

CENSUS ADVISORY GROUP

AG (10) 16 CAG Highlight Report

2011 Census Highlight Report - autumn 2010

Summary

ONS has prepared this Highlight Report on progress on a number of 2011 Census and other census-related issues not covered by agenda items. This paper covers:

- 1) UK Spending Review 2010**
- 2) Preparations for 2011 Census Operations**
- 3) Address Register update**
- 4) Recruitment update**
- 5) UK Statistics Authority assessment**

1. UK Spending Review 2010

Since the last round of Advisory Groups in May, the coalition Government has confirmed its support for the 2011 Census and has recently approved a range of marketing and publicity activities to promote the Census.

The recent spending review confirmed the assumed level of funding in 2011/12, and provided new funding for 2012/13 through to 2014/15 in line with the bid ONS had made to HM Treasury. This should provide sufficient funding to complete the 2011 census programme effectively and to provide a range of products and services that will allow the results to be exploited fully by census users.

So after a prolonged period of uncertainty, significant political and financial issues have been resolved and the 2011 census has been given a green light.

2. Preparations for 2011 Census Operations

Printing of the questionnaires and associated materials is far advanced. Printing of the paper questionnaires, envelopes and information leaflets started on 15 March and is now completed. Over 30m questionnaires and over 30m leaflets have now been printed, along with almost 70m envelopes (for post-out and return). Overprinting of unaddressed questionnaires (with a bar-code and internet access code) started in October. The household and communal establishment address registers were delivered to the printers in mid-November, one week ahead of schedule. Overprinting of the 25m addressed household questionnaires and 1.6m addressed communal establishment questionnaires (with address, bar-code and Internet Access Code) has now started and runs until early March. A late address register update will be provided in February.

The 2011 Census Data Capture Centre was selected and contracts were signed in February 2010. It is located in Trafford Park, Manchester; UK Data Capture took possession of the site at the start of July. The site had previously been a warehouse, and so needed major internal building work to convert it to a census questionnaire data capture facility (installing office space, meeting and training rooms; putting in access controls and internal CCTV security; heating and air-conditioning in some areas; installing sufficient toilets for 600 staff, etc, etc). This work was completed on schedule by September in time for the installation of the equipment (including powered guillotines; trolleys for local storage and movement of questionnaires; nine fast scanners; 300+ computer workstations for keyers/coders; desking and bar-code readers for manual receipting, HR team systems; cleaning equipment, etc etc). This work has now been completed and a launch event took place on 24 November, primarily aimed at generating local publicity to support the bulk recruitment of the 1,300 local staff that will be needed to work at the site across the various shifts.

The census helpline is also located in Manchester. The selected building had been used as a call-centre before and so has needed little work. It is now kitted out with desks, computers, screens and headsets for the 400+ staff required, and recruitment of team leaders has started.

3. Address Register update

Work on the address register is proceeding to plan and all indications suggest that the household register will exceed its quality targets. The main part of the address register – around 25.2M addresses was delivered to the printers ahead of schedule in November and the supplementary list of around 300K addresses is on target to be delivered in February 2011.

Building the residential list – the match

As has been described previously the address register is built by iteratively matching between the national source products (NLPG and PAF/AL2) and then applying additional evidence about particular addresses in order to refine the list.

Census have been working extremely closely with Manchester Geomatics Ltd and Lockheed Martin UK (who are carrying out the match on our behalf and providing the infrastructure respectively) in order to continue to refine the match and evidence application process. This has been intensive work but has shown increasingly positive and reliable results.

The match is built upon a whole suite of semantic, fuzzy and spatial matching algorithms and is now producing a match of around 97% between the source products. This is a sign both of the quality of the match and of the significant improvements, particularly in classification, that have been seen in the national products over the past couple of years.

The residential list – the address check

The Address Check ran from May to August 2011 covering 15% of the addresses in England and Wales (around 3.6m addresses). The check employed 240 people checking residential addresses. Address Checkers were checking pre-printed lists for whole postcodes (split into books for 28,000 separate workloads each with an average of 130 addresses) as well as looking for new household spaces not included on their address lists. The check was split up into 31 zones (each with a coordinator) covering the whole of England and Wales. Special address checkers (a further 85 staff distributed according to the distribution of communal establishments) visited thousands of the more complex communal establishments including all universities, prisons, hospitals and army camps.

The address check was completed to time and under budget and is considered to have been highly successful. As well as validating the address list in areas with large numbers of anomalous or complex addresses the check has provided a real insight into the quality of the matched data and the other sources of evidence available to us.

