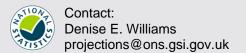


Statistical bulletin

# Subnational population projections for England: 2012-based

Subnational population projections provide an indication of the future size and age structure of the population in the regions, local authorities and clinical commissioning groups of England.



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# 1. Main points

- London, the East and the South East regions are all projected to grow at a faster rate than England
- London is projected to grow by 13%, the East by 9% and the South East by 8% over the 10 year period to mid-2022, compared with the projected growth for England of 7% over the same time period
- The North East is projected to grow at the slowest rate, by just less than 3% over 10 years
- change in population for local authorities ranges from a fall of almost 2% in Barrow-in-Furness to growth of 22% for Tower Hamlets over the 10 years to mid-2022
- The percentage of the population aged 65 and over is projected to increase by between one fifth and one quarter in all regions by mid-2022
- The number of local authorities where more than a quarter of the population are aged 65 and over is projected to increase from an estimated 24 areas in mid-2012 to 83 areas in mid-2022

#### 2. Introduction

This bulletin presents the key findings from the 2012-based subnational population projections for England. They replace the <u>2011-based interim projections</u> published by the Office for National Statistics (ONS) in September 2013.

Subnational population projections provide estimates of the future population of English regions, local authorities and clinical commissioning groups.

These projections are based on the 2012 mid-year population estimates published on 26 June 2013 and a set of underlying demographic assumptions regarding fertility, mortality and migration based on local trends. They are consistent with the 2012-based national population projections for England. They are not forecasts and do not attempt to predict the impact that future government or local policies, changing economic circumstances or other factors might have on demographic behaviour. The trends for these projections take into account information from the 2011 Census.

The primary purpose of the subnational projections is to provide an estimate of the future size and age structure of the population of local authorities in England. These are used as a common framework for informing local-level policy and planning in a number of different fields as they are produced in a consistent way.

Examples of uses made of the population projections include:

- informing local planning of healthcare, education and other service provisions
- forming the basis for other products such as household projections
- a basis for researchers and other organisations that also produce their own projections

Projections become increasingly uncertain the further they are carried forward due to the inherent uncertainty of demographic behaviour. This is particularly so for smaller geographical areas and detailed age and sex breakdowns.

This bulletin focuses on the first 10 years of the projections. <u>Projections to mid-2037</u> are also available on the ONS website. For more information on how ONS population projections meet user needs along with information on their fitness for purpose, please see the report on <u>quality and methodology</u> (120.6 Kb Pdf).

## 3. Projections for regions

The 2012-based national population projections for England published in November 2013 projected the population of England to grow by 3.8 million (7.2%) by mid-2022. All regions of England are projected to see population growth over the 10 year period to mid-2022 but the rate of that growth varies. Three regions are projected to grow faster than the national average with London projected to grow the fastest, by 13% over the 10 year period. The East is projected to grow by 8.6% and the South East by 7.8% per cent. The region projected to grow at the slowest rate over the next 10 years is the North East at 2.9% (Table 1).

Table 1: Population change in regions by age group, mid-2012 to mid-2022

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	Mid-2012	Mid-2022	All ages	0-15 years old	16-64 years old	65 and over
London	8,308,400	9,392,100	13.0	16.0	10.8	21.5
East	5,907,300	6,417,900	8.6	11.3	3.3	24.3
South East	8,724,700	9,407,400	7.8	9.2	2.6	24.7
South West	5,339,600	5,707,400	6.9	9.4	0.8	23.3
East Midlands	4,567,700	4,857,100	6.3	8.1	0.6	25.0
West Midlands	5,642,600	5,954,600	5.5	6.7	1.1	20.3
Yorkshire and The Humber	5,316,700	5,580,800	5.0	6.3	0.4	20.7
North West	7,084,300	7,342,300	3.6	5.7	-1.3	19.6
North East	2,602,300	2,678,200	2.9	4.6	-2.7	21.4
England	53,493,700	57,337,800	7.2	9.2	2.6	22.4

Source: Office for National Statistics

Notes:

Of the 13% projected growth in London, almost nine tenths is due to there being more births than deaths (natural change) and about one tenth is due to net inward migration. Although London is a destination for many people migrating to live and work, both from other regions and internationally, there are also large numbers of people who migrate out of London, which is why growth due to net migration is projected to be just 1.8% (Table 2). One reason for the high level of natural change is because London as a region has a relatively young age structure, with only a little over 11% of its population being aged 65 and over in mid-2012 compared with most other regions which have an average of 17% of the population aged 65 and over. Since mortality rates are lower in younger age groups, fewer deaths are projected in London than elsewhere. London also has a correspondingly larger population of adults aged 16 to 64. In particular, nearly half the population in mid-2012 are estimated to be aged between 16 and 44 years old, the main childbearing ages. In most other regions the proportion in this age group is just less than two fifths. This drives the higher number of births being projected in London over the next 10 years, leading to a 16% projected increase in the number of children between mid-2012 and mid-2022 (Table 1).

