

National population projections, 2014-based Statistical Bulletin



Coverage: **UK**

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Geographical Area: **Country**

Theme: **Population**

Main points

- The UK population is projected to increase by 9.7 million over the next 25 years from an estimated 64.6 million in mid-2014 to 74.3 million in mid-2039.
- The UK population is projected to reach 70 million by mid-2027.
- Assumed net migration accounts for 51% of the projected increase over the next 25 years, with natural increase (more births than deaths) accounting for the remaining 49% of growth.
- Over the 10 year period to mid-2024, the UK population is projected to increase by 4.4 million to 69.0 million. This is 249,000 higher than the previous (2012-based) projection for that year.
- The population is projected to continue ageing, with the average (median) age rising from 40.0 years in 2014 to 40.9 years in mid-2024 and 42.9 by mid-2039.
- By mid-2039, more than 1 in 12 of the population is projected to be aged 80 or over.

Introduction

This bulletin presents the main findings from the 2014-based national population projections. These replace the 2012-based projections published by the Office for National Statistics (ONS) in November 2013 and are based on the population at 30 June 2014. The national projections are produced by the ONS on behalf of the National Statistician and the Registrars General of Scotland and Northern Ireland.

National population projections by age and sex are produced for the UK and its constituent countries every 2 years. The projections are based on the most recently available mid-year population estimates and a set of underlying demographic assumptions regarding future fertility, mortality and migration (these are explained later in this bulletin).

The national projections provide an estimate of the future size and age structure of the population of the UK (and of its constituent countries). They ensure that users can work on consistent assumptions.

Some examples of uses made of the population projections include:

- the Office for Budget Responsibility use the projections as a key input to their long-term fiscal projections published in the fiscal sustainability report
- the Department for Work and Pensions use the projections extensively to produce forecasts of expenditure for benefits and pensions, and as a key input for analysis on policy areas such as extending working lives
- the Department for Education use the projections as the basis for their projections of future school pupil numbers
- the national population projections provide the base for other products such as subnational population projections and household projections, which are widely used for resource allocation and informing planning decisions by local authorities

However, the population projections have limitations. They are not forecasts and do not attempt to predict the impact that future government policies, changing economic circumstances or other factors (for example, government policies on immigration or student fees), might have on demographic behaviour (however, the projections of people of pensionable age do take account of future changes in State Pension Age under existing legislation).

The projections are the outcome of a calculation showing what happens if particular assumptions are made. As a forecast of the future population they would inevitably be proved wrong, to a greater or lesser extent. As well as not taking into account future government policies, there is uncertainty in the underlying data – for example, estimates of the current population or of past migration flows – on which the projections are based. In addition, there is inevitable uncertainty in the assumptions reflecting the inherent unpredictability of demographic behaviour. The latter reason means that projections become increasingly uncertain the further they are carried forward into the future.

To give users an indication of this, a number of variant projections are also available which provide other future scenarios based on alternative assumptions of future fertility, mortality and migration. These do not represent upper or lower bounds, but do illustrate what the population could look like if, for example, fertility was to become lower than assumed for the principal projection, which is the main or central projection. An analysis of the "accuracy" of the projections – describing how close previous sets of projections have been to the subsequent population estimates – is provided in the [National Population Projections Accuracy Report \(1.03 Mb Pdf\)](#).

This bulletin focuses on the first 25 years of the projections. A [longer-term principal projection to mid-2114](#) is also available on our website but this should be treated with caution in view of the increased uncertainty on demographic behaviour that far in the future.

This release contains tables showing the detailed projections by age and sex, commentary on the statistics and information on the methodology and underlying assumptions. For more information on

how our population projections meet user needs along with information on their fitness for purpose, including strengths and limitations, please see the report on [quality and methodology \(290.9 Kb Pdf\)](#).

2014-based principal population projections

The UK population is projected to increase by 4.4 million over the next decade, rising from 64.6 million in 2014 to 69.0 million at mid-2024. This increase, of 6.9% of the 2014 population, is equivalent to an average annual growth rate of 0.7% each year over the decade. Over the full 25 year period of the projection, the UK population is projected to increase by 15.0% to 74.3 million by mid-2039, with an annual average growth rate of 0.6%. It is projected that the population of the UK will reach 70 million by mid-2027 (Table 1).

The population of England is projected to increase by 7.5% by mid-2024. The populations of the other UK countries are also projected to increase, but at a slower rate. Northern Ireland is projected to increase by 5.3% over the same period, while Scotland and Wales are both projected to increase by 3.1% by mid-2024.

Table 1: Estimated and projected population of the United Kingdom and constituent countries, mid-2014 to mid-2039

| | 2014 | 2019 | 2024 | 2029 | 2034 | 2039 | millions |
|------------------|------|------|------|------|------|------|----------|
| United Kingdom | 64.6 | 66.9 | 69.0 | 71.0 | 72.7 | 74.3 | |
| England | 54.3 | 56.5 | 58.4 | 60.2 | 61.8 | 63.3 | |
| Wales | 3.1 | 3.1 | 3.2 | 3.2 | 3.3 | 3.3 | |
| Scotland | 5.3 | 5.4 | 5.5 | 5.6 | 5.7 | 5.7 | |
| Northern Ireland | 1.8 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | |

Table source: Office for National Statistics

Table notes:

1. Figures may not sum due to rounding.

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Births, deaths and net migration

Of the 4.4 million projected increase in the UK population over the next 10 years, some 2.3 million (51%) is a result of projected natural increase (more births than deaths) while the remaining 49% is the assumed net number of migrants (Table 2). Conversely, of the 9.7 million projected increase

in the population over the full projection period to mid-2039, 4.7 million (49%) is due to projected natural increase and 5.0 million (51%) is due to assumed net migration.

