



Department for  
Communities and  
Local Government

# Improving outputs on social housing lettings

Summary of imputation and weighting methods

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# 1. Introduction and main recommendations

## 1.1. Introduction

This project was funded by the UK Statistics Authority's Quality Improvement Fund (QIF) and was commissioned by the Department for Communities and Local Government (DCLG) in summer 2013. The work was carried out by the Methodology Advisory Service at the Office for National Statistics, who have produced this report.

## 1.2. Project aims

The aim of this project is to improve the quality, coherence and commentary around data published on lettings of social housing. There are three strands to this work:

- To produce options and a recommendation to address item level non-response of key data on tenant characteristics; and deliver a working system
- To review the current methodology for weighting social lettings data and make recommendations for improvements
- To identify and make recommendations around ways to improve the presentation and coherence of social lettings statistics for users

The outcome of this work is a set of recommendations that can be taken forward by DCLG to produce a set of statistics on lettings at social and affordable rents that are more coherent, fit for purpose and meet user needs, in advance of a UK Statistics Authority assessment.

The QIF bid included a fourth aim, to make recommendations for the extension of this weighting methodology to affordable rent lettings. This was dropped with the agreement of DCLG in order to concentrate resources on the other objectives; there was also little data on affordable rents to work with.

## 1.3. Summary of main recommendations

The main recommendations are as follows:

To use the Canadian Census Editing and Imputation System (CanCEIS) software, with SPSS and Excel, for donor imputation of missing values for

age, sex, economic status, ethnicity and nationality (but not income) for person number one in a household;

Imputation for general needs and supported housing to be done separately reflecting the different demographic profiles of the tenants. Age, sex and economic status to be imputed in a first pass through the data. Ethnicity and nationality to be imputed in a second pass through the data.

To gross (Continuous Recording of Lettings and Sales) CORE data to population totals for publication purposes;

To classify Local Authorities (LAs) by the National Statistics UK Output Area Classification when calculating weights to gross CORE data to population totals; and to use CORE totals for LAs when they are greater than those reported on the LA Housing Statistics (LAHS) survey.

To modify the existing publications on social housing, which are source based, to be on a topic basis; and to combine the September and December reports based on CORE data into a single publication in September or October, imputing for missing LAHS data.

## 2. Background

There are two types of social housing:

Supported housing (SH), for households who need some support; examples are sheltered housing provided for the elderly, and;

General needs, for other households (GN).

There are two types of providers of social housing:

Local authorities (LA); and

Private Registered Providers (PRP), such as housing associations.

Within a particular local authority area, the proportion of lettings provided by LAs and PRPs varies greatly, with some areas having 100% provision by PRPs.

The analytical requirement is for results at national and local authority area. There is a particular policy interest in nationality and income; the latter is related to the affordability of social housing.

There are three main sources for information relating to social lettings; an administrative system, CORE, managed by DCLG; the annual survey of Local Authorities Housing Statistics in England conducted by DCLG; and the annual survey of Private Registered Providers (the Statistical Data Return) by the Homes and Communities Agency (HCA).

## 2.1. CORE

CORE is a central database administered by contractors on behalf of DCLG. Details of individual property lettings are entered on to it, including information about the property and the characteristics of the tenants by social housing providers.

It is compulsory for social landlords (PRPs and LAs) to create an entry on CORE when a new letting takes place. For LAs this is a requirement on the Single Data List which was introduced from April 2011. As such all bar a handful of LAs provide data. Most of the information collected for a new letting has to be entered on to CORE, but some questions on socio-demographic information include an option to refuse this information. Information provided by PRPs is generally more complete than that provided by LAs.

Socio-demographic information is recorded for up to eight household members. For around five per cent of lettings, no information is recorded for any of the demographic variables.

CORE data are downloaded annually by DCLG and stored in an SPSS database for use in answering PQs, providing briefing and general analysis. Data are not generally downloaded more frequently because several LAs do not load their data on to CORE until after the financial year is over.

Official statistics derived from CORE on social lettings and sales are released annually in September.

## 2.2. Local Authority Housing Statistics

The Local Authority Housing Statistics survey (LAHS) collects a wide range of information relating to local authorities housing stock, including the number of lettings of social housing during the course of the financial year. These data differ from CORE in that they are totals at local authority level whereas CORE provides more detailed information on individual lettings.

LAHS is completed and provided by the vast majority of local authorities. LAHS totals at LA level are used to derive weights to gross up CORE data to take account of incomplete (or missing) lettings. (PRP CORE data are not grossed because they are considered to be complete.) Weights are attached to LA individual lettings in the CORE SPSS database.

Aggregate results from LAHS, covering a broad range of housing statistics, are published annually in December. The LAHS grossed CORE data are also published annually in December.

## 2.3. Annual survey of Private Registered Providers

The Homes & Communities Agency conducts an annual survey of Private Registered Providers, the Statistical Data Return (SDR), which is completed by all PRPs in England. Information collected includes data on size and type of home, location and rents over the year. Additional data for providers with 1,000 homes or more include lettings during the year and Right to Buy sales and acquisitions.

Results from the SDR were published for the first time by the HCA in August 2012.

<http://www.homesandcommunities.co.uk/news/statistical-data-return>

Data from the SDR are also incorporated into the annual Social Housing Sales Statistical Release (SHS) produced by DCLG covering all social housing sales (for both LAs and PRPs).

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/48844/Social\\_Housing\\_Sales\\_Statistical\\_Release\\_F.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48844/Social_Housing_Sales_Statistical_Release_F.pdf)

## 3. Imputation for item non-response

The data entered on to CORE by providers of social housing includes information about the attributes of the tenants; namely age, sex, economic status, ethnicity, nationality and income. It is not currently compulsory to enter this information although it is provided to varying extents in the majority of cases. The requirement on this project was to impute for missing data on these socio-demographic variables. Imputation was only carried out for the household reference person (person 1, as set out in section 3.4.4).

The section sets out recommendations for the imputation of missing variables. It starts by examining the demographics of the social housing population; then identifies variables that are related to the variables for which imputation is required and finally describes the processes to be followed.

### 3.1. Demographics of the social housing population

Annex A shows the overall distribution of responses analysed by type of housing (GN/SH) and type of provider (LA/PRP). Annex B shows the number of lettings in each LA with missing values for each variable of interest. It can be seen that:

The distribution of responses for GN is different to that for SH, for most of the variables of interest, with the possible exception of ethnicity and nationality where white UK dominates;

For GN, the distribution of responses for PRPs is fairly close to that for LAs. The same is not true for SH, but once the different client groups served by SH PRP and LA lettings are taken into account, the distribution for ethnicity, nationality and economic status are reasonably close;

For most district areas, income is missing for a high proportion of lettings for both SH and GN

For many district areas, SH is provided entirely by PRPs, so that in total LAs account for only 10 per cent of SH lettings

Conclusions to be drawn from this are:

Because of their very different population profiles, GN and SH should be treated as separate groups for the purposes of imputation (Recommendation 1).

For GN, the data for PRPs and LAs should be pooled for imputation purposes as they have reasonably close population profiles at an aggregate level (Recommendation 2).



## 3.2. Recommended approach: overview

Experts in editing and imputation in the Office of National Statistics (ONS) were consulted about the most appropriate methodology for imputing missing values. Their recommendation was that **donor imputation should be used to fill in the missing values** (Recommendation 3). This involves identifying classifying variables that are related to the variables with missing values; and then randomly choosing a record with matching values for the classifying variables from which the non-missing value(s) for the variable(s) of interest are taken.

The recommended software is the **Canadian Census Editing and Imputation System (CanCEIS)** (Recommendation 4). CanCEIS uses a nearest-neighbour imputation methodology. It is the software used in ONS for imputation of social surveys and the 2011 Census.

When using donor imputation it is important that the population against which the matching takes place corresponds, as closely as possible, to the sample with missing values. This is particularly important for ethnicity and nationality where the non-white and non-British populations can be concentrated in specific localities. Care therefore needs to be taken to ensure that matching takes place using an appropriate area classification; the recommended classification is the UK output area classification. This is discussed in more detail in section 4.2.

## 3.3. Identification of matching variables

### 3.3.1. General needs

There are relatively few variables in the dataset that are related to the variables of interest. Two that have been found to be related to age and sex are PREVTEN (previous tenancy) and BEDS (number of bedrooms in the property).

Annex B.1 shows the distribution by age and sex for previous tenure. Cells shaded in grey differ by more than 20 per cent when compared against the national average while cells shaded in lighter grey differ by at least 10 per cent.

It can be seen that there is considerable variation in the age and sex profile of Person 1 by type of previous tenure. For instance, women's refuge (code 21) is 100 per cent women (unsurprisingly); former owner-occupiers (codes 26 and 27) are more likely to be older; while former residents of children's homes (code 13) are almost entirely in the 16-19 age group.

The second variable is the number of bedrooms in the property being let. Annex B.2 shows a clear difference in the age/sex profile of the lead tenant by number of rooms:

Single bedroom properties are relatively more likely to be let to younger men

Two bedroom properties are predominantly let to women, particularly those aged under 30;

Three bedroom and larger properties tend to be let to older age groups (ages 30+); they are also more likely to be let to women.

Nationality and ethnicity were not found to be related to the previous tenure, except for code 24 (housed by National Asylum Support Service) where over half are “nationality any other country” and over 90 per cent are non-white. Annexes B.3 and B.4 show that non-white, non-UK nationals are more likely to be found in the 20-49 age bands, and in particular in the 30-39 band. Nationality and ethnicity are also found to be correlated (see Table B.5); for instance, Polish nationals are mainly classified as “white other”, and make up the single largest nationality within this ethnicity group.

Economic status is found to be related to age, sex and number of bedrooms (see Annex B.6). For instance:

Older people are much more likely to be retired (unsurprisingly);

Men in larger properties are more likely to be full-time employees; whereas women are more likely to be not seeking work;

Younger men are much more likely to be job-seekers.

### **3.3.2. Supported housing**

Providers of supported housing are classified according to the nature of their client groups. Annexes C.1 and C.2 show the age and sex breakdown by client group. It can be seen that many categories of client group serve different segments of the population. For instance, category L (people at risk of domestic violence) are predominantly younger women; category M (older people in need of support) are mainly aged 50+; while category N (single homeless in need of support) are more likely to be young males.