<sup>1.</sup> Figures may not sum due to rounding

Focusing on the older age groups, Table 1 shows that the number of people aged 65 and over is projected to increase in all regions by an average of 22% between mid-2012 and mid-2022 as a result of the general ageing of the population as projected in the national population projections. The fastest growth in those aged 65 and over is seen in the East Midlands where the number is projected to increase by 25% from 8.1 million to 10.1 million over the 10 year period.

Table 2: Percentage population change between mid-2012 and mid-2022 by component of change

	Total	Natural change	Total Internation	al migration Internatio	nal migration
London	13.0	11.1	1.8	-6.7	8.5
East	8.6	3.7	4.9	3.3	1.6
South East	7.8	3.5	4.4	3.0	1.3
South West	6.9	1.7	5.2	4.1	1.1
East Midlands	6.3	3.0	3.3	1.0	2.3
West Midlands	5.5	4.2	1.4	-1.0	2.3
Yorkshire and The Humber	5.0	3.5	1.5	-1.0	2.4
North West	3.6	3.1	0.5	-0.6	1.1
North East	2.9	1.8	1.1	-0.8	1.9
England	7.2	4.4	2.8	0.0	2.8

Source: Office for National Statistics

#### Notes:

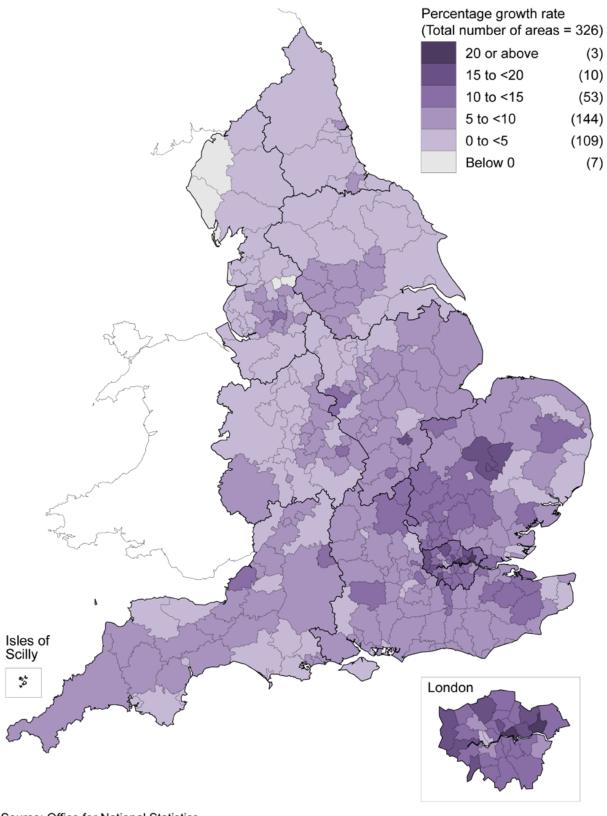
- 1. Figures may not sum due to constraining methods and rounding
- 2. Cross border migration is included with international migration
- 3. Natural change is defined as the difference between births and deaths

### 4. Projections for local authorities

How a population is projected to change locally depends on a number of factors that can interact and produce very different growth rates to England as a whole. The size and age structure of the population at mid-2012 is a big indicator of the future population. Fertility and mortality rates have greater impact at certain age groups within the population and therefore affect areas differently depending on their age structures. Some areas also have more people moving in and out of them and will therefore be more affected by migration trends than others.

The population of England is projected to grow by 7.2% over the 10 years to mid-2022, but a quarter of local authorities are projected to increase by more than 9.5%, and a quarter by less than 3.9% over the same period. Only seven local authorities are projected not to increase in population over the 10 year period. Map 1 shows all local authorities in England colour-coded by projected growth rate to mid-2022.