Table 2: Projected components of change, United Kingdom, mid-2014 to mid-2039

| | millions | | | | |
|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2014 to 2019 | 2019 to 2024 | 2024 to 2029 | 2029 to 2034 | 2034 to 2039 |
| Population at start | 64.6 | 66.9 | 69.0 | 71.0 | 72.7 |
| Births | 3.9 | 4.0 | 4.0 | 4.0 | 4.1 |
| Deaths | 2.9 | 2.9 | 3.0 | 3.2 | 3.4 |
| Natural change | 1.1 | 1.2 | 1.0 | 0.8 | 0.6 |
| Net migration | 1.2 | 0.9 | 0.9 | 0.9 | 0.9 |
| Total change | 2.3 | 2.1 | 2.0 | 1.7 | 1.6 |
| Population at end | 66.9 | 69.0 | 71.0 | 72.7 | 74.3 |

Table source: Office for National Statistics

Table notes:

1. Figures may not sum due to rounding.

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Past international migration also has an indirect impact on the population through its effect on the numbers of births and deaths – for example, women who were born overseas but who give birth after migrating to the UK will increase the numbers of births, while the numbers will be decreased by women born in the UK but who migrate overseas before giving birth. Assumptions of future fertility and mortality are based on past trends of all residents irrespective of where they were born.

Because migration is concentrated at young adult ages, the assumed level of future net migration has a much greater effect on the projected number of women of childbearing age and hence the projected number of births, than on projected number of deaths over the 25 year period of the projection. Of the 4.7 million natural increase projected between mid-2014 and mid-2039, only 3.1 million would occur if net migration were zero (at each and every age) throughout the projection period (Table 3). Thus about 68% of the projected increase in the population over the period mid-2014 to mid-2039 is either directly attributable to future migration (51% of projected

growth), or indirectly attributable to future migration through its effect on births and deaths (17% of projected growth).

Care should be taken in interpreting these figures as "the indirect impact of migration". A fuller assessment of this would consider:

- births to, and deaths of, people who had migrated to the UK before 2014
- how to account for births to, and deaths of, UK-born people who had emigrated and subsequently returned to the UK
- how to account for births to, and deaths of, UK-born people who had parents (or grandparents, etc) who were themselves immigrants and the corresponding figures for foreign-born people descended from UK emigrants

A discussion of the [impact of migration on the number of births](#) is available.

Table 3: Projected population growth by component, United Kingdom, mid-2014 to mid-2039

millions

| | |
|---|-----|
| Total population increase between 2014 and 2039 | 9.7 |
| Resulting from: | |
| Assumed net migration | 5.0 |
| Natural change assuming zero net migration | 3.1 |
| Additional natural change from assumed level of net migration | 1.7 |

Table source: Office for National Statistics

Table notes:

1. Figures may not sum due to rounding.

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Changing age structure

The population projections also provide a picture of how the age structure of the UK population might develop in the future. Projected changes in the age structure are illustrated by the population pyramid in Figure 1. This represents the population of the UK as estimated in mid-2014 and projected for mid-2039. Each bar in the pyramid represents a single year of age and the length of the bar relates to the number of people of that age in the population. The solid bars represent the estimated population for mid-2014 and the lines represent the projected population for mid-2039.

The change in a population pyramid over time illustrates the impact of the demographic factors of ageing, births, deaths and migration.

The pyramid for 2014 shows:

