

Article

Admin-based household estimates for local authorities in England and Wales: 2021

This research presents 2021 estimates of the number of households based on administrative data sources and compares them with Census 2021 and other official statistics. These estimates are official statistics in development.

Contact:
Living Arrangements Estimation
team
pop.info@ons.gov.uk

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1 . Main points

- We have developed 2021 estimates of the number of households in England and Wales based on administrative data sources and compared them with Census 2021 estimates, which are our best estimate of true household numbers, and our survey-based household estimates.
- Our 2021 admin-based household estimate of 24.72 million households in England and Wales was 0.3% lower than the Census 2021 estimate of 24.78 million households; an improvement on our unadjusted administrative data, which recorded 22.60 million occupied addresses, an undercount of 8.8%.
- For Wales and the regions of England, admin-based household estimates generally aligned well with Census 2021; however, estimates for London and Wales were lower than census by 2.9% and 2.8%, respectively.
- For most local authorities in England and Wales (303 of 318), admin-based household estimates were within 5.0% of Census 2021; in addition, the admin-based estimates were generally closer to census than our survey-based estimates.
- At the national level, our admin-based household estimates were similar to our survey-based estimates, when compared with census; however, for the regions and local authorities in England, admin-based estimates generally provided improvements over our survey-based estimates.
- More detailed research needs to be undertaken to understand the reasons for the underestimation in areas such as London and Wales, and specific local authorities within these areas; we also plan to improve the unadjusted administrative data by incorporating new data sources, which should help improve our estimates for these areas.

These are [official statistics in development](#), and we advise caution when using the data as estimates may be revised because of methodological improvements. For more information, see [Section 8: Future developments](#).

2 . Overview of household estimates

Detailed statistics on the number of households are produced from the census for England and Wales every 10 years. In between census years, the Office for National Statistics (ONS) produces survey-based estimates on the number of households, but these provide less detailed, or granular, data.

Therefore, we are developing an alternative method based on administrative data sources, called the admin-based household estimates (ABHE), which have the potential to be more granular than our survey-based method, and have the potential to be produced on a regular basis.

This article presents our ABHE for 2021 for England and Wales at three geographic levels:

- England and Wales
- Wales and the regions of England
- local authority

The analysis provided in this article presents two main comparisons:

- ABHE against the unadjusted administrative data used to produce these statistics to demonstrate the impact of the estimation process, specifically at the local authority level
- ABHE, ONS survey-based household estimates and Welsh Government household estimates against Census 2021 to assess their alignment with census, which provides our best estimate of true household numbers

This research demonstrates the potential of ABHE to provide accurate, timely and cost-effective alternatives to the census and traditional survey-based methods. Our findings show that ABHE align more closely with Census 2021 than survey-based household estimates at local authority level, reducing bias and improving consistency. This work informs future development and helps assess whether ABHE could become a viable source for producing official household estimates.

Currently, the ONS publishes the official households estimates for England and its regions annually in our [Families and households in the UK bulletin](#). The estimates are derived from Quarter 2 (Apr to June) of the Labour Force Survey (LFS). The publication also includes estimates for Wales, but these are not the official household estimates for Wales.

The [official household estimates for Wales](#) are produced and published by the Welsh Government. They are based on the previous census and mid-year population estimates.

Household estimates at a local authority level are also made available by the ONS on an ad hoc basis. These estimates are based on the [Annual Population Survey \(APS\)](#) and they are not badged as [accredited official statistics](#). The APS is not a stand-alone survey. It combines Waves 1 and 5 from the LFS main sample (a quarterly sample) and Waves 1 to 4 from the annual local boost sample.

Finally, Census 2021 household statistics are available in our [Household and resident characteristics, England and Wales bulletin](#).

If you would like more information, our [user guide on household estimates and projections](#) provides further detail on the coherence and comparability of household estimates across the UK.

This article builds on previous [ONS research to produce household statistics from administrative data sources for 2011 and 2016](#), which used a dual system estimation technique to produce coverage-adjusted "occupied address"-based household estimates. An occupied address may contain multiple households, and therefore it differs from the "household" definition typically used by the census and household surveys. In this article, we present a new method for producing admin-based households estimates, which aims to align them more closely with the census definition of a "household".

