

Statistical bulletin

# Housing affordability in England and Wales: 2020

Data on house prices and annual earnings to calculate affordability ratios for national and subnational geographies in England and Wales, on an annual basis.

Contact:  
Nick Woodhill  
better.info@ons.gov.uk  
+44 (0)1633 651731

Release date:  
25 March 2021

Next release:  
To be announced

## Table of contents

1. [Main points](#)
2. [National and regional analysis](#)
3. [Local authority analysis](#)
4. [New and existing housing analysis](#)
5. [Housing affordability data](#)
6. [Measuring the data](#)
7. [Strengths and limitations](#)
8. [Related links](#)

# 1 . Main points

- In England in 2020, full-time employees could typically expect to spend around 7.8 times their workplace-based annual earnings on purchasing a home; this is not significantly different to 2019.
- In Wales in 2020, full-time employees could typically expect to spend around 5.9 times their workplace-based annual earnings on purchasing a home; this is not significantly different to 2019.
- At a local level, earnings grew faster than house prices in nearly 60% of local authority districts, leading to improvements in housing affordability in these areas; however, these were not statistically significant changes.
- In 2020, new dwellings remained less affordable than existing dwellings in both England and Wales.
- The gap between the most and least affordable local authorities continued to decrease in 2020.

## 2 . National and regional analysis

In 2020, we estimated that full-time employees could typically expect to spend around 7.8 times their workplace-based annual earnings on purchasing a home in England. This is not significantly different to 2019.

In Wales, a full-time employee could typically expect to spend around 5.9 times their workplace-based annual earnings on purchasing a home, which is not significantly different to 2019.

## Figure 1: Earnings increased more relative to house prices in England

Annual change in house prices, earnings and affordability ratio, England and Wales, 2019 to 2020

### Figure 1: Earnings increased more relative to house prices in England

Annual change in house prices, earnings and affordability ratio, England and Wales, 2019 to 2020



Source: Office for National Statistics – House Price Statistics for Small Areas, Annual Survey of Hours and Earnings

#### Notes:

1. House prices refer to the median price paid for residential property.
2. Earnings refer to the median workplace-based gross annual earnings for full-time workers.

In England, earnings increased proportionally more than house prices in 2020, making housing slightly more affordable. The median price paid for properties increased by 2.9% in 2020 compared with 2019, while earnings increased by 3.5%.

In Wales, the median price paid for properties increased by 3.1% in 2020 compared with 2019, while earnings increased by 2.4%. This suggests affordability slightly worsened in Wales.

It is important to note that the changes in affordability in both England and Wales were not statistically significant when compared with the previous year.

It is not possible to use these data to examine the effect COVID-19 has had on housing affordability as the latest earnings data available used in this period are as at April 2020.

## 3 . Local authority analysis

At the local level, earnings increased by more than house prices in nearly 60% of local authority districts in England and Wales, leading to improvements in housing affordability in these areas. However, these were not statistically significant changes on the previous year.

Figure 2 is an interactive map that shows the median housing affordability ratios over time, for each local authority in England and Wales.

### Figure 2: Earnings growth driving improved affordability

Housing affordability ratio by local authority district, England and Wales, 1997 to 2020

#### Notes:

1. Median housing affordability ratio refers to the ratio of median price paid for residential property to the median workplace-based gross annual earnings for full-time workers.
2. Data for annual earnings are not available before 1999 and for some local authorities in some years. For these years the earnings relate to annualised weekly earnings. Annualised weekly earnings are not produced on an identical basis to annual earnings and so care should be taken when making comparisons. Refer to the [datasets](#) accompanying this release for information on which ratios are based on annualised weekly earnings.

[Download the data](#)

Although housing affordability improved in nearly 60% of local authorities between 2019 and 2020, looking at longer term trends can help identify significant changes in affordability.

Figure 2 shows that since 1997 housing affordability has worsened overall. Over the last two decades, affordability has worsened the most in London, which is driven largely by increasing house prices. In 2020, 8 of the 10 least affordable local authorities in England and Wales were in London, with the other two being in the surrounding South East region. The most affordable local authorities in 2020 were in the North West, Wales, East Midlands and Yorkshire and The Humber.

### Figure 3: London continued to have the widest range of local authorities' housing affordability

Range of median housing affordability ratio in local authorities for English regions and Wales, England and Wales, 2020

#### Notes:

1. Housing affordability ratio refers to the ratio of median price paid for residential property to the median workplace-based gross annual earnings for full-time workers.
2. The bars in this chart are sorted by the range of affordability ratios.