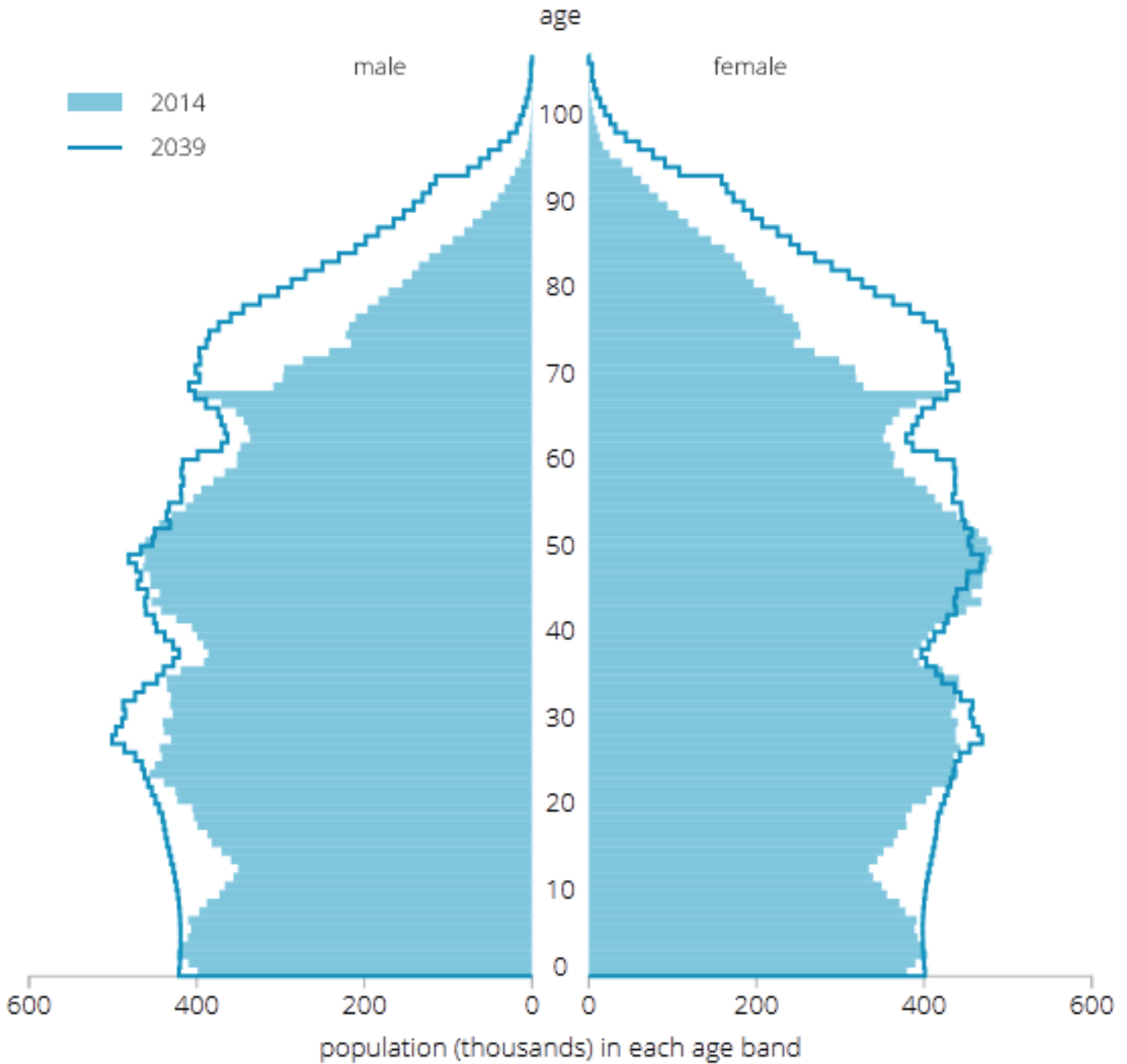
- a sharp spike in the population, for those aged 66 and 67 years old, which reflects the high numbers of births in the period immediately after the Second World War
- the wider area of the pyramid for those aged around 45 to 55 who were born during the baby boom of the 1960s
- the sharp narrowing of the pyramid for people aged around 12 years, a consequence of low numbers of births just after the turn of the millennium, and the increasing broadening of the base of the pyramid from the higher numbers of births in recent years
- females outnumbering males at older ages, reflecting their historically higher life expectancy

The pyramid for 2039 shows:

- the number of children is projected to increase
- the working aged population will remain broadly similar
- there is a marked increase in the population at older ages, largely attributable to the large number of the population who were born in the 1960s moving into the higher age groups

Figure 1 shows the pyramid for the Principal Projection. Similar pyramids for variant projections, and for the UK and its constituent countries, are available in the [Interactive Population Pyramids](#).

Figure 1: Age structure of UK population, mid-2014 and mid-2039



Source: Office for National Statistics

Notes:

1. Ages above 105 are not included on the population pyramid.

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These projected changes in age structure are summarised for age groups in Table 4, which shows the faster growth in the older age groups. The average (median) age rises from 40.0 years in 2014 to 40.9 years in mid-2024 and 42.9 by mid-2039.

Table 4: Projected population by age, United Kingdom, mid-2014 to mid-2039

| | millions | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| Ages | 2014 | 2019 | 2024 | 2029 | 2034 | 2039 |
| 0 to 14 | 11.4 | 12.0 | 12.3 | 12.3 | 12.3 | 12.4 |
| 15 to 29 | 12.6 | 12.4 | 12.3 | 12.6 | 13.2 | 13.5 |
| 30 to 44 | 12.7 | 12.9 | 13.6 | 13.7 | 13.3 | 13.2 |
| 45 to 59 | 13.0 | 13.4 | 12.9 | 12.6 | 12.7 | 13.4 |
| 60 to 74 | 9.7 | 10.4 | 11.1 | 12.0 | 12.4 | 12.0 |
| 75 and over | 5.2 | 5.8 | 7.0 | 7.8 | 8.7 | 9.9 |
| 75 to 84 | 3.7 | 4.1 | 4.9 | 5.4 | 5.6 | 6.3 |
| 85 and over | 1.5 | 1.7 | 2.0 | 2.4 | 3.2 | 3.6 |
| All ages | 64.6 | 66.9 | 69.0 | 71.0 | 72.7 | 74.3 |
| Children | 12.2 | 12.7 | 13.1 | 13.1 | 13.2 | 13.2 |
| Working age | 40.0 | 42.0 | 43.0 | 44.2 | 44.3 | 44.6 |
| Pensionable age | 12.4 | 12.2 | 13.0 | 13.6 | 15.2 | 16.5 |
| Old Age Dependency Ratio (people of pensionable age per thousand people of working age) | 310.35 | 290.36 | 301.30 | 308.11 | 344.06 | 369.64 |

Table source: Office for National Statistics

Table notes:

1. Children are defined as those aged under 16.
2. Working age and pensionable age populations based on state pension age (SPA) for given year.

3. Between 2012 and 2018, SPA will change from 65 years for men and 61 years for women, to 65 years for both sexes.
4. Then between 2019 and 2020, SPA will change from 65 years to 66 years for both men and women.
5. Between 2026 and 2027 SPA will increase to 67 years and between 2044 and 2046 to 68 years for both sexes. This is based on SPA under the 2014 Pensions Act.