Otherwise, the relationships found for general needs lettings are also evident in the supported housing sector, with the exception that the number of bedrooms in the dwelling is not collected for supported housing. For instance, the distribution of previous tenancy by age and sex for supported housing can be seen in Annex C.3; most codes have distinctive distributions, for age in particular.

## 3.4. Imputation in practice

### 3.4.1. Imputation methods - general

Imputation flags should be created in the dataset for each variable that may be imputed, so that real data can be distinguished from imputed if necessary (Recommendation 5).

There are a large number of categories for ethnicity, nationality, previous tenure and client group. It is recommended that these variables are collapsed, as shown in Annex D, in order to improve the matching rates when using CanCEIS (Recommendation 6). The categories for ethnicity and nationality were specified by DCLG and take account of policy needs. The collapsed categories for previous tenure and client group were selected, using judgement, by ONS on the basis of similarity of the age and sex profile of the detailed categories.

Collapsing ethnicity and nationality means that new variables to represent them will need to be added to the dataset. Imputation will remove the missing values in these new variables but will leave the detailed ethnicity and nationality variables untouched.

The geographical areas used are detailed in Section 4.2 and desk instructions and SPSS code was provided to DCLG alongside this report.

### 3.4.2. Imputation methods - detail

Imputation for General Needs tenants should be done in two stages (Recommendation 7):

Impute age, sex and economic status, based on geographical area, previous tenancy, number of bedrooms and the provider (PRP or LA);

Impute ethnicity and nationality, based on geographical area, age, sex, provider (PRP or LA) previous tenancy and whether the client is an asylum seeker.

The proposed matching algorithm for general needs is summarised in the table below. Zeroes in a row indicate the variables that are being imputed from those shown in the same row with the value of 1. Thus, age, sex and economic status are imputed first, matching on previous tenancy and number of bedrooms, type of provider and geographical area. If sex is missing but age is known, matching is also done on age, and vice versa. Once age, sex and ethnicity are known, ethnicity and nationality can be imputed.

**Table 1: Matching algorithm for general needs lettings**

Age	Sex	Ethnicity	Nationality	Economic Status	Geographical area	Provider type	Prev. tenancy	No. beds	Asylum
0	0			0	1	1	1	1	
0	1			1	1	1	1	1	
1	0			1	1	1	1	1	
1	1			0	1	1	1	1	
1	1	0	0		1	1	1		1
1	1	1	0		1	1	1		1
1	1	0	1		1	1	1		1

Imputation for supported housing tenants should be done in two stages (Recommendation 8):

Impute age, sex and economic status based on geographical area, client group of the provider and client's previous tenancy status for PRP tenants and LA tenants separately;

Impute ethnicity and nationality, based on geographical area, age, sex, previous tenancy, client group, provider (PRP or LA) and whether the client is an asylum seeker and/or a refugee for PRP and LA tenants combined.

The proposed matching algorithm for supported housing is summarised in the table below.

**Table 2: Matching algorithm for supported housing lettings**

Age	Sex	Ethnicity	Nationality	Economic Status	Geographical area	Provider type	Prev. tenancy	Client group	Asylum	Refugee
0	0			0	1	1	1	1	1	1
0	1			1	1	1	1	1	1	1
1	0			1	1	1	1	1	1	1
1	1			0	1	1	1	1	1	1
1	1	0	0		1	1	1	1	1	1
1	1	1	0		1	1	1	1	1	1
1	1	0	1		1	1	1	1	1	1

After the first stage, all records will have values (imputed or real) for age, sex and economic status which can then be used for matching against in the final stage.

### 3.4.3. Imputing income

As noted above, and as can be seen in the tables in Annex F, income has high non-response rates for all sub-groups of the population, but particularly for the elderly. Analyses based on the non-missing income values will therefore suffer from non-response bias. It is desirable in principle to impute income, and for people reliant on

benefits it should be possible to do this with a fair degree of accuracy. However, for those in employment, incomes are much more widely distributed and the results would be much less reliable particularly if they are disaggregated to any significant extent. They could also be prone to misuse, with “health warnings” about the quality of the imputed values forgotten or ignored. For these reasons **imputation should not take place for income (Recommendation 9)**.

#### **3.4.4. Imputing for persons 2 to 8**

CORE records age, sex and economic status for all people in each letting, up to a maximum of 8. For persons 2 to 8, relationship to person 1 is also recorded. As with person 1, the supply of this information is voluntary, and it is found that for a substantial number of lettings no demographic data are provided for any of the household members. In the absence of such data, there is no indication of the number of people in the household. Imputation would therefore face two challenges: accounting for the number of people in the property, as well as their characteristics. It is felt that this would over-complicate matters, particularly as DCLG advise that demographic analyses are usually based on person 1. **Imputation should be restricted to person 1 in the household (Recommendation 10)**.

#### **3.4.5. Time period for matching**

The time period for matching should be sufficiently long that it provides a large enough number of records for matching, but sufficiently short that it permits changes in the patterns of lettings to be detected without undue delay.

Data on CORE is collected continuously throughout the year but there are quarterly deadlines. Quarterly data are made available as management information for the first three quarters of the financial year, being released three months after the period has ended. The final annual dataset is released alongside the annual official statistics release around six months after the end of the financial year; data in this release is more complete, particularly for LAs, some of whom do a bulk upload on to CORE at the end of the year.

Analysis of the annual data sets for 2010/11 and 2011/12, and the first three quarters of 2012/13 has shown the distribution of age, sex, number of bedrooms and previous tenancy are stable through time, though there was a peak in the overall percentage of missing records in the 2011-12 data set. From the first three quarters of data for 2012-13, the missing rate appears to be still above that in 2010-11, but below 2011-12. See Annex F for the table. These changes in the rate have little effect over the distributions for age in sex, but will have more of an effect on data with smaller groups in the population, for example ethnicity and nationality.

However, there is a slight upward trend in the number of Eastern Europeans being allocated social housing and a small decrease for tenants from other countries outside the European Economic Area (EEA), as shown in Annex F table

Matching should be done on four quarters worth of data, for the most recent complete financial year (Recommendation 11).

## 3.5. Effect of Imputation

It is important to compare the distribution of the imputed values with the observed to check the imputation. The complete dataset of imputed and observed data can then be compared with the original observed values to see the overall effect of the imputation.

### 3.5.1. General Needs imputation

Annex G gives tables comparing the distributions of observed and imputed variables using 2011/12 data. The tables show a slightly higher proportion of older people in the imputed data compared with the observed. However when the observed and imputed data are combined, the distribution is very similar to the observed. This reflects the fact that missing values make up a relatively small share of the total data. There are differences in the imputed data in the ethnicity and nationality distributions (due to urban areas such as Bristol, Southwark, Sheffield and Leeds missing socio-demographic information), but again when combined with the observed data the distributions are relatively unchanged.

### 3.5.2. Supported Housing imputation

Annex H gives a slightly different picture for supported housing, particularly for the PRP provided lettings. There appears to be more imputation in older age groups and those who are retired. This is because the PRP Anchor Trust (“England’s largest not-for-profit provider of housing care for over-55s”)<sup>1</sup> is missing almost half the socio-demographic information. However, the overall distributions are only slightly different from the observed.

There also appears to be a higher proportion of white tenants in the imputed distribution. However this makes sense; retired and older people are also more likely to be white. As with the general needs imputation, once the imputed data is

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<sup>1</sup> <http://www.anchor.org.uk/Pages/home.aspx>

combined with the observed, there is very little difference in the overall distribution. The imputations for nationality remain close to the observed distributions.

## 4. Review of weighting methods

### 4.1. Background

Private registered providers are required to enter lettings on to CORE. It is judged that returns are made for all PRP lettings and no weighting is required for them.

For local authorities there is a shortfall of lettings on CORE, with six not entering any data onto CORE in 2011/12, and several others providing incomplete information. The total number of LA lettings is known from the LAHS return completed annually by all LAs and this is currently used to derive weights that can be applied at the level of individual lettings records.

Currently, weights are derived for the following categories of LAs:

- Inner and Outer London
- Metropolitan areas by region
- Non-metropolitan urban areas by region
- Rural areas by region

Weights are calculated once all the LAHS data have been received, with weighted analyses being available in December following the end of the financial year.

The objectives of this part of the project were three-fold:

- To consider alternative area classifications;
- To assess the impact of performing the grossing to LAHS totals earlier in the year;
- To identify other changes to the current methods that would lead to improved weights.

The impact of proposed changes is quantified below, together with an assessment of their quality.

### 4.2. Alternative area classifications

One of the principles of weighting is to ensure that the demographics of the areas to which weights are applied are as similar as possible to those areas that are under-represented. There are various ways in which “similarity” can be assessed.

The approach currently used is based on geographic region and the degree of rurality of each local authority area. No explicit account is taken of the demographics



of the people living in each area, although the urban/rural dimension will implicitly take some account of it.

Other possible classifications considered for this report were:

The nearest neighbour analysis performed by Chartered Institute of Public Finance and Accountancy (CIPFA) and published on their website. The CIPFA analysis lists the fifteen nearest neighbours for each LA, based on a number of demographic variables, several of which were based on the 2001 census.

The ONS area classification. This groups each LA into “clusters” of LAs with similar socio-demographic characteristics based on 41 variables derived from census 2001.

The CIPFA analysis shows that for many LAs the majority of their five nearest neighbours are in different regions, thus raising question marks over the current classification. However, the CIPFA analysis does not lend itself easily as the basis to derive natural groupings of LAs.

The ONS area classification is hierarchical, comprising 8 Super Groups, 13 Groups and 24 sub-groups; and is available for Local Authorities. The classifying variables are shown in the table below. Many of these are directly relevant to the factors of interest for social housing – e.g. the age and nationality profile; the household structure; and employment status. This classification also has the merit of being an official National Statistics classification. **It is recommended that the UK output area classification should be used for the derivation of weights**

(Recommendation 12). The current classification is based on results from the 2001 census. It will be updated with results from the 2011 census, and it is expected that this will be ready in the summer of 2014. **The updated classification should be used when it becomes available** (Recommendation 13).