3 . Methods used to produce admin-based household estimates

Admin-based household estimates (ABHE) are produced from administrative data inputs and use a multi-stage estimation process. The estimation process aims to:

- align the administrative data more closely with the census definition of a household (rather than using occupied address as a proxy for households)
- adjust for coverage gaps, errors and address mis-recording in the administrative data inputs
- ensure that the ABHE are coherent with the admin-based population estimates (ABPE)

Administrative data have historically used "occupied address" as a proxy for the "household" definition used by census and other household surveys. This is because the administrative data lack information on shared facilities.

Starting with the [Statistical Population Dataset \(SPD\)](#), we assigned a Unique Property Reference Number (UPRN) to each record. This process forms two administrative data inputs:

- the admin-based occupied address dataset (ABOAD)
- the admin-based communal establishment dataset (ABCED)

These two datasets are used in a multi-stage estimation process, which currently has the following two stages:

- stage one: estimate the household population
- stage two: estimate the number of households

We are also developing a third stage to estimate household size, but these estimates are not included in this article as they are still being developed.

The administrative data inputs and the multi-stage estimation process are set out in detail in a paper presented to the Methodological Assurance Review Panel (MARP) in November 2025. The paper [Research on producing admin-based estimates of the number and size of households for local authorities in England and Wales \(PDF, 268KB\)](#) has been published on the UK Statistics Authority website. A high-level summary of the estimation process follows and is presented schematically in Figure 1.

Stage one: estimate the household population

The ABPE provide estimates of the usually resident population of England and Wales, broken down by local authority, age and sex. Age is broken down by single year until the age of 90 years, after which it is aggregated into one age group.

To produce ABHE that are aligned with the ABPE, we first removed communal establishment residents from the ABPE as they do not form part of the household population. A similar adjustment is made to the [mid-year population estimates](#) when they are used to produce survey weights and household projections.

To do this, we used the ABCED and the ABOAD to calculate the proportion of communal establishment residents, by age and sex. This proportion was then applied to the ABPE to remove communal establishment residents, by age and sex. This left us with the household population estimate.

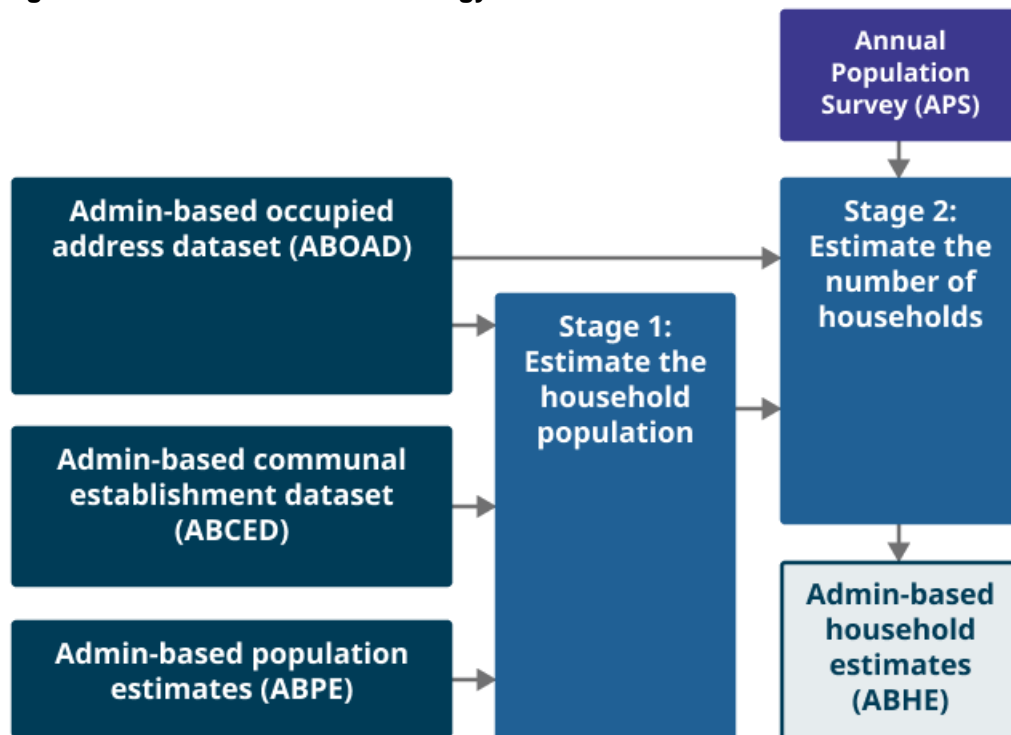
Stage two: estimate the number of households

To convert the household population estimate into the ABHE, we started by calculating the household representative rate (HRR) using weighted auxiliary data from the Annual Population Survey (APS). The HRR is the proportion of people in each demographic group (defined by age and sex) who were identified as the household reference person (HRP). The HRP serves as a reference point, to characterise a whole household.