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Children

The number of children (those aged 0 to 15) is projected to grow by 8.8% between 2014 and 2039. Whilst the number of children aged under 5 is not projected to change much over the period, the number of primary school age (ages 5 to 11) children is projected to increase by 9.2% to reach 5.8 million by mid-2039, while the number of children aged 12 to 15 is projected to rise by 17.8% to 3.4 million. These rises reflect lower numbers of births in the first decade of this century, leading to a smaller population in that age group being used as the base for the comparison.

People of working age and State Pension Age

Despite increases to State Pension Age under existing legislation (see Background note 16), the number of people of State Pension Age and over is projected to increase by 32.7 per cent from 12.4 million in mid-2014 to 16.5 million by mid-2039 (Table 4). This reflects the higher number of people who were born in the 1960s "baby boom" reaching State Pension Age within the 25 year period to mid-2039.

Over the same period, the number of people of working age is projected to rise by 11.4% from 40.0 million in mid-2014 to 44.6 million by mid-2039 (the definition of working age used in this bulletin is people aged between 16 and State Pension Age).

The number of people of pensionable age for every thousand people of working age (termed the "Old Age Dependency Ratio" – see Background note 17) was 310 in 2014. This is projected to fall to 284 in 2020 as a result of changes in the State Pension Age, but then rise to 370 in 2039. This rise means that the projections show more people of pensionable age relative to the number of people of working age in 2039 than in 2014. These figures take into account the change in State Pension Age under existing legislation (see Background note 16).

Older people

The number of people aged 75 and over is projected to rise by 89.3%, to 9.9 million, by mid-2039. The number of people aged 85 and over is projected to more than double, to reach 3.6 million by mid-2039 and the number of centenarians is projected to rise nearly 6 fold, from 14,000 at mid-2014 to 83,000 at mid-2039. This increase in the numbers of older people means that by mid-2039 more than 1 in 12 of the population is projected to be aged 80 or over.

Variant population projections

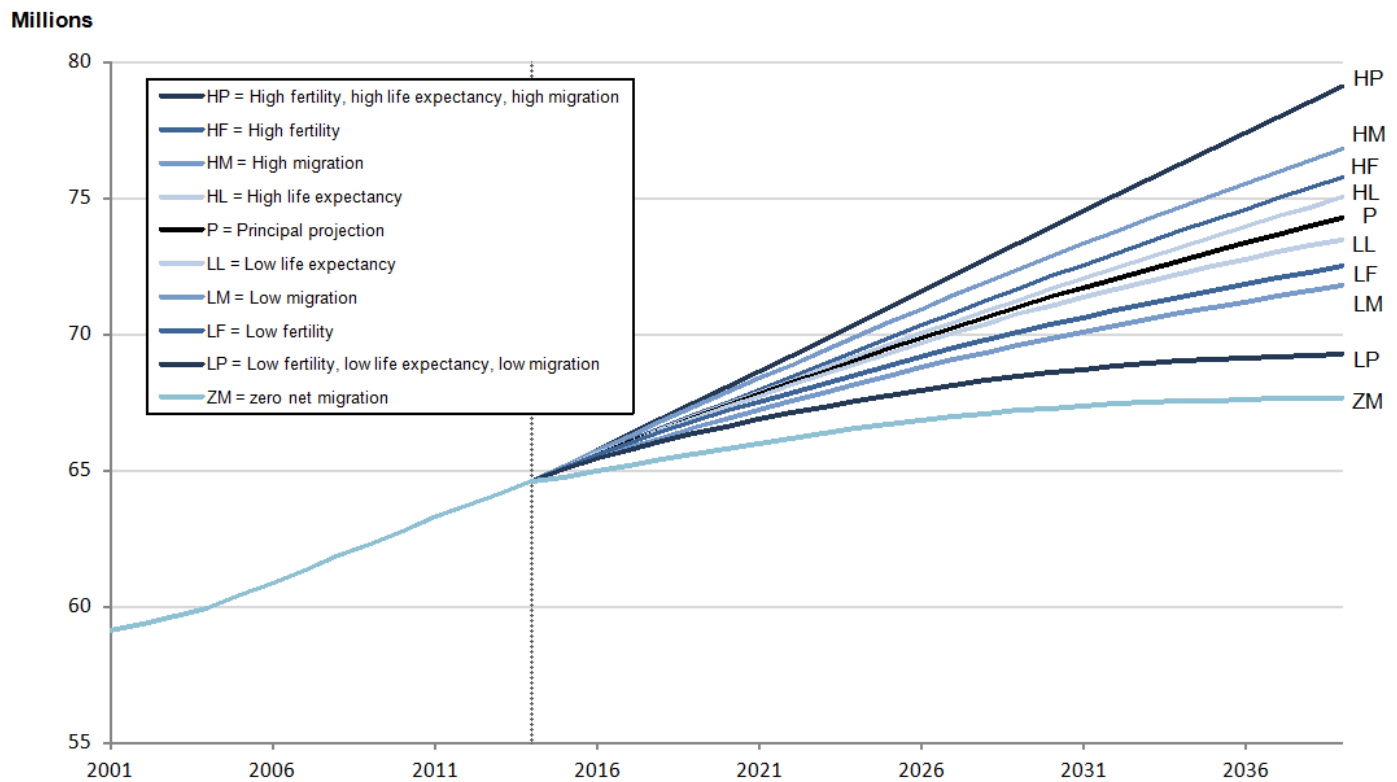
Projections are uncertain and become increasingly so the further they are carried forward in time. In addition to the principal (main or central) projection, variant projections are produced based on alternative, but generally plausible, assumptions of future fertility, mortality and net migration. These variant projections are intended to provide an indication of uncertainty and sensitivity to alternative assumptions; they do not represent upper or lower limits of future demographic behaviour.

