

Measures showing the quality of Census 2021 estimates

Measures and interactive tools showing the quality and quality assurance of Census 2021 data in England and Wales.

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To be announced

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1 . Overview

A range of measures were used to help us interpret and quality assure the Census 2021 population estimates. To help users understand the census estimates, we aim to publish these measures by the end of this year:

- local authority comparison tool version 2
- response rates
- Census Quality Survey (CQS) rates
- edit and imputation rates

2 . Comparison tool version 2

About the tool

The Census 2021 local authority comparison tool is an Excel spreadsheet. It replicates the age-sex charts from the quality assurance (QA) assessment of each local authority in England and Wales.

This tool is an updated version of the [tool to compare age-sex estimates in Census 2021](#) published in June 2022.

Users should note that the version of the tool published in June 2022 contained an error in the pop_comparators_2021 background sheet, which affected data displayed in worksheet W05. This error caused the comparator counts for females and males to be switched in the following columns:

- ABPE v2 2020
- ABPE v3 2020
- Mid-year estimate 2020

This issue has been resolved in version 2.

This latest version includes:

- confidence intervals for 2021
- household response rates for 2011
- person response rates by sex and five-year age band for 2011

The tool also contains charts and information at the county and national levels. This means that you can compare data across England and Wales by:

- local authority
- region
- county
- country

For each local authority, the tool also gives:

- estimates of households occupied by usual residents
- response rates by age and sex
- the components of the estimation and adjustment process

Confidence intervals

You can read the definition of confidence intervals in [uncertainty and how we measure it for our surveys](#).

Rounded data

The data in the tool are the same as rounded population estimates published in our [Population and household estimates, England and Wales: Census 2021 bulletin](#). This means all data in the tool are rounded to the nearest hundred. Please be aware that some table totals may not add up to expected values because of this rounding.

This tool includes data from other sources, which we used to quality assure census estimates. These data were subject to statistical disclosure control processes as agreed with data suppliers.

We also processed the data from other sources before using them in the QA process to ensure they were as consistent as possible with the census definitions.

3 . Using the tools

Comparison tool

You can use the comparison tool to access information from the age-sex charts for any local authority in England and Wales. You can also use it to print individual PDF reports for specific local authorities. To find data for a local authority, you must first select that local authority by using the drop-down selection menu in the first tab of the tool.

Software you need

We have developed the tools to use functionality that Microsoft Excel 2016 and later versions provide. The tools may also work in other open source or free Excel alternatives.

4 . Related links

[Quality and methodology information \(QMI\) for Census 2021](#)

QMI | Released 2 November 2022

Details the data strengths, limitations, uses, users and methods used for Census 2021, England and Wales.

[Population and household estimates. England and Wales: Census 2021](#)

Bulletin | Released 28 June 2022

Census 2021 rounded population and household estimates for local authorities in England and Wales, by sex and five-year age group.

[Maximising the quality of Census 2021 population estimates](#)

Methodology | Released 28 June 2022

How we maximised the quality of Census 2021 population estimates during the processing and quality assurance of the final statistics.