

Imputation for the Local Authority Housing Statistics Release

Imputation attempts to take into account missing or incorrect data in order to provide national and other aggregates. This method has been used in the Local Authority Housing Statistics (LAHS) (and previously the HSSA and BPSA) data collection process for many years. All of the national totals reported in the statistical release include imputed data for missing data. Imputed figures are marked in the complete LAHS dataset (<https://www.gov.uk/government/statistical-data-sets/local-authority-housing-statistics-data-returns-for-2012-to-2013>) in yellow and red to differentiate them from data supplied by local authorities.

For the missing values the general approach was to firstly take values that could be calculated from data supplied by the local authority or other sources of equivalent data. If this wasn't possible, the value reported by the local authority for that question from 2011-12 data was used. If this wasn't available, a value was calculated based on figures reported by similar local authorities for that question in 2012-13.

To identify similar local authorities, the ONS area classification was used. This groups each local authority into "clusters" of local authorities with similar socio-demographic characteristics based on 41 variables derived from the 2001 census. The ONS area classification is hierarchical, comprising 8 Super Groups, 13 Groups and 24 sub-groups and is available for local authorities. Many of the classifying variables 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. For further information, please see the ONS website: <http://www.ons.gov.uk/ons/guide-method/geography/products/area-classifications/ns-area-classifications/index/cluster-summaries/local-authorities/index.html>.

In some cases more detailed methodology was used. Specific methods that were used in particular sections are outlined below.

Section A – Dwelling Stock

- Where a component part or total from question 2 was missing, this was calculated where possible from data supplied for other elements of that question.
- If values for the affordable rent column in question 2 were missing, and all of the stock reported in question 2 was reported as social rent, this was populated with zeros.

Section B – Social Housing Sales

- Data collected from LOGASNet and used in the Quarterly Right to Sales release (<https://www.gov.uk/government/collections/social-housing-sales-including-right-to-buy-and-transfers>) was used to impute missing values.

Section C – Allocations

- Where a component part from question 1 was missing, this was calculated using the total reported in this question and the proportion of the component parts reported by similar local authorities.

Section D – Letting, Nominations and Mobility Schemes

- If a component of question 9 was missing, this was calculated using the total reported in this question and the proportion of the component parts reported by similar local authorities.

Section E – Vacants

- Where the component parts of question 2 were missing, this was calculated using the total reported in this question and the proportion of the component parts from previous year's figures.

Section G – Stock Management

- If a component part from question 2 was missing, this was calculated using the total reported in this question and the proportion of the component parts from previous year's figures.

Section H – Local Authority Rents and Rent Arrears

- Where rent data were missing in question 4, rents were imputed based on the 2011-12 figures. These were multiplied by the average rent increase between 2011-12 and 2012-13 for each bedroom size, aggregated for all local authorities who had provided data in both 2011-12 and 2012-13.
- If values for the affordable rent column in questions 1 – 4 were missing, and all of the stock reported in question 2 of Section A was social rent, this was populated with zeros.
- If incorrect units had been used in questions 5 – 11 (thousands rather than pounds), these were corrected.
- For the derived questions 12 – 14, where components that were used to calculate the derived value were imputed, these derived values were recalculated.