Assessing quality and keeping the residential list up to date

Because of the scale of the address check and the fact that we suppressed (hid) some valid addresses from the address checkers we are able to use counts of new addresses found in the field to estimate under-coverage (the number of addresses missing from the final list) with a high degree of confidence. We believe that (at the time of delivery to the printers) the list will be missing less than 0.5% of residential household addresses nationally.

In simple terms our match is good and the data sources are now of a high quality and much more consistent – we will be delivering a questionnaire to virtually every household nationally.

Critically, unless we have strong evidence to suggest otherwise all properties included in individual LLPGs will be included in the final list.

Nonetheless we are very aware that change is constant in the list – the inclusion of a supplementary print run will allow us to pick up change in the NLPG up until Christmas – but we know there will be further changes during January to March.

Lead times on matching, differencing between products and printing mean that we cannot take change directly from the source products in the new year but we are working closely with all of our data suppliers (Royal Mail, Intelligent Addressing and Ordnance Survey) to agree how best to capture and pre-empt change during this period. Local authorities are recommended to continue to feed their LLPGs in exactly the same way they normally do – but as far as possible to make sure they are up to date before Christmas 2010.

Area Managers will be able to generate new forms in the field so if there are any significant late changes even these can still be managed. We would intend, however, that any significant developments – say new housing estates - would be picked up in the supplementary print run via pre-build information. As ever, our policy will be to err on the side of safety and so to send forms to properties which we believe may be occupied on Census Day.

Area Managers will be briefed on options for capturing late change shortly and will then discuss these with local authorities.

Building the communal establishment list

Obtaining a usable list of communal establishments (CEs - managed residential accommodation including universities, prisons, hotels, care-homes etc) for census has always been troubling. Although most establishments appear in some form in national address sources they are often not coded in a way that allows us to extract them for census use. Equally CE addresses are often complex and differ between sources making them difficult to match without significant clerical intervention.

Our approach has been to pull together the best 3rd party sources and to combine these with information obtained from national sources such as Interestmap and the Non Domestic Rates (NDR). In addition local authorities were provided with an opportunity to comment upon and contribute to the CE list for their area – and around 80% of them did so.

The complexity of printing and collating the constituent parts of CE forms mean that the CE list needed to be delivered to printers alongside the main residential list – and the list was delivered, to target, in the middle of November.

Keeping the communal list up to date

This early supply of the CE list means there are certain to some changes (additional CEs and deletions) required before Census Day.

Census Area Managers will be provided with local CE lists in the next few weeks and will provide local authorities with an opportunity to provide details of any new CEs (likely to exist by Census Day) during December and January. New CEs identified during this period will have additional forms generated at Census HQ. Even after this point it will be possible for local authorities to inform Area Managers about new CEs – again new CE forms can be generated in the field right up to, and through, the census period.

Houses in multiple occupation (HMOs)

We asked for lists of HMOs during the summer and received lists from 167 authorities. Although we are not going to ask again we will continue to accept lists of HMO data (provided with linking UPRNs) up until the end of the year and any such supply should be through Area Managers. AMs will pass lists back to Census headquarters to be considered along with the data already provided (see below).

We have been working with all of the data provided – comparing the lists with other sources to assess where they add most value. We have also carried out intensive field work in 22 local authorities to help us better understand the nature of HMO data.

Work continues but the bullets below provide a few headlines.

- The HMO lists provided to us have proven to be of hugely variable content and quality – ranging in size between 1 and 5,600 records. Different local authorities use their HMO lists in different ways.
- Every single HMO supplied to us was found to be already included on the Address Register. This in itself, although not definitive, is considered a positive indication of the quality of the register.
- Of the HMOs checked in the field 86% provided us with nothing more than the addresses/household spaces already included on our list. On average we need to check 7 HMOs before finding anything we didn't already have.
- HOWEVER some of these HMOs, in some areas, do prove to add value – in some cases adding a number of households not otherwise included on our list. It is worth finding these properties but important to target our effort as far as possible.

We are continuing to work on the HMO lists, trying to tease out any indicators that might help in identifying where the real value lies. We are also looking at ways in which we might further check HMOs very early in the field operation. The approach we will be able to take here will depend a great deal upon how successful we are in narrowing our focus and so is not yet decided.

Sharing data from the Address Check

Current plans are that we will provide the following information from the field check:

For all areas

- 1) Lists of new addresses we have found in the field (although not where we have had contact with the householder – in which case they are considered confidential.)
- 2) A count at the (2001) Output Area level of the number of new addresses and added by the address check (and of the number of these subsequently discovered in source products). Note that this will include all new addresses including those where we have had contact with householders.