We applied the HRR to the household population estimate, disaggregated by age and sex, to estimate the number of households for each demographic group. These were then summed to produce the total number of households for England and Wales.

To allocate this total number of households across local authorities in England and Wales, we used the ABOAD. To do this, the proportions of occupied addresses in each local authority were calculated and used to distribute households across the local authorities.

Figure 1: The estimation methodology for admin-based household estimates



Source: The Office for National Statistics

Notes:

1. A flow chart showing how the administrative data inputs and the Annual Population Survey feed into each stage of the estimation process to create the admin-based household estimates.

Annual Population Survey and Labour Force Survey quality considerations

This article presents comparisons with Labour Force Survey (LFS) household estimates for England and Wales, and Wales and the regions of England. It also presents comparisons with APS household estimates at the local authority level.

In addition, stage two of our estimation process uses APS data to convert from the household population estimate to a number of households estimate. Therefore, it is important to note the following points.

The household weighting scheme used for LFS- and APS-based household estimates has not been updated to reflect Census 2021. Revisions will be made to the back series, which will result in changes to the data and comparisons presented in this article when this is implemented.

Data collected in 2021 were affected by restrictions that were first put in place in March 2020 to limit the spread of coronavirus (COVID-19). These restrictions affected our ability to conduct household surveys and reduced response rates. Further information is available in our [Labour Force Survey performance and quality monitoring reports](#).

In October 2024, the [accredited official statistics](#) status of APS-based outputs was suspended in a [letter from the Office for Statistics Regulation \(OSR\)](#). At the same time, the Office for National Statistics (ONS) provided an assessment of APS quality in a [letter to the Office for Statistics Regulation](#), which concluded that the total sample size is still relatively large at a national level, where results would remain reasonably robust with a small increase in variability compared with the pre-coronavirus pandemic period. Our ABHE methodology uses APS data at a national level (England and Wales).

Measures of quality such as [confidence intervals](#) (to show the levels of [uncertainty](#) associated with survey estimates) are presented in the LFS household datasets. Users are advised to consult these quality measures when interpreting the LFS estimates.

We are transforming the LFS into the Transformed Labour Force Survey (TLFS). When household weights are available on the TLFS, we will assess how we can use these data in our estimation process, and we will carry out comparisons. More information is available in our latest [Labour market transformation - update on progress and plans](#).

4 . Analysis of admin-based household estimates

This section evaluates the quality of our admin-based household estimates (ABHE) by comparing them with Census 2021. It also includes a comparison with the unadjusted administrative data, called the admin-based occupied address dataset (ABOAD), to show the impact of applying the estimation method. In addition, it also compares ABHE against official sources, including our survey-based household estimates and Welsh Government household estimates, to assess relative performance.

England and Wales

ABOAD recorded around 22.60 million occupied addresses (a proxy for households). ABOAD undercounted Census 2021 by approximately 2.18 million households, a relative bias of negative 8.8% (Table 1).

After we applied our estimation method, ABHE reported nearly 24.72 million households, and reduced the undercount to around 65,000 households, achieving a relative bias to census of negative 0.3% (Table 1).

This result showed that the estimation process considerably improved ABHE alignment with Census 2021.

In comparison, the survey-based method (based on the Labour Force Survey (LFS)) counted 24.86 million households and exceeded the Census 2021 estimate by around 79,000 households, which represented a relative bias of positive 0.3% (Table 1).

Both the admin-based method and the survey-based method are similar when compared with Census 2021 for England and Wales.

Table 1: Household estimates relative bias to census for England and Wales, 2021

	Household count	Relative bias to Census 2021
Census 2021	24,783,199	-
Admin-based occupied address dataset (ABOAD)	22,602,571	-8.8%
Admin-based household estimates (ABHE)	24,718,555	-0.3%
Labour Force Survey (LFS)	24,862,000	0.3%

Source: The Office for National Statistics

Notes

1. The weighting scheme used for LFS-based household estimates has not been updated to reflect Census 2021. Revisions will be made to the back series including the data presented in this table when this update is implemented.
2. ABOAD measures occupied addresses which are a proxy for households.

