

Statistical bulletin

Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2020

National and subnational mid-year population estimates for the UK and its constituent countries by administrative area, age and sex.



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Correction

26 July 2021 15:48

An error has been found in the title of the data download for Figure 2: Population change and components of change, mid-2019 and mid-2020, local authorities in the UK. The title had read "Figure 2 - Population change and components of change, mid-2018 to mid-2019, local authorities in the UK" but this has now been corrected to read "Figure 2: Population change and components of change, mid-2019 and mid-2020, local authorities in the UK"

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1 . Main points

- The population of the UK at mid-year 2020 was estimated to be 67.1 million, an increase of about 284,000 (0.4%) since mid-year 2019.
- In the year to mid-2020, there were 669,000 deaths; this is the most in a mid-year reference period since 1986, and 13% higher than in the year to mid-2019, reflecting the impact of wave one of the coronavirus (COVID-19) pandemic.
- The number of births in mid-2020 was 701,000, the lowest number of births since 2003 and a continuation of the trend in fewer births seen over recent years.
- In the year to mid-2020, we estimate that 622,000 people immigrated to the UK while 375,000 emigrated; this makes net international migration 247,000.
- In the year to mid-2020, there were around 11% fewer internal moves than in the previous year, reflecting the impact of the pandemic on mobility from March 2020.
- We estimate the population grew in 294 out of the 374 local authorities of the UK in the year to mid-2020, despite the effects of the pandemic and a slowing of national population growth in this period.

The estimates presented cover the period up to 30 June 2020 and so only describe some of the impacts of the early part of the pandemic on the UK population.

Statistician's comment

“The UK's population continues to grow, albeit at the slowest rate in two decades, surpassing 67 million for the first time. However, the 12 months to June 2020 can be broken into two clear parts. The first eight months, when births, deaths and migration patterns were similar to trends seen in recent years, and the four months from March, when the first wave of coronavirus hit. Some of the clearest impacts of the pandemic can be seen in the increase in the number of deaths and reduction in the number of moves made within the UK.”

Neil Park, Population Estimates Unit, Office for National Statistics

Follow the ONS Centre for Ageing and Demography on Twitter [@RichPereira_ONS](#).

2 . The UK population at mid-2020

We estimate the population of the UK in mid-2020 was 67.1 million (67,081,234 with a confidence interval of plus or minus 0.2%). We estimate that the population of the UK continued to grow in the year to mid-2020 but at the slowest rate since 2001 (0.4%).

The slowing of the growth rate in this period is largely from the impact of the coronavirus (COVID-19) pandemic on mortality. The number of deaths in mid-2020 was around 67,000 higher than the average for the previous five years and at the highest level in the last 34 years (since the year to mid-1986). In addition, the number of births recorded in mid-2020 was the lowest since mid-2003, and around 56,000 fewer than the average for the last five years.

In the year to mid-2020, more international immigrants and fewer international emigrants meant an increase in net international migration compared with the previous year. The drivers of change in the UK population in mid-2020 are set out in Table 1.

Table 1: Components of UK population change

| | Mid-2020 | Mid-2019 | 5 year average (mid-2015 - mid-2019) |
|---------------------------------------------|----------|----------|--------------------------------------------|
| Births | 700,700 | 721,700 | 756,900 |
| Deaths | 669,200 | 593,400 | 602,100 |
| Natural change (births minus deaths) | 31,500 | 128,300 | 154,700 |
| International immigration | 622,100 | 609,300 | 618,500 |
| International emigration | 374,900 | 378,800 | 337,200 |
| Net international migration | 247,200 | 230,500 | 281,300 |
| Other changes | 5,700 | 2,500 | 4,000 |
| Total change | 284,400 | 361,300 | 440,000 |
| % change | 0.43 | 0.54 | 0.67 |

Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

The 12 months of population change covered by this release encompasses two distinct periods. The first, from July 2019 to mid-March 2020, was characterised by continuations of trends in fertility, mortality, and an increase in net international migration. The second period, from mid-March 2020 to June 2020, was characterised by a sharp increase in deaths and a low level of net outward international migration. In [Section 11](#), we describe more fully the events covered by these estimates.

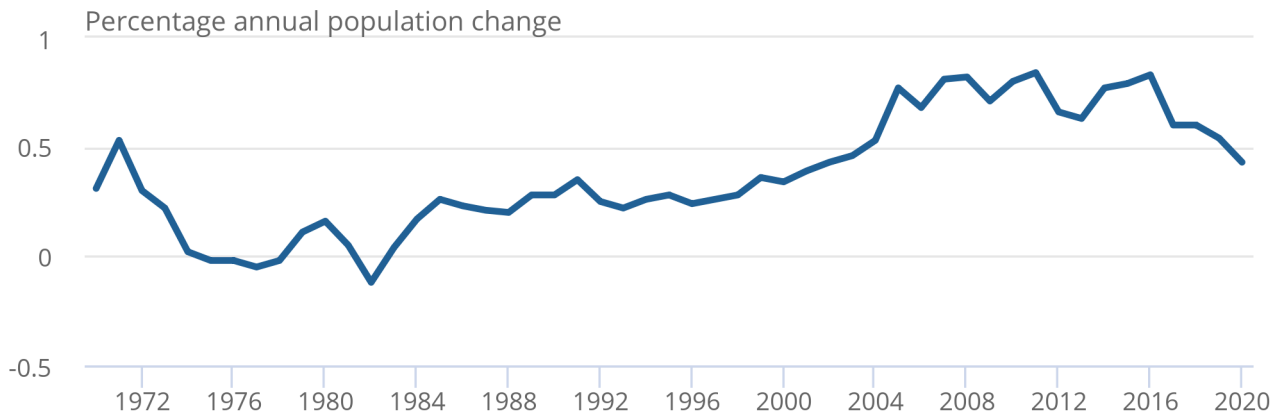
Figure 1 shows that the current level of growth is at its lowest since 2001, representing a fall in a recent trend of high growth, between 0.5 and 0.8%, from mid-2004 to mid-2019. Despite the decline in the rate of population change, it was still higher than in any year between mid-1972 and mid-2001.