**Table 3: Classifying variables in ONS area classification**

Ages 0–4 Ages 5–14 Ages 25–44 Ages 45–64 Indian / Pakistani / Bangladeshi Black Not born in UK Population density	Separated / widowed / divorced Single person household Single pensioner household Lone parent household Two adult no children household	Rent (public) Rent (private) Terrace Detached Flats No central heating
HE qualifications Professional or managerial Household size People per room Household with 2+ cars Public transport Work from home Limiting long-term illness Provide unpaid care	Student Unemployment Long-term unemployment Routine occupation Men working part-time Women looking after the home Women working part-time	Agriculture/fishing Mining / quarrying / construction Manufacturing Hotel & catering Health / social work Finance Wholesale / retail

Which level of hierarchy to use is a matter of judgement: if it is at too aggregate a level, then the benefits of stratifying in this way start to disappear; if it is too detailed, the weights can start to become too high. **It is recommended that the group level is used, but with London Centre and London Cosmopolitan combined; and with London Suburbs and Thriving London Periphery combined** (Recommendation 14). The full classification, with new weights for 2011/12, is shown in the table below. Derivation of the weights is described in the following section.

**Table 4: Number of local authorities and CORE weights by ONS area classification**

Group Name	Number of Local Authorities	New weights: 2011/12
Centres with Industry	21	1.713
Coastal and Countryside	36	1.163
Industrial Hinterlands	19	1.104
London Centre & Cosmopolitan	15	1.494
London Suburbs	12	1.461
Thriving London Periphery	9	1.050
Manufacturing Towns	28	1.110
New and Growing Towns	23	1.096
Prospering Smaller Towns	101	1.190
Prospering Southern England	43	1.119
Regional Centres	19	1.239
<b>Grand Total</b>	<b>326</b>	<b>1.142</b>

### 4.3. Weighting methodology

Each year, English local authorities are asked to complete a survey about housing in their area (the Local Authority Housing Survey) with a July deadline for submission of responses. Following this, there are several months of validation and quality assurance of the data provided by local authorities. Once the LAHS data are complete, they are used to calculate grossing factors that are applied to individual lettings, for publication of results in December.

The aim of this part of the project was to refine the weighting methodology and assess the impact of performing the grossing earlier in the year, with an incomplete set of LAHS data. This was done by grossing the 2011/12 data using the 3<sup>rd</sup>

September and 1<sup>st</sup> October cuts of the LAHS data and comparing the results to those obtained using the final LAHS data.

The 2011/12 September cut was missing 26 stock owning LAs out of 171, while the October cut was missing 18 LAs. The “final” LAHS data set was missing just one LA, but the 2010/11 LAHS data set was missing six LAs.

The grossing methodology computes the weights as the ratio of the sum of LAHS lettings to the sum of CORE lettings for each geographical area.

Examination of the totals at LA level shows that for several LAs the number of lettings reported on CORE exceeds those reported on LAHS. It seems unlikely that the CORE totals are wrong in this instance, as LAs should not be updating CORE with the details of non-existent lettings. There may be definitional differences that could account for this or the LAHS data may be under-counting LA lettings. **It is recommended that where the reported number of lettings on CORE for a particular LA exceeds that reported on LAHS, the CORE total is used in the derivation of grossing factors** (Recommendation 15).

As noted above, grossing takes place to the sum of lettings reported on the LAHS returns. However, LAHS returns are not always available in their entirety when the weights need to be derived or they may be inconsistent with the CORE data. It may therefore be necessary to impute a value for LAHS lettings. The following steps outline how this should be done:

- 1) If CORE is larger than LAHS use the CORE figures in place of the LAHS data.
- 2) If LAHS data from the previous year and current year are both missing, use the latest CORE return.
- 3) If LAHS data for the current year is missing:
  - a) calculate the percentage change in LAHS for those LAs that have provided data for both the current and previous years, for the same geographical cluster as the LA with missing data;
  - b) multiply the previous year’s LAHS figure for the LA by the % change calculated in (a) to give an estimated LAHS figure for the current year;
  - c) choose the largest of the estimated value at (b) or the CORE value.

LAs may transfer ownership of their stock to one or more PRPs by a Large Scale Voluntary Transfer (LSVT). During the year in which this occurs the LA may report some lettings as they will have occurred before the LSVT was complete. This is termed a Mid Year Transfer (MYT). The MYT lettings are included in the total lettings. However, LAs who have undergone a LSVT or MYT in the current or previous year are excluded from the calculation in 3a above, because changes due to stock transfer would distort the percentage change. In addition, if an LA has undergone a LSVT or MYT in the current year, their lettings will not be imputed based on the previous year as this might provide an overestimate of lettings.

Examples for some LAs are given below, with the imputation types corresponding to 1-3 above.

**Table 5: Example estimate for incomplete LAHS data**

Imputation type	LAHS 2010/11	LAHS 2011/12	CORE 2010/11	CORE 2011/12	Growth from LAHS	Imputed LAHS
1	291	268	300	272	-	272
2	-	-	521	491	-	491
3b	579	-	570	470	0.841	0.841*579 = <b>487</b> 0.841*560 = 471
3c	560	-	-	500	0.841	but 471 < 500, so = <b>500</b>

The impact of adopting this new approach for weighting has been assessed by performing the computation using complete data for LAHS in 2011/12, and comparing the results with those obtained using the current method. The comparison thus excludes the effect of imputing for item level non-response. The results can be seen the following two tables and in Annex I in greater detail. Note that totals may not match the sum of the breakdown due to rounding.

They show:

- The estimated total number of supported housing lettings increases by 1,042 in 2011/12 to 14,135 and for general needs it has increased by 451 to 113,143.
- Differences in the distributions using old and new weights are generally small.

The following effects are seen for both general needs and supported housing but are more pronounced for the latter:

- The age profile is slightly younger, and more male;
- Ethnicity is less white and more other ethnicities;
- Nationality is less UK and more other;
- For economic status the picture is more complicated with slightly fewer in work for supported housing tenants but no change for general needs tenants;
- Supported housing tenants are now also more likely to be seeking work, home/not seeking work or sick and disabled.

Tables 6 and 7 also show that taking earlier cuts of the LAHS data resulted in lower estimates for both types of housing than using the final LAHS data. There was little difference for Supported Housing between the September and October cuts of the LAHS data, while for General Needs the September cut was closer to the results using the final LAHS data.

In the September cut of the data, 15 per cent of LAs were missing LAHS data. Sensitivity testing of the effect of different levels of missing LAHS data found that this was the upper bound of what might be considered acceptable. **It is recommended that the grossing factors for LA lettings are calculated at the start of September or when an estimated 85 per cent of LAs have supplied LAHS data, revising as necessary in the subsequent publication** (Recommendation 16).

This would then mean that the analysis currently published in December should form part of a September/October release of results, and the December release could then be dropped (Recommendation 17).

**Table 6: Local authority General Needs lettings grossed for non-response 2011/12**

Age group	New methodology		Full LAHS	Current methodology
	September LAHS	October LAHS		
0-24	24,067	23,963	24,297	24,124
25-34	26,029	25,895	26,290	25,994
35-44	19,268	19,159	19,447	19,250
45-59	17,973	17,878	18,132	17,979
60-69	7,332	7,306	7,397	7,438
70-79	3,526	3,513	3,557	3,625
80+	1,753	1,748	1,768	1,819
Missing	12,229	12,195	12,254	12,464
<b>Grand Total</b>	<b>112,175</b>	<b>111,657</b>	<b>113,143</b>	<b>112,692</b>

**Table 7: Local authority Supported Housing lettings grossed for non-response 2011/12**

Age group	New methodology		Full LAHS	Current methodology
	September LAHS	October LAHS		
0-24	718	707	731	644
25-34	538	529	551	434
35-44	519	510	530	421
45-59	1786	1780	1806	1661
60-69	4160	4156	4200	3946
70-79	2717	2714	2747	2573
80+	2092	2092	2118	1990
Missing	1,453	1,442	1,453	1,424
<b>Grand Total</b>	<b>13,983</b>	<b>13,930</b>	<b>14,135</b>	<b>13,093</b>

#### 4.4. Effect of imputation and weighting on published results

Annex J in the appendix gives tables that compare the effect of imputation and new weighting methodology with the previously published results. The tables also include a column where the incomplete September LAHS data have been used for the weights.

For General Needs there is very little difference shown in the age, sex and economic status distributions between the figures using the current and proposed methodology. However the proportion of white ethnicity shows a drop from 80.0% in the current publication to 79.2% in the proposed. UK nationality also shows a drop from 91.1% to 90.6%. This is mainly due to the change in geography in the weighting as referred to in section 4.2. The effect of imputation on these categories had only a small effect as shown in table G4 and G5 in the annex.

For Supported Housing there is very little difference shown in the age, economic status, ethnicity and nationality distributions in the figures using the current and proposed methodology, but there is a difference shown in the sex distribution. The proportion of males has increased from 50.9% to 51.7%. As with general needs, this is due to the change in geography in the weighting, (also referred to in section 4.2); the imputation shows little effect in tables H3 and H4 in the annex.

## 5. Review of publications

### 5.1. Current publications

DCLG have two Statistical Releases reporting on social housing lettings, the most recent of which are:

[Social Housing Lettings & Sales in England](#), 2011/12: Continuous Recording (CORE) Data, published in September 2012

[Statistics Social Lettings tables](#): 2011 to 2012, published in December 2012

DCLG has a further Statistical Release reporting on social housing sales, the most recent of which is the Social Housing Sales Statistical Release (SHSSR) covering all social housing sales (for both LAs and PRPs), published in November.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/48844/Social\\_Housing\\_Sales\\_Statistical\\_Release\\_F.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48844/Social_Housing_Sales_Statistical_Release_F.pdf)

The [Social Housing Lettings & Sales in England](#) (SHLSE) publication is based solely on CORE data. The 2011/12 release was the first one produced by DCLG and it contains twelve pages of commentary with charts and summary tables, and a further nine pages of metadata. The contents page of the latest release is listed below.

- Annual social lettings
- Social letting characteristics
- Household characteristics of social lettings
- Affordable rent lettings
- Social housing sales
- Data quality
- Uses of lettings and sales data
- Related statistics
- Revisions policy
- Definitions
- Accompanying tables
- Background notes
- User consultation
- Enquiries

The accompanying tables show:

- Annual time series back to 2004-05 by type of housing and type of provider
- Regional and local authority analysis for the latest year by type of housing and type of provider
- Social letting characteristics, some broken down by region
- Household characteristics of social lettings

Affordable rent lettings  
Social housing sales (for PRPs only)

The second publication gives information about the characteristics of households receiving general needs social lettings; it does not cover supported housing. It is based on data collected from CORE but with local authority data grossed up to take account of those not reporting lettings through CORE. Grossing is done using total lettings reported by local authorities on the Local Authority Housing Statistics survey form. The release contains a few paragraphs of text reporting the key findings, together with five tables with time series back to 2007/08 providing breakdowns of the socio-demographic characteristics of the tenants.

