be presented, in addition to the separate totals.
UV44	Tenure (people)	Incorporate information from tables UV91 and UV92 - to give proper counts of the rented sector.
UV46	Household composition (people)	Review usefulness of the household classifications - perhaps as part of developing data cubes that would allow users to create their own classifications.
UV47	Household composition (people) (alternative classification)	Review usefulness of the household classifications - perhaps as part of developing data cubes that would allow users to create their own classifications.
UV64	Tenure (households)	Incorporate information from tables UV91 and UV92 - to give proper counts of the rented sector.
UV65	Household composition (households)	Review usefulness of the household classifications - perhaps as part of developing data cubes that would allow users to create their own classifications.
UV66	Household composition (households) (alternative classification)	Review usefulness of the household classifications - perhaps as part of developing data cubes that would allow users to create their own classifications.
UV68	Household type	Review usefulness of the household classifications - perhaps as part of developing data cubes that would allow users to create their own classifications.
UV69	Multiple ethnic groups	Consider a table which looks at non-white/white as mixed ethnicity.
UV91	Supplementary univariate table on people in households living rent free	Incorporate information within UV44 and UV64
UV92	Supplementary univariate table on households living rent free	Incorporate information within UV44 and UV64

## Annex 2

The table below shows the preliminary set of geographies which it is proposed to include “pre-defined” within the 2011 Census outputs dissemination system. It is also intended that the system will provide users with the ability to define (and save for later re-use) their own output geographies built from aggregations of output areas.

Area <sup>(1)</sup>	Key Statistics	Univariate Statistics	Census Area Statistics	CAS Theme Statistics	Standard Tables	Theme tables	Census Profiles
Scotland	Yes	Yes	Yes	Yes	Yes	Yes	No
Council Area	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scottish Parliamentary Region	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Scottish Parliamentary Constituency 2011	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Westminster Parliamentary Constituency	Yes	Yes	Yes	Yes	Yes	Yes	No
Health Board Area	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Community Health Care Partnership	Yes	Yes	Yes	Yes	Yes	Yes	No
Multi-member Council Ward <sup>(2)</sup>	Yes	Yes	Yes	Yes	Yes	Yes	No
National Park	Yes	Yes	Yes	Yes	No	No	No
Postcode Sector <sup>(2)</sup>	Yes	Yes	Yes	Yes	Yes	Yes	No
Settlement	Yes	Yes	Yes	Yes	No	No	No
Locality	Yes	Yes	Yes	Yes	No	No	Yes
Civil Parish	Yes	Yes	Yes	Yes	No	No	No
Inhabited Islands	Yes	Yes	Yes	Yes	No	No	No
SNS Data zone	Yes	Yes	Yes	Yes	No	No	No
Output Area	Yes	Yes	Yes	Yes	No	No	Yes

1. Output areas are created so that they fit exactly to council area boundaries. All other output geographies will be created from best-fit aggregations of 2011 output areas.

2. As in 2001, it may be necessary to create two versions of the output geographies for council wards and postcode sectors, so that the additional detail included in the Standard and Theme tables can be made available - see [2001 Census - Geography Classification](#) for further background. Users will be consulted again once proposals have been developed.