Figure 1: UK population continues to grow but at a slower rate than any year since 2001

Annual UK population growth rate mid-1970 to mid-2020

Figure 1. UK population continues to grow but at a slower rate than any year since 2001

Annual UK population growth rate mid-1970 to mid-2020



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

Notes:

1. For a more detailed breakdown of the mid-2020 population estimates data, see our [publication tables](#), [detailed time-series tables](#), or [nomis](#).

3 . Local area population change

The interactive map in Figure 2 shows the overall change in population, and components of change for the year to mid-2020 and mid-2019 for each local authority in the UK.

To use this interactive tool, select a component of change from the drop-down menu to view its impact on the population estimates at local authority level. For deaths, this shows there were more deaths in the year to mid-2020 than mid-2019 across almost all areas of the country.

Estimates presented cover the period up to 30 June 2020 and so only describe some of the impacts of the early part of the pandemic on the UK population. All population estimates are subject to statistical uncertainty. A summary of the available quality information for population estimates is provided in [Section 15: Measuring the data](#)

Figure 2: Population change and components of change, mid-2019 and mid-2020, local authorities in the UK

Download the data

[.xlsx](#)

Changes in local populations can be driven by international migration, internal migration, births and deaths. Despite the effects of the coronavirus (COVID-19) pandemic and a slowing of national population growth in the year to mid-2020, in this period, we estimate the population grew in 294 out of the 374 local authorities of the UK.

The areas with the highest rates of population growth from mid-2019 to mid-2020 were predominantly areas of London such as City of London (12.5%), Camden (3.5%) and Westminster (3.3%). In contrast, the areas that saw the greatest decrease in population were Lambeth (negative 1.3%), West Suffolk (negative 1.0%) and Inverclyde (negative 1.0%).

View more information for local areas on deaths, births, natural change in the population, people moving into and out of the UK, and people moving within the UK in each of the following sections. The [Analysis of Population Estimates tool](#) published as part of this release provides access to detailed information on population change for local authority areas, regions and countries within the UK.

In May 2021 the Office for Statistics Regulation (OSR) published a [review into population estimates and projections](#). This review highlighted that at the national level, the approach taken by the Office for National Statistics (ONS) is fit for purpose and is supported by expert advice from demography and academic partners, but that at the subnational level, the accuracy of estimates is variable because of factors such as the size and mobility of the population in a given area. Further details on our response to this review can be found in [Section 12](#).

4 . Deaths in the year to mid-2020

Deaths in the UK

The number of deaths in the year to mid-2020, was 669,000. This reflects a 12.8% (around 76,000) increase in the number of deaths from the previous year. For the UK as a whole, the year to mid-2020 saw the highest number of deaths since the year to mid-1986, 34 years before. The major factor in this increase was the coronavirus (COVID-19) pandemic with over [55,000 deaths involving COVID-19 in the year to mid-2020](#). In the calendar year of 2020, there were 90,000 deaths involving COVID-19 across the UK. More information on [deaths involving COVID-19 by month of registration](#) is available.

There were other contributory factors to the increase in the number of deaths. These include:

- an increased level of [excess winter mortality](#) (19.6% higher than in the previous winter)
- the number of older people in the population has continued to increase; in mid-2020 there were 12.5 million people aged 65 years and over in the UK, compared with just 10.3 million a decade earlier

Deaths by local authority

In the year to mid-2020, there were a higher number of deaths in 366 of the 374 local authorities in the UK. The increase in deaths was not evenly distributed across the UK, with the South West of England seeing a 7.8% annual increase and London seeing a 21.1% increase.

Despite the impact of the pandemic, the highest rates of death were still in areas with older populations, often located in coastal and rural areas (see Figure 2). However, many of the largest increases in deaths were in areas of London such as Harrow (37.6%), Brent (31.2%), Haringey (28.7%) and Newham (28.4%), showing that infections of COVID-19 were highest in densely populated major cities during the first wave of the pandemic.

However, other areas also saw large increases in deaths in the year to mid-2020, such as South Lakeland which saw a 30.5% annual increase in deaths. This is likely due to South Lakeland having a large population of people aged over 65 and is an indicator of the uneven impact of wave one of the pandemic on different parts of the UK.

View the interactive tool in [Section 3](#) to explore the data by local authority.

5 . Births in the year to mid-2020

Births in the UK

The number of births across the UK continued to fall in the year to mid-2020. The 701,000 births in the year to mid-2020 are the fewest in any year since 2003, despite the population being 7.4 million higher. The number of births peaked at 813,000 in mid-2012, around 112,000 more births than in the year to mid-2020. The decrease since mid-2012 reflects reductions in fertility rates since then.

Birth registrations were suspended during the early part of the pandemic, and this affected how the Office for National Statistics (ONS) collated the data. We estimate that the data in this release cover at least 99.7% of births in the reference period.

However, the decrease in the number of births cannot be attributed to the coronavirus (COVID-19) pandemic as all the births in this period were from conceptions that predate the pandemic.

Births by local authority

The number of births continued to fall across much of the UK reflecting the continued decline in fertility rates seen over recent years. In the year to mid-2020, 79.7% of local authorities in the UK had fewer birth registrations than in the previous year. The combination of fewer births and more deaths means that natural change (the number of births minus deaths) was lower in all but eight UK local authorities in mid-2020 than in the previous year.