Six "single component" variant projections are available, where only one component of population change is varied from the principal assumptions. In addition, 3 further variant projections are also available. These are:

- the "high population" variant which assumes a combination of high fertility, high life expectancy and high net migration
- the "low population" variant which assumes a combination of low fertility, low life expectancy and low net migration
- the "zero net migration" (or "natural change only") variant which assumes the same levels of fertility and life expectancy as the principal projection, but that there will be zero net migration (that is, migration inflows and outflows are exactly equal at every age)

More information on variant projections is available at Background note 14.

All the variant projections in this release result in an increasing population between mid-2014 and mid-2039: however, the rate of increase varies between them as shown in Figure 2. Details of the principal and variant assumptions are outlined later in this bulletin.

Figure 2: Estimated and projected population of the United Kingdom, mid-2001 to mid-2039

Source: Office for National Statistics

Notes:

1. Click on image to view an enlarged version.

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(46.5 Kb)

Under the high fertility variant projection for the UK, the population increases to 69.4 million, 0.3 million more than the principal projection, by mid-2024. Using the low fertility variant would see an increase to 68.5 million, about 0.5 million lower than the principal over the same period. By mid-2039, the UK population according to the high fertility variant would be 1.5 million higher than the principal, while the low fertility variant would result in a population 1.8 million lower than the principal. The largest impact of the fertility variants over the next 25 years is on the projected numbers of children and young adults. Whilst the principal projection is for 13.2 million children aged 0-15 at mid-2039, the high fertility variant projects 1.2 million more and the low fertility variant 1.4 million fewer than the principal.

The high and low life expectancy variants do not have as great an impact on the projections as the high and low fertility and migration variant assumptions. They result in populations of 0.1 million higher and lower respectively than the principal in mid-2024 and 0.8 million higher and lower over the 25 year period to mid-2039.

The high and low migration variants result in populations of 0.9 million higher and lower respectively than the principal in mid-2024. By mid-2039, the high and low migration variants differ from the principal by 2.5 million.

When the higher or lower assumptions for all components of population change are combined in the high population and low population variants, the possible range for total population size is considerably wider, with values of 1.3 million above, or 1.5 million below, the principal by mid-2024, and 4.8 million above, or 5.0 million below, the principal by mid-2039.

Assumptions underlying the 2014-based projections

The 2014-based national population projections are based on the estimated population at the middle of 2014 and a set of demographic assumptions about future fertility, mortality and migration based on analysis of trends and expert advice. The assumptions underlying the 2014-based national population projections are compared with those used for the 2012-based projections in Table 5.

This section relates to the long-term assumptions on fertility, mortality and migration. To avoid sudden changes from the base year, some, short-term assumptions have been applied to allow a more gradual convergence to the long-term assumptions. These are described in the detailed discussions linked to in each section.

Base population

The base population for the projections is the set of [mid-2014 population estimates for the UK and its constituent countries](#) that we published in June 2015. These estimates are based on the 2011 Census, updated for estimated births, deaths and migration since that date. There are various sources of uncertainty in the estimates, such as sampling error associated with the Census estimates, which are described in the [Quality and Methodology Information](#) document accompanying that release.

In October 2015, National Records of Scotland (NRS) announced small errors in the [mid-year population estimates \(MYEs\) for areas in Scotland](#). Whilst these errors do not affect the total population of Scotland, or other parts of the UK, they do have a small effect on the age and sex distribution of the population. The impact of these errors is much smaller than the uncertainty around the estimates due to sampling error from the 2011 Census. NRS will publish corrected MYEs in April 2016.

The 2014-based national population projections are based on the original release of the Scottish MYEs in April 2015 and thus do not reflect the correction to the MYE for Scotland used as the base population for the projection. The errors will also have a small effect on the projected age distribution of cross-border migration flows from Scotland to England and Wales. These effects are very small compared to other sources of uncertainty in the projection. See Background note 8 for more information on this.

Fertility

In the projections, "fertility" is taken to mean the total number of children a woman would have, on average, at the end of her child-bearing years. It is sometimes expressed as "completed family size".

The long-term assumption of completed family size for the UK principal projection is unchanged from the 2012-based projections at 1.89. The assumptions for England, Wales and Northern Ireland are also unchanged. The assumption for Scotland has been reduced from 1.75 to 1.70.

The high and low fertility variants assume long-term completed family sizes of 0.2 children per woman higher or lower than the principal assumptions.

More information on the [fertility assumptions](#) has been published as part of this release.

Table 5: Long-term principal assumptions for the 2014-based national population projections compared with assumptions for the 2012-based projections

| | United Kingdom | England | Wales | Scotland | Northern Ireland |
|---|----------------|----------|--------|----------|------------------|
| Fertility – Long-term average number of children per woman | | | | | |
| 2014-based | 1.89 | 1.90 | 1.90 | 1.70 | 2.00 |
| 2012-based | 1.89 | 1.90 | 1.90 | 1.75 | 2.00 |
| Mortality - Expectation of life at birth in 2039* | | | | | |
| Males 2014-based | 84.1 | 84.3 | 83.4 | 82.3 | 83.3 |
| Males 2012-based | 84.3 | 84.5 | 83.8 | 82.2 | 83.5 |
| Females 2014-based | 86.9 | 87.1 | 86.4 | 85.0 | 86.5 |
| Females 2012-based | 87.5 | 87.8 | 87.1 | 85.7 | 87.0 |
| Net international migration † – Annual long-term assumption | | | | | |
| 2014-based | +185,000 | +170,500 | +4,000 | +9,500 | +1,000 |
| 2012-based | +165,000 | +150,000 | +3,000 | +12,000 | 0 |

Table source: Office for National Statistics

Table notes:

- * Expectations of life for 25 years ahead given as specimen year. Note these are period expectations of life based on the mid-year mortality rates assumed for the year 2039 and do not take account of the continuing improvement in mortality projected beyond 2039.