[Download the data](#)

Figure 3 enables us to compare the affordability ratios between regions and for Wales. It also enables us to look at the variation within an area as the length of bar presents the range between the highest and lowest local authority. This means that we can compare the local authorities within and across larger areas.

Figure 3 shows a large degree of overlap in the affordability of local authorities between most English regions and Wales, indicating similar affordability. In 2020, full-time employees in 290 local authorities (86.6%) could expect to spend between 5 and 15 times their annual earnings on buying a property.

The range in estimated housing affordability across London was 27, down from 29 in 2019. This gap is large mainly because of the large affordability ratio in Kensington and Chelsea. The next highest region was the South East, with a range of 10.7. In 2019, the South West had the second largest range, but dropped from 10.5 in 2019 to 8.1 in 2020. Generally, the most affordable regions have the least variability of local authorities' ratios.

Copeland, in the North West, remained the most affordable local authority in England and Wales in 2020. In Copeland, the average price paid for properties was estimated to be 2.6 times average annual earnings. This is a slight decrease from 2019 but is not statistically significant.

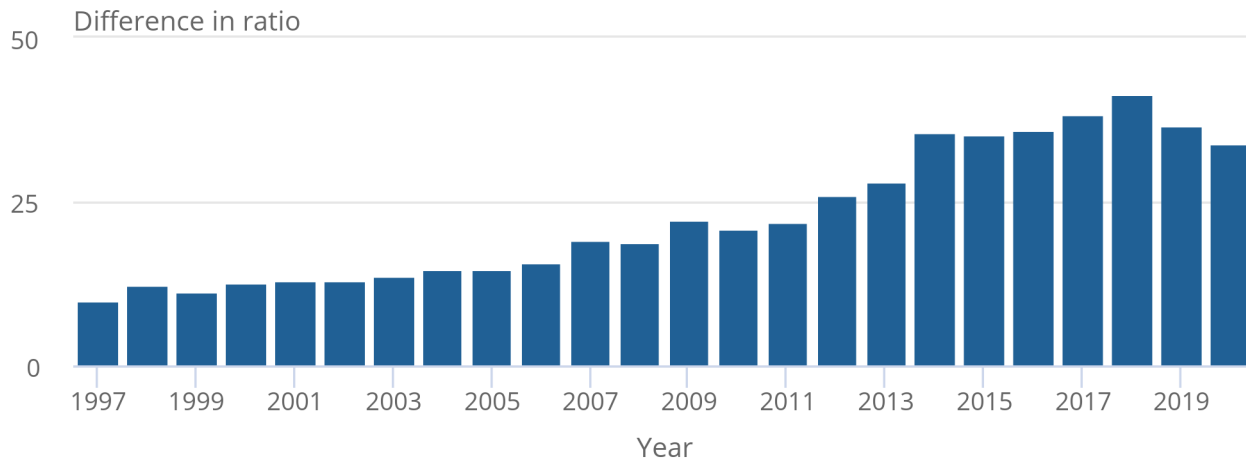
Kensington and Chelsea, in London, remained the least affordable local authority in England and Wales, with average house prices estimated at 36.4 times average annual earnings. This is a decrease from 2019 when house prices were 39.3 times annual earnings in Kensington and Chelsea, although it was not a significant change.

## Figure 4: The gap between the most and least affordable areas continues to shrink in 2020

Difference in median housing affordability ratio, between the most and least affordable local authority, England and Wales, 1997 to 2020

### Figure 4: The gap between the most and least affordable areas continues to shrink in 2020

Difference in median housing affordability ratio, between the most and least affordable local authority, England and Wales, 1997 to 2020



Source: Office for National Statistics – House Price Statistics for Small Areas, Annual Survey of Hours and Earnings

#### Notes:

1. Median housing affordability ratio refers to the ratio of median price paid for residential property to the median workplace-based gross annual earnings for full-time workers.
2. The affordability gap was calculated by deducting the affordability ratio of the most affordable local authority from the affordability ratio of the least affordable local authority for each year. In 2020 Kensington and Chelsea was the least affordable and Copeland was the most affordable.
3. Data for annual earnings are not available before 1999. For these years the earnings relate to annualised weekly earnings. Annualised weekly earnings are not produced on an identical basis to annual earnings and so care should be taken when making comparisons.

The difference in the housing affordability ratio estimates between the most and least affordable local authorities in England and Wales was 33.8 in 2020. This is a decrease from 36.6 in 2019. This year was the second year running that the gap between the most and least affordable local authorities closed since the series peak in 2018.

