



Department
for Education

Schools' costs

2018-19 to 2019-20

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Summary

This note is to help the School Teachers' Review Body (STRB), school leaders, governors and academy trustees, researchers and others understand costs for schools in England at the national level over 2018-19 and 2019-20.

Expiry or review date

Annual updates are planned.

Main points

Core funding for schools and high needs rose from almost £41 billion in 2017-18 to £42.4 billion in 2018-19, and will reach £43.5 billion in 2019-20. At the national level, total core schools and high needs funding across 2018-19 and 2019-20 financial years will increase by 3.6 per cent on a per-pupil basis.¹

Within this total funding, implementation of the new national funding formula from April 2018 is helping schools to have maximum impact in improving outcomes for pupils, by directing resources to where they are most needed and by creating greater certainty and transparency in the funding system to allow schools to plan.²

In August 2018, we published our Excellent School Resource Management strategy document. This sets out the range of help and support that we are making available to help schools reduce their costs. This includes recommended deals on goods and services that schools buy, the Risk Protection Arrangement for academies, a dedicated programme of School Resource Management Advisers, a financial benchmarking service to allow school and trust-level comparison of spending, and face-to-face support with procurement through pilot Buying Hubs in the north west and south west. Our high-level analysis indicates that if the 25% of schools spending the highest amounts on each

¹ Pupil numbers are measured using the national pupil projections: Department for Education (2018), *National pupil projections: July 2018*, <https://www.gov.uk/government/statistics/national-pupil-projections-july-2018>. Growth in pupil numbers in 2019-20 has been adjusted down to reflect the latest outturn growth, based on pupil numbers in the 2018/19 and 2019/20 Dedicated Schools Grant allocations (<https://www.gov.uk/education/local-authority-schools-funding>).

² Department for Education (2018), *National funding formula for schools and high needs*, <https://www.gov.uk/government/publications/national-funding-formula-for-schools-and-high-needs>

category of non-staff expenditure were instead spending at the level of the rest, this could save over £1 billion that could be spent on improving teaching.³

We focus on the increase in funding that goes specifically to schools (schools block funding; plus the pupil premium; plus the 2018 teachers' pay grant; plus the majority of the high needs block). That sub-set of the overall funding is forecast to increase by 6.2 per cent over 2018-20. Schools' expenditure on the other hand is estimated to rise by 5.6 per cent nationally over the same two years. The latter figure omits the impact of the 2019 teachers' pay bill increase, for which the pay award will not be known until later in 2019.

We assume the costs associated with staffing numbers (including teachers' pay bill) increase in line with figures obtained from the published teacher supply model,⁴ driven by increases in pupil numbers. By comparing the 6.2 per cent increase in funding with the 5.6 per cent increase in expenditure, we demonstrate that, nationally and overall, costs could rise a further 0.6 per cent over 2018-19 and 2019-20 before schools would face real terms pressures.

The 0.6 per cent increase in costs is equivalent to a 2.0 per cent per teacher increase in the teachers' pay bill from September 2019. This increase amounts to £280m, spread over the 7 months of the 2019-20 financial year affected by the 2019 teachers' pay award.

This figure represents a theoretical absolute upper bound to the impact on schools' budgets above which increases in teachers' pay in would lead to real per-pupil pressures for schools. It is based on funding currently available to schools in 2019-20, and makes no assumption that there will be a new teachers' pay grant, to cover all or part of the 2019 teachers' pay award. A 2019 pay award which led to a 2.0 per cent per teacher increase in the teachers' pay bill from September 2019 could be considered to be fully funded at the national level.

However, there are other activities and priorities schools could choose to spend money on, and schools will need to prioritise their spending on teachers' pay against other needs, such as school improvement, teacher continuing professional development, pastoral support and teaching resources.

³ Department for Education (2017), *The national funding formula for schools and high needs*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/648532/national_funding_formula_for_schools_and_high_needs-Policy_document.pdf.

⁴ Department for Education (2018), *Teacher supply model 2019 to 2020*, <https://www.gov.uk/government/statistics/tsm-and-initial-teacher-training-allocations-2019-to-2020>.