Map 1: Projected population growth rate by local authority, England, mid-2012 to mid-2022



Source: Office for National Statistics Contains National Statistics data © Crown copyright and database right 2014 Contains Ordnance Survey data © Crown copyright and database right 2014 Some local planning needs are directly relevant to specific age groups and therefore it is important to understand the possible changes to the age structure of an area when planning for the future. Interactive population pyramids are available for viewing the results of the 2012-based population projections for local authorities, regions and England. They can be used to illustrate how the size and age and sex structure of the population in an area is projected to change over time, as well as enabling comparison with other areas.

#### Highest projected population growth

Table 3 shows areas where the population is projected to have the highest percentage growth in the 10 years to mid-2022. It should be noted that the projections simply reflect the situation if current trends were to continue and do not take into account the ability of an area to accommodate any extra population.

Table 3: Local authorities with the highest projected percentage population growth between mid-2012 and mid-2022

	Mid-2012 I	Mid-2022	Projected P change	ercentage change
Tower Hamlets	263,000	321,100	58,100	22.1
Barking and Dagenham	190,600	229,300	38,700	20.3
Redbridge	284,600	337,600	52,900	18.6
Islington	211,000	246,400	35,300	16.7
Kingston upon Thames	163,900	190,200	26,300	16.1
Barnet	364,000	422,300	58,300	16.0
Newham	314,100	363,800	49,700	15.8
Hillingdon	281,800	325,600	43,900	15.6
East Cambridgeshire	85,100	98,300	13,200	15.5
Corby	63,100	72,800	9,800	15.5

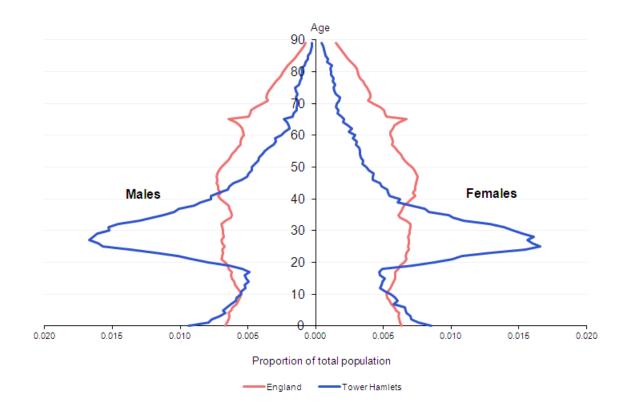
Source: Office for National Statistics

Notes:

Tower Hamlets is projected to have the fastest growth rate, growing by 22.1% over the 10 years to mid-2022. Of the 22.1% growth, almost three quarters is due to more births than deaths and slightly more than a quarter is due to net inward migration. As with London as a whole, the high level of natural change can be attributed to the young age structure of the local authority. In fact, Tower Hamlets has the youngest age structure of all local authorities, with about 60% of the population in mid-2012 estimated to be concentrated in the main childbearing ages of 16 to 44 years old and only 6% of the population aged 65 years old or over (Figure 1). This age structure results in high numbers of births (an average of over 5,000 per year) and low numbers of deaths (an average of 1,000 per year) compared with other local authorities of a similar size but with older age structures.

<sup>1.</sup> Figures may not sum due to constraining methods and rounding

Figure 1: Estimated age structure of Tower Hamlets compared with England, mid-2012



**Source: Office for National Statistics** 

### Lowest projected population growth

Table 4 shows areas where the population is projected to have the lowest percentage growth in the 10 years to mid-2022.

Table 4: Local authorities with the lowest projected percentage population growth between mid-2012 and mid-2022

	Mid-2012 I	Mid-2022	Projected I change	Percentage change
Barrow-in-Furness	68,400	67,200	-1300	-1.8
Copeland	70,300	69,300	-1100	-1.5
Hyndburn	80,200	79,900	-300	-0.3
Blackpool	142,000	141,700	-300	-0.2
Burnley	87,100	87,100	0	0.0
Allerdale	96,300	96,300	0	0.0
Redcar and Cleveland	135,000	135,000	0	0.0
Oadby and Wigston	56,100	56,200	100	0.2
South Lakeland	103,500	103,700	300	0.2
West Lancashire	110,900	111,500	600	0.5