Wales and the regions of England

ABOAD recorded fewer occupied addresses (a proxy for households) than Census 2021 for Wales and all the regions of England. None of the regions fell within 5.0% of the Census 2021 estimates and are therefore not presented in Figure 2.

After we applied our estimation method, ABHE aligned much more closely with the Census 2021 estimates (Figure 2). Wales and all the regions of England fell within 5.0% of census estimates, and seven out of nine English regions were within 1.0%. This improvement demonstrates the effectiveness of the estimation method in correcting for coverage gaps, errors, address mis-recording and definitional issues present in the unadjusted administrative data.

London showed the greatest underestimation in ABHE, with a relative bias to census of negative 2.9%, closely followed by Wales at negative 2.8%. The East Midlands showed the greatest overestimation at positive 1.1%.

In comparison, our survey-based estimates (based on the LFS) also generally performed well for Wales and the regions of England, as all were within 5.0% of the Census 2021 estimates, and five were within 1.0%. London recorded the largest overestimation at positive 4.2%, while the South East showed the largest underestimation at negative 2.0%.

London is a particularly challenging region to measure accurately. In our comparisons, the survey-based method overestimated household numbers by positive 4.2%, while the admin-based method underestimated by negative 2.9%.

In Wales, the survey-based method compared well with Census 2021, showing a small underestimation of negative 0.1%, whereas the admin-based method underestimated by negative 2.8%. The potential reasons for the ABHE underestimation for London and Wales are explored further in this section.

In general, the survey-based estimates showed greater variability relative to Census 2021 than the ABHE (Figure 2).

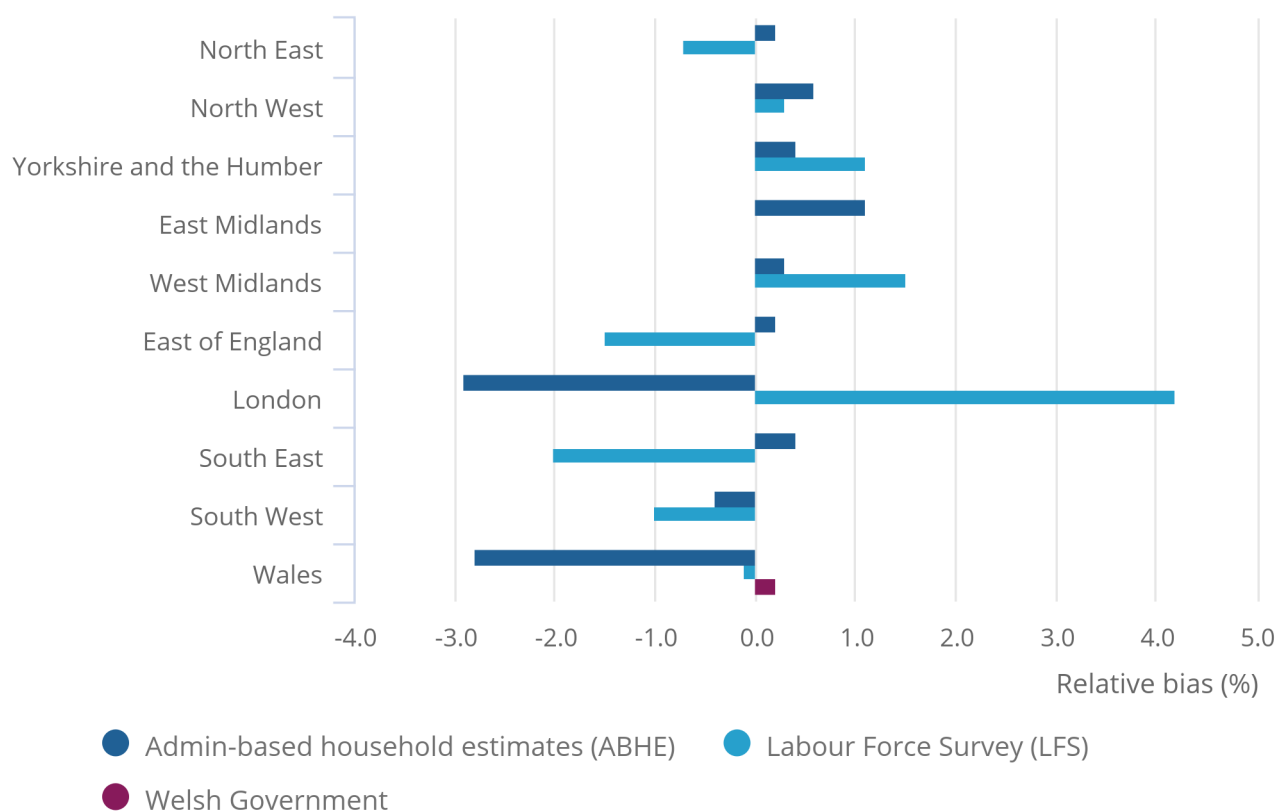
Estimates of the number of households published by the Welsh Government aligned very closely with Census 2021, with a relative bias of positive 0.2%. This close alignment is expected because these estimates are based on Census 2021 and mid-year population estimates.

