Birmingham Population

Mid-2022 estimate

March 2024





Summary

The Office for National Statistics (ONS) estimate Birmingham's resident population at 1,157,603 in 2022. This represents 70% people living in the West Midlands Combined Authority area¹.

The population in Birmingham has increased 1.3% (14,318) since 2021. The strongest population growth was for people in their 20's.

Between 2012 and 2022 the population increased by 72,900 or 6.7%.

2012 to 2022 Birmingham gained 74,000 people through natural change, a net flow of 90,300 people from overseas, and a net outflow of -112,300 Birmingham residents to other areas of the UK. There was also an adjustment to account for <u>Unattributable Population Change (UPC)</u>².

During the last decade, the number of pre-school aged children declined by almost 10,000.

The most rapid population growth between 2012 and 2022 was seen amongst those aged 10-14 (12,100), 55 to 59 (11,600) and 35 to 39 (10,500) years.

Introduction

The Office for National Statistics (ONS) estimate Birmingham's mid-2022 resident population at 1,157,603.

Birmingham is the largest UK city outside of London, it lies at the heart of the West Midlands. Over recent decades the city has been revitalised through economic restructuring, having large areas of the city regenerated and its environment transformed.

Birmingham is a superdiverse city having 51% of the population belonging to an ethnic group other than White, migrating from 187 countries. From the arrival of the Irish, who came to Birmingham looking for work, through to the Windrush era when people from the Caribbean and south Asia answered the call to help rebuild the country after the Second World War – through to the expansion of the European Union, various conflicts and political situations, which most recently saw refugees arrive from Afghanistan, Syria and Ukraine.

Birmingham is also a young city with 36% of the population below 25 years, this compares with the national average of 29%. In addition, Birmingham universities supported 76,093 full-time students during 2021/22. Around 22% of students were from overseas, the majority were from a non-European Union country. 28.3% of Birmingham students domicile in the UK were from elsewhere in the West Midlands region, 27.6% from Birmingham and 9.5% from London.

Table 1: Domicile address of Birmingham full-time students 2021/2022

| Domicile address by region | students | % |
|--------------------------------------|----------|-------|
| Birmingham | 16,660 | 27.6 |
| West Midlands (excluding Birmingham) | 17,055 | 28.3 |
| East Midlands | 4,535 | 7.5 |
| East of England | 3,245 | 5.4 |
| London | 5,715 | 9.5 |
| North East | 290 | 0.5 |
| North West | 2,240 | 3.7 |
| South East | 5,280 | 8.8 |
| South West | 2,335 | 3.9 |
| Yorkshire and The Humber | 1,310 | 2.2 |
| outside of England, within UK | 1,595 | 2.6 |
| UK students studying in Birmingham | 61,215 | 100.0 |

Rounding to the nearest 5, Source: Higher Education Statistics Agency (HESA)

¹ The West Midlands Combined Authority (WMCA) consists of Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton.

² Unattributable population change (UPC) is the remaining population change that can be seen between census-based and rolled forward population estimates, which are not explained by any of the components of population change that ONS measure.

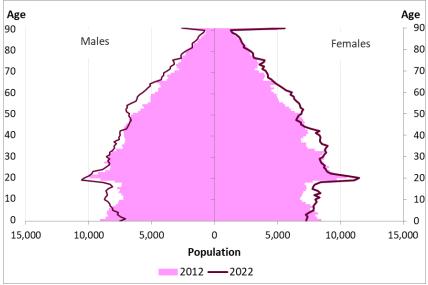
Mid-2022 Population Estimates

The Office for National Statistics (ONS) estimate Birmingham's resident population at 1,157,603 in 2022. This represents 70% of people living in the wider West Midlands Combined Authority area and 20% of the West Midlands region.

The population in Birmingham increased 6.7% (72,942) between 2012 and 2022 and 1.3% (14,318) since 2021.

Age Structure

Figure 1: Mid-2012 compared with mid-2022 population - Birmingham.



Source: ONS, mid-2021 population estimates, Crown Copyright 2024

Figure 1 shows an age pyramid of Birmingham's population in 2012 and 2022.

The solid line shows the 2022 population age structure.

Each line of the pyramid represents a single year of age of population. The size and makeup of the population is determined by births, deaths and migration that have taken place in previous years.

It shows Birmingham's young age structure with more people in the younger ages than older. The median age in Birmingham is 34 years this compares with 40 years for the region and 40.5 years for England.