For more information on trends in fertility, view our publications on:

- fertility analysis based on calendar year data, for example: [Births in England and Wales: summary tables](#)
- [Vital statistics in the UK: births, deaths and marriages](#)

View the interactive tool in [Section 3](#) to explore the data by local authority.

6 . Natural change in the UK population

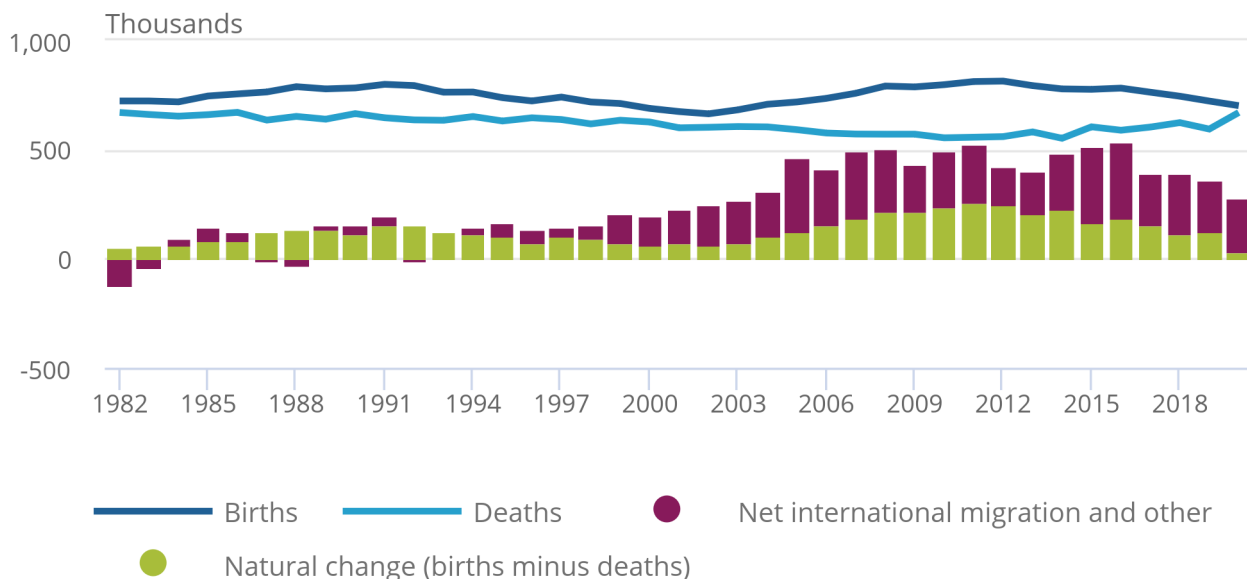
In mid-2020, natural change (the difference between the number of births and the number of deaths) was 31,000 (Figure 3). Largely the result of the increase in deaths, natural change in mid-2020 was lower than the previous year (128,000 in year to mid-2019) and is at its lowest in at least 38 years.

Figure 3: A large decrease in natural change in the year to mid-2020 has contributed to population growth falling to its lowest level since mid-2003

Drivers of UK population growth mid-1982 to mid-2020

Figure 3: A large decrease in natural change in the year to mid-2020 has contributed to population growth falling to its lowest level since mid-2003

Drivers of UK population growth mid-1982 to mid-2020



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

Notes:

1. Figures may not add exactly because of rounding.
2. Other changes include changes to the size of armed forces stationed in the UK and other special population adjustments; and is combined with net international migration for the purposes of this chart.
3. Components of population change are broken down for countries, regions, counties and local authority districts in [Table MYE3](#).

Figure 3 shows that population growth is well below the average levels between mid-2005 and mid-2016 and is continuing its recent decline. The slower growth in recent years is influenced by lower international migration and, particularly this year, much lower natural change (the balance between births and deaths).

View the interactive tool in [Section 3](#) to explore the data by local authority.

7 . International migration in the year to mid-2020

We estimate that 622,000 people immigrated to the UK in mid-2020, while 375,000 emigrated and moved to other countries outside of the UK. This gives net international migration of 247,000.

Broadly, international migration in the year to mid-2020 can be split into two distinct phases. In the period to March 2020, there were relatively high levels of net inward international migration and then from March 2020 onwards this flow became a small net outflow. The combination of these two phases leads to net international migration that is around 20,000 higher than in the year to mid-2019 and lower than the average level of net international migration seen in the past five years (average 281,000).

Estimates are based on International Passenger Survey (IPS) data up to March 2020 and modelled migration estimates for the period after March 2020 when the IPS was suspended because of coronavirus (COVID-19). Figures in this release are therefore methodologically inconsistent with previous figures. View the [QMI](#) for more detail.

International migration by local authority

In the period to June 2020, international migration to the UK was higher than in the previous year, in part because of an increase in students arriving to study in the UK from abroad during this period. In keeping with trends of recent years, the areas with the highest estimates of international immigration were predominantly areas of London such as Westminster and Camden, large major cities such as Birmingham and Manchester, and university towns such as Coventry and Oxford.

A similar pattern is seen with international emigration, with major cities such as Manchester and Birmingham, London boroughs such as Camden and Lambeth, and university towns such as Oxford and Cambridge all having relatively high estimates of international emigration.

The majority of the international migration captured in the current estimates occurred prior to the start of the pandemic in the UK and the travel restrictions that were implemented in March 2020.

View the interactive tool in [Section 3](#) to explore the data by local authority.

8 . Movement of people within the UK

In the 12-month period to mid-2020, an estimated 3.2 million people moved between local authorities in the UK, a decrease in internal migration of 11.5% on the previous year (3.7 million to mid-2019).