Figure 2: Admin-based household estimates generally align well with census estimates, except for London and Wales

Household estimates relative bias to census for Wales and the regions of England, 2021

Figure 2: Admin-based household estimates generally align well with census estimates, except for London and Wales

Household estimates relative bias to census for Wales and the regions of England, 2021



Source: The Office for National Statistics and Welsh Government

Notes:

1. Welsh Government household estimates cover Wales only. In addition, Welsh Government estimates are [official statistics in development](#), which means they may be revised because of methodological improvements.
2. The weighting scheme used for LFS-based household estimates has not been updated to reflect Census 2021. Revisions will be made to the back series, which will result in changes to the comparisons presented in this chart, when this update is implemented.

Despite considerable improvements from the estimation method, London and Wales continued to show underestimation in the ABHE relative to Census 2021. There are several factors that could have contributed to this underestimation; however, we cannot confirm their impact and further investigation is needed.

Most likely contributing factors to ABHE underestimation

Statistical Population Dataset coverage

The ABHE was built using the ABOAD, which was derived from the Statistical Population Dataset (SPD). Any coverage issues in the SPD therefore feed through to ABOAD and, in turn, into the ABHE. In 2021, the SPD showed overcoverage for London and undercoverage for Wales, as detailed in our [Developing Statistical Population Datasets, England and Wales: 2021](#) article.

In addition, as part of the ABOAD and admin-based communal establishment dataset (ABCED) methodology, the local authority assigned to a record in the SPD may have been updated when Unique Property Reference Number (UPRN) data sources were linked. This linkage ensures that records are assigned to the correct occupied address or communal establishment UPRN, as the UPRN provides the most granular level of geography available. However, this process could have resulted in records being moved between local authorities, which may have increased or decreased the overcoverage or undercoverage already present in the SPD.

Complex housing structures

London contains many blocks of flats and properties that have been converted into multiple flats, which can make address matching more difficult. If addresses are vague or inconsistently recorded, the Address Index Matching Service (AIMS) may group multiple occupied addresses into a single large occupied address. This grouping creates undercoverage in ABOAD because individual occupied addresses are not correctly identified. Since ABOAD is used to distribute households in the ABHE, this undercoverage can lead to underestimation in the ABHE.

In addition, the prevalence of Households of Multiple Occupation (HMOs) in an area may contribute to underestimation, depending on how these properties are represented in administrative data compared with the census. If HMOs are recorded as a single occupied address rather than multiple households, this creates undercoverage in ABOAD, which can lead to underestimation in ABHE.

Multiple households living at a single occupied address

Areas with a high proportion of multiple households living at a single occupied address, compared with the average for England and Wales, will likely be consistently underestimated relative to other areas. This occurs because the ABHE estimation method attempts to adjust for multiple households at the England and Wales level, rather than by specific geographies.

As a result, where this pattern is more concentrated locally, the adjustment may not fully account for the additional households, leading to underestimation.

High population churn

High population churn occurs when people move frequently, which is especially common among young adults. ABOAD relies on interactions with services such as GP registration. When people move often, they may not update their details promptly or at all, and may also fail to update them when they leave. This can lead to records being incorrectly assigned to previous addresses or missing entirely.

As a result, high population churn can have a mixed effect on our estimates: it may cause undercoverage in some areas and overcoverage in others, depending on how these movements are captured in administrative data.

Unassigned records

The process of forming our unadjusted administrative datasets (ABOAD and ABCED) results in records that cannot be classified as either a household or a communal establishment; these records are referred to as residuals. This typically occurs when a record does not have a UPRN available from the administrative data sources currently used, or when the UPRN is not recognised as residential on the Address Frame. This can happen for several reasons, such as poor address string quality in the administrative data or limited address information being supplied, which makes it difficult for AIMS to link correctly.