It shows the difference between the sexes – mid 2022 estimate shows more males than females for child ages to 18 years, all other age groups generally show more females. The largest differences were shown in the oldest age groups (due to female longevity), late 30's and student ages.

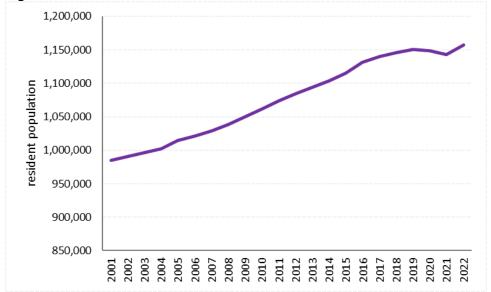
The bulge around early 20's is due to students coming to the city's universities and is also influenced by international migration.

The narrowing at the base of the pyramid reflects the recent decline in fertility rates.

Comparing the 2012 and 2022 pyramids we see population added to all age groups except preschool aged children and those in their late 40's or 20's.

Population change

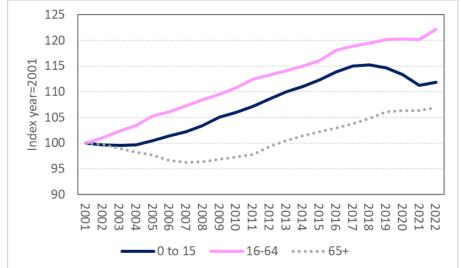
Figure 2: mid-2001 to mid-2022



Source: ONS, mid-2001 to mid-2011, rebased 2012 to 2020, mid-2021 and mid-2022 population estimates, Crown Copyright 2024

Figure 2 shows the 2001 time series of population estimates. The chart shows rapid growth from the start of the millennium to the more modest growth of recent years. It also includes a decline in population between 2019 and 2021.

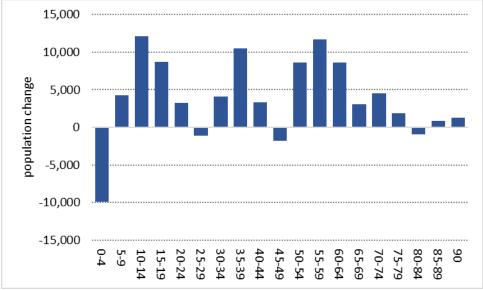
Figure 3: 2001 to 2022 Population growth for broad age groups - Birmingham



Source: ONS, mid-2001 to mid-2011, rebased 2012 to 2020, mid-2021 and mid-2022 population estimates, Crown Copyright 2024

Figure 3 shows index of change from 2001 (base year) to 2022 for broad age groups in Birmingham. Population growth was strongest for the working age population with consistent year on year growth. The child population also show strong growth until 2017 with subsequent years showing a decline. Pensioners initially showed a steady decline but have experienced strong growth since 2012. Population change for more detailed age groups are shown in figures 4 and 5.

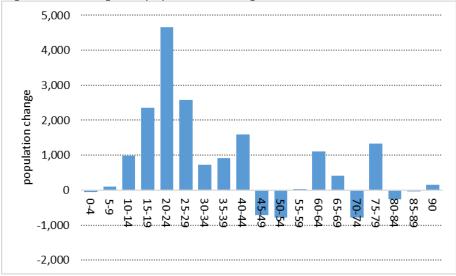
Figure 4: Birmingham population change 2012 to 2022.



Source: ONS, mid-2022 population estimates, Crown Copyright 2024

Figure 4 shows that during the last decade the number of pre-school aged children declined by almost 10,000, the only other age groups to show decline were those aged 45-49 years (-1,800), 25-29 years (-1,100) and 80-84 years (-1,000). The most rapid growth was seen amongst those aged 10-14 (12,100) ,55 to 59 (11,600) and 35 to 39 (10,500).

Figure 5: Birmingham population change 2021 to 2022



Source: ONS, mid-2022 population estimates, Crown Copyright 2024

Figure 5 shows that the strongest population growth 2021 to 2022 was for people in their 20's, the 20 to 24 population increased by 4,700 and 25 to 29s increased by 2,600. While most 5-year age groups showed growth, there were losses for five groups, those aged 70 to 74 (-800), 50 to 54 (-790), 45 to 49 (-700) showed the greatest losses.

