National pupil projections – future trends in pupil numbers: July 2016
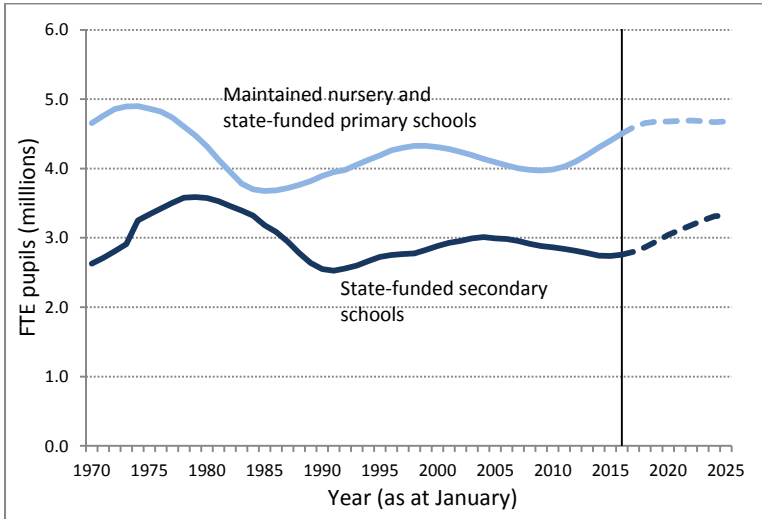
Mainstream state-funded schools: full-time equivalent pupil numbers, actual and projected
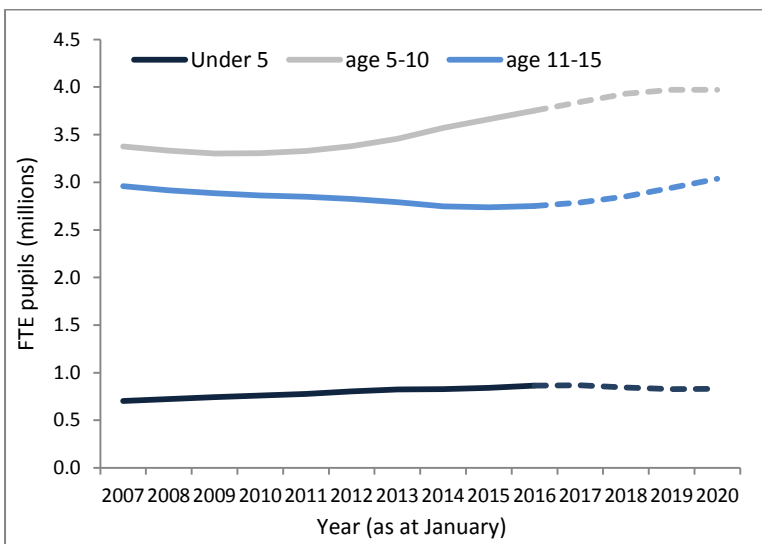

The pupil projection model contains actual data from the school census up to 2016 and a projected population up to 2025.

The nursery & primary school population has been rising since 2009 and reached 4.50 million in 2016. The rate of increase is forecast to slow in the first years of the projection period, due to falling birth rates. The population is projected to stabilise in 2020 at 4.68 million, with subsequent smaller increases towards the end of the projection period.

The secondary school population rose to 2.76 million in 2016 (the first rise since 2005) as the increased births from 2002 reached secondary school age. The secondary school population is projected to continue increasing to 3.04 million by 2020 and further until 2025 when it will peak at 3.33 million.

All state funded schools: pupil numbers by age group, actual and projected

From 2016 the number of children aged 11 to 15 attending state-funded schools is forecast to start rising from 2.75 million in 2016 to reach 3.04 million by 2020.

The projections are calculated by age as well as by school phase and institution type (e.g. alternative provision, independent schools). The largest pupil population group attending state-funded schools is those aged 5 to 10. By 2020 there are projected to be 3.97 million children of this age attending state funded schools, including special schools and alternative provision.

The under-5 age group includes 4 year olds in reception year and younger children attending state-funded nurseries and nursery classes in primary or all-through schools. This age group is projected to remain broadly stable, with 0.83 million pupils attending state-funded provision by 2020.

