National pupil projections – future trends in pupil numbers: July 2017

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 2017 and a projected population up to 2026.

The nursery & primary school population has been rising since 2009 and reached 4.58 million in 2017. However, the rate of increase is slowing, due to falling birth rates, and the population is projected to stabilise in 2019 at 4.66 million.

The secondary school population rose to 2.80 million in 2017 as the increased births from 2002 are now entering the secondary school population. The secondary school population is projected to continue increasing for most of the projection period, finally stabilising at 3.33 million in 2025.

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

The projections are also calculated by age. The largest population group attending all state-funded schools (including special schools and alternative provision) is those aged 5 to 10, with 3.84 million pupils in 2017. These figures are expected to rise to 2019 then stabilise, and by 2022 there are projected to be 3.96 million children of this age attending state-funded schools.

In 2017 there were 2.79 million children aged 11 to 15 attending state-funded schools, a slight rise on 2016 (2.75 million). The increase is projected to continue, with the number of 11-15 year olds estimated to reach 3.18 million by 2022.

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 broadly stable, with 0.84 million pupils under 5 attending state-funded provision by 2022.
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, mid-2015 ONS population estimates, ONS monthly births data up to and including 2015 and School Census data up to and including January 2017. 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.
1. National pupil projection results

Early years

The overall population of under 5 year olds in state-funded schools is projected to decrease slightly over the first 2 years of the projection, from a full-time equivalent of 865,000 in 2017 to 824,000 in 2019, before equally slight rises to 859,000 by 2026. The drop is primarily due to 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 was 1,017,000 in 2017, and is projected to drop to 972,000 in 2020 before rising slightly to a peak of 1,006,000 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 865,000 (95%) full-time equivalent pupils aged under 5 in a state-funded school in 2017. This level is projected to drop very slightly over the projection period – this is due to an assumed continuation of the recent increase in the number of all through schools, which are recorded within the secondary school population.

State-funded primary schools

There was a 1.8% increase in the population in state-funded primary schools between 2016 and 2017, slightly lower than forecast in the previous projections. The annual rate of increase is expected to fall gradually to 0% for 2020 before remaining broadly stable for the rest of the projection period. This is due to the drop in births in 2013 and 2014 and the expected recovery in birth figures in later years.

The overall population in state-funded primary schools was 4,558,000 in 2017 and is projected to be 100,000 higher in 2026 at 4,658,000. This represents a 2.2 per cent increase over the projection period.

State-funded secondary schools

In 2017 the overall number of pupils in secondary school increased for the second year, reaching 2,797,000. This is primarily 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 in 2018 to 2.4% and to remain high until towards the end of the projection period.

As a consequence of these larger cohorts there is forecast to be a continued increase in the secondary school population until the very end of the projection period. The overall population in secondary schools is projected to reach 3,331,000 in 2026, 534,000 higher than it was in 2017 and a 19.1% increase over the whole 2017-26 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 and 2017 the school census showed a notable increase in the proportion of 2 year olds attending any type of school, from under 10% in 2015 to over 13% in 2017 (headcount numbers). As a result, the pupil projection assumes a continued higher proportion of 2 year olds entering the school population in the future.

\(^1\) 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.
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 overall tend to have higher fertility rates). For more information on this see the accompanying methodology document.

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 throughout the projection period, albeit at a gradually slowing rate after 2019. The actual population in state-funded schools in 2017 was 7,490,000 and this is projected to increase by 8.7% to 8,144,000 by 2026.

2. Comparison with previous projections

Both these 2017 national pupil projections and those published in 2016 are based on the latest (mid-2014 based) ONS population projections. 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.

Therefore changes to this 2017 pupil projection are limited to the addition of new outturn data comprising of pupil numbers in 2017 (taken from the School Census), mid-2015 ONS population estimates and 2015 monthly birth figures from ONS to bring the historic data up to date. These affect the participation and abstraction rates which are used to calculate the pupil projections.

A comparison can be made between the new projections and those published in 2016 to gain an understanding of the effect of actual and projected changes on the future school population. As the projected base data is unchanged we would not expect there to be significant differences in the projected figures in these two datasets.

However, in the first year actual census totals replace projected figures from the previous year’s projection and any differences then feed into the methodology used to project the participation and abstraction rates.

This time round the census total for all state-funded schools in 2017 was 12,000 lower than the 2017 figures projected in the 2016 pupil projections. Almost all of this difference is found in nursery and state-funded primary schools. The actual population of 4,583,000, as measured in the 2017 school census is 13,000 lower than the 4,596,000 figure previously projected. By 2025, the projected nursery and primary total is 17,000 (0.4%) lower than previously forecast.

In the first year the secondary pupil projections are very slightly lower than forecast in 2016. In 2017, the population in the school census is just 1,000 lower than the previously projected figure. In 2025, the 2017 projections have produced higher figures than previously, but the difference is only 5,000 (0.2%).

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 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

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2 All figures rounded to the nearest thousand
fertility, net migration and life-expectancy. 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 0.7% (48,000 pupils) higher by 2026, compared to the principal projection. This compares to being 0.7% lower (48,000 pupils) under the low net migration scenario.

- Under the high fertility assumption, total pupil numbers are predicted to be 1.5% (109,000 pupils) higher by 2026, compared to the principal projection. This compares to being 2.5% lower (183,000 pupils) under the low fertility assumption scenario.

- Under the high population assumption, total pupil numbers are predicted to be 2.2% (158,000 pupils) higher by 2026, compared to the principal projection. This compares to being 3.2% lower (230,000 pupils) under the low population scenario.

Figure 1 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). It 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.

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

![Graph showing the comparison of alternative scenarios for projected pupil numbers aged 5 to 15.](image)

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.

3 For further details of the ONS principal and variant national population projections, see ONS releases here and here.
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 2017 (actual) – January 2018 to 2028 (projection)

Table 2:
All schools: Full-time equivalent number of pupils by age group and by type of school in England: January 2010 to 2017 (actual) – January 2018 to 2021 (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 2017 (actual) - January 2018 to 2026 (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 2017 (actual) - January 2018 to 2026 (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 2017 (actual) - January 2018 to 2026 (projection)

Definitions

<table>
<thead>
<tr>
<th>Date of Count</th>
<th>Figures relate to January of the year shown. For years up to and including 2017 they are actuals from the School Census and related censuses 4. Figures for 2018 and later years are projected.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School Types</strong></td>
<td><strong>State-funded schools</strong> 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. <strong>State-funded primary schools</strong> include maintained primary schools, primary academies and primary Free Schools. <strong>State-funded secondary schools</strong> include secondary and all-through schools. However, it does not include all-through special schools and special academies. <strong>State-funded special schools</strong> include all special schools apart from non-maintained special schools and general hospital schools. <strong>Non-maintained special schools</strong> constitute a separate category of school. <strong>Alternative provision settings</strong> 5 include pupil referral units and alternative provision academies &amp; free schools, but not other types of alternative provision. <strong>Independent schools</strong> include all schools that are not state funded, except non-maintained special schools.</td>
</tr>
</tbody>
</table>

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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

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