## 5.2. Issues

For the SHLSE release, the trends in social lettings by provider are not meaningful for LAs because of changes in the number of LAs entering data on CORE. The notes to the tables also indicate that there are concerns about the 2009-10 results due to a change in the contractors collecting the data.

The table showing the number of lettings recorded on CORE for each LA, broken down by type of letting and type of provider, is potentially misleading because there is no indication of which LAs provide incomplete or missing data. This could cause problems for the user interested in a particular LA or in comparing LAs.

The tables in Section 5 of the SHLSE release provide various analyses relating to sales of social housing in the PRP sector. However, the separate annual SHSSR also reports on social housing sales (for both LAs and PRPs). The data in the SHSSR are based on LAHS for LAs, and the Statistical Data Return supplied to the Homes and Communities Agency by PRPs. The scope of the SHSSR is limited to sales of stock which pass out of social ownership – it therefore excludes low cost home ownership sales which are included in CORE. Analysis of CORE is used to provide a more detailed geographical split in the SHSSR.

## 5.3. Recommendations for change

The key recommendation is that, the analyses and statistical bulletins produced by DCLG in relation to social housing should be topic based, rather than system/survey based (Recommendation 18). This would mean for instance that there would be separate bulletins for:

- Lettings of social housing, bringing data together from CORE and LAHS;
- Sales of social housing, bringing data together from CORE, LAHS and the SDR



This would mean sales of social housing by PRPs being dropped from the SLSHE release, and included in a separate release (e.g. SHSSR). The focus of the SLSHE release would then be social lettings rather than an analysis of the CORE administrative system. Furthermore, **the analysis presented in the SLSHE release should be grossed to take account of under-reporting of LA lettings on CORE** (Recommendation 19).

## References

CIPFA nearest neighbour classification

[http://www.cipfastats.net/default\\_view.asp?content\\_ref=2748](http://www.cipfastats.net/default_view.asp?content_ref=2748)

National Statistics UK output area classification

<http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/ns-area-classifications/index/cluster-summaries/local-authorities/index.html>

# A Distribution of socio-economic variables for 2011/12

Age	General Needs			Supported Housing			percentage non-missing					
							General Needs			Supported Housing		
	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total
16-24	32226	16603	48829	39695	1554	41249	22	21	21	37	16	36
25-39	58284	29251	87535	21618	538	22156	39	37	38	20	5	19
40-59	43099	22160	65259	17363	1354	18717	29	28	29	16	14	16
60+	15667	10834	26501	27285	6536	33821	10	14	12	26	65	29
Missing	3647	10047	13694	3643	1206	4849						
<b>Grand Total</b>	<b>152923</b>	<b>88895</b>	<b>241818</b>	<b>109604</b>	<b>11188</b>	<b>120792</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>% missing</i>							2	11	6	3	11	4
<b>Sex</b>												
	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total
F	86968	46104	133072	48780	4968	53748	58	57	58	46	49	46
M	62514	35063	97577	58363	5181	63544	42	43	42	54	51	54
Missing	3441	7728	11169	2461	1039	3500						
<b>Grand Total</b>	<b>152923</b>	<b>88895</b>	<b>241818</b>	<b>109604</b>	<b>11188</b>	<b>120792</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>% missing</i>							2	9	5	2	9	3
<b>Ethnicity</b>												
	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total
White	123964	62275	186239	90036	9097	99133	85	81	84	86	92	86
Afro-Caribbean	10856	7482	18338	7147	329	7476	7	10	8	7	3	7
Asian	5789	3467	9256	3345	247	3592	4	5	4	3	3	3
Mixed	3984	1881	5865	3230	93	3323	3	2	3	3	1	3
Other	2116	1657	3773	1550	93	1643	1	2	2	1	1	1
Missing	6214	12133	18347	4296	1329	5625						
<b>Grand Total</b>	<b>152923</b>	<b>88895</b>	<b>241818</b>	<b>109604</b>	<b>11188</b>	<b>120792</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>% missing</i>							4	14	8	4	12	5
<b>Nationality</b>												
	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total
UK	136649	65716	202365	97350	9041	106391	93.4	91.3	92.7	93.9	96	94.1
Poland	2462	1272	3734	464	43	507	1.7	1.8	1.7	0.4	0.5	0.4
Baltic	873	623	1496	247	27	274	0.6	0.9	0.7	0.2	0.3	0.2
Romanian/Bulgarian	118	93	211	55	6	61	0.1	0.1	0.1	0.1	0.1	0.1
Other east EU	531	313	844	190	32	222	0.4	0.4	0.4	0.2	0.3	0.2
Other EEA	1350	737	2087	1436	72	1508	0.9	1	1	1.4	0.8	1.3
Other	4350	3191	7541	3885	198	4083	3	4.4	3.5	3.7	2.1	3.6
Missing	6590	16950	23540	5977	1769	7746						
<b>Grand Total</b>	<b>152923</b>	<b>88895</b>	<b>241818</b>	<b>109604</b>	<b>11188</b>	<b>120792</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>% missing</i>							4	19	10	5	16	6

**Economic Status**

	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total
Full time	32562	13686	46248	2745	457	3202	22	20	22	3	5	3
Full time student	2122	1087	3209	5091	29	5120	1	2	1	5	0	5
Govt training	337	185	522	520	6	526	0	0	0	1	0	0
Job seeker	33203	16381	49584	33308	724	34032	23	24	23	32	8	30
Not seeking work/home	31156	14676	45832	13662	661	14323	21	21	21	13	7	13
Part time	16271	6796	23067	2518	255	2773	11	10	11	2	3	2
Retired	10914	7222	18136	26246	5914	32160	7	10	8	25	62	28
Sick or disabled	19290	8991	28281	19584	1448	21032	13	13	13	19	15	19
Missing	7068	19871	26939	5930	1694	7624						
<b>Grand Total</b>	<b>152923</b>	<b>88895</b>	<b>241818</b>	<b>109604</b>	<b>11188</b>	<b>120792</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>% missing</i>							5	22	11	5	15	6

**Income**

	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total	PRP	LA	Total
<50	523	322	845	14052	1631	15683	1	1	1	24	40	25
50-99	21131	8342	29473	33778	729	34507	23	27	24	57	18	55
100-199	26430	9441	35871	7458	1147	8605	29	31	29	13	28	14
200-299	20615	6500	27115	2740	449	3189	22	21	22	5	11	5
300-399	11793	3258	15051	693	109	802	13	11	12	1	3	1
400+	11281	2836	14117	306	44	350	12	9	12	1	1	1
Missing	61150	58196	119346	50577	7079	57656						
<b>Grand Total</b>	<b>152923</b>	<b>88895</b>	<b>241818</b>	<b>109604</b>	<b>11188</b>	<b>120792</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>% missing</i>							40	65	49	46	63	48

## B General needs Lettings: 2011/12

These tables are only for the reported data, apart from where indicated as missing.

### B.1 Previous tenancy analysed by age and sex

	Numbers				Total	Percentage by age band				Women (%)
	<30	30-59	60+	Missing		<30	30-59	60+	Total	
1 = LA General Needs tenancy	10410	19782	6496	3644	<b>40332</b>	28	54	18	<b>100</b>	61
2 = HA General needs tenancy	10865	21499	6231	1214	<b>39809</b>	28	56	16	<b>100</b>	61
3= Private sector tenancy	12056	24699	3994	2118	<b>42867</b>	30	61	10	<b>100</b>	59
4 = Tied housing or renting with job	163	589	271	38	<b>1061</b>	16	58	26	<b>100</b>	44
6= Supported housing	3831	2694	446	255	<b>7226</b>	55	39	6	<b>100</b>	46
7 = Direct access hostel	1985	1806	77	248	<b>4116</b>	51	47	2	<b>100</b>	42
8 = Housing for older people	37	91	363	14	<b>505</b>	8	19	74	<b>100</b>	50
9 = Residential care home	81	118	61	6	<b>266</b>	31	45	23	<b>100</b>	46
10 = Hospital	101	234	58	31	<b>424</b>	26	60	15	<b>100</b>	43
11 = Prison	47	86	14	7	<b>154</b>	32	59	10	<b>100</b>	16
12 = Approved probation hostel	122	181	18	21	<b>342</b>	38	56	6	<b>100</b>	22
13 = Children's home or foster care	299	2	0	19	<b>320</b>	99	1	0	<b>100</b>	54
14 = Bed and breakfast	769	901	78	72	<b>1820</b>	44	52	4	<b>100</b>	52
15 = Short life housing	640	614	24	33	<b>1311</b>	50	48	2	<b>100</b>	58
16 = Living with family	30019	14944	1833	2015	<b>48811</b>	64	32	4	<b>100</b>	58
17 = Living with friends	4597	5113	429	504	<b>10643</b>	45	50	4	<b>100</b>	45
18 = Any other temporary accom	6285	6128	334	607	<b>13354</b>	49	48	3	<b>100</b>	62
19 = Rough sleeping	941	1066	69	132	<b>2208</b>	45	51	3	<b>100</b>	33
21 = Women's refuge	942	917	16	57	<b>1932</b>	50	49	1	<b>100</b>	100
22 = Foyer	353	49	1	12	<b>415</b>	88	12	0	<b>100</b>	55
23 = Mobile home or caravan	123	409	264	35	<b>831</b>	15	51	33	<b>100</b>	40
24 = Housed by National Asylum Support Service	86	146	3	18	<b>253</b>	37	62	1	<b>100</b>	42
25 = Other	5553	7379	1547	2307	<b>16786</b>	38	51	11	<b>100</b>	53
26 = Owner-occupation (private)	504	3032	1920	277	<b>5733</b>	9	56	35	<b>100</b>	57
27 = Owner-occupation (low cost home ownership)	37	149	103	10	<b>299</b>	13	52	36	<b>100</b>	56
<b>Total</b>	<b>90846</b>	<b>112628</b>	<b>24650</b>	<b>13694</b>	<b>241818</b>	<b>40</b>	<b>49</b>	<b>11</b>	<b>100</b>	<b>58</b>