Areas with a higher proportion of unassigned records compared with the average for England and Wales are likely to be consistently underestimated, as these records are excluded from household counts.

Differences in data availability

Differences in data availability help explain some of the underestimation observed in Wales. For example, in England, address data for children are available through the English School Census, whereas the Welsh equivalent does not capture full address information. As a result, the Welsh School Census cannot be used as a UPRN data source in the creation of ABOAD and ABCED, which means school-aged children cannot be assigned to a UPRN from this source. Another challenge is the presence of addresses recorded in Welsh, which are less effectively linked to UPRNs using AIMS.

Local authority

At the local authority level, applying the estimation method to ABOAD resulted in much closer alignment between the ABHE and Census 2021. Overall, the ABHE were generally closer to Census 2021 than our survey-based estimates derived from the Annual Population Survey (APS) (Table 2, Figure 3 and Figure 4).

Most local authorities based on the ABHE method (303 of 318) were within 5.0% of the Census 2021 estimate, representing a considerable improvement compared with the survey-based estimates (based on the APS), where only 180 out of 316 local authorities fell within 5.0%. By contrast, ABOAD had no local authorities within 5.0% of Census 2021 (Table 2).

Table 2: Household estimates relative bias to census, local authority counts for England and Wales, 2021

	Admin-based occupied address dataset (ABOAD)	Admin-based household estimates (ABHE)	Annual Population Survey (APS)
Within 5.0%	0	303	180
Within 10.0%	270	312	282
Within 15.0%	311	318	306
Within 20.0%	318	318	316

Source: The Office for National Statistics

Notes

1. APS data exclude the Isles of Scilly and the City of London (therefore 316 local authorities are included). APS data for 2021 do not cover the Isles of Scilly, and the City of London has been removed as it has a large relative bias to census (positive 178.8%) because of low response rates affecting the quality of the APS estimate.
2. The weighting scheme used for APS-based household estimates has not been updated to reflect Census 2021. Revisions will be made to the back series, which will result in changes to the comparisons presented in this table, when this update is implemented.
3. ABOAD measures occupied addresses, which are a proxy for households.

Figure 3 shows that the ABHE has a slight overestimation relative to Census 2021 in 199 local authorities, all of which were in England except Torfaen in Wales. The local authorities with the largest underestimation were concentrated in London and Wales.

In comparison, the survey-based method (based on the APS) generally showed a wider spread of overestimation and underestimation (Figure 4).

The median absolute relative bias fell from 8.1% for ABOAD to 1.2% for ABHE, demonstrating that the adjustments applied were effective for most areas. For the survey-based method, the median absolute relative bias was 4.1%, indicating that the ABHE were generally closer to Census 2021.

Figure 3: The estimation process reduces bias across all local authorities

Household estimates relative bias to census for the local authorities of England and Wales, 2021

Notes

1. APS data exclude the Isles of Scilly and the City of London (therefore 316 local authorities are included). APS data for 2021 do not cover the Isles of Scilly, and the City of London has been removed as it has a large relative bias to census (positive 178.8%) because of low response rates affecting the quality of the APS estimate.
2. The weighting scheme used for APS-based household estimates has not been updated to reflect Census 2021. Revisions will be made to the back series, which will result in changes to the comparisons presented in this chart, when this update is implemented.
3. The ABOAD measures occupied addresses, which are a proxy for households.
4. Results are presented for 318 local authorities rather than the 331 local authorities that existed in 2021. This is so we have consistency across the time series in future releases.

Figure 4 presents some of the same relative bias information in a different format to better visualise the distribution of the data. It again demonstrates that, for the local authorities in England and Wales, the ABHE were generally more closely aligned with Census 2021 than the survey-based method.

However, the pattern differs for the 22 local authorities in Wales, where the ABHE estimates show underestimation. In contrast, the survey-based method was generally closer to Census 2021, with some local authorities showing overestimation. The Welsh Government household estimates were closely aligned with Census 2021, which is expected as they are based on Census 2021 and mid-year population estimates.

