

Population statistics and sources guide

A comparison of the different types of population estimate that are published on the ONS website or are planned for future publication.

Contact:
Demography team
pop.info@ons.gov.uk
+44 1329 444661

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1 . Mid-2023 population estimates

Type of estimate

Accredited official estimates of the population.

Release information

- Data sources: Census 2021, births, deaths and migration estimates.
- Latest reference period: mid-2023 (30 June 2023).
- Geographical coverage: England and Wales.
- Lowest geographical breakdown: local authority district.
- Population definition: usual residents of households and communal establishments.
- Publication type: accredited official statistics.

Uses and guidance

This provides the official annual estimates of the population. They represent the highest quality annual estimates consistent with previous mid-year estimates produced from the traditional cohort component method of population estimates, underpinned by Census 2021 for England and Wales.

These estimates are used for planning and policy purposes as well as onward analysis, such as for sampling and weighting surveys and use in population and household projections.

Publication

The [Population estimates for England and Wales: mid-2023 bulletin](#), published 15 July 2024.

2 . Rebased mid-2012 to mid-2020 population estimates

Type of estimate

Accredited official estimates of the population.

Release information

- Data sources: 2011 Census, Census 2021, births, deaths and migration estimates.
- Latest reference period: mid-2020.
- Geographical coverage: England and Wales.
- Lowest geographical breakdown: local authority district.
- Population definition: usual residents of households and communal establishments.
- Publication type: accredited official statistics.

Uses and guidance

These are the best population estimates to use for a comparable time-series of estimates with mid-2021 and later estimates.

Publication

The [Rebasing of mid-year population estimates following Census 2021, England and Wales bulletin](#), published 23 November 2023.

3 . Mid-2012 to mid-2022 population estimates for the UK and its constituent countries

Type of estimate

Accredited official estimates of the population

Release information

- Data sources: Census 2021 for England, Wales and Northern Ireland, Census 2022 for Scotland, births, deaths and migration estimates.
- Latest reference period: mid-2022 (30 June 2022).
- Geographical coverage: UK.
- Lowest geographical breakdown: local authority.
- Population definition: usual residents of households and communal establishments.
- Publication type: accredited official statistics.

Uses and guidance

This provides the official annual estimates of the population for the whole UK and its constituent countries. They represent the highest quality annual estimates consistent with previous mid-year estimates produced from the traditional cohort component method of population estimates, underpinned by Census 2021 for England and Wales.

These estimates are used for planning and policy purposes as well as for onward analysis, such as for sampling and weighting surveys and use in population and household projections.

Publication

The [Population estimates for the UK, England, Wales, Scotland and Northern Ireland: mid-2011 to mid-2022 dataset](#), published 15 July 2024.

4 . Census 2021

Type of estimate

Accredited official statistics from Census 2021, giving a picture of the population on 21 March 2021.

Release information

- Data sources: Census 2021.
- Latest reference period: 21 March 2021.
- Geographical coverage: England and Wales.
- Lowest geographical breakdown: output area and postcodes.
- Population definition: all resident people on census night - households and communal establishments.
- Publication type: accredited official statistics.

Uses and guidance

Census 2021 is our best estimate of the population of England and Wales on Census Day (21 March 2021). It underpins subsequent official mid-year population estimates.

Publication

On 28 June 2022 we released the [First results from Census 2021 in England and Wales](#) and two statistical bulletins, one focused on England and Wales and one focused on Wales, to explain these data. Further [census data and analysis](#) have been released regularly.

5 . Admin-based population estimates from the Dynamic Population Model

Type of estimate

Official statistics in development for population estimates.

Release information

- Data sources: predominantly administrative data.
- Latest reference period: mid-2023 (30 June 2023).
- Geographical coverage: England and Wales.
- Lowest geographical breakdown: local authority district.
- Population definition: target is usual residents of households and communal establishments.
- Publication type: official statistics in development.

Uses and guidance

Our mid-year admin-based population estimates (ABPEs) for England and Wales are [official statistics in development](#) while we refine our methods and the data sources used to estimate the usual resident population. They do not currently replace official mid-year population estimates and should not be used for policy or decision making.

We have [requested an assessment](#) of our ABPEs and are working to ensure that these meet the standards expected of [accredited official statistics](#) by summer 2025. Our article [Understanding mid-year admin-based population estimates for local authorities in England and Wales](#) provides more information on the ABPEs.

Publication

On 15 July 2024, we published [updated ABPEs for all local authorities in England and Wales, mid-2011 to mid-2023](#). Supporting commentary is provided in our [Population estimates for England and Wales: mid-2023 bulletin](#), alongside the latest official estimates published 15 July 2024. This allows users to compare the ABPEs with official population estimates.

We also published a [Quality and Methodology Information \(QMI\) report for ABPEs](#) and an [update on the data sources used by the DPM to produce ABPEs](#).

We welcome feedback on our ABPEs to help inform our transition. If you would like to contact us, please email us at pop.info@ons.gov.uk.