## B.2 Nationality by age band: general needs social housing 2011/12

		0-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Total
1	UK	93.4	91.2	85.2	91.5	93.7	96.9	97.9	98	<b>91.1</b>
2	UK	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	<b>0.2</b>
3	Czech	0.1	0.2	0.3	0.2	0.2	0.1	0	0.1	<b>0.2</b>
4	Estonia	0	0.1	0	0	0	0	0	0	<b>0</b>
5	Hungary	0	0	0.1	0.1	0.1	0.1	0.1	0	<b>0.1</b>
6	Latvia	0.1	0.3	0.4	0.2	0.2	0	0	0	<b>0.2</b>
7	Lithuania	0.1	0.4	0.6	0.2	0.3	0.1	0.1	0.1	<b>0.3</b>
8	Poland	0.3	2	4.2	1.6	1.5	0.4	0.1	0.4	<b>2</b>
9	Slovakia	0.1	0.1	0.2	0.2	0.1	0	0	0	<b>0.1</b>
10	Slovenia	0	0	0.1	0	0	0	0	0	<b>0</b>
11	Other EEA	0.5	0.8	1.5	1.5	1.1	0.8	0.5	0.4	<b>1.1</b>
12	Any other country	5.1	4.5	7.2	4.2	2.6	1.3	1.1	0.7	<b>4.4</b>
14	Bulgaria	0	0	0.1	0.1	0.1	0.1	0.1	0	<b>0.1</b>
15	Romania	0	0.1	0.1	0.1	0	0.1	0	0	<b>0.1</b>
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

## B.3 Ethnicity by age band: general needs social housing 2011/12

		0-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Total
1	White British	86.9	80.3	69.2	75.5	82.3	89.9	89.1	92.5	<b>78.7</b>
2	White Irish	0.2	0.3	0.4	0.6	0.9	1.1	1.4	1.2	<b>0.5</b>
3	White other	0.9	3.3	6.9	4.6	4.5	2.1	1.2	1.3	<b>4.1</b>
4	White & Caribbean	3	2	1.1	0.8	0.4	0.2	0.3	0.1	<b>1.3</b>
5	White & African	0.4	0.5	0.6	0.5	0.3	0.3	0.3	0.2	<b>0.5</b>
6	White & Asian	0.4	0.4	0.4	0.3	0.2	0.1	0.1	0	<b>0.3</b>
7	Mixed other	0.6	0.6	0.6	0.5	0.3	0.1	0.1	0.1	<b>0.5</b>
8	Indian	0.2	0.5	1	0.9	0.9	0.7	0.7	0.5	<b>0.7</b>
9	Pakistani	0.4	1.1	1.9	1	0.8	0.6	0.7	0.7	<b>1.1</b>
10	Bangladeshi	0.3	1.1	1.6	0.9	0.6	0.3	0.6	0.2	<b>1</b>
11	Other Asian	1	1	2	1.6	1	0.8	0.5	0.3	<b>1.3</b>
12	Caribbean	1.9	2.7	2.8	3.3	2.5	1.1	2.4	1.7	<b>2.6</b>
13	African	1.9	3.6	6.9	5.9	3	1.4	1.3	0.5	<b>4.3</b>
14	Other black	0.8	1.2	1.7	1.6	0.9	0.4	0.5	0.3	<b>1.3</b>
15	Chinese	0.1	0.2	0.4	0.3	0.2	0.2	0.2	0.2	<b>0.2</b>
16	Other ethnic group	0.8	0.9	1.8	1.3	0.9	0.5	0.4	0.3	<b>1.1</b>
18	Traveller	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	<b>0.1</b>
19	Arab	0.1	0.2	0.4	0.3	0.2	0.1	0.1	0	<b>0.2</b>
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

## B.4 General Needs social housing lettings: ethnicity by nationality: 2011/12

	UK	Czech	Estonia	Hungary	Latvia	Lithuania	Poland	Slovakia	Slovenia	Other EEA	Any other country	Bulgaria	Romania	Missing/refused	Total
White British	171537	76	28	21	35	59	185	19	4	90	148	25	9	3699	<b>175935</b>
White Irish	885	0	1	0	1	4	4	0	1	102	23	0	1	81	<b>1103</b>
White other	2380	251	40	75	478	605	3241	159	28	750	567	47	56	524	<b>9201</b>
White & Caribbean	2721	1	13	3	2	0	10	0	1	14	62	1	0	146	<b>2974</b>
White & African	721	1	2	6	0	0	12	1	2	71	166	2	0	69	<b>1053</b>
White & Asian	570	4	1	1	7	3	4	1	4	11	71	1	1	42	<b>721</b>
Mixed other	742	14	8	4	8	37	47	7	0	75	115	3	2	55	<b>1117</b>
Indian	1331	0	3	0	1	1	8	1	0	22	192	0	0	72	<b>1631</b>
Pakistani	2086	0	0	1	2	0	0	8	0	18	278	5	1	134	<b>2533</b>
Bangladeshi	1927	0	1	0	0	2	1	1	7	7	157	1	0	95	<b>2199</b>
Other Asian	1621	7	3	2	6	9	23	9	6	101	808	11	2	285	<b>2893</b>
Caribbean	5073	3	2	2	0	4	10	2	1	25	432	1	0	336	<b>5891</b>
African	5552	6	5	9	2	11	14	2	1	444	2722	6	2	864	<b>9640</b>
Other black	1797	4	1	2	1	8	5	1	1	149	438	5	0	395	<b>2807</b>
Chinese	301	0	0	0	0	0	2	0	0	5	209	0	0	26	<b>543</b>
Other ethnic group	1120	26	6	4	27	36	126	25	8	154	787	10	8	195	<b>2532</b>
Traveller	137	2	0	0	0	4	4	0	1	4	4	0	5	8	<b>169</b>
Arab	281	0	0	0	0	0	1	0	0	22	208	1	0	16	<b>529</b>
Missing/refused	1583	8	0	2	7	22	37	7	1	23	154	3	2	16498	<b>18347</b>
<b>Total</b>	<b>202365</b>	<b>403</b>	<b>114</b>	<b>132</b>	<b>577</b>	<b>805</b>	<b>3734</b>	<b>243</b>	<b>66</b>	<b>2087</b>	<b>7541</b>	<b>122</b>	<b>89</b>	<b>23540</b>	<b>241818</b>

## B.5 Economic status by age, sex and number of bedrooms: General Needs lettings: 2011/12

	Other	Full time work	Part time work	Govt training	Job seeker	Retired	Not seeking work	Full time student	Sick/ disabled	Total	Missing %
<b>1 bedroom</b>											
Total	4	18	6	0	29	14	8	2	18	<b>100</b>	9
F	4	17	8	0	23	19	9	3	16	<b>100</b>	3
M	5	19	5	0	33	10	7	1	20	<b>100</b>	3
<b>2 bedrooms</b>											
Total	4	22	12	0	19	7	24	1	10	<b>100</b>	7
F	4	15	15	0	16	6	33	2	8	<b>100</b>	3
M	3	34	6	0	24	10	7	1	14	<b>100</b>	3
<b>3+ bedrooms</b>											
Total	4	22	14	0	16	1	33	1	8	<b>100</b>	8
F	5	13	16	0	15	1	43	1	7	<b>100</b>	3
M	4	45	9	0	19	2	9	1	10	<b>100</b>	2
<b>Grand Total</b>	<b>4</b>	<b>21</b>	<b>10</b>	<b>0</b>	<b>22</b>	<b>8</b>	<b>20</b>	<b>1</b>	<b>13</b>	<b>100</b>	<b>8</b>
	Other	Full time work	Part time work	Govt training	Job seeker	Retired	Not seeking work	Full time student	Sick/disabled	Total	Missing %
<b>Female total</b>											
0-29	4	13	14	0	22	0	40	3	4	<b>100</b>	2
30-59	5	20	16	0	16	0	25	1	17	<b>100</b>	3
60+	3	4	3	0	1	80	3	0	5	<b>100</b>	3
<b>Male total</b>											
0-29	4	28	7	1	44	0	6	3	8	<b>100</b>	2
30-59	4	32	6	0	26	0	9	0	22	<b>100</b>	2
60+	4	9	2	0	3	66	5	0	11	<b>100</b>	3
<b>Grand Total</b>	<b>4</b>	<b>21</b>	<b>10</b>	<b>0</b>	<b>22</b>	<b>8</b>	<b>20</b>	<b>1</b>	<b>13</b>	<b>100</b>	<b>8</b>



# C Supported housing lettings 2011/12

## C.1 Supported housing lettings: client group of provider by age of client

	0-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Missing	Grand Total
A = People with physical or sensory disabilities	104	170	73	87	140	278	187	181	17	1237
B = People with HIV or AIDS	8	6	6	2	3					25
D = People with learning disabilities	294	642	346	391	331	185	58	22	160	2429
E = People with mental health problems	319	1219	991	882	451	166	45	37	171	4281
F = People with drug problems	137	426	598	380	89	19	4	2	13	1668
G = People with alcohol problems	26	209	438	476	204	38	9	1	11	1412
H = Offenders and people at risk of offending	687	2102	1483	986	326	68	10	10	264	5936
I = Refugees (permanent)	33	42	38	21	8					142
J = Young person at risk or leaving care	2	1								3
L = People at risk of domestic violence	907	3489	2058	967	290	52	9	5	168	7945
M = Older people with support needs	156	325	284	888	6077	13515	10398	11148	3732	46523
N = Single homeless in need of support	8937	11380	6499	5051	1985	353	48	14	261	34528
O = Homeless families with support needs	947	1387	576	313	188	141	60	49	19	3680
P = Young people leaving care	930	231	13	2	3		1		3	1183
Q = Young people at risk	5441	2529	204	70	12	2			24	8282
R = Teenage parents	650	219	13	6	1				2	891
S = Rough sleepers	13	76	101	123	61	16	1			391
X = Missing	134	41	19	20	10	4	1	3	4	236
<b>All categories</b>	<b>19725</b>	<b>24494</b>	<b>13740</b>	<b>10665</b>	<b>10179</b>	<b>14837</b>	<b>10831</b>	<b>11472</b>	<b>4849</b>	<b>120792</b>