2. † Net international migration does not include cross-border migration between the countries of the UK.

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Mortality

In the projections, "mortality" is taken to mean the propensity to die. This is often expressed as mortality rates – the proportion of a group of a particular age and sex which would die over the year.

The mortality assumptions are set in terms of annual rates of improvement in age and sex specific mortality rates; these improvements are then applied to mortality rates, year on year.

The assumptions used in the 2014-based projections are that annual rates of improvement in mortality rates will converge to 1.2% for most ages in 2039 (the 25th year of the 2014-based projections), and remain constant at 1.2% a year thereafter.

However, those born after 1922 and before 1939 have exhibited greater rates of improvement over the last 25 years than those born on either side. There is currently no evidence that these differentials are declining. Similar cohort effects seen in other countries suggest that these differentials may persist well into the oldest ages.

As a result, it is assumed that these cohorts will continue to experience higher rates of improvement after 2039, with the assumed rate of improvement in 2039 and beyond rising from 1.0% a year for those born in 1922 to a peak of 2.5% a year for those born in 1931 and 1932 and then declining back to 1.2% a year for those born in 1939 and later. For those born before 1922, rates of improvement are assumed to be lower than 1.2% in 2039. Rates of improvement are assumed to decline further from 1.0% for those born in 1911 to 0.1% for those born in 1902 and earlier. These are the same assumptions for the rates of mortality improvement in the target year as those used in the 2012-based projections (where the target year was 2037).

The effects of the assumed rates of improvement are best illustrated using the projected period life expectancies at birth. For the year to mid-2039, for example, period life expectancy at birth for the UK is projected as 84.1 years for males (0.2 years lower than in the previous projections), and 86.9 years for females (0.6 years lower than in the previous projections). These projected life expectancies are lower as a result of recent mortality rates.

The high and low life expectancy variants assume annual rates of mortality improvement from mid-2039 to be 1.2% higher or lower than the principal assumptions (that is, 2.4% and 0.0% for most ages). Thus the variant projections assume life expectancy at birth in the year to mid-2039 to be 1.91 years higher or lower for males and 1.75 years higher or lower for females.

More information on the [mortality assumptions](#) has been published as part of this release.

Migration

In the projections, "migration" is taken to mean a flow of people who change their country of usual residence for a period of at least a year, so that the country of destination becomes the country of usual residence. This is the standard definition used in official population and migration statistics. In this discussion, particular use is made of the concept of "net migration" – that is, migration into a country less migration out of that country.

The new long-term assumption for net international migration to the UK is +185,000 per year, compared with +165,000 per year in the 2012-based projections.

The assumed level of annual net international migration to England is +170,500. For Scotland it is +9,500, for Wales +4,000, and for Northern Ireland +1,000.

Assumed migration levels are higher than the long-term assumption for the first 7 years of the projection to allow a gradual convergence to the long-term assumption as described in the [migration assumptions](#) paper.

As the method of projecting "cross-border flows" of migration between countries in the UK has changed from being based on assumed absolute levels to being calculated from assumed rates of migration (thus taking into account the size of the population), these flows are not included in the assumed international migration flows in the previous paragraphs. More information on this change in methodology is available in a [Methods paper \(399 Kb Pdf\)](#).

The calculated cross-border flows, based on the assumed rates, indicate that net flows from England to elsewhere in the UK are projected to continue at between 6,000 and 7,000 each year, similar to the assumed figure in the 2012-based projections. Scotland's net inflow from elsewhere in the UK is projected at between 5,000 and 6,000 each year compared to the previous assumption of 3,500. Corresponding projected flows for Wales are a net inflow of around 1,500, compared to 3,000 in the 2012-based projections and for Northern Ireland a net outflow of between 500 and 1,000 compared to an assumed zero flow in the previous projections.

The high and low migration variants assume long-term annual net migration to the UK to be 80,000 people higher or lower than the principal assumption (that is, +265,000 and +105,000).

More information on the [migration assumptions](#) has been published as part of this release.

Comparison with previous projections

The population of the UK is projected to grow to 69.0 million by 2024. This is 249,000 higher than the 2012-based projection for 2024. This is partly attributable to the base 2014 population being 86,000 higher in the 2014-based projection than in the 2012 projections. The remainder of the difference reflects changes in the age structure of the base population (which affects the numbers of projected births and deaths) and changes in assumptions made in the 2014 projections as described in previous sections.

These changed assumptions result in there being projected over the decade to mid-2024:

- around 141,000 fewer births

- 198,000 more deaths
- 502,000 more net migrants

These effects result in projected growth of 6.9% between 2014 and 2024 compared to 6.6% in the 2012-based projections.

Table 6: Comparison of 2014-based and 2012-based principal projections, United Kingdom

millions

| Population at mid-2024 | | | | |
|------------------------|------------------------|------------------------|-----------------------|----------------|
| | 2012-based projections | 2014-based projections | Difference (millions) | Difference (%) |
| United Kingdom | 68.8 | 69.0 | 0.2 | 0.4% |
| England | 58.1 | 58.4 | 0.3 | 0.6% |
| Wales | 3.2 | 3.2 | 0.0 | -0.9% |
| Scotland | 5.6 | 5.5 | 0.0 | -0.9% |
| Northern Ireland | 1.9 | 1.9 | 0.0 | 0.2% |

Table source: Office for National Statistics

Table notes:

1. Figures may not sum due to rounding.

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Comparison with other EU countries

In order to compare population projections across Europe, it makes sense to use projections produced by comparable methods such as those produced for the UK and other EU countries by Eurostat. The most recent [Eurostat projections](#) are 2013-based and were published in March 2014. However, it is useful to be aware of how those data differ to our latest 2014-based projections.