Figure 4: Admin-based household estimates generally align well with census estimates for most local authorities

Household estimates relative bias to census for the local authorities of England and Wales, 2021

Notes

1. Welsh Government data points compare Welsh Government household estimates with Census 2021 for the 22 local authorities in Wales. In addition, Welsh Government estimates are [official statistics in development](#), which means they may be revised because of methodological improvements.
2. APS data exclude the Isles of Scilly and the City of London (therefore 316 local authorities are included). APS data for 2021 do not cover the Isles of Scilly, and the City of London has been removed as it has a large relative bias to census (positive 178.8%) because of low response rates affecting the quality of the APS estimate.
3. The weighting scheme used for APS-based household estimates has not been updated to reflect Census 2021. Revisions will be made to the back series, which will result in changes to the comparisons presented in this chart, when this update is implemented.
4. Results are presented for 318 local authorities rather than the 331 local authorities that existed in 2021. This is so we have consistency across the time series in future releases.

Table 3 shows the 10 local authorities with the largest relative bias between the ABHE and Census 2021, all of which showed underestimation. Seven of these were London boroughs, likely affected by complex housing structures and high population churn.

Two local authorities in Wales (Ceredigion and Pembrokeshire) also appear in the top 10. Both had undercoverage in the Statistical Population Dataset (SPD) in 2021, as detailed in our [Developing Statistical Population Datasets, England and Wales: 2021](#) article. In addition, underestimation may have been caused by missing address information. For Ceredigion, high population churn linked to its large student population may also have contributed.

Local authorities in Table 3 may also have a higher proportion of multiple households living at a single occupied address and a higher proportion of unassigned records.

The Isles of Scilly appears in the list because its small population size means even minor differences result in a disproportionately large relative bias.

In all these cases, our estimation methodology accounted for some, but not all, of the undercoverage.

Table 3: Top 10 local authorities with the largest ABHE relative bias to Census 2021

Rank	Local authority	Relative bias to Census 2021
1	Hammersmith and Fulham	-12.5%
2	Haringey	-12.1%
3	Kensington and Chelsea	-11.2%
4	Islington	-11.1%
5	Westminster	-10.5%
6	Isles of Scilly	-10.1%
7	Camden	-9.5%
8	Ceredigion	-6.7%
9	Pembrokeshire	-6.7%
10	Brent	-6.6%

Source: The Office for National Statistics

5 . Data on producing admin-based household estimates

[Admin-based household estimates for local authorities in England and Wales](#)

Dataset | Released 8 December 2025

This research presents 2021 estimates of the number of households based on administrative data sources and compares them with Census 2021 and other official statistics. These estimates are official statistics in development.

6 . Glossary

Address Index Matching Service (AIMS)

An address matching algorithm developed in-house at the Office for National Statistics (ONS) that links administrative records to Unique Property Reference Numbers (UPRNs), helping assign people to the correct address or communal establishment. AddressBase Premium is used as the reference data for matching addresses.

Administrative data

Collections of data maintained for administrative reasons, for example, registrations, transactions, or record keeping. They are used for operational purposes, and their statistical use is secondary. These sources are typically managed by other government bodies.

Communal establishment

A place providing managed residential accommodation. "Managed" here means full-time or part-time supervision of the accommodation, such as care homes, student halls of residence, hospitals, or prisons.

Household

One person living alone or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area. A household can consist of a single family, more than one family or no families in the case of a group of unrelated people.

Household reference person (HRP)

The householder, who is the household member who owns the accommodation, is legally responsible for the rent; or occupies the accommodation as reward for their employment, or through some relationship to its owner who is not a member of the household. If there are joint householders, the one with the highest income is the HRP. If their income is the same, then the eldest one is the HRP.

Median absolute relative bias

Median absolute relative bias shows the typical relative bias between an estimate and a reference source, such as the census, ignoring whether the estimate is higher or lower. It is calculated by taking the median of the absolute relative bias across all areas. A lower median absolute relative bias means the estimates are generally closer to the reference.

Occupied address

An occupied address is a Unique Property Reference Number (UPRN) on the Address Frame, which has been successfully linked to at least one individual in the Statistical Population Dataset (SPD). Multiple households can be present within a single occupied address.

Relative bias

Relative bias shows how much an estimate differs from the actual value, expressed as a percentage. A positive value means the estimate is higher than the actual value (an overestimate), while a negative value means it is lower than the actual value (an underestimate).

Unique Property Reference Number (UPRN)

Unique Property Reference Number (UPRN) is a unique identifier for every addressable location in the UK. They provide every place with a consistent identifier throughout its lifecycle, from planning through to demolition.

