



CENSUS ADVISORY GROUP

AG (12) 11 - 2011 Census analysis

Census analysis – Office for National Statistics (ONS) work programme

1. Background

The Census Analysis work programme that ONS is leading will provide users with timely analysis that are intended to meet a number of key aims as set out below. This requires a coordinated approach across ONS, other Governments Departments, Local Government and external researchers & academics. The work programme ultimately aims to deliver a series of analytical products to be produced by ONS in a timely and coordinated manner, to link and coordinate with analysis produced externally to ONS and to develop and maintain an Analytical Centre for the Census. The analysis programme will meet a number of key aims which are to:

- fully exploit the use of census data/outputs;
- help users to understand and interpret census outputs;
- add value to census outputs by incorporating them into topic reports, adding insight to policy and other users;
- provide comparisons over the decade and even longer time frames;
- use the rich source of data from the census and potentially link with other sources to meet specific user needs;
- ensure more robust outputs from our regular surveys. This includes comparisons with other survey outputs to identify differences and reasons for this.

2. Developing the ONS census analytical work programme - consultation

In order to develop an analytical work programme to be delivered by ONS, consultation has taken place in various forms:

- internal consultation aimed at utilising the expertise of relevant business areas;
- workshops, seminars & meetings aimed at gaining input from other Government Departments, Local Government and academics & researchers;
- continued discussion via various key groups (e.g. GSS theme groups, CLIP);
- business areas liaising with key users on specific topics.

The consultation process has been crucial in helping to determine the planned analysis. It is important to be flexible within the analysis plans so as to respond to any new and changing policies and to react to any change in priorities. To ensure these are captured it will be important to continue to communicate and consult with users throughout the work programme to identify this at the earliest opportunity.

A key aspect of the census analysis work, which is a UK programme, is to ensure a joined up approach across both the ONS and devolved administrations. It is important to utilise the knowledge and expertise across the ONS in various subject areas so business areas within ONS will produce analysis relating to their relevant topics. This will be controlled and coordinated centrally to ensure a joined up approach.

3. Current Analysis Plans

Analysis based on census data will be presented in the following ways by ONS:

(i) Short stories:

- generally based on detailed analysis;
- presented so accessible for all users.

(ii) Scholarly articles:

- detailed pieces of analysis.

(iii) Reports:

- accompany publications;
- provide clarification on specific issues.

The aim is to supplement the analysis with ‘podcasts’ and data visualisation, where appropriate. The ‘podcasts’ have been introduced over the last eighteen months within the ONS and have proved popular and useful in explaining analysis and reaching out to new and existing users. All analysis produced by ONS will be published on the ONS website.

1st release

The 2nd release will act as the main start for the analytical work programme, however, some analysis has been produced based on the first release. The mid-year population estimates have been updated using the Census results and a reconciliation report is to be produced to sit alongside this. In addition, population ‘pyramids’ were produced at a local authority level (together with England & Wales) to allow users to compare over time or against different areas.

2nd release

The second release of Census data provides us with the first opportunity to produce analysis and add value to the Census Output tables and commentary. It has been agreed that this analysis will be disseminated in the format of short stories, which are analysis organised in a succinct manner and are designed to help the user. The target audience for short stories are generally the citizen user, quite often via the media.

It is proposed that twelve short stories be produced to follow the second release grouped into three waves, with the first phase to be published on the same day as the statistical bulletin for the second release and the second and third phases being released subsequently. The short stories will be followed by compendium report /regional reports highlighting some of the key findings (in some of the key topics) from the Census. A list of the short stories by wave is provided in the table:

	Wave 1	Wave 2	Wave 3
Population & Demography	International Migration		
		Families	
Culture	Ethnicity & Identity		
	Religion		
			Language
Labour Market	Labour Market		
			Qualifications
			Occupation & Industry
			Economic Activity
Health & Caring		General Health & Disability	
		Unpaid Care	
Regional			(Mode of) Travel to Work

These short stories will only include data that is in the second outputs release (univariate) and look at comparisons over the decade highlighting and explaining key changes and differences since 2001.

