School Funding Equity in England

Risk and resource analysis of state-funded mainstream schools

Bruce D. Baker · University of Miami · October 2026

Progressive by a fifth, against a large gap

1.21

High-need ÷ low-need spending per pupil, primary, same local authority

1.16

Same ratio, secondary schools

1.6 SD

Secondary outcome gap, 90th vs. 10th percentile of need

1.90

Teaching assistants per pupil, high- vs. low-need secondary (teachers 1.06)

15,767 primary and 3,348 secondary schools, maintained and academies; spending 2021/22–2024/25, workforce to 2025/26, NFF 2026-27.

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Two questions from the equal-opportunity framework

1a Risk analysis

Which pupil characteristics most strongly predict lower outcomes?

Outcomes = f(Needs, Context)

1b Resource analysis

Are funding and staff higher where risks are concentrated, net of size, sparsity and London costs?

Resources = f(Needs, Context)

2 Cost modeling (next)

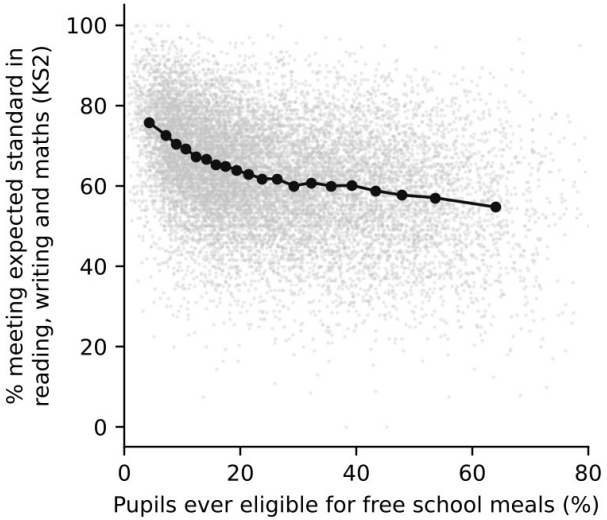
How much more would give high-need schools an equal opportunity to reach common goals?

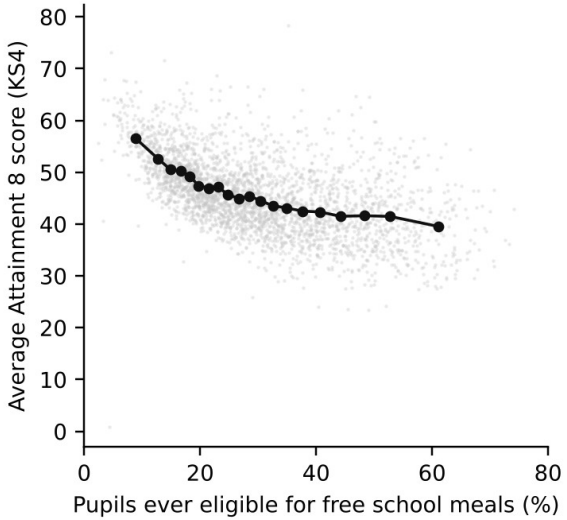
Sizing the differential

The national funding formula (£50.9bn, 2026-27) gives 18.1% through additional needs factors: FSM, FSM6, IDACI, EAL, low prior attainment, mobility. Pupil premium is paid on top.

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Poverty predicts lower results





Current FSM and SEN support selected in both phases; EAL explains **~0%**

Primary: **74%** vs. **55%** reach expected standard, lowest vs. highest need tenth

