

Compendium

An Executive Summary, 2012-based NPP Reference Volume



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Table of contents

1. [Introduction](#)
2. [Key points](#)
3. [Projected population change](#)
4. [Underlying Assumptions](#)
5. [Background notes](#)

1 . Introduction

This publication presents the results of the 2012-based population projections produced by ONS for the United Kingdom and its constituent countries. These results were previously published in statistical releases on [6 November 2013](#) and [10 December 2013](#). This volume is the latest in a regular series started in 1970 which brings together a summary of the results and details of the methodology into one compendium.

This volume includes some alternative summary charts and tables to those published previously. It also provides further detail of the projections methodology, some discussion around the trends which informed the assumptions and a range of related references for further background reading.

The following chapters are included:

- [Chapter 1 – Background and methodology](#)
- [Chapter 2 – Results](#)
- [Chapter 3 – Fertility](#)
- [Chapter 4 – Mortality](#)
- [Chapter 5 – Migration](#)
- [Chapter 6 – Variants](#)

2 . Key points

Since the 2010-based projections were published the results of the 2011 Census have been released and used to rebase the population estimates series. There were around 500,000 more people estimated by the 2011 United Kingdom Census than had been previously estimated. At mid-2012 the estimated population of the UK was about 460,000 higher than that projected for mid-2012 in the 2010-based projections. The key points of the 2012-based population projections are:

- The population of the UK is projected to increase by 4.3 million over the next 10 years from an estimated 63.7 million in mid-2012 to 68.0 million in mid-2022. This increase is equivalent to an annual growth rate of 0.6% each year between mid-2012 and mid-2022. The UK population is projected to be 73.3 million at mid-2037, a total increase of 9.6 million over the next 25 years.
- The projected total population of the UK in mid-2037 is about 639,000 (0.9%) lower than in the 2010-based projections. This slower projected growth is due to the assumptions for migration being less and those for fertility being lower in the short term (but higher in the long term) than the 2010-based projections, resulting in fewer births and fewer net migrants.
- Some 43% of the projected 9.6 million increase in the population between mid-2012 and mid-2037 is directly attributable to the assumed level of net inward migration. The remaining 57% is attributable to projected natural change (an excess of births over deaths) of which 39% would occur in the absence of migration, or where migration inflows and outflows are exactly equal at every age from 2012 onwards (where there is zero net migration). The remaining 17% arises from the effect of net migration on births and deaths. It is estimated therefore, that about 60% of projected population growth in the period to mid-2037 is attributable, directly or indirectly, to net migration.

3 . Projected population change

The projection has the following features:

- The population is projected to continue ageing with the median age of the population expected to rise from 39.7 years in mid-2012 to 42.8 years in mid-2037.
- The number of children aged under 16 is projected to increase by 8% from 12.0 million in mid-2012 to 13.0 million by mid-2037. The projected increase is at school age, rather than pre-school age.
- The number of people of working age is projected to rise from 39.4 million in mid-2012 to 44.2 million by mid-2037.
- The number of people of pensionable age is projected to increase by 31% from 12.3 million in mid-2012 to 16.1 million by mid-2037. In mid-2012, there were 0.3 million more people of pensionable age than children aged under 16; by mid-2037 this difference is projected to be 3.1 million.
- The population aged 80 and over is projected to grow from 3.0 million in mid-2012 to 6.2 million by mid-2037, more than doubling over 25 years. Longer-term projections suggest this rapid increase will continue throughout the projection period, tempered only by periods such as the late 2050s where the small population cohorts born in the 1970s reach this oldest age group. By mid-2087 the projections suggest there will be 11.3 million people aged 80 and over.

The change in the age distribution between mid-2012 and mid-2037 is shown in Figure 0-1.

Figure 0-1: Estimated and projected age structure of the United Kingdom population, mid-2012 and mid-2037