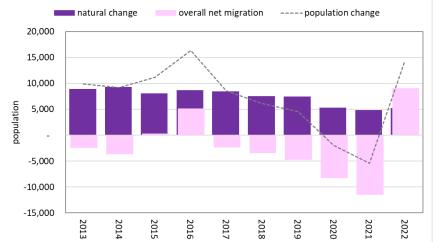
Components of population change

Table 2: Components of population change - Birmingham

| Start | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| End | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Start population | 1,084,661 | 1,094,531 | 1,103,724 | 1,114,932 | 1,131,271 | 1,139,893 | 1,146,050 | 1,150,646 | 1,148,692 | 1,143,285 |
| Natural change: births | 17,533 | 17,231 | 16,829 | 17,163 | 17,017 | 16,186 | 15,706 | 15,230 | 14,582 | 14,674 |
| Natural change: deaths | 8,577 | 7,954 | 8,733 | 8,468 | 8,522 | 8,647 | 8,215 | 9,905 | 9,749 | 9,464 |
| Naturual change: net | 8,956 | 9,277 | 8,096 | 8,695 | 8,495 | 7,539 | 7,491 | 5,325 | 4,833 | 5,210 |
| Internal migration: in | 46,425 | 51,280 | 50,023 | 50,728 | 59,271 | 57,640 | 57,618 | 52,839 | 58,409 | 59,091 |
| Internal migration: out | 54,012 | 60,691 | 57,428 | 56,300 | 68,335 | 68,613 | 71,348 | 66,209 | 77,562 | 75,125 |
| Internal migraiton: net | - 7,587 | - 9,411 | - 7,405 | - 5,572 | - 9,064 | -10,973 | -13,730 | -13,370 | -19,153 | - 16,034 |
| International migration: in | 15,180 | 16,649 | 18,342 | 21,362 | 18,339 | 19,278 | 22,533 | 21,918 | 18,510 | 32,657 |
| International migration: out | 10,083 | 10,888 | 10,620 | 10,646 | 11,681 | 11,767 | 13,526 | 16,818 | 10,908 | 7,548 |
| International migration: net | 5,097 | 5,761 | 7,722 | 10,716 | 6,658 | 7,511 | 9,007 | 5,100 | 7,602 | 25,109 |
| Overall net migration | - 2,490 | - 3,650 | 317 | 5,144 | - 2,406 | - 3,462 | - 4,723 | - 8,270 | -11,551 | 9,075 |
| Unexplained population change (UPC) | 3,270 | 3,434 | 2,832 | 2,489 | 2,556 | 2,133 | 1,722 | 1,183 | 1,376 | |
| Other changes | 134 | 132 | - 37 | 11 | - 23 | - 53 | 106 | - 192 | - 65 | 33 |
| All population change | 9,870 | 9,193 | 11,208 | 16,339 | 8,622 | 6,157 | 4,596 | - 1,954 | - 5,407 | 14,318 |
| End population | 1,094,531 | 1,103,724 | 1,114,932 | 1,131,271 | 1,139,893 | 1,146,050 | 1,150,646 | 1,148,692 | 1,143,285 | 1,157,603 |

Source: ONS, rebased mid-2012 to mid-2020, mid-2021 and mid-2022 population estimates, Crown Copyright 2024

Figure 6: Components of population change - Birmingham



Source: ONS, rebased mid-2012 to mid-2020, mid-2021 and mid-2022 population estimates, Crown Copyright 2024

Table 2 and Figure 6 show the components of population change for Birmingham between 2012 and 2022. In all years, natural change and international migration added to the population. The data shows the continuation of the longstanding net out migration trend for internal migration (more people leaving Birmingham to go and live elsewhere compared with those migrating inwards from other areas of the UK).

Overall, the population increased by 72,900 or 6.7% 2012 to 2022. This comprised of an additional 74,000 people through natural change (births minus deaths), a net inflow of 90,300 people from overseas, a net outflow of -112,300 Birmingham residents to other areas of the UK and an adjustment of 21,000 was added to account for Unattributable Population Change (UPC).

Internal migration net outflow for the second half of the decade is almost double that of the 1st half, part of this difference is attributable to a change in the National Statistics data source and method for estimating migration flows. Net international migration flows for 2021 to 2022 were higher than any of the previous years shown. The latest international migration flow was triple the average flow between 2012 and 2019 (pre-pandemic years).

2012 to 2020 Rolled forward mid-year population estimates compared to 2021 Census based estimates.

