Office for National Statistics

Statistical bulletin

Variant subnational population projections for England: 2016-based

2016-based variant subnational population projections, including a variant based on a 10-year trend of migration data and variants with higher and lower levels of net international migration.

Table of contents

1 . Main points

- The West Midlands is the region with the largest negative difference in population in the 10-year migration variant, with 38,300 fewer residents compared with the principal projection by mid-2026.

- London is the region with the largest positive difference in population in the 10-year migration variant, with 36,200 more residents compared with the principal projection by mid-2026.

- Liverpool is the local authority with the largest negative difference in population in the 10-year migration variant, with 17,900 fewer residents compared with the principal projection by mid-2026.

- Ealing is the local authority with the largest positive difference in population in the 10-year migration variant, with 13,200 more residents compared with the principal projection by mid-2026.

- The West Midlands is the region with the largest difference in old age dependency ratio (OADR) between the principal projection and 10-year migration variant by mid-2026.

- City of London is the local authority with the largest percentage change in population within the high and low international migration variants.

2 . Purpose of these projections

Building on the subnational principal projections published in May 2018, this bulletin illustrates alternative possible future sizes and age structures of the population in the regions, counties, local authorities, clinical commissioning groups and NHS regions of England. These alternatives can be used alongside the principal projection; they do not replace it.

The 10-year migration variant was created because of user demand for analysing the differences arising from migration assumptions based off 10 years of historical data rather than the five years that are used in the principal projection. The high and low international migration variants were created to inform user interest in these areas. This bulletin highlights the most notable differences between the principal projection and the variants. More information can be found in the methodology documents and datasets accompanying this release.

3 . Things you need to know about this release

Population projections provide an indication of the future size and age structure of the population based on mid-year population estimates and a set of assumptions of future fertility, mortality and migration.

These are the first official 2016-based variant subnational population projections and provide an alternate set of projections from the 2016-based principal subnational population projections, created to offer users a range of alternate scenarios to illustrate the consequences of particular sets of assumptions.

High and low international migration variants are available, constrained to the equivalent migration variants of the national population projections.

The 10-year migration variant projection uses migration data from years ending mid-2007 to mid-2016 to set the migration assumptions of the projection. This differs from the five years of data (years ending mid-2012 to mid-2016) used in the principal projection and the high and low international migration variants. The 10-year migration variant includes different methodologies because of the time range of data used to set assumptions. Further information about these changes can be found in the QMI and methodology documents released with this bulletin.

All three variant projections provide information at region, county, local authority, clinical commissioning group and NHS region levels. The variant projections use the same geographies and boundaries as the 2016-based subnational principal population projection. They do not incorporate any change made after 2016.

Variant household projections based on the 2016-based variant subnational population projections will be released on 16 May 2019.

4 . The West Midlands and London are the regions with the largest differences in residents between the principal projection and 10-year migration variant

The West Midlands is the region with the largest negative difference in population when comparing the principal projection with the 10-year migration variant (Table 1), with 38,300 fewer residents in mid-2026. This contrasts with London, which is projected to have 36,200 more residents in mid-2026 in the 10-year migration variant.

These differences are caused by lower average levels of migration to these areas in the 10-year migration variant compared with the 5-year average used in the principal projection; additionally, there is a subsequent indirect impact on numbers of births and deaths.

Table 1: Population difference by region between the principal projection and 10-year migration variant by mid-2026, England

Region	2026 population: Principal projection	2026 population: 10-year migration variant	Difference
West Midlands	6,125,200	6,086,900	-38,300
North West	7,466,900	7,443,500	-23,400
East Midlands	5,008,400	4,996,300	-12,100
South West	5,880,900	5,871,600	-9,300
North East	2,687,100	2,689,000	1,900
East	6,573,400	6,584,600	11,200
Yorkshire and The Humber	5,615,500	5,631,300	15,800
South East	9,604,800	9,622,800	18,000
London	9,543,400	9,579,600	36,200

Source: Office for National Statistics

Notes

1. All regions shown in Table 1 experience population growth between 2016 and 2026. The difference shown is purely that between the variants. Back to table

5 . Liverpool and Ealing are the local authorities with the largest change in residents between the principal projection and 10-year migration variant

Table 2 shows local authorities with the largest negative differences in population between the principal projection and 10-year migration variant by mid-2026. Liverpool is the local authority with the largest negative differences. These differences are once again largely caused by lower average levels of migration to these areas in the 10-year migration variant compared with the 5-year average.

Table 2: Largest negative population differences in local authorities between principal projection and 10-year migration variant by mid-2026, England

Local authority	2026 population: principal projection	2026 population: 10-year migration variant	Difference
Liverpool	518,300	500,400	-17,900
Coventry	405,700	387,900	-17,800
Birmingham	1,209,500	1,194,300	-15,200
Manchester	585,400	573,300	-12,100
Greenwich	314,700	304,400	-10,300
Tower Hamlets	354,500	344,300	-10,200
Hackney	309,500	300,100	-9,400
Camden	280,200	271,000	-9,200
Aylesbury Vale	220,100	212,900	-7,200
Islington	257,500	251,000	-6,500

Source: Office for National Statistics

Notes

1. All local authorities shown in Table 2 experience population growth between 2016 and 2026. The difference shown is purely that between the variants. Back to table

Table 3 shows local authorities with the largest positive differences in population between the principal projection and 10-year migration variant by mid-2026. Out of the 10 local authorities shown, seven are in the London region. In contrast to the local authorities in Table 2, these changes are because of higher average levels of migration to these areas in the 10-year migration variant compared with the 5-year trend in migration used in the principal projection.