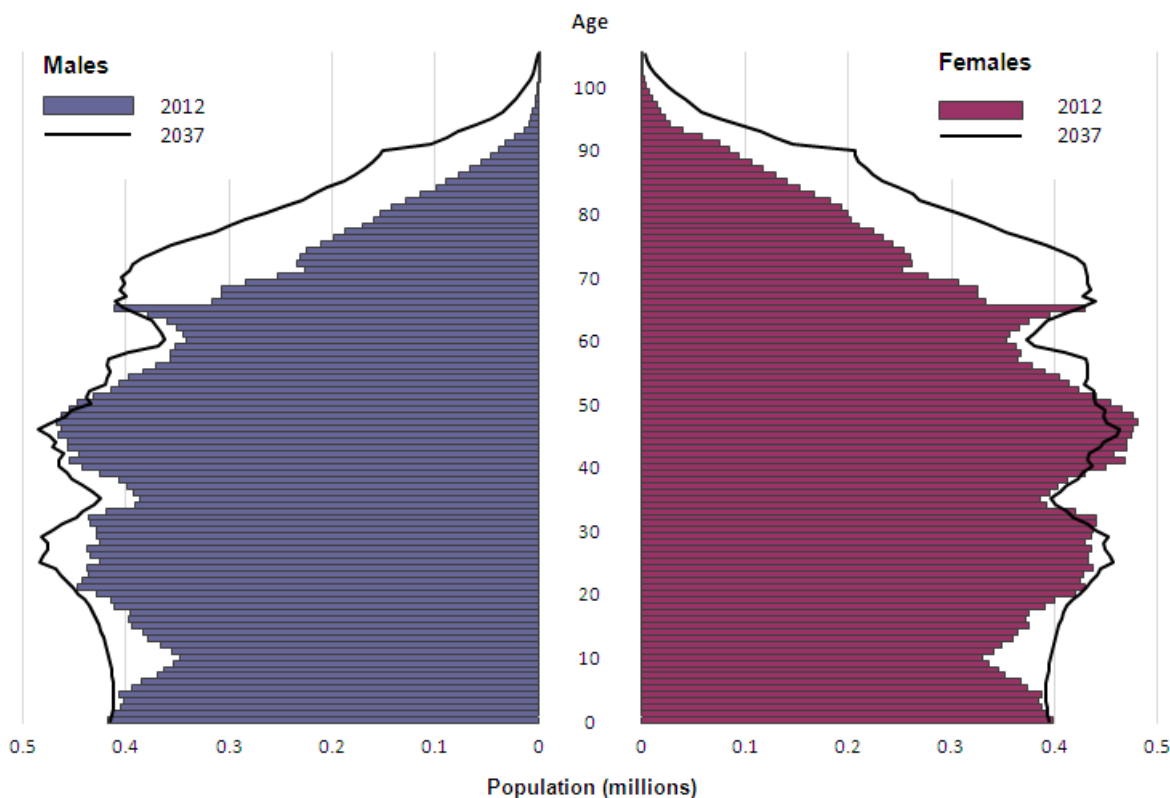


Table 0-1: Actual and projected population by age, United Kingdom, mid-1971 to mid-2087

Year	Thousands				
	All ages	Under 16	16-64	65 & over	(80 & over)
Estimates					
1971	55,928	14,257	34,263	7,408	1,287
1981	56,357	12,543	35,339	8,476	1,572
1991	57,439	11,685	36,695	9,059	2,126
2001	59,113	11,863	37,877	9,373	2,459
2011	63,285	11,883	40,944	10,458	2,915
2012	63,705	11,984	40,880	10,841	2,973
Projections					
2017	65,825	12,432	41,308	12,085	3,330
2022	67,969	13,002	41,709	13,258	3,804
2032	71,713	13,048	42,197	16,468	5,567
2037	73,272	12,989	42,492	17,791	6,176
Longer-term projections					
2042	74,739	13,084	43,277	18,378	6,967
2052	77,493	13,647	44,188	19,658	8,574
2062	79,904	13,896	44,921	21,087	9,015
2072	82,376	14,024	46,450	21,903	10,085
2082	85,106	14,404	47,105	23,597	10,930
2087	86,463	14,573	47,445	24,445	11,290

Source: Office for National Statistics

Notes:

1. Figures may not sum due to rounding

Due to differences in past and present demographic patterns, and those assumed for the future, projected trends differ for the four countries of the UK (see Table 0-2).

- The population of England is projected to increase by 16%, Northern Ireland by 10%, Scotland by 9% and Wales by 8% by mid-2037.

Table 0-2: Actual and projected population of the UK by constituent country, mid-1971 to mid-2062

Year	Thousands				
	United Kingdom	England	Wales	Scotland	Northern Ireland
Estimates					
1971	55,928	46,412	2,740	5,236	1,540
1981	56,357	46,821	2,813	5,180	1,543
1991	57,439	47,875	2,873	5,083	1,607
2001	59,113	49,450	2,910	5,064	1,689
2011	63,285	53,107	3,064	5,300	1,814
2012	63,705	53,494	3,074	5,314	1,824
Projections					
2017	65,825	55,414	3,132	5,407	1,871
2022	67,969	57,338	3,193	5,520	1,918
2032	71,713	60,724	3,291	5,714	1,985
2037	73,272	62,166	3,321	5,780	2,005
Longer-term projections					
2042	74,739	63,536	3,346	5,836	2,021
2052	77,493	66,128	3,391	5,935	2,040
2062	79,904	68,411	3,431	6,029	2,034

Source: Office for National Statistics

Notes:

1. Figures may not sum due to rounding

4 . Underlying Assumptions

The national population projections are based on the latest available mid-year population estimates and a set of demographic assumptions about future fertility, mortality and migration based on analysis of trends and expert advice. For the United Kingdom as a whole the key assumptions for the future are that:

- Average completed family size, which has been falling from a peak of nearly 2.5 children per woman for women born in the mid-1930s, is assumed to level off at 1.89 children for women born after 2010. This is higher than the 2010-based projection which assumed an average completed family size of 1.84 children per woman in the long term. This increase is based on the observation that the falling completed family size for women has slowed in recent years, and younger cohorts partway through their childbearing years look set to have similar levels of completed fertility to those who have recently completed childbearing.
- Expectation of life at birth, based on the mortality rates for the year in question, is projected to rise from 78.7 years in 2012/13 to 84.0 years in 2036/37 for men and from 82.4 years in 2012/13 to 87.3 years in 2036/37 for women. In 2037, period expectation of life at birth for the UK is around 0.4 years higher for males and 0.1 years higher for females compared to the previous projections. These differences are mainly due to a combination of the changes in initial rates of mortality improvement and base mortality rates, the change in the target year and the assumed interpolation of the rates of improvement between 2012 and 2037. After 2037 the life expectancies for males converge to those in the 2010-based projections whilst those for females fall to around 0.2 years lower.
- The long term assumption for net migration to the United Kingdom is +165,000 each year, compared with +200,000 a year in the 2010-based projections. This change reflects the most recent trends in international migration available at the time the projections were produced. New methods have been used to model migration trends in setting the migration assumptions for the 2012-based projections (see [Chapter 5](#)).

5. Background notes

1. The 2012-based Population Projections for United Kingdom and constituent countries were published on [6 November 2013](#) (main release) and [10 December 2013](#) (extra variants).
2. 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

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