Mid-year population estimates are published annually between censuses, they use the previous census as a benchmark. Difference is expected between the estimates rolled forward from the 2011 Census and the 2021 census-based estimates. The further away from the benchmark year we are, the more mid-year estimates drift. ONS routinely investigates the size and cause of the drift and adjust population estimates using the new Census.

In Birmingham, the difference between the rolled forward estimates (RFE) and the censusbased estimates (CBE) was 34,120. Reasons for the drift are due to a variety of reasons including revised international migration estimates and the incorporation of very late death and birth registrations.

Table 3 shows the difference between RFE and CBE, net internal migration was underestimated by almost 20%, net international migration was underestimated by 6.7%, and there were a few very late birth and deaths registrations.

After reconciliation and making all relevant adjustments to the population estimates, there was still 24,524 unattributable population change (UPC3). This was allocated across the decade to create a plausible distribution of change. The UPC distribution is shown in table 2.

Table 3: Rolled forward estimates compared with 2021 Census based estimates.

| Components | RFE ⁴ | ⁵ CBE | Difference | % Difference |
|-------------------|------------------|------------------|------------|--------------|
| Birth | 165,091 | 165,113 | -22 | 0.0 |
| Deaths | -86,854 | -86,981 | 127 | -0.1 |
| Internal in | 467,980 | 531,255 | -63,275 | -11.9 |
| Internal out | 550,979 | 633,787 | -82,808 | -13.1 |
| Internal net | -82,999 | -102,532 | 19,533 | -19.1 |
| International in | 135,260 | 186,666 | -51,406 | -27.5 |
| International out | 76,479 | 117,814 | -41,335 | -35.1 |
| International net | 64,245 | 68,852 | -4,607 | -6.7 |
| Special | -141 | - | -141 | - |
| Other | 64 | 26 | 38 | - |
| UPC | - | 24,524 | - | - |
| Population change | 59,406 | 69,002 | -9,596 | -13.9 |

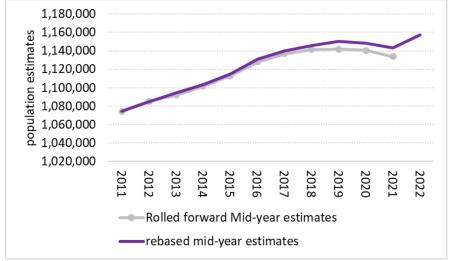
Source: ONS, rebased mid-2012 to mid-2020, mid-2021 and mid-2022 population estimates, Crown Copyright 2024

³ Unattributable population change (UPC) is the remaining population change that can be seen between census-based and rolled forward population estimates, which are not explained by any of the components of population change that ONS measure.

Rolled forward estimates (RFE) in this case refers to the 2011 mid-year estimate as the starting point that is aged on, and data on births, deaths and migration are used to reflect population change during 2011 to 2021.

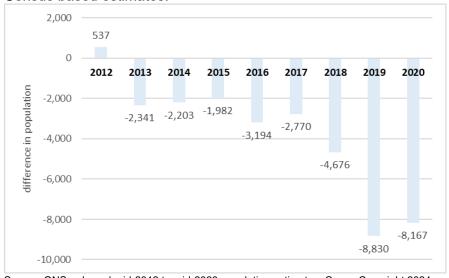
⁵ Census based estimates (CBE) refers to the mid-year population estimates that were based on the 2021 Census.

Figure 7: Comparison of rolled forward mid-year estimates and census-based estimates.



Source: ONS, rebased mid-2012 to mid-2020, mid-2021 and mid-2022 population estimates, Crown Copyright 2024

Figure 8: 2012 to 2020 Rolled forward mid-year population estimates compared to 2021 Census based estimates.



Source: ONS, rebased mid-2012 to mid-2020 population estimates, Crown Copyright 2024

Figure 7 and figure 8 shows that for all years there was an under-estimate of Birmingham's population, except for 2012, where there was a slight over-estimate (537). The first half of the decade showed a 9,200 under-estimate of the population, the second half shows an under-estimate of 34,000. Confirming the size of the drift increases the further away from the base year that we are.

Population Projections

2021 interim National Population Projections were published by the Office for National Statistics (ONS) on 30th January 2024. The population in England was estimated at 56.6 million in 2021 and is expected to rise to 59.3 million (4.9%) by 2026 and to 61 million (7.9%) in 2031. The 2021 projection shows higher increases in population than previous bases (Figure 9).