There are differences between our projections methodology and that used by Eurostat. For example, our projections are based on the population estimates at 30 June while the Eurostat projections are based on an estimate of the population at 1 January.

Eurostat uses our demographic data to produce its assumptions but uses different methods to derive the assumptions. We assume constant levels of net migration in the long-term to avoid implying a level of accuracy that is not evidence-based. Eurostat applies a convergence methodology for the long-term net migration assumptions. This means they have a varying assumption throughout the projection period, starting at a level of 165,000 in 2013 and rising to a peak of around 210,700 in 2037 before gradually decreasing over the projection period to an assumed level of around

133,200 in 2080. Eurostat also makes slightly different assumptions about future levels of fertility and mortality.

The estimated population in the base year for our projections is 0.4 million higher than the Eurostat projected population (Table 7). By 2024 we project the population to be approximately 0.8 million higher than that projected by Eurostat and this difference of 0.8 million remains in 2039.

Table 7: ONS and Eurostat projected population of the UK, 2014 to 2039

| | 2014 | 2024 | 2039 |
|------------|------|------|------|
| ONS | 64.6 | 69.0 | 74.3 |
| Eurostat | 64.2 | 68.3 | 73.5 |
| Difference | 0.4 | 0.8 | 0.8 |

millions

Table source: Office for National Statistics

Table notes:

1. ONS projections are as at mid-year, Eurostat projections are at 1 January.

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(30 Kb)

According to the Eurostat figures, the estimated resident population of the UK at 1 January 2014 was 64.2 million, with only Germany and France estimated to have more people (Table 8). The UK is projected to have more people than France by 2030 and is projected to have the largest population in the EU by 2047.

The population of the EU28 as a whole is projected to increase by 2% over the 10 years to 2024 and by 3% in the 25 year period to 2039. Of the member states, the UK is projected to be the fourth fastest growing population, with only Luxembourg, Belgium and Sweden projected to grow at a faster rate.

Table 8: Population projections comparison for countries in the European Union, by rate of growth 2014 to 2039

| | 2014 | 2024 | 2039 | % increase to 2024 | % increase to 2039 |
|-------------------------------|-------|-------|-------|-----------------------|-----------------------|
| European Union (28 countries) | 507.2 | 515.2 | 523.1 | 2% | 3% |
| Luxembourg | 0.5 | 0.7 | 0.9 | 26% | 67% |
| Belgium | 11.2 | 12.2 | 13.8 | 9% | 23% |
| Sweden | 9.6 | 10.5 | 11.7 | 9% | 21% |
| United Kingdom | 64.2 | 68.3 | 73.5 | 6% | 14% |
| Austria | 8.5 | 9.0 | 9.6 | 6% | 13% |
| Denmark | 5.6 | 5.9 | 6.3 | 5% | 11% |
| Finland | 5.5 | 5.7 | 6.0 | 5% | 11% |
| France | 65.9 | 68.8 | 72.6 | 4% | 10% |
| Cyprus | 0.9 | 0.9 | 1.0 | 4% | 10% |
| Malta | 0.4 | 0.4 | 0.5 | 5% | 9% |
| Italy | 60.7 | 62.8 | 66.0 | 3% | 9% |
| Netherlands | 16.8 | 17.3 | 17.7 | 3% | 5% |
| Czech Republic | 10.5 | 10.7 | 10.9 | 2% | 4% |
| Ireland | 4.6 | 4.6 | 4.7 | 0% | 1% |
| Slovenia | 2.1 | 2.1 | 2.1 | 2% | 1% |
| Germany | 80.7 | 80.4 | 78.1 | 0% | -3% |
| Hungary | 9.9 | 9.8 | 9.5 | -1% | -3% |
| Spain | 46.5 | 45.2 | 44.5 | -3% | -4% |
| Slovakia | 5.4 | 5.4 | 5.1 | 0% | -5% |
| Poland | 38.5 | 38.1 | 36.4 | -1% | -6% |
| Croatia | 4.3 | 4.2 | 4.0 | -2% | -7% |
| Romania | 20.0 | 19.5 | 18.5 | -2% | -7% |
| Portugal | 10.4 | 10.0 | 9.4 | -4% | -10% |
| Estonia | 1.3 | 1.3 | 1.2 | -5% | -11% |
| Greece | 11.0 | 10.5 | 9.6 | -5% | -13% |
| Bulgaria | 7.2 | 6.8 | 6.1 | -6% | -16% |

millions

| | 2014 | 2024 | 2039 | % increase to 2024 | % increase to 2039 |
|-----------|------|------|------|-----------------------|-----------------------|
| Latvia | 2.0 | 1.8 | 1.5 | -11% | -24% |
| Lithuania | 2.9 | 2.5 | 2.0 | -16% | -32% |

Table source: Eurostat

Download table

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(32.5 Kb)

Further information

Further information on the National Population Projections and related statistics is available from the following sources. Links are listed in full in the Background notes.

This bulletin is part of the full release of the [2014 National Population Projections](#) which includes detailed tables containing the projections for the UK and its constituent countries, as well as more detail on the assumptions made for the projections and how these assumptions were developed.