## C.2 Supported housing lettings: client group of provider by sex of client

	<b>Female</b>	<b>Male</b>	<b>Missing</b>	<b>Total</b>
A = People with physical or sensory disabilities	576	651	10	<b>1237</b>
B =People with HIV or AIDS	17	8	0	<b>25</b>
D =People with learning disabilities	1050	1282	97	<b>2429</b>
E =People with mental health problems	1327	2794	160	<b>4281</b>
F = People with drug problems	318	1336	14	<b>1668</b>
G = People with alcohol problems	351	1051	10	<b>1412</b>
H = Offenders and people at risk of offending	753	4926	257	<b>5936</b>
I = Refugees (permanent)	96	46	0	<b>142</b>
J = Young person at risk or leaving care	1	2	0	<b>3</b>
L = People at risk of domestic violence	7623	169	153	<b>7945</b>
M =Older people with support needs	22905	21124	2494	<b>46523</b>
N = Single homeless in need of support	10289	23975	264	<b>34528</b>
O = Homeless families with support needs	2695	966	19	<b>3680</b>
P = Young people leaving care	579	602	2	<b>1183</b>
Q = Young people at risk	4108	4156	18	<b>8282</b>
R = Teenage parents	863	26	2	<b>891</b>
S = Rough sleepers	90	301	0	<b>391</b>
X = Missing	107	129	0	<b>236</b>
<b>All categories</b>	<b>53748</b>	<b>63544</b>	<b>3500</b>	<b>120792</b>

## C.3 Local Authority lettings of supported housing: distribution by age and sex: 2011/12

	Numbers					Percentage by age band				Women (%)
	<30	30-59	60+	Missing	Total	<30	30-59	60+	Total	
1 = LA General Needs tenancy	52	428	2446	381	<b>3307</b>	2	15	84	<b>100</b>	54
2 = HA General needs tenancy	13	78	405	52	<b>548</b>	3	16	82	<b>100</b>	56
3= Private sector tenancy	69	418	1189	211	<b>1887</b>	4	25	71	<b>100</b>	45
4 = Tied housing or renting with job	0	16	54	10	<b>80</b>	0	23	77	<b>100</b>	41
6= Supported housing	39	113	571	101	<b>824</b>	5	16	79	<b>100</b>	48
7 = Direct access hostel	99	117	27	3	<b>246</b>	41	48	11	<b>100</b>	41
8 = Housing for older people	0	17	229	19	<b>265</b>	0	7	93	<b>100</b>	54
9 = Residential care home	0	6	49	3	<b>58</b>	0	11	89	<b>100</b>	33
10 = Hospital	13	29	44	7	<b>93</b>	15	34	51	<b>100</b>	29
11 = Prison	12	12	4	0	<b>28</b>	43	43	14	<b>100</b>	11
12 = Approved probation hostel	1	0	14	0	<b>15</b>	7	0	93	<b>100</b>	7
13 = Children's home or foster care	11	0	0	0	<b>11</b>	100	0	0	<b>100</b>	36
14 = Bed and breakfast	48	41	51	2	<b>142</b>	34	29	36	<b>100</b>	35
15 = Short life housing	2	4	8	0	<b>14</b>	14	29	57	<b>100</b>	36
16 = Living with family	216	194	586	88	<b>1084</b>	22	19	59	<b>100</b>	54
17 = Living with friends	59	82	128	22	<b>291</b>	22	30	48	<b>100</b>	37
18 = Any other temporary accom	30	72	62	26	<b>190</b>	18	44	38	<b>100</b>	34
19 = Rough sleeping	30	98	24	7	<b>159</b>	20	64	16	<b>100</b>	12
21 = Women's refuge	3	8	1	0	<b>12</b>	25	67	8	<b>100</b>	100
22 = Foyer	2	0	2	0	<b>4</b>	50	0	50	<b>100</b>	0
23 = Mobile home or caravan	1	10	95	14	<b>120</b>	1	9	90	<b>100</b>	33
24 = Housed by National Asylum Support Service	8	7	0	0	<b>15</b>	53	47	0	<b>100</b>	40
25 = Other	40	129	518	178	<b>865</b>	6	19	75	<b>100</b>	42
26 = Owner-occupation (private)	3	80	736	79	<b>898</b>	0	10	90	<b>100</b>	58
27 = Owner-occupation (low cost home ownership)	1	2	26	3	<b>32</b>	3	7	90	<b>100</b>	40
<b>Total</b>	<b>752</b>	<b>1961</b>	<b>7269</b>	<b>1206</b>	<b>11188</b>	<b>8</b>	<b>20</b>	<b>73</b>	<b>100</b>	<b>49</b>

## D Collapsed variable groupings

### **Ethnicity**

White	1-3,18
Mixed	4-7
Asian or Asian British	8-11
Black or Black British	12-4
Chinese/other	15,16,19
Missing	17, blank

### **Nationality**

UK	1,2
A8 countries, Romania and Bulgaria	3-10,14,15
Other EEA	11
Other	12
Missing	13, blank

### **Client Group**

People with physical or sensory disabilities	A
People with learning disabilities	D
Problems & rough sleepers	E to H, S
Young people	J, P, Q
Older people with support needs	M
Single homeless	N
Teenage parents	R
Domestic violence	L
Other	B,I,O
X = Missing	X

### **Previous tenancy collapsed - SH**

Tenant	1-4,9
Owner-occupier, residential care home	8,23,26,27
Prison, hostel, asylum seekers	11,12,19,24
Temp accommodation	14,15,17,18
Children's home or foster care	13, 22
Women's refuge	21
Living with family	16
Supported housing	6,7
Other	25
Hospital	10

### **Previous tenancy collapsed - GN**

Tenant	1-3
Owner-occupier, residential care home	4,9,23,26,27
Prison, hostel, asylum seekers	11,12,24
Temp accommodation	10,14,17,19
Children's home or foster care	13, 22
Women's refuge	21
Living with family	16
Supported housing	6,7
Housing for older people	8
Short life/temp housing	15,18
Other	25

# E Income

## E.1 General Needs letting; average weekly income by age and economic status

	<50	50-59	60-69	70-99	100-199	200-299	300-399	400-499	500+	Missing	Grand Total	% NA
<b>Age band</b>												
0-29	602	7288	3337	4325	16147	10190	4978	2643	1754	39582	<b>90846</b>	44
30-59	206	795	7237	5739	14603	13759	8807	4841	4034	52607	<b>112628</b>	47
60+	34	47	185	430	5015	3100	1240	482	336	13781	<b>24650</b>	56
Missing	3	22	44	24	106	66	26	18	9	13376	<b>13694</b>	
Grand Total	<b>845</b>	<b>8152</b>	<b>10803</b>	<b>10518</b>	<b>35871</b>	<b>27115</b>	<b>15051</b>	<b>7984</b>	<b>6133</b>	<b>119346</b>	<b>241818</b>	49
<b>Economic Status</b>												
Other	22	101	123	200	621	379	195	109	63	7450	<b>9263</b>	80
Full time work	13	26	22	83	2120	8727	7003	4482	3963	19809	<b>46248</b>	43
Part time work	28	112	166	915	4409	3704	2393	1200	874	9266	<b>23067</b>	40
Govt training	2	40	29	61	87	39	14	4	2	244	<b>522</b>	47
Job seeker	536	6018	8043	2880	6937	2707	884	283	148	21148	<b>49584</b>	43
Retired	29	27	53	258	4189	2368	823	286	127	9976	<b>18136</b>	55
Not seeking work	96	929	963	2948	10442	5671	2550	1180	707	20346	<b>45832</b>	44
Full time student	48	483	81	210	476	264	139	53	30	1425	<b>3209</b>	44
Sick/disabled	55	387	1282	2937	6458	3173	1013	365	206	12405	<b>28281</b>	44
Missing	16	29	41	26	132	83	37	22	13	17277	<b>17676</b>	
Total	<b>845</b>	<b>8152</b>	<b>10803</b>	<b>10518</b>	<b>35871</b>	<b>27115</b>	<b>15051</b>	<b>7984</b>	<b>6133</b>	<b>119346</b>	<b>241818</b>	49

## E.2 Supported housing: average weekly income band by age and economic status

	<50	50-59	60-69	70-79	80-89	90-99	100-199	200+	Missing	Total	% NA
<b>Age band</b>											
0-29	500	18508	4305	787	760	641	3590	1000	14128	<b>44219</b>	32
30-59	123	784	8436	671	850	1642	4100	2199	15779	<b>34584</b>	46
60+	26	35	220	100	136	349	7108	6103	23063	<b>37140</b>	62
Missing	2	26	30	4	5	2	45	49	4686	<b>4849</b>	
<b>Grand Total</b>	<b>651</b>	<b>19353</b>	<b>12991</b>	<b>1562</b>	<b>1751</b>	<b>2634</b>	<b>14843</b>	<b>9351</b>	<b>57656</b>	<b>120792</b>	<b>48</b>
<b>Economic Status</b>											
Other	65	368	152	39	35	53	188	50	1370	<b>2320</b>	59
Full time work	8	9	10	1	5	34	262	1250	1623	<b>3202</b>	51
Part time work	16	170	124	119	99	96	609	409	1131	<b>2773</b>	41
Govt training	12	270	22	19	18	22	27	6	130	<b>526</b>	25
Job seeker	277	12677	8521	394	212	245	1145	150	10411	<b>34032</b>	31
Retired	18	22	73	70	90	254	6253	5236	20144	<b>32160</b>	63
Not seeking work	95	1708	1376	387	548	449	2407	778	6575	<b>14323</b>	46
Full time student	91	3163	74	36	72	25	122	18	1519	<b>5120</b>	30
Sick/disabled	67	945	2612	495	668	1452	3787	1413	9593	<b>21032</b>	46
Missing	2	21	27	2	4	4	43	41	5160	<b>5304</b>	
<b>Total</b>	<b>651</b>	<b>19353</b>	<b>12991</b>	<b>1562</b>	<b>1751</b>	<b>2634</b>	<b>14843</b>	<b>9351</b>	<b>57656</b>	<b>120792</b>	<b>48</b>