The completeness of internal migration estimates for the year to mid-2020 may have been affected by the coronavirus (COVID-19) pandemic, as movement may not have been accompanied by timely updates to the administrative data used to produce the estimates. View the [QMI](#) for more detail.

One of the clearest impacts of the coronavirus (COVID-19) pandemic on internal migration for the year to mid-2020 was a reduction in the number of moves because of the first national lockdown (implemented across the UK in March 2020), which restricted people moving home.

Movement of people by age group

Figure 4 shows the change in rate of moves (number of moves divided by population) by single year of age between mid-2019 and mid-2020, along with average change in the last two years. Ordinarily, there is little difference between the rate of moves in one year and in the next. However, for most ages there was a fairly consistent decrease of between 10% and 15% in the rate of moves made; the main exception was for the 19 to 23 years age group, which saw a much smaller decrease. For this age group, a high proportion of moves are associated with moves to and from higher education. Typically these moves occur between July and October and so were not affected by the pandemic.

Figure 4: In the year to mid-2020 there were fewer moves made by all age groups

Change in rate of moves by single year of age, England and Wales, mid-2019 to mid-2020

Notes:

1. The reduction in the rate of moves for those aged under one year reflects that lags between birth and registration with general practices increased during the period March to June 2020. It is likely that the lower coverage of this age group has suppressed our estimate of moves in the year to mid-2020.

Download the data

[.xlsx](#)

Despite the impact of the pandemic, the overall geographical pattern of internal migration flows in the year to mid-2020 appears to be broadly consistent with previous years, reflecting that around nine months of the year were not affected.

Movement of people into and out of London

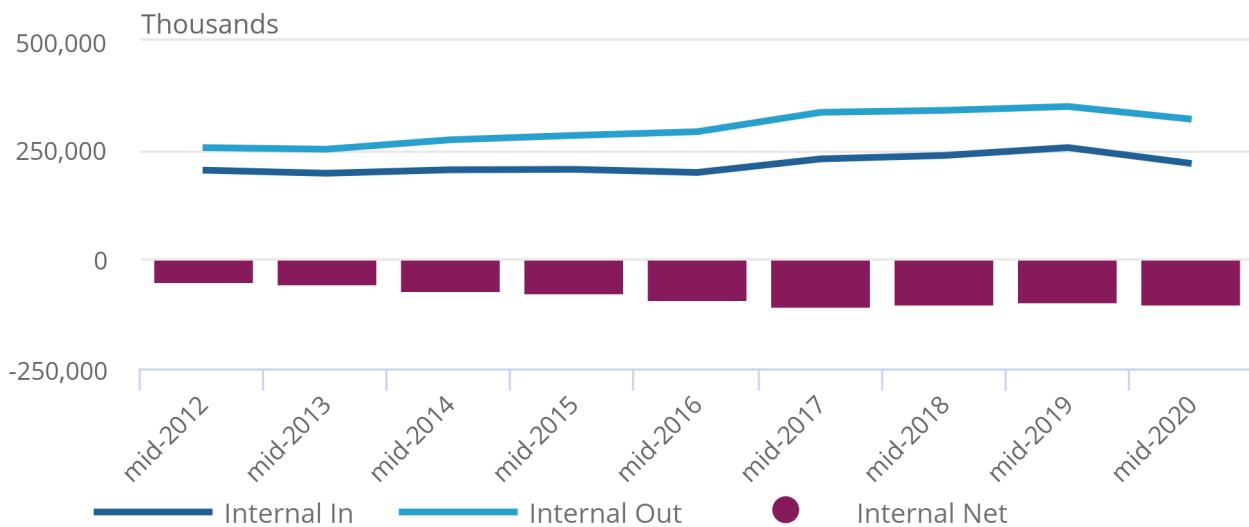
In the year to mid-2020, around 101,000 more people left London for elsewhere in the UK than moved in (Figure 5); this is consistent with the average for the previous three years (101,000). However, the consistency in net flows masks a decrease in the overall number of moves both into and out of London, which reflects the decrease in moves nationally. In the year to mid-2020, 320,000 people left London and 219,000 moved in (8% and 14% fewer than in mid-2019).

Figure 5: London continued to see a net outflow of residents to other parts of the UK

Number of moves made to and from London, 2012 to 2020

Figure 5: London continued to see a net outflow of residents to other parts of the UK

Number of moves made to and from London, 2012 to 2020



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

Notes:

1. Internal migration methods changed for mid-2017 resulting in higher estimates of moves. See appendix 2 in the [Methodology document](#) for further information.

Movement of people between English regions and UK countries

Similarly, across the UK, the net flows were broadly consistent with previous years' data (Figure 6). Most English regions and UK countries that saw net inward or outward migration in mid-2019 had similar flows in mid-2020 with the exception of Northern Ireland and Yorkshire and The Humber.