Introduction

1. This technical note provides the School Teachers' Review Body (STRB), schools and others with analysis of the cost increases (e.g. price inflation) that schools are expected to face over this and the next financial year. This will help them plan their expenditure strategically, including understanding broadly where costs are set to rise. Cost increases are estimated at a national level. They will vary from school to school. In this note, we update the Department's analysis of costs that was published in February 2018.⁵

2. The cost increases should be seen in the wider context of funding for schools. In July 2017 we announced an additional £1.3bn of funding across 2018-19 and 2019-20.⁶ This means that total core schools and high needs funding has increased from almost £41 billion in 2017-18 to £42.4 billion in 2018-19, and will reach £43.5 billion in 2019-20, an overall increase of 3.6 per cent on a per-pupil basis.⁷ The government has committed to protecting per-pupil funding in real terms over 2018-19 and 2019-20.

3. Implementation of the national funding formula (NFF)⁸ from April 2018 is helping schools to have maximum impact in improving educational outcomes for pupils and to better manage cost increases, by directing resources to where they are most needed and by creating greater certainty and transparency in the funding system. The move to the NFF affects schools differently; according to their individual and local circumstances, schools will see changes to their funding that vary from the national level changes. Local authorities continue to set local formulae to determine individual school budgets, and are able to use more recent school-level data, so actual school funding allocations will differ from individual schools' notional NFF allocations.

4. Our estimate of cost increases covers primary and secondary schools (local authority maintained schools, academies and free schools, with pupils in reception to year 11) and special schools (maintained special schools, special academies and free schools, pupil referral units, alternative provision academies and free schools) in

⁵ Department for Education (2018), *Schools' costs: 2018-19 to 2019-20*, <https://www.gov.uk/government/publications/schools-costs-technical-note>.

⁶ Department for Education (2017), *£1.3bn for core schools budget delivers rise in per-pupil funding*, <https://www.gov.uk/government/news/13bn-for-core-schools-budget-delivers-rise-in-per-pupil-funding>.

⁷ Pupil numbers are measured using the national pupil projections: Department for Education (2018), *National pupil projections: July 2018*, <https://www.gov.uk/government/statistics/national-pupil-projections-july-2018>. Growth in pupil numbers in 2019-20 has been adjusted down to reflect the latest outturn growth, based on pupil numbers in the 2018/19 and 2019/20 Dedicated Schools Grant allocations (<https://www.gov.uk/education/local-authority-schools-funding>).

⁸ Department for Education (2018), *The national funding formula for schools and high needs*, <https://www.gov.uk/government/publications/national-funding-formula-for-schools-and-high-needs>.

England. This is a national level estimate of the cost increases faced by schools across the years 2018-19 and 2019-20.

5. The approach taken is as follows:

- We calculate the proportions of teaching staff, non-teaching staff and non-staff expenditure in 2016-17 using outturn data.
- We forecast the growth in each category of expenditure for 2017-18, 2018-19 and 2019-20 due to the principal cost drivers including changes to staff and pupil numbers.
- We consider the effect on teaching staff expenditure of the 2018 pay award and of pay progression and changes to composition of the workforce, and the forecast change to the overall number of teachers, driven by pupil numbers.
- For non-teaching staff, we include the cost effects of the 2018-20 pay agreement, National Living Wage (NLW) awards and changes to Local Government Pension Scheme (LGPS) employer contributions. The costs are assumed to increase in line with the number of teachers.
- We assume that non-staff expenditure will change in line with inflation, as measured by the GDP deflator, and with the change in pupil numbers.

6. We have not included the impact of the 2019 teachers' pay award, which will be announced later in 2019. We are not aware of any planned changes to National Insurance (NI) contributions and have excluded changes to Teachers' Pension Scheme contributions in 2019, which are not yet finalised, but which the government proposes to fund in full.

7. The next section presents the results of the analysis. Subsequent sections detail the methodology we have used to produce the estimates of cost increases and discuss uncertainties and limitations of the analysis.

Analysis

8. We consider the increased costs that schools face this financial year and next, up to the end of the Department for Education's funding settlement agreed at the 2015 Spending Review.