Secondary Attainment 8: **54.3** vs. **38.4**

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Where need is concentrated

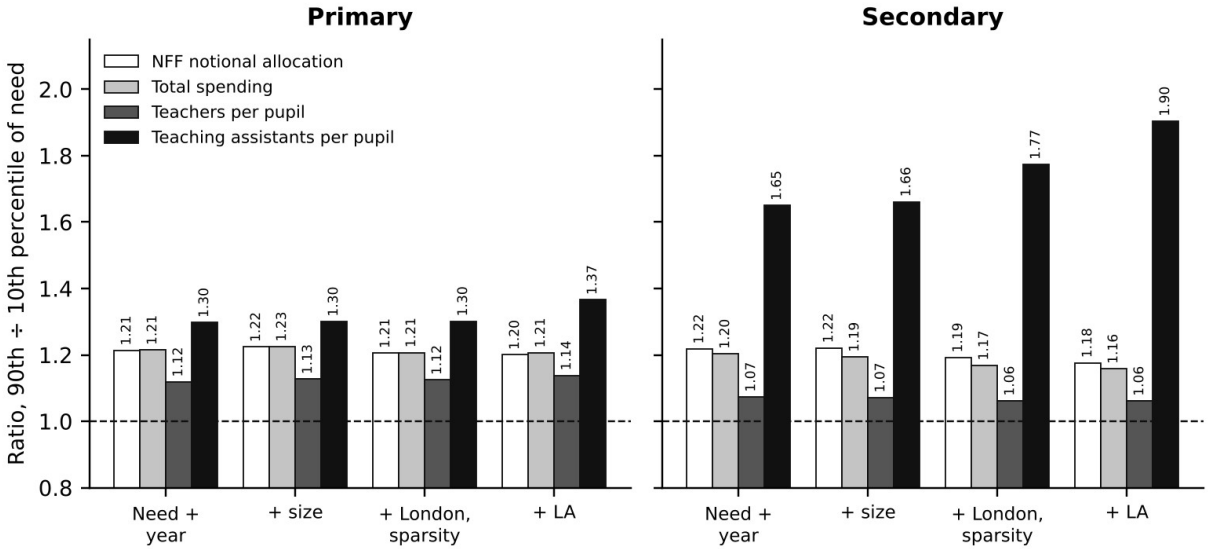


Need index: predicted outcome shortfall from FSM and SEN support, in SD units

Concentrated in inner London, the North East, Merseyside, Manchester and Birmingham

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Spending follows need; teachers barely do



Spending: **1.21×** primary, **1.16×** secondary

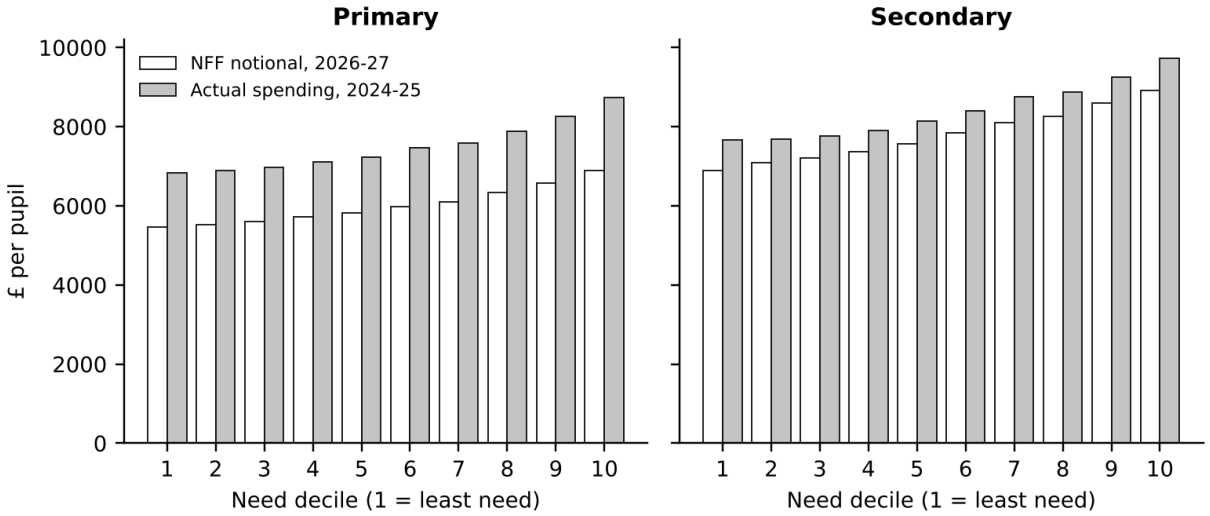
NFF allocation: **1.20×** and **1.18×**

Teachers: **1.14×** and **1.06×**

TAs: **1.37×** and **1.90×**

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Formula and spending by need decile