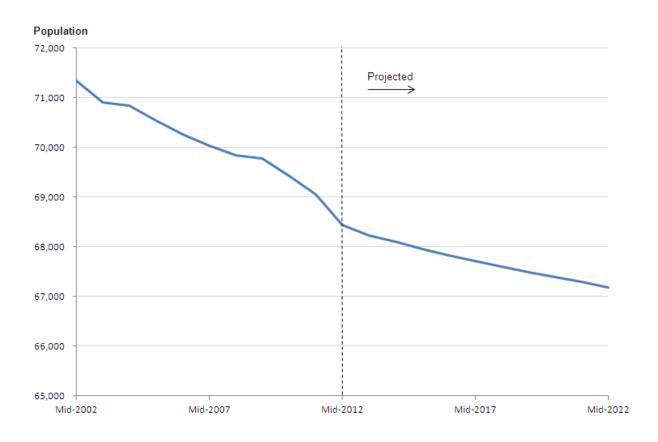
Source: Office for National Statistics

Notes:

1. Figures may not sum due to constraining methods and rounding

Four local authorities are projected to fall in size, with Barrow-in-Furness projected to show the largest population decrease of 1,300 (1.8%) over the 10 years to mid-2022. As Figure 2 shows, this fall is consistent with past trends as the population in this area has shown a generally steady decrease from mid-2002 onwards.

Figure 2: Estimated and projected population of Barrow-in-Furness, mid-2002 to mid-2022



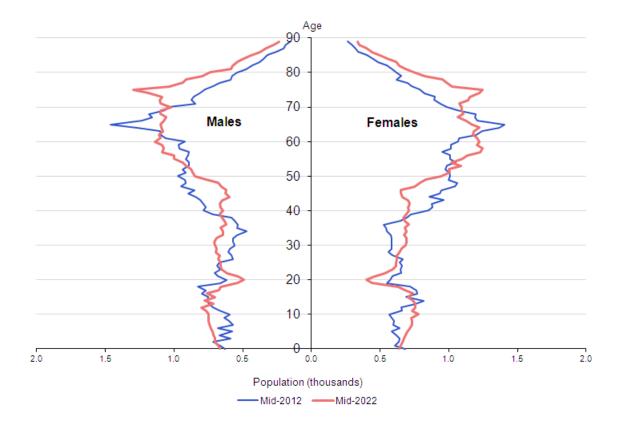
This projected population decrease in Barrow-in-Furness is driven by migration, with about 150 more people projected to leave the area than enter it each year over the 10 years to mid-2022.

#### Oldest age structure

Estimates indicate that in mid-2012 there were 24 local authorities where more than a quarter of residents were aged 65 and over. By mid-2022, it is projected that the number with this proportion will have increased more than threefold to 83 local authorities. Quantifying these trends is important in order to inform organisations who are interested in the population in this age group. For example, projections can be used to inform organisations involved in planning for health and social care provision, reviewing transport needs and business planning.

East Lindsey has the greatest proportion of the population aged 65 and over in both mid-2012 and mid-2022. The total population of East Lindsey is projected to grow by 5.4% over the 10 years to mid-2022 whereas the population aged 65 and over is projected to grow by 19.7% over the same period. This results in the projected proportion of people in this age group increasing from 38.8% to 44.4% by mid-2022. The population aged 16 to 64 is projected to fall by 2,000 (2.6 per cent) over the same period. The main reason for these changes is that East Lindsey has a large number of people aged between 60 and 64 in mid-2012 who will therefore be aged over 70 by mid-2022 (Figure 3).

Figure 3: Estimated and projected age structure of the population of East Lindsey, mid-2012 and mid-2022



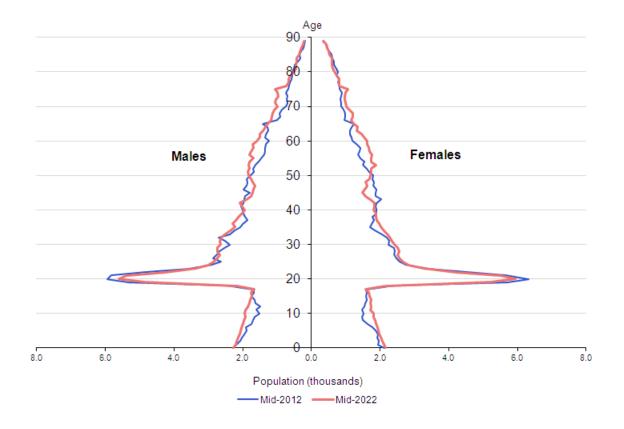
#### **Source: Office for National Statistics**

Unlike at the national level, it is migration rather than natural change that is the current main driver of population change in East Lindsey. Due to this area's older age structure, it is projected that there will be about 500 more deaths than births, whereas net inward migration is projected to add around 1,200 people per year. Over the next 10 years, net growth is therefore projected to be around 700 people per year.