9. The three primary categories of expenditure examined, with respective proportions of the total in 2016-17 (the latest full outturn year), are: teaching staff (52 per cent), non-teaching staff (29 per cent) and non-staff (19 per cent). We assume that future non-staff costs grow in line with changes to pupil numbers, and that staff-costs scale with the number of teachers, driven by increases in pupil numbers.

10. In 2018-19 and 2019-20, schools face cost increases (price inflation) on:

- 1) Teachers' pay;
- 2) Pay for non-teaching staff (pay awards, including the NLW, and LGPS employer contributions); and
- 3) Non-staff expenditure.

11. Overall price inflation is determined primarily by the costs of staff on rates above the NLW, because those costs account for most of the expenditure.

12. Total expenditure, without teacher price inflation in 2019-20, is estimated to rise by 5.6 per cent nationally over 2018-20. Removing the effects of the 2.5 per cent increase in pupil numbers across the two years, an effective per-pupil cost increase of 3.0 per cent is estimated.

13. The cost increases of each of the main expenditure categories are set out in the table below. Note that the teacher-related figure omits the effects of teachers' pay cost increases from September 2019 but includes previous pay cost increases; the effects of changing teacher numbers are included in both 2018-19 and 2019-20.

Cost increases over financial years:	2018-20
<i>Teacher pay expenditure, per teacher⁹</i>	3.2%
<i>Non-teaching staff expenditure, per staff member</i>	6.3%
<i>Non-staff expenditure, per pupil</i>	3.6%

Table 1: Estimates of cost increases acting on each expenditure category.

⁹ Omits the effects of teachers' pay cost increases from September 2019 but includes previous pay cost increases.

14. To judge the impact of the cost increases on schools' finances, we compare the growth in schools' funding with the growth in their overall expenditure over the same period.
15. Total core schools and high needs funding across 2018-19 and 2019-20 will increase by 6.4 per cent. For the purposes of the comparison, we focus on the increase in funding that goes specifically to schools (schools block funding; plus the pupil premium; plus the 2018 teachers' pay grant; plus the majority of the high needs block). That sub-set of the funding is forecast to increase by 6.2 per cent.
16. As mentioned above, schools' expenditure, without teacher price inflation in 2019-20, is estimated to rise by 5.6 per cent nationally over 2018-20. By comparing the 6.2 per cent increase in funding with the 5.6 per cent increase in expenditure, we see that costs could rise a further 0.6 per cent over the same period, nationally and overall, before schools would face real terms pressures. This conclusion assumes that the additional costs are staff-related, thereby representing a theoretical absolute upper bound to the impact on schools' budgets above which increases in the teachers' pay bill would lead to real terms per-pupil pressures for schools.
17. The 0.6 per cent increase in costs is equivalent to a 2.0 per cent per teacher increase in the teachers' pay bill from September 2019. This increase amounts to £280m, spread over the 7 months of the 2019-20 financial year affected by the 2019 teachers' pay award.
18. However, there are a wide range of other activities and priorities that schools could choose to spend money on. While teachers' pay is the single largest item in a school budget, schools will need to prioritise spending on teachers' pay against other needs, such as school improvement, teacher CPD, pastoral support and teaching resources.
19. The estimated forecasts presented here are averages across expenditure by all schools in England. There are a number of factors that could lead to differences between the forecasts and eventual outturn as set out at the end of this note.
20. The implications of the forecasts for individual schools will depend on various factors, including the characteristics and number of their staff and pupils, their approaches to procurement and the conditions and types of their buildings. All schools need to understand and plan for their own situation.

Methodology

Cost increases

21. The analysis has been improved since our February 2018 publication on schools' costs.¹⁰ Modelling was previously done on a financial year basis but now cost increases are applied in either April (e.g. non-teaching staff pay awards) or September (e.g. teachers' pay awards). Changes to pupil and teacher numbers are deemed to happen in September. Annual cost changes due to employer contributions to the LGPS are now included as pressures. Pay bill effects of average pay awards for non-teaching staff in 2018-19 and 2019-20 have been added following the pay settlement in April 2018. The pay bill effects of the September 2018 teachers' pay increase have also been added.