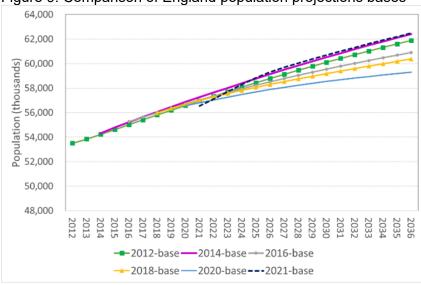


Figure 9: Comparison of England population projections bases

Source: ONS, Crown Copyright 2024

ONS are not producing sub-national interim projections. Sub-national 2022-based population and household projections are due to be published early Spring 2025 and late Spring/early Summer, respectively.

Figure 10 shows the comparison between current and previous population projection bases for Birmingham. 2018 and 2012 base projections produced population estimates for 2021 and 2022 that were closest to the mid-2021 and 2022 population estimates, however, thereafter the projection results for 2018 and 2012 start to diverge.

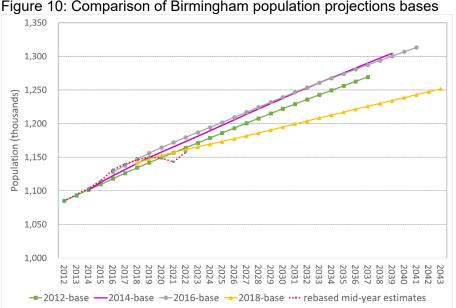


Figure 10: Comparison of Birmingham population projections bases

Source: ONS, Crown Copyright 2024

Core cities

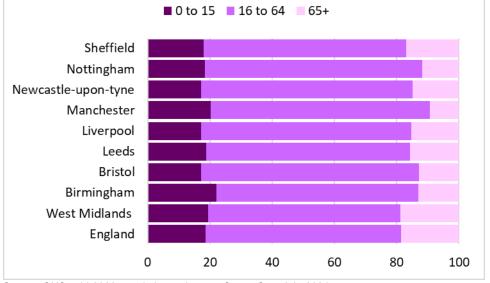
Table 4 shows population size and population change in England, West Midland region and the 8 English core cities. Birmingham (1,157,603) is the largest core city followed by Leeds (822,483). Birmingham's population growth was very similar to the English average. At 12.3% population growth between 2012 and 2022, Manchester showed the most rapid population growth of English core cities, Sheffield the least at 2.2%.

Table 4: Population change – England, region and core cities

| | 2022 | 2021 | 2021-2022 | 2012 | 2012-2022 |
|---------------------|------------|------------|-----------|------------|-----------|
| England | 57,106,398 | 56,554,891 | 1.0 | 53,506,812 | 6.7 |
| West Midlands | 6,021,653 | 5,956,200 | 1.1 | 5,640,300 | 6.8 |
| Birmingham | 1,157,603 | 1,142,494 | 1.3 | 1,084,661 | 6.7 |
| Bristol | 479,024 | 471,117 | 1.7 | 433,264 | 10.6 |
| Leeds | 822,483 | 809,036 | 1.7 | 758,029 | 8.5 |
| Liverpool | 496,770 | 484,488 | 2.5 | 465,365 | 6.7 |
| Manchester | 568,996 | 549,853 | 3.5 | 506,869 | 12.3 |
| Newcastle-upon-Tyne | 307,565 | 298,264 | 3.1 | 280,869 | 9.5 |
| Nottingham | 328,513 | 319,566 | 2.8 | 307,436 | 6.9 |
| Sheffield | 566,242 | 554,401 | 2.1 | 553,842 | 2.2 |

Source: ONS, rebased mid-2012 to mid-2020, mid-2021 and mid-2022 population estimates, Crown Copyright 2024

Figure 11: mid-2022 population estimates by broad age groups – core cities. ■ 0 to 15 ■ 16 to 64 ■ 65+



Source: ONS, mid-2022 population estimates, Crown Copyright 2024

Figure 11 shows population age structure by broad age groups. Birmingham (22%) ranked first for the proportion of population that were children, followed by Manchester (20%). Birmingham (13.1%) ranked fifth for the proportion of population that are 65 years or older, Sheffield (17%) ranked 1st and Manchester (9.4%) 8th.

For more information about Birmingham's population please see other Briefings on the city council website and the Birmingham Observatory.