Nottingham was the only local authority in England and Wales that had a statistically significant change in the ratio of median house prices to median workplace-based annual earnings over five years between 2015 and 2020. In Nottingham, affordability significantly worsened, going from 4.33 in 2015 to 5.16 in 2020. There were no other local authorities that had a statistically significant improvement or decline in affordability over the last five years.

## 4 . New and existing housing analysis

In 2020, full-time employees in England could expect to spend 9.6 times their median gross annual earnings on purchasing a newly built property, and 7.6 times their annual earnings on an existing property.

In Wales, full-time employees on average spent 8.2 times their median gross annual earnings on a newly built property, and 5.7 times their earnings for an existing property.

In Wales, the ratio of house prices to earnings in 2020 was 44% higher for new dwellings than for existing dwellings. This is a slight decrease from 2019 but higher than the previous 13 years.

In England, the ratio of house prices to earnings in 2020 was 27% higher for new dwellings than for existing dwellings, having remained at a similar level since 2017.

In the English regions, the North East had the largest difference in affordability between new and existing dwellings. In that region, the ratio of house prices to earnings for new dwellings was 67% greater than the ratio for existing dwellings.

The regions that had the smallest difference between the housing affordability ratios for new and existing dwellings were London, the South East, South West and East of England. In all these areas, the difference between affordability ratios for new and existing dwellings was less than 20%.

## 5 . Housing affordability data

### [House price to residence-based earnings ratio](#)

Dataset | Released 25 March 2021

Affordability ratios calculated by dividing house prices by gross annual residence-based earnings. Based on the median and lower quartiles of both house prices and earnings in England and Wales.

### [House price to workplace-based earnings ratio](#)

Dataset | Released 25 March 2021

Affordability ratios calculated by dividing house prices by gross annual workplace-based earnings. Based on the median and lower quartiles of both house prices and earnings in England and Wales.

### [House price \(newly-built dwellings\) to workplace-based earnings ratio](#)

Dataset | Released 25 March 2021

Affordability ratios calculated by dividing house prices for newly built dwellings, by gross annual workplace-based earnings. Based on the median and lower quartiles of both house prices and earnings in England and Wales.

### [House price \(newly-built dwellings\) to residence-based earnings ratio](#)

Dataset | Released 25 March 2021

Affordability ratios calculated by dividing house prices for newly built dwellings, by gross annual residence-based earnings. Based on the median and lower quartiles of both house prices and earnings in England and Wales.

### [House price \(existing dwellings\) to workplace-based earnings ratio](#)

Dataset | Released 25 March 2021

Affordability ratios calculated by dividing house prices for existing dwellings, by gross annual workplace-based earnings. Based on the median and lower quartiles of both house prices and earnings in England and Wales.

### [House price \(existing dwellings\) to residence-based earnings ratio](#)

Dataset | Released 25 March 2021

Affordability ratios calculated by dividing house prices for existing dwellings, by gross annual residence-based earnings. Based on the median and lower quartiles of both house prices and earnings in England and Wales.

## 6 . Measuring the data

### Data sources

Median and lower quartile house prices are taken from the [House price statistics for small areas in England and Wales statistical bulletins](#) produced by the Office for National Statistics (ONS). They are calculated using open data from the Land Registry, a source of comprehensive record-level administrative data on residential property transactions.

Median and lower quartile gross annual earnings for full-time workers are taken from the Annual Survey of Hours and Earnings (ASHE) produced by the ONS. ASHE is a sample survey of employees and so the housing affordability ratios presented in this statistical bulletin are estimates, which are less precise than if all employees were included.

Earnings data used in the calculation of housing affordability are gross full-time annual earnings where available. Annualised weekly earnings are used when annual earnings are not available from ASHE. See the [Housing affordability in England and Wales QMI](#) for more information on comparing affordability statistics based on annual earnings against those based on annualised weekly earnings.



Workplace-based earnings refer to the earnings recorded for the area in which the employee works, whereas residence-based earnings refer to the area in which the employee lives.

The analysis in this statistical bulletin uses earnings data based on the place of work rather than the place of residence, unless otherwise stated. This measure of affordability indicates the extent to which employees could afford to live where they work, which is not necessarily where they already live.

The earnings data from ASHE provide a snapshot of earnings in April of each year. The house price statistics from the HPSSAs report the prices paid for residential properties referring to a 12-month period with April in the middle (year ending September).