To each supplier (including the local authorities in the case of the NLPG)

- 3) Details of how the field check coded each property sourced from (or matched to) their product (only) (i.e local authorities will receive a coding of all NLPG addresses checked – not the PAF version of addresses.
- 4) A summary at the local authority level of all evidence resulting from the field check.

It would be our intention to publish all of these data early in the new year (and before Census Day).

We will also publish for each local authority (after census)

- 5) A summary of total counts of addresses included in the final list – broken down by each address and evidence source.

This is all obviously subject to plans progressing to timetable. As ever carrying out an effective census will always take priority over other work.

4. Recruitment update

Following a successful recruitment campaign 157 Area managers started work on 2 August 2010 followed by 41 Community Advisors on 9/8/10. Of the 157 Area Manager's, there are two secondee's from the Local Authority in Birmingham and Southwark.

Recruitment for all roles has a planned two or three phased approach, so that Capita can focus resources and activities on those areas where the number of applicants are fewer in the later phases. Recruitment figures are assessed against expected figures constantly and formally at the end of each phase. This means that at the end of each phase, some roles in some areas will close, whereas in other areas the roles will remain open and Capita move to the next, planned stage of the campaign strategy. We are currently recruiting for Coordinators, Special Enumerator & Collectors. The recruitment phases for these posts are below. The numbers needed are given in brackets¹;

Recruitment Phase	Coordinator (2,194)	Special Enum (1,744)	Collector (29,692)
Phase 1	20/9/10 to 17/10/10	4/10/10 to 24/10/10	1/11/10 to 22/11/10
Phase 2	18/10/10 to 7/11/0	25/10/10 to 14/11/10	23/11/10 to 13/12/10
Phase 3	8/11/10 to 18/11/10	15/11/10 to 5/12/10	4/1/11 to 17/1/11
Start Date	7/2/11	7/3/11	21/3/11 & 6/4/11

Recruitment is going very well and overall response is excellent. As at 25 November 2010, there have been 1,300,000 visits to www.censusjobs.co.uk and over 118,000 completed applications.

SiftAbility forms part of the recruitment process. There are two versions, one for the managers and one for the front line fieldstaff. Siftability is a situational judgement based tool which uses scenarios that the successful candidate may meet as part of their new role. The responses to the different scenarios results in a profile which differentiates between strong and not so strong candidates. This means that candidates scoring over this minimum mark have demonstrated appropriate skills but are ranked against other candidates providing the answers that demonstrate strongest and best fit scores at the top. Training places are then filled from the strongest down in order of merit in each area. Therefore it is likely that there will be some candidates with appropriate skills but, because of the strength of other candidates, find they are further down the merit order list and so will not be given a place on training. The number of candidates taken through depends on the anticipated drop out later in the process and this may vary by area. Should candidates drop out, Capita will contact those held on the reserve list.

¹ For Collectors, the number assumes all working 25 hour a week. In reality, there is a mix of hours available; people can opt to work either 15, 25 or 37 hours.

Census coordinators are in recruitment phase 3. There have been 34,800 completed applications for the 2194 roles. 89% of roles have officially closed. Figures by GOR are below. Please note that the expected number of applications is the expected at the end of recruitment phase 3.

	Apps 25.11.10	Expected number of applications	Actual number of roles	Ratio 25.11.10
East Midlands	2,506	2040	170	15
East of England	3,264	2628	219	15
London	5,663	5328	444	13
North East	1,696	1080	90	19
North West	4,838	3096	258	19
South East	4,892	3756	313	16
South West	3,365	2352	196	17
West Midlands	3,351	2472	206	16
Yorks & Humber	3,146	2208	184	17
Wales	2,103	1368	114	18
Total	34,831	26328	2194	16

Additional marketing activity is taking place in inner London over the next two weeks to boost numbers. Broadly this consists of;

- Newspaper advertising in Sun, Daily Mail, Telegraph, Guardian, Mirror. This range of papers has been chosen for their demographic. The primary purpose is to launch Collector recruitment, but will also benefit the Coordinator recruitment.
- AMRA package - covered 22 local papers in London. Due to specific recruitment issues in this area.
- Radio advertising booked for London as well.
- There was an advertorial in Saga this week.
- Planning to use search engine optimisation - where you type things like part-time working into search engines it will bring up census jobs.
- 55 publications with lineage ads. Cross country various locations identified as needing extra work.
- Calling libraries, community groups checking got posters and asking them to keep them up.