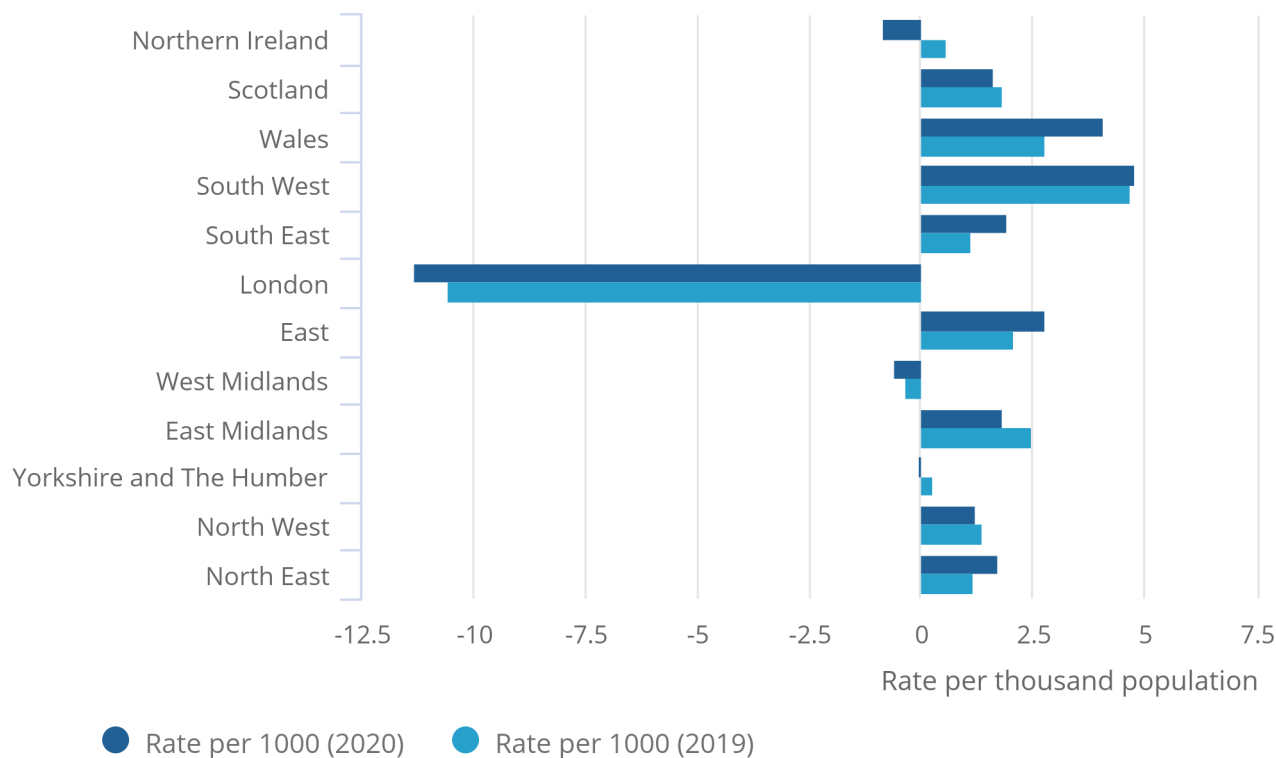
Additionally, more people arrived than departed in the East and South East in comparison with previous years; these trends are largely seen from people moving out of London. However, there were still local authorities within these regions that had a net flow that differed from that of the region, demonstrating considerable within-region variation.

Figure 6: London continued to see the largest outflow of residents to other parts of the UK

Net internal migration flow per 1,000 population (mid-2019 and mid-2020), regions of England and countries of the UK.

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Net internal migration flow per 1,000 population (mid-2019 and mid-2020), regions of England and countries of the UK.



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

The pattern of moves within the UK are largely similar to that of previous years as most of the year (eight months) was unaffected by the pandemic. It is reasonable to assume that the majority of moves were made over the course of the first eight months because after March 2020, government restrictions on movement were introduced as a result of the pandemic.

The data here would reflect for example, flows out of local authorities to student areas before the pandemic began. However, following the temporary closure of universities across England and Wales, large numbers of students left their place of study and returned to their parental home or other residence. If they did not register with a new GP after making this move, then their move would not be captured by the administrative data sources used to compile internal migration.

View the interactive tool in [Section 3](#) to explore the data by local authority.

9 . Population change for UK countries

While all four countries of the UK saw population increases in the year to mid-2020 there has been a divergence between the rates of population change.

In the year to mid-2019 all four countries of the UK had population increases of between 0.45% and 0.64%. In the year to mid-2020, England and Wales have continued to grow at a similar rate while the populations of Scotland and Northern Ireland have grown more slowly (at 0.05% and 0.1% respectively). Table 2 shows the populations and growth rates for each country of the UK.

Table 2: Drivers of population change for UK countries: mid-2020

| | Population | % change | Population | % change |
|-------------------------|-------------------|---------------------|-------------------|---------------------|
| | mid-2020 | 2019 to 2020 | mid-2019 | 2018 to 2019 |
| UK | 67,081,000 | 0.43 | 66,797,000 | 0.54 |
| England | 56,550,000 | 0.47 | 56,287,000 | 0.55 |
| Wales | 3,170,000 | 0.53 | 3,153,000 | 0.45 |
| Scotland | 5,466,000 | 0.05 | 5,463,000 | 0.46 |
| Northern Ireland | 1,896,000 | 0.10 | 1,894,000 | 0.64 |

Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

All four countries saw their rate of population growth slow because of a combination of a higher number of deaths and a lower number of births. Figure 7 shows how the rates (per 1,000 population) of births, deaths, migration and population changed for each country, between the year to mid-2019 and the year to mid-2020.

For Northern Ireland, where the rate of population increase fell from 6.4 per thousand in mid-2019 to 1 per thousand in mid-2020, internal and international migration were responsible for most of the slower rate of increase.

In Scotland, which saw the second largest decrease in population growth rate, the main driver of slower population growth is a decrease in international migration.

In the year to mid-2020 the population of Wales increased at the fastest rate of the UK countries, reflecting higher net migration from other countries and from other parts of the UK.