There are [alternative measures of housing affordability](#) that provide a more detailed picture of affordability for households in different circumstances. These alternative measures are produced at the regional level in England, and the latest data point is 2018. The official affordability ratios in this bulletin are the established headline measure.

## Definitions and input data

Housing affordability estimates are calculated by dividing house prices by annual earnings to create a ratio. House prices are taken from the house price statistics for small areas (HPSSAs) produced by the ONS and refer to the median and lower quartile price paid for residential properties in England and Wales. Earnings data are from the ASHE and refer to median and lower quartile gross annual earnings for full-time employees for a given geographical area.

Because we divide house prices by earnings, a larger housing affordability ratio means that an area is less affordable, whereas a smaller ratio means that an area is more affordable. In addition to the analysis in this statistical bulletin, there are six housing affordability [datasets](#) available. These contain housing affordability data for new dwellings, existing dwellings, and all dwellings combined, and are available on a workplace basis and on a place of residence basis. We produce these statistics on countries, regions, counties and local authority districts in England and Wales.

## Newly built dwellings and existing dwellings

The house price data used to create the affordability ratio estimates are based on the price paid for residential property only, so are not fully comprehensive for all housing in England and Wales as only include those that have transacted. The breakdown of price paid for newly built and existing dwellings is available in the HPSSAs, therefore we have provided affordability ratios for each of these, as well as "all dwellings", which includes both. Affordability estimates for new dwellings and existing dwellings are calculated from the same earnings data. This is because statistics are not available for average earnings of people who buy new dwellings and people who buy existing dwellings. Average earnings of these two groups may differ and so these affordability estimates provide an indication of the affordability of new and existing dwellings rather than a precise figure.

## Revisions

These affordability ratio statistics are revised annually to reflect revisions to the HPSSAs and ASHE data. House prices are subject to revision throughout the entire time series, as there can be a lag in the registration of property transactions.

The house price data used in the affordability ratios in this release are based on the HPSSA data for October 2019 to September 2020, published in March 2021.

The earnings data taken from ASHE is released as provisional for the latest year, and then revised with the following annual release. Earnings data is collected as at April of each year with the results published in October. Therefore, new information can still be received subsequently, and this is inputted into the revised data.

## Quality

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Housing affordability in England and Wales QMI](#).

# 7 . Strengths and limitations

## Earnings versus household income

Official statistics about total household income are not available for all geographical areas presented in these statistics, so earnings data for individuals are used. Not only is it likely that more than one individual in a household would be involved in purchasing a property, there are also other sources of income rather than earnings. These include income recorded through Self-Assessment (including income received from self-employment, property rental and investments) and income from benefits or pensions.

## Measuring uncertainty

Annual Survey of Hours and Earnings (ASHE) data come from a survey and so there is a degree of uncertainty in the earnings estimates because they are based on a sample of the population rather than the entire population. The sample is designed to be as accurate as possible given practical limitations such as time and cost constraints but results from sample surveys are always estimates. This means that the housing affordability ratios presented are subject to some uncertainty. This can have an impact on how changes in the estimates should be interpreted, especially for short-term comparisons.

Sampling error is estimated through providing the coefficient of variation (CV) for each estimate, which is the ratio of standard error of an estimate to the estimate itself, expressed as a percentage. These can be accessed in the [original ASHE datasets](#) and can be used to assess the quality of each estimate. We have retained all estimates, even when the CV is between 10 to 20%, and so it is important to consider the margins of error around the earnings estimates used to derive these housing affordability statistics.

We look at statistical differences over time by looking at the range of plus or minus twice the coefficient of variation around the estimate, as indicated in the ASHE datasets. For example, for estimated earnings of £30,000 with a CV of 5%, we would expect the true population average to be within the range £27,000 to £33,000. We then divide the median house price by the lower and upper earnings limits to derive lower and upper limit affordability ratios. The true value of earnings is likely to lie within these values. We use these ranges to determine if an area's affordability estimate has changed significantly.

## 8 . Related links

[Research Output: Alternative measures of housing affordability: financial year ending 2018](#)

Article | Released 19 March 2020

This includes affordability in relation to varying household income and house price distributions, upfront costs, mortgage repayments, and private rental affordability.

[House price statistics for small areas in England and Wales: year ending June 2020](#)

Bulletin | Released 9 December 2020

House prices and number of transactions for property sales in England and Wales, on an annual basis, updated quarterly.

[Employee earnings in the UK: 2020](#)

Bulletin | Released 3 November 2020

Measures of employee earnings, using data from the Annual Survey for Hours and Earnings (ASHE).