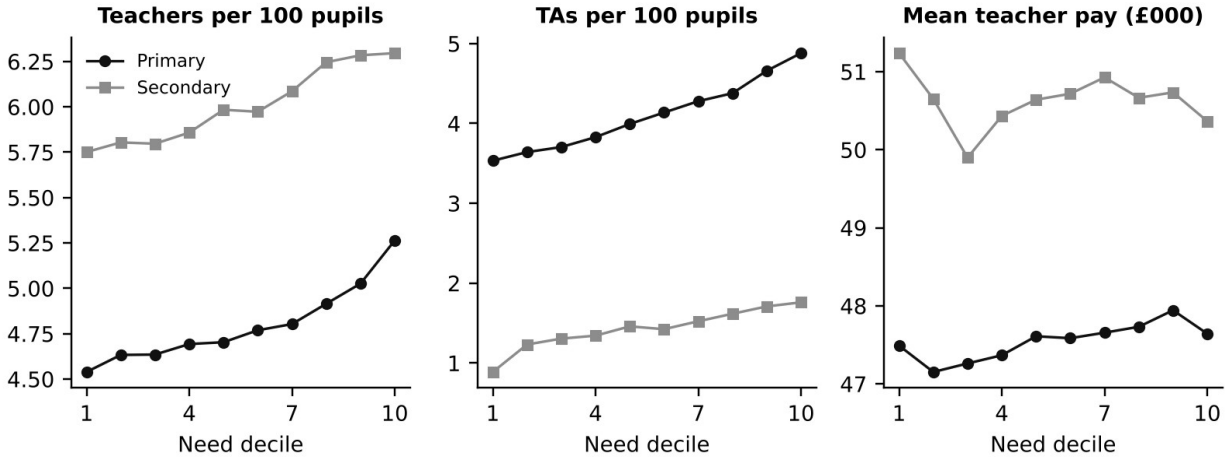
Primary spending: **£6,826** lowest-need tenth, **£8,739** highest

Secondary: **£7,673** to **£9,720**

Actual spending is about as progressive as the NFF

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Extra money buys assistants, not teachers

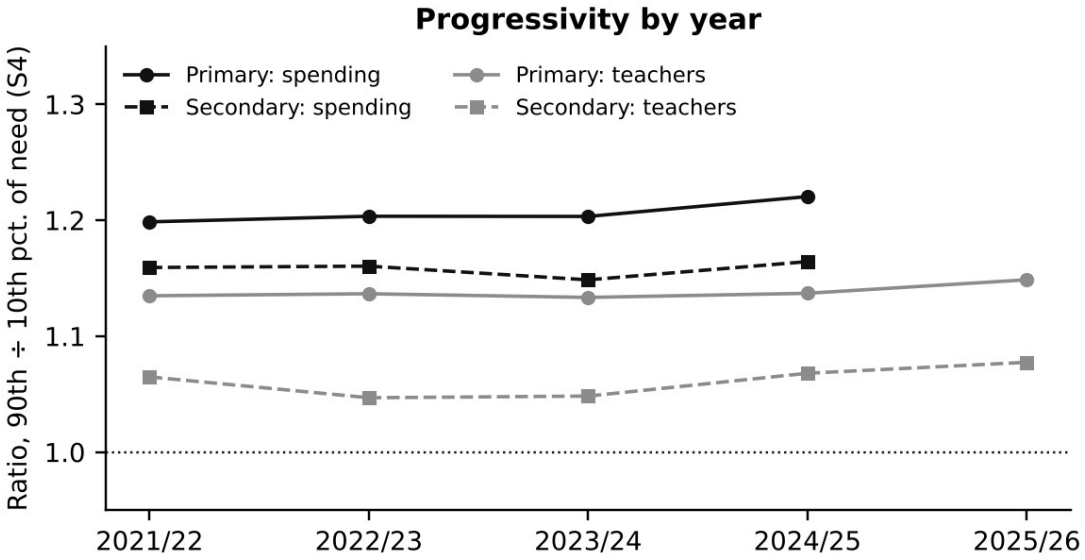


Mean teacher pay flat with need (**0.99×**, **0.98×**)