Contents

About this release

This statistical first release (SFR) provides national projections for the number of pupils in schools in England by type of school and age group. It provides overall figures by main school type, and also more detailed figures for the first four years of the projection by age group and school type.

Alternative pupil projection totals by age group are also provided based on variant population scenarios such as high migration or low fertility.

The projections are based on the mid-2014 ONS national population projections published in October 2015, ONS monthly births data up to and including 2014 and School Census data up to and including January 2016. ONS's principal projections are used for the main pupil projections and their variant projections are used as a base for the variant pupil projection figures.

In this publication

The following documents are included as part of this SFR:

National tables (Excel .xlsx)

Underlying data (open format .csv and metadata .txt)

An accompanying quality and methodology information document provides information on the data source, the coverage and quality and explains the methodology used in producing the data.

Feedback

We are changing how our releases look and welcome feedback on any aspect of this document at school.preference@education.gsi.gov.uk. See section 7 about future changes to this address.

1. National pupil projection results

Early years

The overall population of under-5 year olds is projected to decrease slightly over the first 3-4 years of the projection, from a full-time equivalent of 864,000 in 2016 to 828,000 in 2019. This is due to a drop in the number of births in 2013 and 2014 feeding into this age group.

The under-5 population includes 4 year olds in reception classes, which virtually all eligible children attend. However, this age group also has a high proportion of pupils attending school on a part-time basis. Measured as a headcount[1], the number of children aged under-5 in all state-funded schools is 1,020,000 in 2016, dropping to a projected 978,000 in 2020 before rising again to 1,010,000 by 2024.

The vast majority of early years pupils (current and projected) are in primary schools. That was the case for 823,000 out of 864,000 full-time equivalent pupils aged under 5 in a state-funded school in 2016. This level remains stable throughout the projection period.

State-funded primary schools

There was a 2.4% increase in the population in state-funded primary schools between 2015 and 2016, as forecast in the previous projections. The annual rate of increase is then expected to fall slightly to 2.1% for 2017, due to reducing birth figures. It is then projected to continue falling to 0% for 2020 and to turn negative at -0.2% for 2023.

The overall population in state-funded primary schools was 4,479,000 in 2016 and is projected to be 172,000 higher in 2025 at 4,651,000. This represents a 3.8 per cent increase over the projection period.

State-funded secondary schools

In 2016 the overall number of pupils in secondary school increased for the first time since 2009, reaching 2,758,000. This is because increased births from 2002 onwards means there are now larger numbers entering secondary schools at age 11 than are leaving them at age 16. The rate of increase is projected to increase rapidly from 1.5% between 2016 and 2017 to 3.1% between 2019 and 2020, before starting to fall.

As a consequence of these larger cohorts there is forecast to be a continued increase in the secondary school population over the projection period. The overall population aged 11-15 is projected to reach a peak of 3,325,000 in 2025, 567,000 higher than it was in 2015 and a 20.6 per cent increase over the whole 2016-25 projection period.

Reasons for changes in pupil populations

Changes in the school age population are largely driven by the birth rate. However, the proportion of the overall population which actually attends school (the participation rate) also has an effect, particularly in the early years, since parents can choose whether or not to send their children aged under 5 to school.

In 2016 the school census showed a notable increase in the proportion of 2-year olds attending state-funded provision, from under 10% in 2015 to over 12% in 2016 (headcount numbers). As a result, the pupil projection assumes a continued higher proportion of 2-year olds entering the school population in the future.

Direct immigration of pupils born outside the UK has a very small effect on the school age population. However, the birth rate, which has a much larger effect, is in turn affected by any increase in the number of children born to non-UK born women (who tend to have higher fertility rates). For more information on this see the accompanying methodology document.

---

[1] The tables in this release are presented as full-time equivalents (FTE). Pupil headcount figures can be found in the underlying data which accompany this release.

The overall effect of these changes on the projected population is that the number of children (up to and including age 15) attending all state-funded schools has been rising since 2010, and is projected to continue on an upward trend to 2025. The actual population in state-funded schools in 2016 was 7,367,000 and this is projected to increase by 10.3% to 8,124,000 by 2025.