We plan to publish our next release of ABPE in winter 2024 to 2025. This will include provisional ABPEs for mid-2024.

6 . Population totals from Annual Population Survey

Type of estimate

Annual Population Survey (APS) population estimates, used for official labour market outputs.

Research information

- Data sources: Annual Population Survey.
- Latest reference period: published quarterly.
- Geographical coverage: UK.
- Lowest geographical breakdown: local authority district.
- Population definition: usual residents of households.
- Publication type: official labour market estimates.

Uses and guidance

The main use of populations within the APS data is to provide contextual comparisons of the labour markets for different areas, and for use as a denominator for calculating rates from within the published APS datasets. They are not comparable with the official mid-year population estimates and so, although they feed into the production of other official statistics, they are not an official measure of the population themselves.

Unlike the Labour Force Survey (LFS), the APS has not been reweighted using the population estimates published in November 2023. The APS weighting methodology uses an adjustment based on older Pay As You Earn (PAYE) Real Time Information (RTI) data. The further we move away from the PAYE RTI timepoint, the more unreliable the APS estimates will become. The APS population totals will be inconsistent with those used on the LFS, and the discrepancy between the LFS and APS estimates may also increase over time.

Publication

These statistics are used in the production of labour market statistics, but do not currently form a separate publication of population estimates from the Annual Population Survey.

7 . Population totals from Labour Force Survey

Type of estimate

Labour Force Survey (LFS) population estimates, used for official labour market outputs.

Release information

- Data sources: Labour Force Survey.
- Latest reference period: published monthly.
- Geographical coverage: UK.
- Lowest geographical breakdown: regions - International Territorial Level 1.
- Population definition: usual residents of households.
- Publication type: official statistics in development.

Uses and guidance

The main use of populations within the Labour Force Survey data is to provide contextual comparisons of the labour markets for different areas, and for use as a denominator for calculating rates from within the published LFS datasets. They are not comparable with the official mid-year population estimates.

From our February 2024 labour market release, LFS periods from July to September 2022 onwards have been reweighted to incorporate estimates of the size and composition of the UK population published in November 2023.

Publication

These statistics are used in the production of labour market statistics, but do not currently form a separate publication of population estimates from the Labour Force Survey.

8 . Population by country of birth and nationality

Type of estimate

Discontinued accredited official statistics about the country of birth and nationality of UK residents.

Release information

- Data sources: Annual Population Survey (APS).
- Latest reference period: year ending June 2022.
- Geographical coverage: UK.
- Lowest geographical breakdown: local authority district.
- Population definition: usual residents of households.
- Publication type: official estimate of the population when broken down by country of birth and nationality.

Uses and guidance

The Annual Population Survey (APS) is not designed to measure long-term international migration flows but does give insights into changes and size of the non-UK born and non-UK national population. The population estimates in the statistical bulletin that accompanies the publication are referred to as "stocks", but it is not possible to directly compare stocks from the APS with estimates of migration flows. These estimates are also not comparable with the population totals in the official mid-year population estimates.

Publication

Discontinued. Please see our [International migration research progress update article](#), published on 23 May 2024.

Future developments

Following its introduction, we are investigating how the Transformed Labour Force Survey (TLFS) can be used to produce interim measures of the non-UK-born population. Historically, we have used Labour Force Survey and Annual Population Survey data for this purpose, and it is intended that TLFS will replace these surveys in due course. We plan to update users later in 2024 on our progress.

Our long-term ambition is for the non-UK-born estimate of the population to be consistent with both our admin-based population estimates (ABPE), produced from the Dynamic Population Model (DPM), and our migration flows to ensure a coherent suite of data across population and migration statistics.

9 . Employee population by nationality

Type of estimate

Supporting data and research.

Release information

- Data sources: HMRC Pay As You Earn (PAYE) Real-Time Information (RTI) and nationality from Migrant Worker Scan (MWS).
- Latest reference period: December 2022.
- Geographical coverage: UK.
- Lowest geographical breakdown: regions - Nomenclature Units for Territorial Statistics Level 1.
- Population definition: payrolled employees.
- Publication type: research.

Uses and guidance

Provides information on the number of payrolled employees. The different definition to other population estimates means it is not comparable with official estimates of the population. These are not indicative migration or population estimates and should not be used as such.

The estimates published on 23 March 2023 provide an update to the ad-hoc estimates published in March 2021 and 2022.

Publication

The [Employments from Pay As You Earn Real Time Information: Ad hoc estimates of payrolled employees by NUTS1 region and nationality](#), seasonally adjusted dataset, published 23 March 2023.

10 . Related links

[Future of population and migration: a statistical design](#)

Article | Released 15 July 2024

A description of plans to improve population and migration statistics in England and Wales, underpinning our consultation on the proposed new system.

[Understanding Admin-Based Population Estimates](#)

Methodology | Released 15 July 2024

A paper written in a "frequently asked questions" style aimed at providing accessible information to non-technical audiences.

[International migration research, progress update: May 2024](#)

Methodology | Released 23 May 2024

An update on international migration methods and research.

11 . Cite this methodology

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