Secondary teachers without QTS: **4.5%** vs. **2.2%**

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Stable since 2021/22



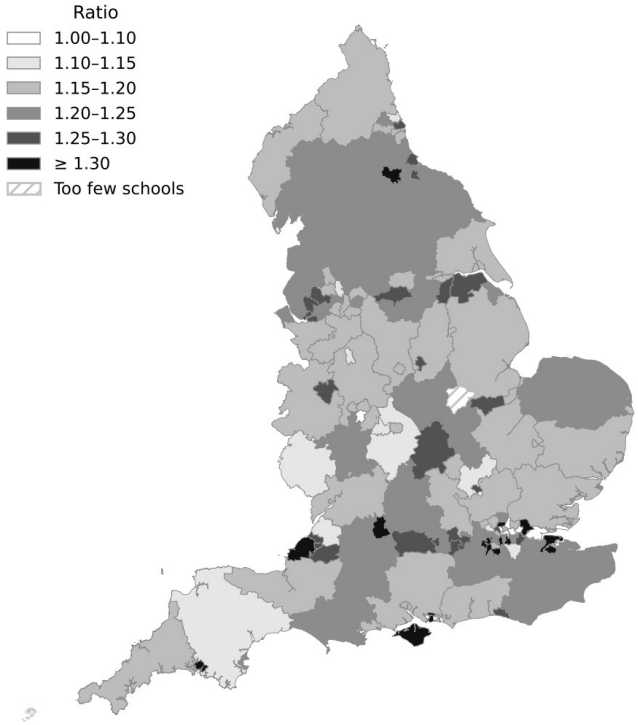
Primary spending ratio **1.20 → 1.22**

Secondary **1.16 → 1.16**

Teacher ratios unchanged

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Every local authority is progressive



Within-authority primary spending ratios: median **1.21**, range **1.04–1.78**

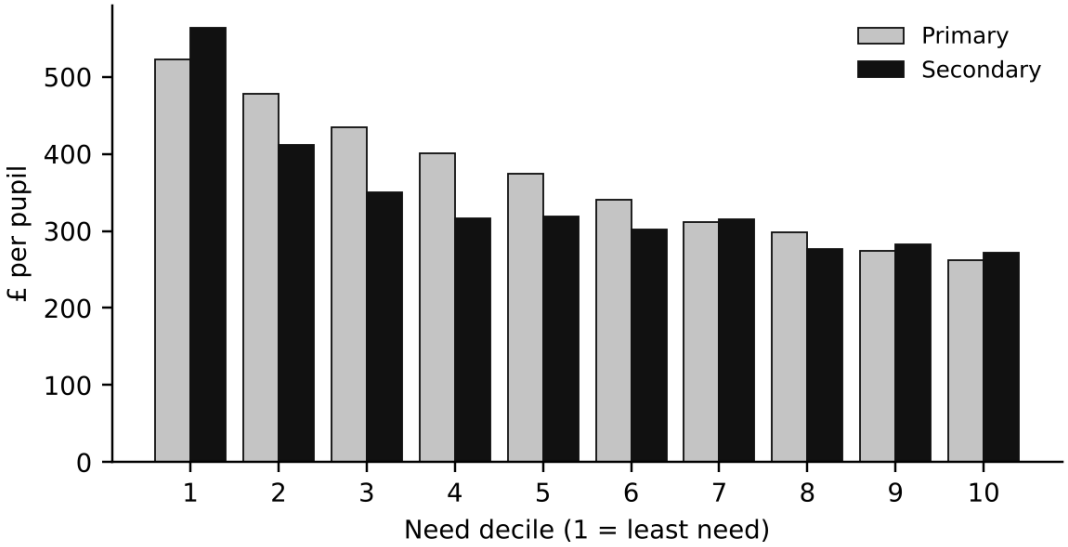
Least progressive: uniformly high-need authorities (e.g. Tower Hamlets)

Regional ratios **1.18–1.23** (primary), **1.14–1.22** (secondary)

Academies spend **5–6%** less than maintained schools with the same need; secondary academies less progressive (**1.15** vs. **1.20**)

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Self-generated income runs the other way



Lettings, catering, donations: **£523** per pupil in lowest-need primary schools, **£262** in highest

Small next to the **~£1,900** need-based spending difference

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Cost modeling is feasible from open data

Outcomes	KS2 and KS4 Attainment 8, school level, 2022–2025 (no Progress 8 in 2025, 2026)	**Strong**
Spending	FBIT spending per pupil, 19,056 schools, 2021/22–2024/25	**Strong**
Need	FSM, FSM6, SEN support, EHCP, EAL; IDACI	**Strong**
Input prices	School mean teacher pay; area cost adjustment; needs outside wage index	**Moderate**
Structural	Size, rurality, sparsity, split sites	**Strong**
Variation	~12% residual spending variation within LA, net of need and size	**Sufficient**
Instruments	NFF transition, minimum per-pupil levels, LA formula boundaries	**Promising**

England is the strongest case so far: a school-level cost function could test whether ~20% more is enough.

Source: B. D. Baker analysis of DfE performance tables, school census, School Workforce, FBIT finance and NFF 2026-27. Mainstream schools.

Implications

- A ~20% differential is modest against a 1.2–1.6 SD outcome gap; cost modeling should size it
- Recalibrate additional needs weights to the risk evidence: more on FSM and SEN support, less on EAL
- Target teacher pay and retention in high-need schools, not only support staff
- Keep a targeted poverty measure for funding as free meals expand to all Universal Credit families