2. Comparison with previous projections

The 2016 national pupil projections are based on the latest (mid-2014 based) ONS population projections, replacing the mid-2012 based projections used in the previous pupil projections published in July 2015. ONS use the most recent information on levels of fertility, migration and life expectancy to create up-to-date projections giving future population levels for England by age and gender.

In addition, the new pupil projections incorporate outturn data for pupil numbers in 2016 (taken from the School Census) and 2014 monthly birth figures from ONS to bring the historic data up to date. A comparison can be made between the new projections and those published in 2015 to gain an understanding of the effect of actual and projected changes on the future school population.

The 2015 national pupil projections forecast figures for 2016 which have proved to be very close to the actual census totals. The projection for nursery and state-funded primary schools was 4,504,000[2], which is the same as the actual population for these schools as measured in the 2016 school census. The 2015 forecast of the 2016 secondary school population was almost as close, with the 2015 projection of 2,756,000 being within 0.1% of the actual figure of 2,758,000.

After a significant drop in the number of births in 2013, which was incorporated into the previous projections, a small further drop was seen in 2014. This influenced a drop in the projected birth totals in the first seven years of the ONS mid-2014 national population projections, which were used as a base for these projections. Thus the size of the cohorts reaching school age in the first few years of the projections is lower than in the previous pupil projections.

In 2018, the nursery and primary projected total is 20,000 (0.4%) higher than previously forecast. At that point, the reduced births have not fed into the pupil population aged 4 and above (which is the point at which the school population becomes larger due to most children starting to attend full-time). The actual increase in participation at age 2 seen between 2015 and 2016 will have also contributed to this projected increase in nursery and primary pupils.

In the longer term, the reduction in births feeds into the nursery and primary population, and this is one of the causes for a drop in the longer-term projection results for these pupil populations compared to the 2015 projection. In 2024, the FTE population for nursery and primary pupils is forecast to be 68,000 lower than in the previous projection at 4,667,000 (i.e. 1.4% lower than the 2024 forecast given in the 2015 pupil projections).

In both the short and the longer term, the secondary pupil projections are just slightly higher than forecast in 2015. In 2018, the population is projected to be just 2,000 higher (0.1%) than previously projected. In 2024, the difference has grown but is still only 25,000 (0.4%).

3. Alternative scenarios

There are inherent uncertainties in projecting the future size of the pupil population. This is particularly true for early age cohorts, which are the most immediately dependent on projections of future birth rates.

The 2014-based principal national population projections for England produced by the ONS are the base for this projection of future trends in pupil numbers. Principal population projections are based on

---

[2] Rounded to the nearest thousand

assumptions considered to best reflect demographic patterns at the time they were adopted. However, the ONS also produce a number of variant projection scenarios, based on alternative assumptions of future fertility, net migration and life-expectancy.[3] An understanding of the overall effect of the uncertainty in the population projections can be obtained by comparing the results of the principal population projections with projections based on the ONS alternative scenarios.

The national pupil projections look at the effect on the projected pupil population using the ONS variant projections which adopt: a) high and low fertility assumptions; b) high and low migration assumptions, and c) high and low population scenarios (which combine the impact of high and low fertility, net migration and life-expectancy). **These scenarios are for illustrative purposes only and are not intended to represent the upper or lower limits of projected pupil numbers.**

The main findings are:

Under the high **net migration assumption**, total pupil numbers are predicted to be 0.6% (44,000 pupils) higher by 2025, compared to the principal projection. This compares to being 0.6% lower (45,000 pupils) under the low net migration scenario.
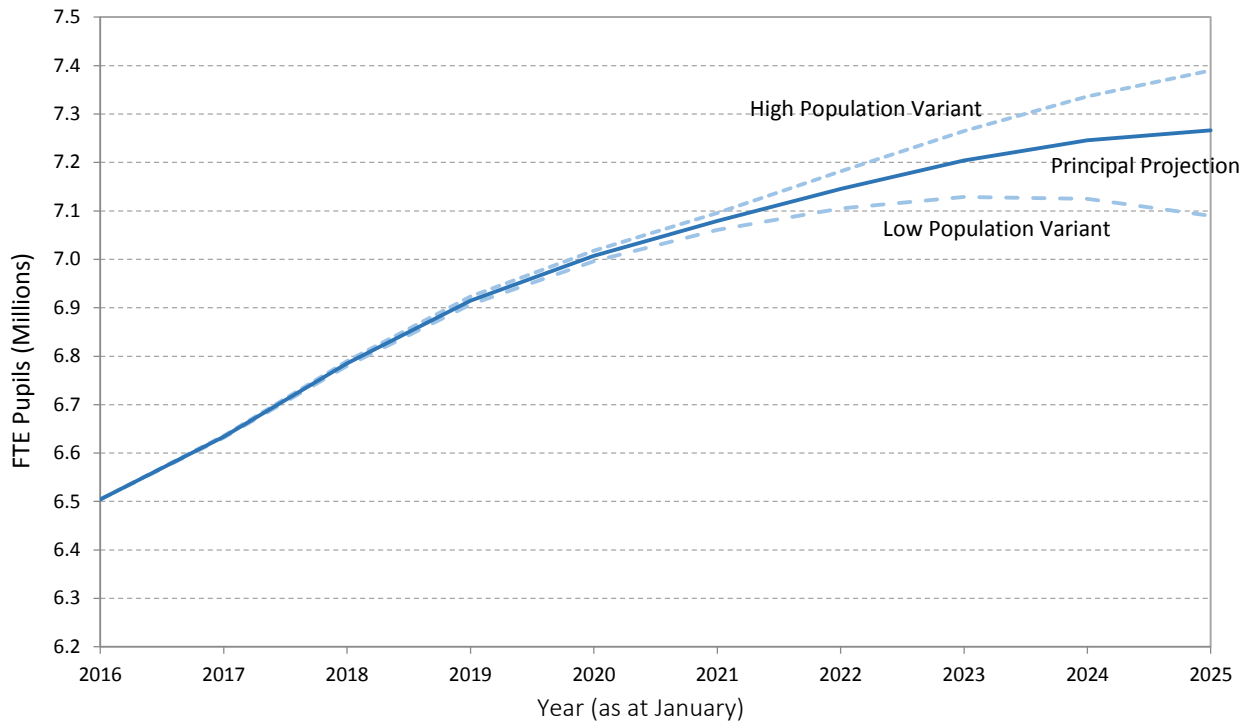

Under the high **fertility assumption**, total pupil numbers are predicted to be 1.1% (79,000 pupils) higher by 2025, compared to the principal projection. This compares to being 1.8% lower (132,000 pupils) under the low fertility assumption scenario.

Under the high **population assumption**, total pupil numbers are predicted to be 1.7% (124,000 pupils) higher by 2025, compared to the principal projection. This compares to being 2.4% lower (176,000 pupils) under the low population scenario.

Figure 1 below shows the combined impact of the ONS high and low population assumptions (which combine varying assumptions for high and low fertility, high and low net migration and high and low life-expectancy). The chart shows that varying the scenarios does not have a notable impact until around 2022, since it takes several years for changes in birth rates to feed through and affect the size of the school aged population.

---

[3] For further details of the ONS principal and variant national population projections, see ONS releases here and here.

Figure 1: Comparison of alternative scenarios for projected pupil numbers aged 5 to 15

Notes

1.   Projections use the mid-2014 based national population projections produced by the Office for National Statistics. Projections incorporate the Office for National Statistics principal projections and high and low population variant scenarios which assume a combination of high and low fertility, life expectancy and net migration.

2.   All state-funded schools include maintained nursery, primary, secondary and special schools, pupil referral units, City Technical Colleges, free schools and all academy types.