Usually resident population

We are currently adopting the United Nations (UN) definition of "usually resident" - that is, the place at which a person has lived continuously for at least 12 months, not including temporary absences for holidays or work assignments, or intends to live for at least 12 months (United Nations, 2008).

7 . Data sources and quality

Our methods have been reviewed by the independent Methodological Assurance Review Panel (MARP). All [reviewed papers](#) are available on the UK Statistics Authority website.

Census 2021

Provides the most complete and reliable household data for England and Wales, collected every 10 years.

Address Frame

A list of all residential and communal establishment addresses in England and Wales. It is created by the Office for National Statistics (ONS) and uses AddressBase Premium (ABP) as its spine, which contains complete address information from creation to retirement, along with a variety of administrative data sources to help in identifying various types of addresses.

Admin-based occupied address dataset (ABOAD)

Record-level data that links people to private residential addresses (occupied address) using administrative data.

Admin-based communal establishment dataset (ABCED)

Record-level data identifying people living in communal establishments (for example, care homes, student halls of residences, and prisons) using administrative data.

Annual Population Survey (APS)

Continuous household survey covering the UK. Combines Waves 1 and 5 from the Labour Force Survey (LFS) and a local boost sample. Topics include employment and unemployment, housing, ethnicity, religion, health and education.

Admin-based population estimates (ABPE)

Estimates of the total population of England and Wales disaggregated by local authority, sex, and birth cohort based on administrative data and statistical modelling (Dynamic Population Model), currently badged as [official statistics in development](#).

Labour Force Survey (LFS)

The UK's largest household study, providing official employment and unemployment measures. For household statistics, the Office for National Statistics (ONS) uses April to June data to produce intercensal household estimates, excluding most communal establishments. These estimates are not the official household estimates for Wales, Scotland or Northern Ireland, as each produces its own official household statistics.

Statistical Population Dataset (SPD)

A single, coherent dataset that forms the basis for estimating the size of the resident population. It is produced by linking records across multiple administrative data sources and applying a set of inclusion and distribution rules.

Survey quality and transformation

The ONS is transforming the LFS into the Transformed Labour Force Survey (TLFS), with both surveys currently running. [LFS response rates declined from Quarter 3 \(July to September\) 2021](#) because of the coronavirus (COVID-19) pandemic and a shift from face-to-face to telephone interviews, affecting data quality. Response rates started to increase again in Quarter 3 2023.

The LFS remains an official source.

APS remains robust at the England and Wales level but has deteriorated at local authority level. Planned improvements, including reweighting, are expected in 2026.

Welsh Government statistics

Official household estimates for Wales at national and local authority level. These are based on census, mid-year population estimates and household formation rates. They are subject to uncertainty because they rely on assumptions about population and household formation.

8 . Future developments

We plan to further improve the unadjusted administrative data by incorporating new data sources, which should help enhance the accuracy of our household estimates, particularly in local authorities where coverage issues persist. This includes addressing both undercoverage and overcoverage. We will also carry out additional research to understand the reasons for these coverage issues in specific local authorities.

Future development of the admin-based household estimates (ABHE) will include producing a size breakdown and providing estimates for more recent years, which we intend to publish in 2026. This will enable time series analysis to assess how estimates perform as we move further away from the decennial census.

To help shape this work, we would like to hear from users. Please let us know how we can improve the ABHE and tell us about their potential uses. Please email your feedback to pop.info@ons.gov.uk.

9 . Related links

[Household and resident characteristics, England and Wales](#)

Statistical bulletin | Released 2 November 2022
Household statistics using Census 2021 data.

[Estimated number of households in Great Britain in ITL1, ITL3, English and Welsh local authorities and Scottish council areas, 2020 to 2022](#)

Data | Released 12 March 2024

Annual Population Survey (APS) estimates of the number of households in Great Britain for years 2020 to 2022.

[Welsh Government household estimates](#)

Report | Released 11 December 2024

Data by household type, population and average size.

[Research Outputs: An update on developing household statistics for an Administrative Data Census](#)

Research Output | Released 8 March 2018

An update on our research into producing household statistics from administrative data in 2011 and 2016.

[Families and households in the UK: 2021](#)

Statistical bulletin | Released 9 March 2022

Trends in living arrangements including families, people living alone and people in shared accommodation, broken down by size and type of household.

10 . Cite this article

Office for National Statistics (ONS), released 8 December 2025, ONS website, article, [Admin-based household estimates for local authorities in England and Wales: 2021](#)