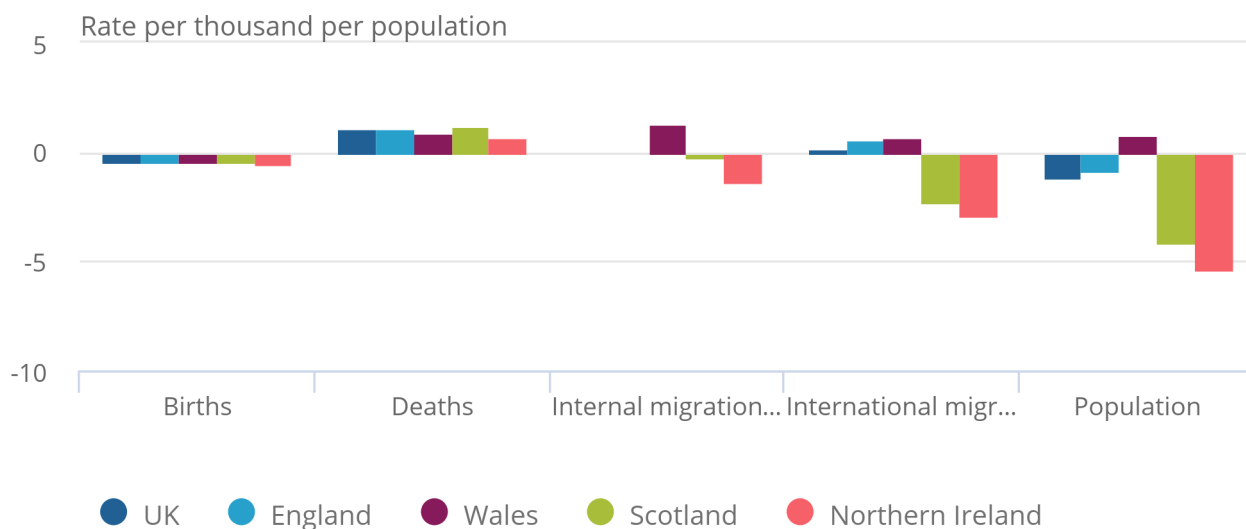
Unrelated to the pandemic, all four countries also saw a continuation in the trend of a decreasing number of births.

Figure 7: More deaths and fewer births occurred across all four UK countries

Difference between mid-2019 and mid-2020 components of population change, rate per 1,000 per population

Figure 7: More deaths and fewer births occurred across all four UK countries

Difference between mid-2019 and mid-2020 components of population change, rate per 1,000 per population



Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

10 . Age structure of the UK population

The age composition of the UK population is determined by the patterns of births, deaths and migration that have taken place in previous years. The result is that the broad age groups in the UK population are changing at different rates, with the number of those aged 65 years and over growing faster than those under 65 years. Similarly, whereas most areas of the UK have become older in the year to mid-2020, median age was lower in some areas of the UK compared with mid-2019.

The median age of the UK population increased from 40.3 years in mid-2019 to 40.4 years in mid-2020. Table 3 shows that of the countries of the UK, Wales had the highest median age (42.4 years), followed by Scotland (42.1 years), England (40.2 years) and Northern Ireland (39.2 years).

Table 3: National and regional age structure of UK, mid-2020

| | Median Age (years) | Percentage of population aged 65 years and over | Percentage of population aged 85 years and over |
|---------------------------------|---------------------------|--------------------------------------------------------|--------------------------------------------------------|
| UK | 40.4 | 18.6 | 2.5 |
| England | 40.2 | 18.5 | 2.5 |
| North East | 41.7 | 20.1 | 2.5 |
| North West | 40.3 | 18.8 | 2.4 |
| Yorkshire and the Humber | 40.2 | 18.9 | 2.4 |
| East Midlands | 41.4 | 19.6 | 2.5 |
| West Midlands | 39.6 | 18.7 | 2.5 |
| East | 41.8 | 20.0 | 2.8 |
| London | 35.8 | 12.2 | 1.7 |
| South East | 41.9 | 19.7 | 2.8 |
| South West | 44.1 | 22.4 | 3.1 |
| Wales | 42.4 | 21.1 | 2.7 |
| Scotland | 42.1 | 19.3 | 2.3 |
| Northern Ireland | 39.2 | 16.9 | 2.1 |

Source: Office for National Statistics, National Records of Scotland, Northern Ireland Statistics and Research Agency – Population estimates

In the North East of England, the median age fell from 41.8 to 41.7 years driven by increased numbers of deaths and increases in net international and internal migration.

In Wales, the combination of higher numbers of deaths (mostly of older age) and increased international and internal migration (generally of younger adults and their families) meant that the median age fell from 42.5 to 42.4 years.

The South West (22.4%), Wales (21.1%), and the North East (20.1%) were the areas with the highest percentage of people aged 65 years and over. Whereas the South West (3.1%), South East (2.8%) and East of England (2.8%), had the highest proportion of people aged 85 years and over.

Figure 8: Interactive population pyramid, mid-2001 to mid-2020

The population pyramids in Figure 8 illustrate how numbers of older people within the population can change year on year because of variations in cohort size. Notably, the large cohort of people born around 1946 and 1947 are now aged around 73 years.

11 . Coronavirus and the impact on population estimates

The population estimates presented in this release reflect the population of the UK at the end of June 2020 towards the end of the first wave of the coronavirus (COVID-19) pandemic. During the period between March and June 2020, the UK was in lockdown for much of the time and these restrictions had direct impacts on population change at both the national and subnational level. Events that affected the components of population change and that feed into the population estimates include:

- a “first wave” of deaths from the coronavirus pandemic occurred during the period up to June 2020
- moving home within the UK became more difficult from 23 March 2020, however, many moves for study had already occurred before the pandemic
- international immigration became more difficult, with the Foreign and Commonwealth Office advising against overseas travel from 17 March 2020
- areas with the other populations we measure, such as prisoners or members of armed forces, had fewer people joining those populations in the months up to June 2020

Estimates of the mid-year population reflect changes in the net position of long-term international migration (LTIM) between July 2019 and June 2020. Historically, estimates of LTIM are sourced from the Office for National Statistics’ (ONS’) [Migration Statistics Quarterly Report](#) using information on UK arrivals and departures collected via the International Passenger Survey (IPS). However, measures of LTIM feeding population estimates in mid-2020 were affected by the suspension of the IPS in mid-March following the restrictions imposed during the pandemic.