Special enumerators are in recruitment phase 3. There have been 30,000 completed applications for the 1744 roles. 94% of the roles now have now closed. Figures by GOR are below. Please note that the expected number of applications is the expected at the end of recruitment phase 3.

	Apps 25.11.10	Expected number of applications	Actual number of roles	Ratio 25.11.10
East Midlands	2,283	1680	140	16
East of England	2,895	2040	170	17
London	3,345	1884	157	21
North East	1,574	828	69	23
North West	3,925	2328	194	20
South East	4,513	3360	280	16
South West	3,480	2952	246	14
West Midlands	2,964	1860	155	19
Yorks & Humber	2,669	1692	141	19
Wales	2,432	2304	192	13
Total	30,080	20928	1744	17

Collector recruitment are in recruitment phase 2. To date we have received 53,500 applications. Figures by GOR are below. Please note that the expected number of applications is the expected at the end of recruitment phase 3, and that currently we are very early in the recruitment campaign.

	Apps 25.11.10	Expected number of applications	Actual number of roles	Ratio 25.11.10
East Midlands	3,609	27180	2265	1.6
East of England	4,458	34428	2869	1.6
London	10,672	70332	5861	1.8
North East	2,784	15348	1279	2.2
North West	7,823	42528	3544	2.2
South East	6,787	49524	4127	1.6
South West	4,631	32868	2739	1.7
West Midlands	4,757	33708	2809	1.7
Yorks & Humber	4,988	32172	2681	1.9
Wales	3,002	18216	1518	2.0
Total	53,512	356304	29692	1.8

Next Stage Recruitment Detail

Recruitment for the remaining roles commences in early January 2011. Details of the relevant phases for the recruitment are shown below.

Recruitment Phase	CCS Regional Manager (26)	CCC Team Manager (approx 300) CCS Interviewer (approx 4,000)	Non Compliance Coordinator (3)	Non Compliance Officer (50) Non Compliance Asst (50)
Phase 1	4/1/11 to 23/1/11	4/1/11 to 21/1/11	4/1/11 to 23/1/11	4/1/11 to 4/2/11
Phase 2	17/1/11 to 28/1/11	24/1/11 to 7/2/11	24/1/11 to 4/2/11	24/1/11 to 11/2/11
Phase 3	N/A	8/2/11 to 21/2/11	N/A	N/A
Start Date	11/4/11	18/4/11 Team Manager 9/5/11 Interviewer	18/4/11	26/4/11

5. UK Statistics Authority special assessment of the 2011 Censuses

The Highlight Report presented at the last Advisory Group explained that the UK Statistics Authority's Phase 1 report had been generally very positive but had identified a few areas where the census offices compliance with the Code of Practice could be strengthened. They had asked the census offices to publish a response by July 2010 with clear plans (or evidence) on how these requirements will be satisfied. The Requirements were:

- Requirement 1 Publish explanations of how the census estimates relating to the resident population, based on 12-month residency, will be derived from the information collected about three and six-month residency.
- Requirement 2 Publish information on how discontinuities (relating to the introduction of the 12 month residency base) between population estimates from the 2001 and 2011 Censuses will be measured and explained.
- Requirement 3 Publish plans for how participation in both the Census and the follow-up surveys will be maximised, in the light of the low response rates in the Census Rehearsals.
- Requirement 4 Publish estimates, with methods, of the times taken to complete the paper and online versions of the census questionnaire, based on data from the Census Rehearsals.

ONS can now report that an initial response to the UK Statistics Authority's Phase 1 report was published¹ on 29th July 2010. This included a full UK response to Requirements 3 and 4 and a response from England, Wales and Northern Ireland for Requirement 1 (a separate paper, outlining the equivalent bases and process for Scotland, is being prepared by GROS). A UK response to Requirement 2 has now been agreed and will be published by the end of November 2010, as will a response to the Suggestions made in Phase 1.

ONS have begun the task of gathering together written evidence for Phase 2 and will provide all evidence by the end of January 2011. The UK Statistics Authority plan to publish the Phase 2 report in summer 2011, several weeks after the Census takes place on 27th March. This phase will allow the UK Statistics Authority to decide whether the census outputs may be designated as National Statistics in accordance with the requirements of the Statistics and Registration Services Act. Phase 3 will be carried out after the census outputs are published and will involve an assessment of the outputs in light of users' views. This is currently scheduled to start in mid 2012.

¹ <http://www.ons.gov.uk/census/2011-census/2011-census-project/independent-assessments/index.html>

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