The third and fourth releases

The third and fourth releases of Census data will allow more detailed analysis to be carried out, and a mixture of scholarly articles and short stories will then be produced at key times. This analysis will help to show how the country has changed over time – over the last 10 years & beyond, where feasible as this was identified as a key requirement from user consultations. Some examples of planned analysis comparing over time include:

- change in 'Informal' care in the UK and is it explainable in terms of population ageing;
- exploring if and how ethnicity and religion's inter-action have changed since 2001;
- how the Labour Market has changed over a generation;
- high level picture of how ethnic distribution has changed over time.

These are part of a more detailed analytical plan which has been identified. A full and wide ranging set of analyses have been identified based on user consultations in areas such as migration, population, families and health. Other topics also have plans for more detailed analytical work. Some further examples of the **potentially** more detailed analysis currently planned are:

- Ageing & older people
 - Electoral statistics; estimates of the population eligible to vote and analysis of voter registration rates
 - Demographic profile and characteristics of older people
 - Living arrangements of older people (private households and communal establishments)
- Fertility & Families
 - Total Fertility Rates for 2011 by mother's country of birth
 - Analysis by family size
- International Migration
 - comparison of international migration estimates for year to March 2011 with 2011 Census data on address one year ago, & estimates for the past decade with 2011 data on year of arrival
 - analysis of the characteristics of both long-term and short-term international migrants
 - analysis of residents of communal establishments by country of birth and nationality
 - comparison of activity last week with reason for migrating collected in the IPS
- Internal Migration
 - comparison of internal and cross-border migration estimates by age and sex
 - development of a data visualisation tool that maps internal migration flows
- Regional
 - Travel to Work Areas - based on commuting and work patterns from LSOA data
 - Area Classifications - identify areas of the country with similar characteristics
 - Urban/Rural classifications
- Health
 - Health expectancies by birth for Middle Layer Super Output Areas and Electoral Wards
 - Small area analyses of informal care
 - Distribution and density of communal establishment populations across local areas

However, the work programme has been defined in such a way to have the option/flexibility to change the planned work due to changing priorities, policies or upon analysis of the data itself. High level analysis plans have been included in the prospectus and further updates will follow as information becomes available. Analytical topic areas will include; population, language, migration, religion, ethnicity, caring, identity, nationality, disability, ageing, families qualifications, housing, health, labour market and fertility.

4. Dissemination of census analysis

A key point of the ONS Census Analysis work programme is that it is not just about identifying analysis to be produced by ONS. A key aim is to link and coordinate with other Government Departments, Local Government and academics & researchers.

This will play a key role

in developing a Census Analysis work programme that is coordinated across all of the UK, which will be beneficial for the users of census data and have the most chance of realising the full benefits of the census. The development of Census Analysis landing page will be a key tool for helping us to achieve this goal, and will include:

- a news section and a plan of scheduled work to be produced by both ONS, other Government Departments, Local Government and academics / researchers;
- a facility to access internal and external analysis (split into appropriate categories). ONS products could be supplemented by visualisations and social media, while other products produced externally to ONS could include a synopsis and a link;
- guidance and best practice (including some templates to ensure that ONS products are branded);
- access to a discussion forum.

In order for the Census Analysis landing page to work and deliver on its aims, it is imperative that other Government Departments, Local Government and academics & researchers 'buy-in' to the ideas expressed and have a mechanism for their analysis to be included in a timetable and then ultimately as a link. To ensure that this happens, ONS are continually liaising with a number of key organisations. Discussions have proved extremely useful and the ideas for the landing page have been welcomed. To encourage further discussion, a discussion group entitled 'census analysis plans' has been added to the 2011 census community on the StatUserNet. In addition to this a discussion forum has also been added on the Knowledge Hub.