To overcome the lack of IPS data from March to June 2020, [measures of LTIM were modelled](#) to estimate UK international migration.

The migration estimates that form the input into mid-year 2020 population estimates are presented within [Quarterly Long Term International Migration Estimates July 2019 to June 2020](#). A description of how each quarter’s data is constructed can be found in our [methodology guide](#).

Early indicators of UK population size and age structure: 2020

In April 2021 an [early indicator of the population of the UK](#) was published. This suggested a slightly higher population than shown in this release (by around 32,000). The main difference is caused by a slightly higher estimate of net international migration being used in that release and the unavailability, at the time, of data on home and foreign armed forces personnel.

12 . Upcoming population estimates

Mid-2021 population estimates

The mid-2021 population estimates for England, Wales and Northern Ireland will be based primarily on the results of the 2021 censuses adjusted for births, deaths and migration in the period between census day and mid-year. Mid-2021 population estimates for Scotland will be rolled forward from 2020 as the census in Scotland is taking place in March 2022.

Following the publication of the Census [2021 results for England and Wales](#), we will conduct reconciliation work to understand how and why the estimates based on Census 2021 differ from those based on the mid-year estimates rolled from 2011. The insights gained will be used to improve the production of future population estimates and will result in a revised back series of population estimates for the period 2012 to 2020, which will increase the coherence between the census and mid-year estimates.

Population and migration statistics transformation

The estimates of long-term international migration included in this release are the best possible given the available data sources. However, they remain experimental, and users should be aware that they are likely to be revised as new sources of information become available, and as we refine our methodology for measuring migration. For more information on our future plans for improving migration statistics, please see [population and migration statistics system transformation – recent updates](#). The Office for National Statistics (ONS) intends to publish an update on our progress to develop admin-based population estimates and understand the impact of the pandemic on administrative data sources at the end of 2021.

Office for Statistics Regulation review into population estimates and projections

In May 2021, the Office for Statistics Regulation (OSR) published a [review of population estimates and projections](#). The review identified that we use internationally recognised methods and sources as the basis for population estimates and projections that are fit for purpose for national level estimates. However, the review also identified the need to keep methods current and responsive especially at some lower levels where there is more variability in the data. We are already progressing work in this area as we consider how best to meet these recommendations, and we will report back to the OSR about our plans while continuing to gather feedback on them more broadly. We recognise the need for:

- development work to keep these sources current and responsive
- developing how we work and engaging with users of our statistics, particularly at a local level
- planning how we move to Census 2021-based estimates, and take on board improvements from the population and migration statistics transformation programme

A more detailed response to the review is planned for July 2021.

13 . Population estimates data

[Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland](#)

Dataset | Released 25 June 2021

National and subnational mid-year population estimates for the UK and its constituent countries by administrative area, age and sex (including components of population change, median age and population density).

[Analysis of population estimates tool for UK](#)

Dataset | Released on 25 June 2021

Interactive analysis of estimated population change for England and Wales, by geography, age and sex. Annual estimates are from mid-2011 onwards.

[Population estimates: quality information](#)

Dataset | Released on 25 June 2021

Quality information on the mid-year population estimates at local authority and region level for England and Wales, by age and sex.

[Internal migration: detailed estimates by origin and destination local authorities, age and sex](#)

Dataset | Released on 25 June 2021

Annual mid-year data on internal migration moves into and out of each local authority in England and Wales, including moves to and from Scotland and Northern Ireland.

[Internal migration: by local authority and region, age and sex](#)

Dataset | Released on 25 June 2021

Annual mid-year data on internal migration moves for England and Wales, by local authority, region, age and sex.

[Internal migration: matrices of moves by local authority and region \(countries of the UK\)](#)

Dataset | Released on 25 June 2021

Annual mid-year data on internal migration moves between local authorities and regions in England and Wales, Scotland and Northern Ireland.

14 . Glossary

Components of change

Components of change are the factors that contribute to population change. This includes births and deaths (commonly referred to as natural change) and net migration. Migration includes movements of people between England and the various countries of the world (international migration) and between local authority areas within the UK (internal migration).

Internal migration

Internal migration describes moves made between local authorities, regions or countries within the UK. Unlike international migration, there is no internationally agreed definition.

Median age

Median age is the age that divides a population into two numerically equal groups (that is, half the people are younger than this age and half are older).

Net flow

The net flow is the inflow minus the outflow. Positive net flows (greater than zero) indicate the inflow is larger than the outflow, that is, a net inflow. Negative net flows (less than zero) indicate the outflow is bigger than the inflow that is, a net outflow.

Usually resident population

These data estimate the “usually resident population”. This is the standard UN definition and includes only people who reside in a country for 12 months or more, making them usually resident in that country. As such, visitors and short-term migrants are excluded.

15 . Measuring the data

Quality

The mid-year estimates for England and Wales are produced by the Office for National Statistics (ONS), for Scotland by [National Records Scotland \(NRS\)](#) and for [Northern Ireland by the Northern Ireland Statistics and Research Agency \(NISRA\)](#).

Estimates are produced by updating a census base using a standard demographic method, the cohort component method, and cover the usually resident population. The previous year’s resident population, by single year of age, is aged by one year, and then flows are applied to cover births, deaths, immigration, emigration and people entering and leaving "special populations" such as people in prisons or the armed forces.

Detailed information on the methods and data sources used can be found in the following methodology guides:

- [England and Wales](#)
- [Northern Ireland \(PDF, 204KB\)](#)
- [Scotland \(PDF, 840KB\)](#)
- [Consistency of methods used for population statistics across UK countries](#)

The [Quality and Methodology Information reports](#) for England and Wales mid-year population and internal migration estimates describe how estimates were created, quality assurance, their appropriate usage, strengths and limitations.