#### Student age structure

There are some local authorities that are projected to show little ageing or population growth over the 10 years to mid-2022. In some cases this can be attributed to the fact that the area has a large student population, meaning that many young people migrate into the area for study but then leave post-study, therefore having little long term effect on the population. For example, there are two large universities in Nottingham and about 22% of the population is concentrated in the 18-25 years old age group, with the area also experiencing a large amount of internal migration (on average 24,000 people arrive and 27,000 people leave each year). The local authority therefore undergoes a large amount of population churn but is projected to grow by only 5% between mid-2012 and mid-2022, with little ageing of the population and, as such, the proportion of the population aged 65 and over is projected to change very little (from 11.7% in mid-2012 to 12.7% in mid-2022) (Figure 4).

Figure 4: Estimated and projected age structure of the population of Nottingham, mid-2012 and mid-2022



**Source: Office for National Statistics** 

### 5. Subnational population projections for other UK countries

Population projections are produced for similar small areas in Wales, Scotland and Northern Ireland, however it should be noted that these projections are not directly comparable due to differences in methodology and base years.

National Records of Scotland (NRS) produce <u>population projections for Scottish council and NHS board areas</u>. The latest Scottish subnational projections are 2012-based and were published on 14 May 2014.

The statistical directorate of the Welsh Government produces population projections for Welsh local authorities, although, unlike the projections for English local authorities, these do not aggregate to equal the national population projections for the country as a whole. The latest Welsh subnational projections are 2011-based and were published on 20 December 2013

The Northern Ireland Statistics and Research Agency (NISRA) produces <u>population projections for areas within Northern Ireland</u>, including local government, health and education geographies. The latest Northern Irish subnational projections are 2008-based and were published on 27 May 2010.

## 6. Methodological information

The subnational population projections take the 2012 mid-year population estimates, which were published on 26 June 2013, as their starting point. The projected local authority population for each year is calculated by ageing on the population for the previous year, applying assumed local fertility and mortality rates to calculate the number of projected births and deaths, and then adjusting for migration into and out of each local authority. Local authority assumed levels of fertility, mortality and migration are derived from observed values during the previous five years and are constrained to the assumptions made in the 2012-based national projections. Finally, the subnational population projections are constrained to the national population projections for England. A full description of the methodology used to produce the subnational population projections is available.

## 7. Background notes

- 1. This release includes a statistical bulletin, files containing the projections, and supporting information covering their quality and the methodology used to produce them. These products have been designed with the intention of best meeting users' requirements. Our understanding of these requirements is set out in the <u>Quality and Methodology Information</u> (120.6 Kb Pdf) document: we welcome any comments or suggestions on these
- 2. A new set of projections is normally made every second year. Full details of the results from the 2012-based subnational population projections are available on the National Statistics website. The 2010-based subnational projections were published in March 2012. An interim set of 2011-based projections were also produced in September 2012 to take into account results of the 2011 Census
- Subnational population projections are produced on a consistent basis across all local authorities in England. The 2012-based subnational population projections for England are fully consistent with the 2012 mid-year population estimates published on 26 June 2013 and at a national level with the 2012-based national population projections for England published in November 2013
- 4. Projections are made of the usually resident population, as defined for the mid-year population estimates. The population includes all usually resident persons, whatever their nationality. Members of HM Armed Forces in England are included, but members of HM Armed Forces and their families who are abroad are excluded. Members of foreign armed forces in England are also included, as are any accompanying dependants
- 5. Assumptions made about future fertility, mortality and migration at local authority level in the 2012-based subnational population projections are based upon recent observed trends from the components of change

as published with the latest mid-year population estimates. The assumptions do not take account of future policy changes nor local development policies that have not yet occurred. Further information on the <a href="mailto:methodology">methodology</a> is available

- 6. References in this statistical bulletin to local authorities exclude the Isles of Scilly and the City of London as the results for these areas are considered to be less reliable than for other areas due to their small population sizes. Data are published for these areas
- 7. These projections are available on local authority boundaries in place at mid-2012
- 8. ONS has published a new charging policy
- 9. All figures presented in the tables in this release have been rounded independently, so component figures may not add exactly to totals
- 10. Further information about population statistics is available
- 11. National Statistics are produced to high professional standards 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
- 12. Details of the policy governing the release of new data are available by visiting <a href="www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html">www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</a> or from the Media Relations Office email: <a href="media.relations@ons.gsi.gov.uk">media.relations@ons.gsi.gov.uk</a>

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