## F Comparison between years

### F.1 Percentage of records missing age by provider and type of social housing

		2010/11	2011/12	2012/13 (Q1 to 3)
PRP	GN	2.40%	2.40%	1.90%
	SH	1.70%	3.30%	2.60%
LA	GN	5.90%	11.30%	9.00%
	SH	7.40%	10.80%	9.10%

### F.2 Percentage of complete records with nationality by provider and type of social housing

	General Needs						Supportive Housing					
	PRP			LA			PRP			LA		
	2010-11	2011-12	2012-13	2010-11	2011-12	2012-13	2010-11	2011-12	2012-13	2010-11	2011-12	2012-13
UK	94.60%	93.40%	92.60%	91.00%	91.30%	92.20%	93.80%	93.90%	93.90%	95.30%	96.00%	96.80%
Eastern Europe	2.10%	2.70%	3.40%	2.80%	3.20%	3.20%	0.90%	0.90%	1.10%	0.90%	1.10%	0.90%
Other EEA	0.70%	0.90%	1.10%	0.90%	1.00%	1.00%	1.20%	1.40%	1.50%	0.70%	0.80%	0.60%
Any other country	2.60%	3.00%	2.90%	5.20%	4.40%	3.60%	4.20%	3.70%	3.50%	3.10%	2.10%	1.70%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

# G General Needs: Effect of imputation

## G.1 Age of household reference person

Age of Household Reference Person	Type	Observed	Imputed	Overall
16-17	Count	1587	103	1690
	%	0.70%	0.80%	0.70%
18-24	Count	55222	3054	58276
	%	24.20%	22.30%	24.10%
25-29	Count	34037	1902	35939
	%	14.90%	13.90%	14.90%
30-39	Count	50004	2840	52844
	%	21.90%	20.70%	21.90%
40-49	Count	38671	2505	41176
	%	17.00%	18.30%	17.00%
50-59	Count	23953	1533	25486
	%	10.50%	11.20%	10.50%
60-69	Count	14753	1025	15778
	%	6.50%	7.50%	6.50%
70-79	Count	6800	497	7297
	%	3.00%	3.60%	3.00%
80 and above	Count	3097	235	3332
	%	1.40%	1.70%	1.40%
<b>Total</b>		<b>228124</b>	<b>13694</b>	<b>241818</b>

## G.2 Sex of household reference person

Sex of household reference person	Type	Observed	Imputed	Overall
Male	Count	97577	4796	102373
	%	42.30%	42.90%	42.30%
Female	Count	133072	6373	139445
	%	57.70%	57.10%	57.70%
<b>Total</b>		<b>230649</b>	<b>11169</b>	<b>241818</b>



### G.3 Economic Status of household reference person

Economic Status	Type	Observed	Imputed	Overall
Full time work (>30hrs)	Count	46248	3214	49462
	%	20.60%	18.20%	20.50%
Part time work (<30hrs)	Count	23067	1640	24707
	%	10.30%	9.30%	10.20%
Government training/ New Deal	Count	522	55	577
	%	0.20%	0.30%	0.20%
Job seeker	Count	49584	4162	53746
	%	22.10%	23.50%	22.20%
Retired	Count	18136	1734	19870
	%	8.10%	9.80%	8.20%
Not seeking work/Home	Count	45832	3488	49320
	%	20.40%	19.70%	20.40%
Full time student	Count	3209	185	3394
	%	1.40%	1.00%	1.40%
Sick or disabled	Count	28281	2201	30482
	%	12.60%	12.50%	12.60%
Other adult (>16), child (<16) or =>16 to 19 if in full-time education	Count	9263	997	10260
	%	4.10%	5.60%	4.20%
<b>Total</b>		<b>224142</b>	<b>17676</b>	<b>241818</b>

### G.4 Ethnicity of household reference person

Ethnicity	Type	Observed	Imputed	Overall
White	Count	186239	14840	201079
	%	83.30%	80.90%	83.20%
Mixed	Count	5865	508	6373
	%	2.60%	2.80%	2.60%
Asian or Asian British	Count	9256	791	10047
	%	4.10%	4.30%	4.20%
Black or Black British	Count	18338	1783	20121
	%	8.20%	9.70%	8.30%
Chinese of other ethnic group	Count	3773	425	4198
	%	1.70%	2.30%	1.70%
<b>Total</b>		<b>223471</b>	<b>18347</b>	<b>241818</b>

### G.5 Nationality of household reference person

Nationality	Type	Observed	Imputed	Overall
UK National	Count	202365	21412	223777
	%	92.70%	91.00%	92.50%
A8 countries, Romania and Bulgaria	Count	6285	706	6991
	%	2.90%	3.00%	2.90%
Other EEA countries	Count	2087	318	2405
	%	1.00%	1.40%	1.00%
All other countries	Count	7541	1104	8645
	%	3.50%	4.70%	3.60%
<b>Total</b>		<b>218278</b>	<b>23540</b>	<b>241818</b>

# H Supported Housing: Effect of imputation

## H.1 Age of household reference person – PRP

Age of Household Reference Person	Type	Observed	Imputed	Overall
16-17	Count	8875	45	8920
	%	8.40%	1.20%	8.10%
18-24	Count	25898	334	26232
	%	24.40%	9.20%	23.90%
25-29	Count	8694	175	8869
	%	8.20%	4.80%	8.10%
30-39	Count	13404	253	13657
	%	12.60%	6.90%	12.50%
40-49	Count	10243	249	10492
	%	9.70%	6.80%	9.60%
50-59	Count	8976	378	9354
	%	8.50%	10.40%	8.50%
60-69	Count	11468	646	12114
	%	10.80%	17.70%	11.10%
70-79	Count	8637	619	9256
	%	8.20%	17.00%	8.40%
80 and above	Count	9766	944	10710
	%	9.20%	25.90%	9.80%
<b>Total</b>		<b>105961</b>	<b>3643</b>	<b>109604</b>

## H.2 Age of household reference person – LA

Age of Household Reference Person	Type	Observed	Imputed	Overall
16-17	Count	75	0	75
	%	0.80%	0.00%	0.70%
18-24	Count	459	5	464
	%	4.60%	0.40%	4.10%
25-29	Count	218	5	223
	%	2.20%	0.40%	2.00%
30-39	Count	336	9	345
	%	3.40%	0.70%	3.10%
40-49	Count	422	36	458
	%	4.20%	3.00%	4.10%
50-59	Count	1203	160	1363
	%	12.10%	13.30%	12.20%
60-69	Count	3369	454	3823
	%	33.80%	37.60%	34.20%
70-79	Count	2194	329	2523
	%	22.00%	27.30%	22.60%
80 and above	Count	1706	208	1914
	%	17.10%	17.20%	17.10%
<b>Total</b>		<b>9982</b>	<b>1206</b>	<b>11188</b>

### H.3 Sex of household reference person - PRP

Sex of household reference person	Type	Observed	Imputed	Overall
Male	Count	58363	1270	59633
	%	54.50%	51.60%	54.40%
Female	Count	48780	1191	49971
	%	45.50%	48.40%	45.60%
<b>Total</b>		<b>107143</b>	<b>2461</b>	<b>109604</b>

### H.4 Sex of household reference person – LA

Sex of household reference person	Type	Observed	Imputed	Overall
Male	Count	5181	545	5726
	%	51.00%	52.50%	51.20%
Female	Count	4968	494	5462
	%	49.00%	47.50%	48.80%
<b>Total</b>		<b>10149</b>	<b>1039</b>	<b>11188</b>

## H.5 Economic Status of household reference person – PRP

Economic Status	Type	Observed	Imputed	Overall
Full time work (>30hrs)	Count	2745	90	2835
	%	2.60%	2.30%	2.60%
Part time work (<30hrs)	Count	2518	70	2588
	%	2.40%	1.80%	2.40%
Government training/ New Deal	Count	520	9	529
	%	0.50%	0.20%	0.50%
Job seeker	Count	33308	541	33849
	%	31.50%	14.00%	30.90%
Retired	Count	26246	2241	28487
	%	24.80%	58.10%	26.00%
Not seeking work/Home	Count	13662	243	13905
	%	12.90%	6.30%	12.70%
Full time student	Count	5091	35	5126
	%	4.80%	0.90%	4.70%
Sick or disabled	Count	19584	589	20173
	%	18.50%	15.30%	18.40%
Other adult (>16), child (<16) or =>16 to 19 if in full-time education	Count	2071	41	2112
	%	2.00%	1.10%	1.90%
<b>Total</b>		<b>105745</b>	<b>3859</b>	<b>109604</b>

## H.6 Economic Status of household reference person – LA

Economic Status	Type	Observed	Imputed	Overall
Full time work (>30hrs)	Count	457	60	517
	%	4.70%	4.20%	4.60%
Part time work (<30hrs)	Count	255	45	300
	%	2.60%	3.10%	2.70%
Government training/ New Deal	Count	6	0	6
	%	0.10%	0.00%	0.10%
Job seeker	Count	724	29	753
	%	7.40%	2.00%	6.70%
Retired	Count	5914	1007	6921
	%	60.70%	69.70%	61.90%
Not seeking work/Home	Count	661	34	695
	%	6.80%	2.40%	6.20%
Full time student	Count	29	1	30
	%	0.30%	0.10%	0.30%
Sick or disabled	Count	1448	198	1646
	%	14.90%	13.70%	14.70%
Other adult (>16), child (<16) or =>16 to 19 if in full-time education	Count	249	71	320
	%	2.60%	4.90%	2.90%
<b>Total</b>		<b>9743</b>	<b>1445</b>	<b>11188</b>

## H.7 Ethnicity of household reference person

Ethnicity	Type	Observed	Imputed	Overall
White	Count	98652	5126	103778
	%	85.70%	91.10%	85.90%
Mixed	Count	3323	79	3402
	%	2.90%	1.40%	2.80%
Asian or Asian British	Count	4073	143	4216
	%	3.50%	2.50%	3.50%
Black or Black British	Count	7476	211	7687
	%	6.50%	3.80%	6.40%
Chinese of other ethnic group	Count	1643	66	1709
	%	1.40%	1.20%	1.40%
<b>Total</b>		<b>115167</b>	<b>5625</b>	<b>120792</b>

## H.8 Nationality of household reference person

Nationality	Type	Observed	Imputed	Overall
UK National	Count	106372	7291	113663
	%	94.10%	94.10%	94.10%
A8 countries, Romania and Bulgaria	Count	1083	60	1143
	%	1.00%	0.80%	0.90%
Other EEA countries	Count	1508	122	1630
	%	1.30%	1.60%	1.30%
All other countries	Count	4083	273	4356
	%	3.60%	3.50%	3.60%
<b>Total</b>		<b>113046</b>	<b>7746</b>	<b>120792</b>

# I Comparison of different current and proposed weighting strategies (before imputation)

Note: The totals in some tables are not exactly the same due to rounding.