4. List of tables

The following tables are available in Excel format on the department's statistics [website](#):

Table 1:

State-funded schools: Full-time equivalent number of pupils (aged up to and including 15) by type of school in England: January 2003 to 2016 (actual) – January 2017 to 2027 (projection)

Table 2:

All schools: Full-time equivalent number of pupils by age group and by type of school in England: January 2010 to 2016 (actual) – January 2017 to 2020 (projection)

Table 3a:

State-funded schools: Comparison of the full-time equivalent number of pupils aged 5 to 15 based on varying net migration assumptions in the underlying population projections in England: January 2016 (actual) - January 2017 to 2025 (projection)

Table 3b:

State-funded schools: Comparison of the full-time equivalent number of pupils aged 5 to 15 based on varying fertility assumptions in the underlying population projections in England: January 2016 (actual) - January 2017 to 2025 (projection)

Table 3c:

State-funded schools: Comparison of the full-time equivalent number of pupils aged 5 to 15 based on varying population assumptions in the underlying population projections in England: January 2016 (actual) - January 2017 to 2025 (projection)

When reviewing the tables, please note that:

Date of Count	Figures relate to January of the year shown. For years up to and including 2015 they are actuals from the School Census and related censuses[4]. Figures for 2016 and later years are projected.
School Types	**State-funded schools** include maintained nursery, primary, secondary and special schools, including all academy types, alternative provision settings, City Technology Colleges, Free Schools, University Technical Colleges and Studio Schools. **State-funded primary schools** include maintained primary schools, primary academies and primary Free Schools. **State-funded secondary schools** include secondary and all-through schools. However, it does not include all-through special schools and special academies. **State-funded special schools** include all special schools apart from non-maintained special schools and general hospital schools. **Non-maintained special schools** constitute a separate category of school. **Alternative provision settings**[5] include pupil referral units and alternative provision academies & free schools, but not other types of alternative provision. **Independent schools** include all schools that are not state funded, except non-maintained special schools.

---

[4] The related censuses are the School Level Annual School Census and Pupil Referral Unit Census. In this document "School Census" is taken to include these related censuses.
[5] Only registered alternative provision settings that are directly state-funded are included here. Non-registered alternative provision settings (which can be indirectly state funded where places are commissioned by schools and local authorities) are not included.

Age (measured at the previous 31 August)	Under 5 = ages up to and including rising 5s. Primary ages = 5 to 10. Secondary ages = 11 to 15. Post-16 = 16 and over.
Part-time and full-time equivalent	Part-time pupils assumed to represent half of a full-time pupil to give totals as full-time equivalents. Until 2002, only pupils aged under-5 could be recorded as part-time. From 2003 to 2011 inclusive, state-funded schools could record part-time pupils of any age. From 2012, all pupils aged 5 to 15 as at the previous 31 August are recorded by state-funded schools as full-time. However, all pupils aged under 5 or over 15, and pupils of any age in independent schools, may be recorded as part-time.

5. Further information

Previously published figures	Figures from earlier projection releases are still available from the department's website. For this and earlier releases follow the link here.
More information on trends in schools and their pupils	The latest and previous releases of the SFR 'Schools, pupils and their characteristics', can be found on the department's website here.
More information on population projections	Information on the ONS population projections and their projections methodology can be found here.

6. Technical information

A quality and methodology information document accompanies this SFR. This provides further information on the data sources, their coverage and quality and explains the methodology used in producing the data, including how it was processed.

7. Get in touch

Media enquiries

Press Office News Desk, Department for Education, Sanctuary Buildings, Great Smith Street, London SW1P 3BT.

Tel: 020 7783 8300

Other enquiries/feedback

Helen Bray, IFD Analysis, Department for Education, Sanctuary Buildings, Great Smith Street, London, SW1P 3BT.

Tel: 0370 000 2288   Email: PupilPopulation.projections@education.gsi.gov.uk

Note on 1 October 2016 this email address will change to PupilPopulation.projections@education.gov.uk.

About this publication:

Enquiries: Helen Bray, IFD Analysis, Department for Education, Great Smith Street, London, SW1P 3BT. Tel: 0370 000 2288 Email: pupilpopulation.projections@education.gsi.gov.uk.
https://www.gov.uk/government/collections/statistics-pupil-projections

Reference: SFR 25/2016

Follow us on Twitter:
@educationgovuk

Like us on Facebook:
facebook.com/educationgovuk