The following quality information is also provided:

- [Quality Indicators](#) indicate the percentage of a local authority population that consists of a difficult to estimate population groups.
- The [MYE comparator tool](#) compares population estimates for 2011 and the current year against aggregate administrative data.
- [Measures of statistical uncertainty](#) are available for local authority population estimates for each year from 2011 to 2019. Uncertainty measures for mid-2020 will be made available later in the year.

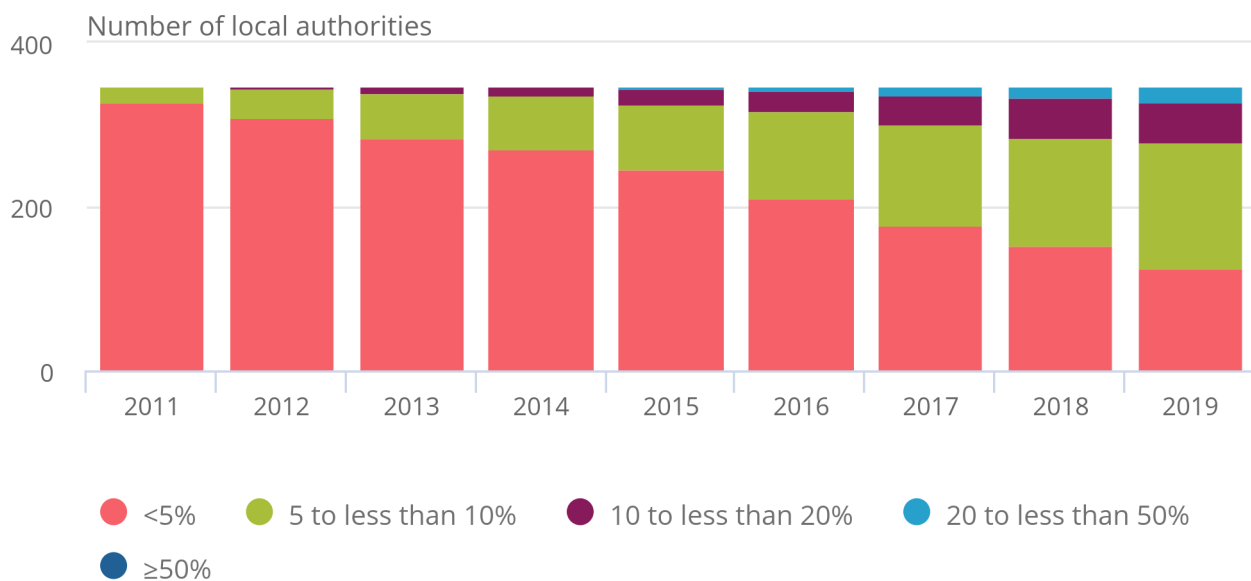
Figure 9 demonstrates how uncertainty increases over the intercensal decade. In 2011, when estimates were primarily census based, 330 (95%) of local authorities had uncertainty measures of less than 5% of their population estimates; by mid-2019, 127 (36%) had uncertainty measures of less than 5%, and 69 had uncertainty measures of greater than 10%.

Figure 9: The level of uncertainty in population estimates increased through the decade

Nearest 95% uncertainty interval range, as a percentage of the mean of the simulated mid-year estimates

Figure 9: The level of uncertainty in population estimates increased through the decade

Nearest 95% uncertainty interval range, as a percentage of the mean of the simulated mid-year estimates



Source: Office for National Statistics – Statistical measures of uncertainty

16 . Strengths and limitations

Strengths

- the estimates form the official population estimates of the UK, providing timely data between censuses
- information from administrative registers, such as the numbers of births and deaths, is considered to be very reliable
- estimates include data on moves between local authorities, and between countries of the UK (internal migration)
- these estimates are coherent with [small-area population estimates](#) and official [population projections](#)

Limitations

- the data are not counts, rather they are estimates created by combining many different data sources
- the data sources used are the best available on a nationally consistent basis down to local authority level, but the estimates are subject to the coverage and error associated with these sources
- errors can accumulate over time; consequently, population estimates for the years immediately following a census year tend to be more accurate than for those immediately prior to a census year
- international migration in particular is estimated using multiple data sources; in England and Wales the latest data are not always available, necessitating the use of averages

National Statistics status for population estimates

Date of [last assessment](#): 24 November 2020

17 . Related links

[Early indicators of UK population size and age structure](#)

Dataset | Released 16 April 2021

A preliminary indication of the age and sex structure of the UK population for mid-year 2020, and a range of scenario-based values for end of year 2020.

[Mid-year population estimates for Scotland: 2020](#)

Report | Released 25 June 2021

The latest annual mid-year population estimates for Scotland and its constituent NHS Board and council areas, produced by National Records of Scotland (NRS).

[Mid-year population estimates for Northern Ireland: 2020](#)

Report | Released 25 June 2021

The latest annual mid-year population estimates for Northern Ireland, produced by the Northern Ireland Statistics and Research Agency (NISRA).

[Population estimates by output areas, electoral, health and other geographies, England and Wales: mid-2019](#)

Bulletin | Released 9 September 2020

National population estimates for Super Output Areas and experimental statistics for health geographies, electoral wards, Parliamentary constituencies, and National Parks in England and Wales.

[Measures of statistical uncertainty in ONS local authority mid-year population estimates: 2011 to 2019](#)

Report | Released 9 December 2020

Measures of statistical uncertainty are research statistics that aim to give users of Office for National Statistics (ONS) local authority mid-year population estimates (MYEs) information about their quality.