	Supported Housing		General Needs	
	New method	Old method	New method	Old method
<b>Number of lettings</b>				
<b>Total</b>	<b>14,135</b>	<b>13,093</b>	<b>113,143</b>	<b>112,692</b>
<b>Age band</b>				
0-24	5.76%	5.52%	24.08%	24.07%
25-34	4.34%	3.72%	26.06%	25.93%
35-44	4.18%	3.60%	19.28%	19.21%
45-59	14.24%	14.24%	17.97%	17.94%
60-69	33.12%	33.82%	7.33%	7.42%
70-79	21.66%	22.05%	3.53%	3.62%
80+	16.70%	17.05%	1.75%	1.81%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Missing	11.46%	12.20%	12.15%	12.44%
<b>Sex</b>				
Female	48.46%	49.12%	56.66%	56.84%
Male	51.54%	50.88%	43.30%	43.16%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100.00%</b>	<b>100.00%</b>
Missing	8.72%	9.23%	8.34%	8.46%
<b>Economic Status</b>				
Other > 16	2.84%	2.90%	8.19%	7.78%
Working full-time	4.56%	4.81%	18.48%	18.48%
Working part-time	2.57%	2.68%	9.03%	9.12%
Govt training/New Deal	0.06%	0.07%	0.24%	0.25%
Unemployed	8.22%	7.35%	21.95%	22.01%
Retired	59.22%	60.40%	9.36%	9.55%
Home/not seeking work	7.05%	6.92%	19.49%	19.52%
Student	0.31%	0.33%	1.49%	1.48%
Sick or disabled	15.18%	14.53%	11.76%	11.80%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Missing	14.57%	14.95%	17.96%	17.81%
<b>Ethnicity</b>				
White	91.00%	91.81%	79.16%	80.03%
Mixed	1.10%	0.94%	2.62%	2.57%
Asian or Asian British	3.04%	2.76%	5.00%	4.81%
Black or Black British	3.86%	3.53%	10.91%	10.44%
Chinese/other	0.99%	0.95%	2.30%	2.15%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Missing	12.82%	13.67%	15.21%	15.53%
<b>Nationality</b>				
UK	95.44%	95.90%	90.65%	91.08%
A10	1.31%	1.11%	3.39%	3.31%
Other EEA	0.81%	0.85%	1.10%	1.05%
Other	2.44%	2.13%	4.86%	4.56%
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Missing	18.80%	19.81%	23.07%	23.28%

# J Effect of imputation and weighting on previously published results

Note: The totals in some tables are not exactly the same due to rounding.

## J.1 Age of household reference person – General Needs

Age	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
16-17	918	0.9%	970	0.9%	962	0.9%
18-24	23205	23.2%	26050	23.0%	25823	23.0%
25-29	14287	14.3%	16068	14.2%	15925	14.2%
30-39	21688	21.6%	24491	21.6%	24268	21.6%
40-49	16697	16.7%	19218	17.0%	19062	17.0%
50-59	10551	10.5%	11942	10.6%	11850	10.6%
60-69	7438	7.4%	8366	7.4%	8297	7.4%
70-79	3625	3.6%	4052	3.6%	4019	3.6%
80+	1819	1.8%	1985	1.8%	1969	1.8%
<b>Total</b>	<b>100229</b>	<b>100.0%</b>	<b>113143</b>	<b>100.0%</b>	<b>112175</b>	<b>100.0%</b>
Missing	12464	0.0%				

## J.2 Sex of household reference person – General Needs

Sex	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
Female	58632	56.8%	64020	56.6%	63482	56.6%
Male	44525	43.2%	49123	43.4%	48693	43.4%
<b>Total</b>	<b>103157</b>	<b>100.0%</b>	<b>113143</b>	<b>100.0%</b>	<b>112175</b>	<b>100.0%</b>
Missing	9535	8.5%				



### J.3 Economic Status of household reference person – General Needs

Economic Status	Previously published distributions (No imputation, previous weighting methodology)		Proposed published distributions			
	Count	%	Count	%	Count	%
Working full-time	17681	18.5%	20812	18.4%	20592	18.4%
Working part-time	8720	9.1%	10196	9.0%	10104	9.0%
Govt training/New Deal	239	0.3%	293	0.3%	292	0.3%
Unemployed	21057	22.0%	25126	22.2%	24873	22.2%
Retired	9135	9.6%	10658	9.4%	10567	9.4%
Home/not seeking work	18676	19.5%	22006	19.5%	21806	19.4%
Student	1420	1.5%	1632	1.4%	1620	1.4%
Sick or disabled	11283	11.8%	13372	11.8%	13264	11.8%
Child < 16	0	0.0%	9048	8.0%	9058	8.1%
Other > 16	7445	7.8%	0	0.0%	0	0.0%
<b>Total</b>	<b>95655</b>	<b>100.0%</b>	<b>113143</b>	<b>100.0%</b>	<b>112175</b>	<b>100.0%</b>
Missing	17037	15.1%				

### J.4 Ethnicity of household reference person – General Needs

Ethnicity	Previously published distributions (No imputation, previous weighting methodology)		Proposed published distributions			
	Count	%	Count	%	Count	%
White	78068	80.0%	89598	79.2%	88838	79.2%
Mixed	2511	2.6%	2938	2.6%	2905	2.6%
Asian/Asian British	4688	4.8%	5632	5.0%	5575	5.0%
Black/Black British	10180	10.4%	12331	10.9%	12240	10.9%
Chinese/other	2101	2.2%	2643	2.3%	2618	2.3%
<b>Total</b>	<b>97548</b>	<b>100.0%</b>	<b>113143</b>	<b>100.0%</b>	<b>112175</b>	<b>100.0%</b>
Missing	15145	13.4%				

## J.5 Nationality Status of household reference person – General Needs

Nationality	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
UK	83257	91.1%	102515	90.6%	101679	90.6%
A10	3021	3.3%	3816	3.4%	3769	3.4%
Other EEA	961	1.1%	1297	1.1%	1283	1.1%
Other Country	4173	4.6%	5515	4.9%	5445	4.9%
<b>Total</b>	<b>91412</b>	<b>100.0%</b>	<b>113143</b>	<b>100.0%</b>	<b>112175</b>	<b>100.0%</b>
Missing	21280	18.9%				

## J.6 Age of household reference person – Supported Housing

Age Group	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
16-17	95	0.8%	100	0.7%	99	0.7%
18-24	549	4.7%	636	4.5%	625	4.5%
25-29	250	2.1%	328	2.3%	320	2.3%
30-39	391	3.3%	496	3.5%	486	3.5%
40-49	479	4.1%	623	4.4%	612	4.4%
50-59	1397	12.0%	1715	12.1%	1700	12.2%
60-69	3946	33.8%	4732	33.5%	4692	33.6%
70-79	2573	22.0%	3132	22.2%	3104	22.2%
80+	1990	17.1%	2372	16.8%	2346	16.8%
<b>Total</b>	<b>11669</b>	<b>100.0%</b>	<b>14135</b>	<b>100.0%</b>	<b>13983</b>	<b>100.0%</b>
Missing	1424	0.0%				

## J.7 Sex of household reference person – Supported Housing

Sex	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
Female	5838	49.1%	6829	48.3%	6759	48.3%
Male	6047	50.9%	7306	51.7%	7224	51.7%
<b>Total</b>	<b>11885</b>	<b>100.0%</b>	<b>14135</b>	<b>100.0%</b>	<b>13983</b>	<b>100.0%</b>
Missing	1208	9.2%				

## J.8 Economic Status of household reference person – Supported Housing

Economic Status	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
Working full-time	548	4.8%	649	4.6%	644	4.6%
Working part-time	306	2.7%	371	2.6%	367	2.6%
Govt training/New Deal	8	0.1%	7	0.0%	7	0.0%
Unemployed	837	7.4%	1045	7.4%	1024	7.3%
Retired	6879	60.4%	8503	60.2%	8418	60.2%
Home/not seeking work	789	6.9%	923	6.5%	913	6.5%
Student	37	0.3%	40	0.3%	39	0.3%
Sick or disabled	1655	14.5%	2158	15.3%	2129	15.2%
Child < 16	0	0.0%	442	3.1%	442	3.2%
Other > 16	330	2.9%	0	0.0%	0	0.0%
<b>Total</b>	<b>11390</b>	<b>100.0%</b>	<b>14135</b>	<b>100.0%</b>	<b>13983</b>	<b>100.0%</b>
Missing	1703	13.0%				

## J.9 Ethnicity of household reference person – Supported Housing

Ethnicity	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
White	10575	91.8%	12887	91.2%	12752	91.2%
Mixed	109	0.9%	144	1.0%	141	1.0%
Asian/Asian British	318	2.8%	426	3.0%	420	3.0%
Black/Black British	406	3.5%	533	3.8%	527	3.8%
Chinese/other	110	1.0%	144	1.0%	143	1.0%
<b>Total</b>	<b>11518</b>	<b>100.0%</b>	<b>14135</b>	<b>100.0%</b>	<b>13983</b>	<b>100.0%</b>
Missing	1575	12.0%				

## J.10 Nationality of household reference person – Supported Housing

Nationality	Previously published distributions		Proposed published distributions			
	<i>(No imputation, previous weighting methodology)</i>		<i>Imputation + weights with cap</i>		<i>Imputation + weighting with CORE cap and Sept LAHS cut</i>	
	Count	%	Count	%	Count	%
UK	10479	95.9%	13436	95.1%	13293	95.1%
A10	122	1.1%	166	1.2%	162	1.2%
Other EEA	93	0.9%	156	1.1%	156	1.1%
Other Country	233	2.1%	377	2.7%	372	2.7%
<b>Total</b>	<b>10928</b>	<b>100.0%</b>	<b>14135</b>	<b>100.0%</b>	<b>13983</b>	<b>100.0%</b>
Missing	2165	16.5%				