Table 3: Largest positive population difference in local authority between principal projection and the 10-year migration variant by mid-2026, England

Local Authority	2026 population: principal projection	2026 population: 10-year migration variant	Difference
Ealing	351,900	365,100	13,200
Bradford	543,000	552,800	9,800
Harrow	258,600	268,300	9,700
Merton	217,700	226,100	8,400
Redbridge	333,600	341,700	8,100
Enfield	361,600	368,600	7,000
Hounslow	284,400	291,200	6,800
Swindon	231,700	238,200	6,500
Hammersmith and Fulham	182,000	187,600	5,600
East Riding of Yorkshire	344,500	349,800	5,300

Source: Office for National Statistics

Notes

1. All local authorities shown in Table 3 experience population growth between 2016 and 2026. The difference shown is purely that between the variants. Back to table

Figure 1 is an interactive tool that illustrates how the population of each local authority in England is projected to change in both the principal projection and the 10-year migration variant. By choosing a local authority, you will see total population change, natural change (the difference between births and deaths), net international migration and net internal within England migration over the 10 years to mid-2026.

Figure 1: Population change and components of change for local authorities in England between mid-2016 and mid-2026

6 . The West Midlands old age dependency ratio is projected to change the most between the principal projection and 10-year migration variant

Use the interactive map (Figure 2) to see how local authority-level old age dependency ratios (OADRs) and population age structures are projected to change by broad age group between the principal projection and 10-year migration variant in mid-2026.

Figure 2: Population age composition by broad age groups and old age dependency ratio for local authorities in England, principal and 10-year variant, mid-2026

The OADR is defined as the proportion of people of State Pension age (SPA) relative to the working age population, expressed as the number of pensioners per 1,000 working age population. For example, an OADR of 303 indicates there are 303 people of SPA per 1,000 working age people. Under current legislation, SPA will gradually rise to age 67 years for both sexes by 2028. Note that being over SPA does not necessarily mean someone is retired, nor that all working age people are in employment.

The OADR can change for a number of reasons. More people of SPA migrating into an area can raise the OADR, similarly large numbers of younger people moving to the area can lower the OADR.

The West Midlands is the region that experiences the largest differences in OADR between the 10-year migration variant and the principal projection. The OADR for West Midlands decreases from 314 in mid-2016 to 307 in mid-2026 in the 10-year migration variant; this compares with an OADR of 304 in mid-2026 in the principal projection.

At a local authority level, the City of London has the highest change in OADR with a difference of 126 by mid-2026. In the principal projection the OADR is 442 and in the 10-year migration variant it is 316. West Somerset has the second-largest difference in OADR by mid-2026 between the principal projection and 10-year migration variant. The principal projects West Somerset to have an OADR of 711 in mid-2026 compared with an OADR of 679 in the 10-year migration variant.

A difference in OADR of 10 or greater between the principal and 10-year migration variants is uncommon by mid-2026 and is only present in 20 of the 326 local authorities.

7 . City of London is the local authority with the largest percentage change in the population in the high and low international migration variants

The high international migration variant is projected to increase the mid-2026 population of England to 59.2 million compared with 58.5 million in the principal projection. Equally, the low migration variant projects an increase to the population at a slower rate, to 57.8 million in mid-2026.

Birmingham, England's largest local authority in terms of population, also has the largest actual difference in population in the high and low international migration variants by mid-2026. It is projected to gain 16,800 more people in the high international migration variant by mid-2026 and have 16,800 fewer people with the low international migration variant, which is either an increase or decrease of 1.4% in the population compared with the principal projection.

City of London is most affected in these variants in percentage terms, gaining or losing 10.8% of the local authority's population by mid-2026, an actual difference of 1,300.

London local authorities generally have the largest differences in the high and low international migration variants. This is because London has the greatest flows of international migrants so is most impacted by a net loss or gain in the migration variants. Westminster has the second-highest percentage change of 5.1%. Except for Oxford and Cambridge, the top 15 local authorities most affected as a percentage of the population are all based in London. The local authorities least affected by the migration variant are much more rural, with Cannock Chase experiencing the smallest percentage change of 0.3% between the variants by mid-2026.

Our interactive population pyramids (Figure 3) allow you to explore the results of the variant 2016-based population projections for local authorities, counties, regions and England as a whole. By choosing the name of an area you can see how the size, age and sex structure of its population is projected to change between the variants. You can create age groups by highlighting your desired ages and can also compare two areas at once.

Figure 3: Population age structure by single year of age and sex for local authorities, counties, regions and England as a whole, mid-2016 to mid-2041

8 . Links to related statistics

A range of related statistics are also available with today's release (9 April 2019).

- a range of [datasets](#) containing all the projections data; this includes summaries and detailed data, as well as projected population by components of change

- the subnational principal population projection [bulletin](#) from May 2018

- the principal subnational projection is also on the [Nomis website](#), where you can use the "Query data" option to do customised extracts for your chosen year, country, sex and age combination

In addition, we have some [frequently asked questions](#) about the statistics.

9 . Quality and methodology

The [Subnational population projections Quality and Methodology Information](#) report contains important information on:

- the strengths and limitations of the data and how it compares with related data

- uses and users of the data

- how the output was created

- the quality of the output including the accuracy of data

We have also published a [methodology report](#) to provide information on how the projections were produced. The report also summarises the improvements we have made to our methods and changes to source data.