Separate releases for individual countries are also published by [National Records for Scotland](#), the [Northern Ireland Research and Statistics Agency](#), and [Welsh Government statistics](#).

Information on how the projections are produced and the quality of the projections is provided in a [Quality and Methodology Information \(290.9 Kb Pdf\)](#) document.

An analysis of how close previous sets of projections have been to the subsequent population estimates is provided in the [National Population Projections Accuracy Report \(1.03 Mb Pdf\)](#).

Information on previous sets of projections is available for [1954 to 2004](#) and for [2006 onwards](#).

Documents are available providing supporting information on [methodology and using the projections](#).

A summary of the key findings of the projections is provided in [What do the 2014-based National Population Projections show?](#)

A high level description of our population-related statistics is available in the [Overview of Population and Migration Statistics](#).

Background notes

1. National Statistics are produced to high professional standards as set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

2. National population projections are prepared by the Office for National Statistics (ONS) on behalf of the National Statistician and the Registrars General of Scotland and Northern Ireland. The assumptions are agreed in liaison with the devolved administrations, following consultation with main users of projections in each country and advice from an expert academic advisory panel.
3. A new set of projections is normally made every second year, based on a full-scale review of the trends affecting the underlying assumptions about fertility, mortality and migration. The last set of national projections, issued in November 2013, was based on the estimated population at 30 June 2012.
4. The projections for the UK and its constituent countries are based on estimates [of the population at 30 June 2014](#). More information is available on our website.
5. Projections are made of the resident population of the UK and its constituent countries, as defined for the mid-year population estimates. The population includes all usually resident persons, whatever their nationality. Members of HM Armed Forces in the UK are included, but members of HM Armed Forces and their families who are abroad are excluded. Members of foreign armed forces in the UK are also included, as are any accompanying dependants.
6. Full details of the [results from the 2014-based principal and key variant national population projections](#), along with detailed information on the assumptions underlying the projections, are available on our website. Details of the [2012-based national projections](#) are also available on our website.
7. Commentary and reports on the results of the 2014-based national population projections for Scotland, Northern Ireland and Wales is also published today; by [National Records for Scotland](#), the [Northern Ireland Research and Statistics Agency](#) and [Welsh Government statistics](#).
8. Information on the quality of the projections, including information on an error in the population estimates for Scotland which has a very small effect on the projections, is provided in the [Quality and Methodology Information document \(290.9 Kb Pdf\)](#). More [detail on this error](#) is also available on the National Records of Scotland Website.
9. An analysis of how close previous sets of projections have been to the subsequent population estimates is provided in the [National Population Projections Accuracy Report \(1.03 Mb Pdf\)](#).
10. Information on [previous sets of projections from 1954 to 2004](#) and information on [projections between 2006 and 2012](#) is also available on our website.
11. A [description of the methodology used, and guidance on using projections](#), is provided on our website.
12. A summary of the key findings of the projections is provided in [What do the 2014-based National Population Projections show?](#)
13. A high level description of the population-related statistics published by us is available in the [Overview of Population and Migration Statistics](#).

14. The main focus of the projections is on the 25 year period to mid-2039. The principal projection is also published for the 100 year period to 2114. Projections become increasingly uncertain the further they are carried forward. To illustrate this uncertainty, variant projections, based on alternative assumptions of future fertility, mortality and net migration, are also available for the standard 25 year period. Further variant projections for this period, illustrating additional alternative possible scenarios and including selected combinations of the high and low variants, will be published on 26 November 2015, as listed in the [Background and Methodology](#) paper. Variants for the extended 100 year period can be requested using the statistical contact details below.
15. Projected natural change and assumed net migration are not independent of each other. The projected numbers of future births and deaths are themselves partly dependent on the assumed level of net migration. More information on the [impact of projected migration on the projected number of births](#) is available on our website.
16. The figures in this bulletin reflect the changes to the State Pension Age specified in the State Pensions Act 2014. Further information on this is available in the [Background and Methodology document](#) accompanying this release.
17. The Old Age Dependency Ratio is defined as: the number of people of pensionable age for every thousand people of working age. An alternative measure is the Old Age Support Ratio, which is the ratio of the working age population to the pensionable age population, or, equivalently, $1,000 \times (1/\text{Old Age Dependency Ratio})$.
18. Rounding: All figures presented in the tables in this release have been rounded independently, so component figures may not add exactly to totals.
19. Subnational population projections for England are the responsibility of the Office for National Statistics, while those for Scotland, Wales and Northern Ireland are the responsibility of the National Records of Scotland, the Welsh Government Statistical Directorate and the Northern Ireland Statistics and Research Agency respectively.
20. A list of the names of those given [pre-publication access](#) to the contents of this release is available.
21. 2014-based cohort life expectancy figures are provisionally scheduled for release in December 2015/January 2016.
22. Any errors or need for revising the projections will be dealt with in accordance with the [Population Statistics Revisions Policy \(54 Kb Pdf\)](#).
23. In 2011, the United Kingdom Statistics Authority designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. The statistics were re-assessed in 2015 and their National Statistics status is subject to confirmation once all the requirements in the assessment report have been met.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs
- are well explained and readily accessible
- are produced according to sound methods
- are managed impartially and objectively in the public interest

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.

24. News on our population statistics can be obtained by subscribing to the quarterly newsletter (email your request to projections@ons.gsi.gov.uk) or following the Twitter account [@paulvickers_ONS](https://twitter.com/paulvickers_ONS).

25. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk

These National Statistics are produced to high professional standards and released according to the arrangements approved by the UK Statistics Authority.

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This document is also available on our website at www.ons.gov.uk.

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