22. The base year (for setting the expenditure proportions by category) has been changed from 2015-16 to 2016-17.¹¹ ¹² The expenditure in each category was projected to future years by applying the relevant cost, staff and pupil number changes.

23. We used National Pupil Projections (NPP) of numbers of pupils, to age 15, in state-funded schools to determine the annual growth in pupil numbers to be applied to non-staff expenditure.¹³ ¹⁴ Separate projections are available that are specific to mainstream and to special (including alternative provision) schools. This differs from our previous analysis which used a combined NPP series for mainstream school pupils and ONS age 2-18 population projections for special school pupils.

24. Staff-costs, in both mainstream and special schools, are assumed to scale with the number of primary and secondary teachers needed in mainstream schools, driven by increases in pupil numbers. Teacher number projections are based on data in published teacher supply models (TSM). To determine the growth in 2018-19 back to 2016-17, we chain the latest TSM projections¹⁵ with earlier years' projections in previous years' TSMs.

¹⁰ Department for Education (2018), *Schools' costs: 2018-19 to 2019-20*, <https://www.gov.uk/government/publications/schools-costs-technical-note>.

¹¹ Department for Education (2017), *LA and school expenditure: 2016 to 2017 financial year*, <https://www.gov.uk/government/statistics/la-and-school-expenditure-2016-to-2017-financial-year>

¹² Department for Education (2018), *Schools financial benchmarking*, 2016/17 academies' accounting returns, <https://schools-financial-benchmarking.service.gov.uk/Help/DataSources>.

¹³ Department for Education (2018), *National pupil projections: July 2018*, <https://www.gov.uk/government/statistics/national-pupil-projections-july-2018>

¹⁴ Except that the growth in pupil numbers in mainstream schools in 2018/19 was adjusted from 1.5 per cent (based on NPP data) to 1.2 per cent, to reflect outturn growth based on pupil numbers in the most recent Dedicated Schools Grant allocations (<https://www.gov.uk/education/local-authority-schools-funding>).

¹⁵ Department for Education (2018), *Teacher supply model 2019 to 2020*, <https://www.gov.uk/government/statistics/tsm-and-initial-teacher-training-allocations-2019-to-2020>.

This is to ensure that the entire series, both past and future years' growth, is driven by pupil numbers as opposed to applying outturn growth to teachers' numbers in past years.¹⁶

Teachers' pay

25. Following the STRB's teachers' pay recommendation in July 2018, the government awarded a rise of 3.5 per cent to the minima and maxima of the unqualified pay range and main pay range; 2 per cent to the minima and maxima of the upper pay range, leading practitioner pay range and all allowances; and 1.5 per cent to the minima and maxima of the leadership pay ranges.¹⁷

26. Based on internal pay and workforce data and taking account of factors such as pay progression and workforce composition changes, we estimate that the average cost increase in teachers' pay was around 1.2 per cent in 2017/18 academic year and will be around 2.7 per cent in 2018/19. The STRB will not make its recommendation for the 2019 teachers' pay award until later in 2019, thus no impact of that award has been included in the analysis.

27. The increase in the pay bill associated with the introduction of the apprenticeship levy in 2017-18 was determined to be 0.3 per cent, as opposed to 0.4 per cent previously, after updating financial and school census data with the latest outturn expenditures (2016-17), and adjusting for increases in staff, pay awards and conversions of maintained schools to academies between the outturn year and 2017-18.

Non-teaching staff pay

28. In April 2018, agreement was reached between the employers and trade unions on rates of pay for local government services employees, including most non-teaching staff in schools, in 2018-19 and 2019-20 financial years. New pay scales were set out in circulars from the National Joint Council (NJC) for Local Government Services¹⁸ and the

¹⁶ We estimated the growth in teacher numbers in 2018/19 by applying the adjusted pupil growth (footnote 15) to the published 2019-20 teacher supply model.

¹⁷ Department for Education (2018), *School Teachers' Review Body's (STRB's) recommendations and response from the Secretary of State for Education (Damian Hinds)*, http://data.parliament.uk/DepositedPapers/Files/DEP2018-0782/DEPARTMENT_FOR_EDUCATION.pdf.

¹⁸ National Joint Council for Local Government Services (2018), *2018 and 2019 PAYSCALES & ALLOWANCES*, http://www.emcouncils.gov.uk/write/LGS_Pay_2018-19.pdf.

Greater London Provincial Council (GLPC).¹⁹ For staff on the NLW, we used awards forecast by the Office for Budget Responsibility.²⁰

29. We estimate average awards across non-teaching staff of 1.2, 3.1 and 3.3 per cent in 2017-18, 2018-19 and 2019-20, respectively. The estimates are based on the distribution by hourly pay band of the pay bill for schools' non-teaching staff, obtained from the 2016 and 2017 School Workforce Censuses. By applying NJC pay spines to the pay bill distributions in the census years, the average pay award²¹ in each year is estimated for the staff on those rates (two-thirds of staff were identified in the censuses as being on NJC (Local Government Services) pay scales). Those staff at National Living Wage (NLW) pay levels are given the relevant awards. We assume that staff not on NLW or NJC-based pay scales would receive the same award as those on the higher NJC pay levels (1 per cent in 2017-18; 2 per cent in 2018-19 and 2019-20).

30. The Local Government Pension Scheme (LGPS) undergoes triennial valuations and accompanying adjustments to employer contribution rates. The 2016 valuation covered contributions for the period 2017-18 to 2019-20.²² Analysis of the employer rates for staff in local authority maintained schools and academies indicates that the rates change, on average, at the national level, by +1.1, -0.4 and +0.2 per cent in the respective years of the valuation period. We use supplementary data on total salaries of each employer's active members to turn lump sum payments into percentages, assuming salaries increase in line with pay awards and staff numbers, and to weight average rates across employers and funds. The LGPS cost changes are averaged across 79 funds; contribution rates vary widely at both the fund and the employer level (local authority or academy trust).

31. The cost of introducing the apprenticeship levy in 2017-18 is estimated as 0.3% of the pay bill (see paragraph 27).

¹⁹ Greater London Provincial Council (2018), *GLPC CIRCULAR 1/2018*, <http://www.barnetunison.me.uk/wp/wp-content/uploads/2018/05/2018-19-GLPC-Circular-Special-Salary-Arrangements-for-London-2018-2020.pdf>.

²⁰ Office for Budget Responsibility (2018), *October 2018 Economic and fiscal outlook – supplementary economy tables*, Table 1.18, <https://obr.uk/efo/economic-fiscal-outlook-october-2018/>.

²¹ Wages are used as a proxy for expenditure on staff pay, including National Insurance and pension contributions.

²² The valuations of Local Government Pension Scheme (LGPS) funds are published on the LGPS Advisory Board website. The 2016 valuations and links to earlier valuations can be found at: <http://www.lgpsboard.org/index.php/fund-valuations-2016>).

Non-staff expenditure

32. We assume that the per-pupil costs of non-staff expenditure rise in line with the GDP deflator forecast, as published in November 2018, with a deflator of 1.9 per cent in 2017-18 and 1.8 per cent in each of 2018-19 and 2019-20.²³

²³ HM Treasury (2018), *GDP deflators at market prices, and money GDP October 2018 (Budget 2018)*, <https://www.gov.uk/government/collections/gdp-deflators-at-market-prices-and-money-gdp>.

Data quality, limitations of analysis and key assumptions

33. The data used to estimate cost increases come from a variety of sources, referenced throughout the note, which have their own sets of assumptions and vary in quality.

34. There is a greater level of uncertainty for non-teaching staff expenditure, where less published information is available.

35. Estimates of the effects of teachers' pay awards also carry an inherent uncertainty given the flexibility that schools and academies have to make decisions on pay.

36. Factors which could contribute to differences between estimates and eventual outturn include changes in:

- Pupil numbers
- Forecast inflation
- Pressures, including those that cannot yet be accounted for due to lack of information at this time
- Government policies affecting schools

37. The estimates of cost increases will be updated annually. The analysis will use the latest data, and assumptions and methodology will be reviewed and refined before each update.

38. The cost increases presented are averages across expenditure made by all schools in England and should not be read as pertaining to individual schools. All schools need to understand and plan for their own situation.

39. Note that due to rounding, the sum of individual figures quoted in the text may not always precisely equal the total shown.



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